INVESTIGATING THE RATES, AETIOLOGY AND CONSEQUENCES OF PHYSICAL AND PSYCHOLOGICAL INTIMATE PARTNER VIOLENCE IN INTERNATIONAL UNIVERSITY STUDENTS

by

ESTEBAN EUGENIO ESQUIVEL SANTOVEÑA

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School of Psychology
College of Life and Environmental Sciences
University of Birmingham
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ABSTRACT

This thesis investigates the rates, aetiology and consequences of physical and psychological intimate partner violence (IPV) in international University student samples using a gender-inclusive perspective.

Part I of the thesis examined the prevalence of IPV and methodological considerations of empirical studies that investigate this. Review findings highlight the importance of methodological rigour of surveys to estimate the rate of IPV by both sexes and how low levels of national gender empowerment for women are associated with higher levels of female victimisation. Empirical research showed motives and beliefs about IPV by both sexes in England and Mexico are chivalrous and that perpetration is determined by a complex web of risk factors, with important differences amongst types of perpetrators, for male and female offenders. Part II provides research that explores the associations of risk and mental health factors of IPV in female and male perpetrators and victims. Empirical research confirms that adverse mental health issues in male and female IPV perpetrators and victims tend to be similar, with important differences amongst types of aggressive and controlling perpetrators and victims.

In conclusion, this thesis demonstrates the complexity of IPV and the need for a gender inclusive approach to research, practice and policy in this domain.
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# TABLE OF CONTENTS

## INTRODUCTION

- Statement of Authorship

- Chapter 1: Investigating the true rate of physical intimate partner violence: A review of nationally representative surveys

- Chapter 2: Investigating the collective beliefs of physical intimate partner violence in two countries with varying levels of gender empowerment

## STATEMENT OF AUTHORSHIP

18

## CHAPTER 1: Investigating the true rate of physical intimate partner violence: A review of nationally representative surveys

19

## Chapter rationale

19

## ABSTRACT

20

## Introduction

21

## Method

26

## Results

32

## Discussion

51

## CHAPTER 2: Investigating the collective beliefs of physical intimate partner violence in two countries with varying levels of gender empowerment

55

## Chapter rationale

55

## ABSTRACT

56

## Introduction

57
CHAPTER 3: Investigating the rates of and differences between types of heterosexual female intimate partner violence perpetrators from England and México who vary in their use of control

CHAPTER 4: Intimate partner violence and associated risk and mental health factors in men and women in dating relationships
CHAPTER 5: Different types of IPV victimisation in dating samples and its relationship with mental health indicators and relationship satisfaction ........................................ 146

Chapter rationale ........................................................................................................ 146

Introduction .................................................................................................................. 147

Method .......................................................................................................................... 156

Results .......................................................................................................................... 158

Discussion ..................................................................................................................... 171

CHAPTER 6 ................................................................................................................... 179

GENERAL DISCUSSION ............................................................................................... 179

REFERENCES ................................................................................................................. 194

APPENDIX A - ETHICAL APPROVAL OF STUDIES ...................................................... 234

APPENDIX B - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF

SECTION THAT APPEARED ONLINE FOR THE BRITISH SAMPLE FOR THE FIRST

STUDY .......................................................................................................................... 237
APPENDIX C - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF

SECTION OF THE PRINTED QUESTIONNAIRE FOR THE MEXICAN SAMPLE FOR

THE FIRST STUDY ................................................................................................................................. 242

APPENDIX D - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF

SECTION OF THE PRINTED QUESTIONNAIRE FOR THE MEXICAN SAMPLE FOR

THE SECOND STUDY ............................................................................................................................... 246

APPENDIX E - COLLABORATION LETTERS BETWEEN UNIVERSITY OF

BIRMINGHAM (UB), UNIVERSIDAD AUTONOMA DEL ESTADO DE MEXICO AND

THE CENTRO UNIVERSITARIO DE IXTLAHUACA ........................................................................ 250

............................................................................................................................................................. 255
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Quality ratings of survey methodology</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>Rates of intimate partner violence victimization and/or perpetration reported in each of the eleven surveys</td>
<td>36</td>
</tr>
<tr>
<td><strong>Chapter 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Frequency of conflict tactics reported by English and Mexican men and Women in the last 12 months</td>
<td>71</td>
</tr>
<tr>
<td>2</td>
<td>Violence patterns reported by English and Mexican women and men</td>
<td>72</td>
</tr>
<tr>
<td>3</td>
<td>Violent English and Mexican women who were the first to ever physically lash out in some way</td>
<td>74</td>
</tr>
<tr>
<td>4</td>
<td>Within-group comparisons of approval of MFPV and FMPV perpetration</td>
<td>75</td>
</tr>
<tr>
<td>5</td>
<td>Approval of male and female perpetration by patterns of English and Mexican men and women</td>
<td>77</td>
</tr>
<tr>
<td><strong>Chapter 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>English and Mexican student’s demographics</td>
<td>96</td>
</tr>
<tr>
<td>2</td>
<td>Prevalence of perpetrator type in English and Mexican participants</td>
<td>97</td>
</tr>
<tr>
<td>3</td>
<td>Prevalence of minor and severe aggressive acts and injuries experienced by</td>
<td></td>
</tr>
</tbody>
</table>
different types of female Mexican and English perpetrators

**Chapter 4**

1. Psychological characteristics of perpetrators based on two typologies of partner violence
2. Frequency of physical IPV perpetration amongst female and male Mexican respondents
3. Male and female scores for anger, jealousy, emotional flooding, PTSD and depressive symptoms measurements
4. Drinking patterns of non-aggressive and physically-aggressive female and male respondents
5. Perpetrators typology status: Aggressive and non-aggressive perpetrators
6. Levels of partner jealousy, anger expression, emotional flooding, PTSD and depressive symptoms measurements in the different types of perpetrators
7. Alcohol drinking patterns of different types of perpetrators

**Chapter 5**

1. Prevalence of victimisation type amongst male and female respondents
2. Levels of mental health conditions by type of victim
3 Low and High level drinking patterns in different types of victims of partner violence 163

4 Odds rations of experiencing physical aggression by victims of IT and SCV 167

5 Likelihood of experiencing relationship and adverse mental health by victims of physical aggression 168

6 Likelihood of male victims of IT experiencing different mental health effects in comparison with other types of victims 169

7 Likelihood of female victims of IT experiencing different mental health and relationship satisfaction effects in comparison with other types of victims 170
INTRODUCTION

Currently a lack of consensus is held about the true nature and aetiology of intimate partner violence (IPV), its prevalence, and predictive risk factors by academics, researchers and practitioners working in the field. This inconsistency has arisen due to different theoretical perspectives, their resultant definitions and research methodologies used to understand the phenomenon. Furthermore, the extent to which findings apply to different countries is unknown. As such, this introduction to the thesis will provide the reader with a comprehensive guide to the complexities of the knowledge base around IPV, discussing differences in terminology, theory, associated risk factors and prevalence rates with consideration given to how it manifests in different countries. Then, the overall aim of the thesis will be presented before discussing the specific aims and methodology of individual chapters.

Definitions of Intimate Partner Violence (IPV)

A wide array of terms is used in the literature to describe aggressive and violent behaviour between two intimate partners. Indeed Dixon and Graham-Kevan (2010) highlight how it is not feasible for one definition of IPV to be accepted by professionals adopting different theoretical perspectives. However, this lack of coherence can increase confusion about the nature of this phenomenon and encourage a lack of consistency in response to IPV in both academic and practice arenas.

For example, Dixon and Graham-Kevan (2010) highlight that domestic violence is the most commonly used term to describe this behaviour. However, this is typically used in feminist-oriented research to refer to male assault toward a female partner and therefore has connotations of male aggression associated with it. Similarly, the use of terms such as women abuse, wife abuse, or wife
*battering* only capture aggression and violence towards female victims (Dixon & Graham-Kevan, 2010). Such terminology used in any definition does not capture same-sex aggression or female aggression to a male partner. Furthermore, specific terminology referring to marital status limits IPV to that occurring in marital relationships, which is dangerous as it can occur in any type of intimate relationship (i.e., married, cohabiting and dating; Dixon & Graham-Kevan, 2010).

In addition, terms such as abuse or battering depict violence of greater severity and morbidity (Dixon & Graham-Kevan, 2010), and exclude acts of a less severe nature and frequency. Furthermore, the terms violence and abuse are often used interchangeably by researchers studying IPV, despite these concepts not being conceptually equivalent. Indeed, Dixon and Graham-Kevan (2010) assert that terms such as abuse and battering suggest that:

“...a behavioural act is both inherently unwelcome and morally unjustified. Although this may seem straightforward it is not. All behaviours occur within a relationship context and it is not possible to deduce motivations, consequences, legality or morality of actions without first exploring the contextual basis of them” (p. 2).

Therefore, definitions should capture different types of severity and experiences of IPV, not just severe and chronic experiences.

Finally, terminology should capture the different forms of IPV. IPV can consist of physical violence, sexual violence, coercive controlling behaviours and psychological abuse. Coercive controlling behaviours refer to “subtle behaviours” concerned with the perpetrator’s reasons or motives instead of the effect or consequences of such behaviours on the victims. This incorporates
acts such as emotional control, threats, sulking, withholding affection, intimidation, jealous and possessive behaviours, and financial control (Dixon & Graham-Kevan, 2010). They can be seen as motivated by a desire to undermine a partner’s self-confidence. Research has demonstrated the importance of controlling behaviours as they do not diminish over time, are a precursor to physical aggression, and have been reported to result in more damage than physical aggression (Graham-Kevan, 2007).

Based on the above discussion it is proposed that any definition of IPV should encapsulate both aggressive and violent acts of various forms and severity, be gender neutral and encompass any type of relationship (dating/courtship, cohabiting, and married).

Definitions that do this well are such as the one provided by the CTS (Straus, Hamby, Boney-McCoy & Sugarman, 1996) which considers verbal or indirect acts, and physically aggressive acts, sexual coercion, as well as injuries as consequences of any of such behaviours carried out by, or inflicted in an intimate partner. The research conducted throughout this thesis is based on such inclusive criteria of intimate partner violence.

**Theories of Intimate Partner Violence**

Theoretical frameworks give professionals insight into the nature of IPV and hint at the course of action that should be adopted to eliminate it. The variations in the terminology and definitions of partner violence stem from the different theoretical approaches used to understand this phenomenon. Inconsistency in theoretical approach has led to not only differences in definitions, but also in research methodology and resultant findings.
Two main perspectives that dominate research of intimate partner violence to date are the Gendered (also known as Feminist) and the Gender-Inclusive perspectives (Dixon & Graham-Kevan, 2011).

The Gendered (Feminist) Perspective

The Gendered perspective initially took great importance in the 1970’s, with a vision that considered women to occupy a subordinate role in society, and that attempted to set them free from male domination (Dobash & Dobash, 1992).

There are two key elements in the Feminist or gendered approach, for understanding IPV: Gender and Power (Yllo, 1993). According to Yllo, the analysis of violence against women rests within a broader feminist analysis which considers all the aspects of women’s lives within patriarchal society.

From this theoretical framework, men are depicted as innately using violence as means to exert power and control over women to keep them in a subordinate position within society relative to them. It is postulated that patriarchy and its institutions support male domination over women, originating at the societal level which infiltrates into the individual level. Therefore, the feminist claim is twofold, considering that society is patriarchal, and that the use of violence to maintain male patriarchy is widely accepted (Dutton, 2007). One example of the controlling nature of men and subordinate nature of women is marital hierarchy reinforced by patriarchal domination (Dobash & Dobash, 1979). As Yllo (1993: 54) asserts:
“Violence grows out of inequality within marriage (and other intimate relations that are modelled on marriage) and reinforces male domination and female subordination within the home and outside it”.

She goes onto add that violence against women in its different forms is basically a tactic of male control.

Research oriented from this perspective has typically focused on studying female victims residing within shelters, rape crisis centres and hospitals or with men who had been trialled or convicted of such offenses (Dobash & Dobash, 1998). This is because from the Feminist perspective there is no point in studying female violence or male victimisation as the man is always the perpetrator. Therefore, the methodological focus of such research is designed to elicit information from female victims only. However, such selected samples are likely to give very specific results that are only generalisable to women fleeing a violent relationship. Such research has been criticised when results have been generalised to the wider population (the clinical fallacy-Straus, 1999a). Indeed, such generalisations can be misleading for other researchers working in the field.

For example, some large scales surveys, such as the National Violence against Women Survey (NVAWS) and Statistics Canada’s General Social Survey (GSS), have focused on male violence against women, adopting this design because of findings of the aforementioned studies with selected samples (Dobash & Dobash, 1998). Indeed, organisations such as RESPECT who are responsible for setting the national accreditation guidelines for perpetrator intervention programmes in the UK posit claims such as IPV is a gendered issue and women are typically only violent in self-
defence, and women’s violence is neither the same as nor symmetrically opposite to male violence against women (RESPECT, 2004). These claims are typically based on research with selected samples and do not consider other forms of IPV that occur between couples in the general population.

**Gender Inclusive Perspective**

A Gender-Inclusive approach to the study of intimate partner aggression, investigates the perpetration and victimisation of men and women in intimate relationships. This perspective assumes both members of a couple can be either victims and/or perpetrators.

Typically the studies conducted from this stance involve large community samples, which are often nationally representative and university student samples, where measures of aggression are presented in a neutral context in surveys. Commonly, both men and women are asked to report on their victimisation/perpetration by completing the Conflict Tactics Scales (CTS). Items in the CTS deal with conflict tactics used to settle disagreements.

The CTS was devised by Murray Straus in the early 1970’s and has been used worldwide in studies examining the characteristics of violence in families and intimate relationships. Its revision (Straus et al., 1996) resulted in a streamlined version composed of 5 scales: Negotiation (a conflict-of-interest-situation), physical aggression, sexual coercion and injury, it distinguishes between behavioural acts of minor and severe intensity throughout its five scales (Straus, Hamby & Warren, 2003). The assorted array of behavioural acts defines well its composing categories, and allows for systematic comparisons within and across samples (Straus, 2004; 2007; 2008).
Landmark Gender-Inclusive studies are the two National Family Violence Surveys (NFVS) carried out in the United States in 1975 and 1985 by Murray Straus and his collaborators. Using large national representative samples (2143 and 6002 persons in the 1975 and 1985 surveys, respectively) they broke new ground by shedding light on perpetration/victimisation rates by men and women in intimate relationships (Straus, 1990a) that were approximately 12% for both, men and women. Such perpetration rates indicate gender-symmetry and highlight the reciprocal nature of IPV, at least in that context of a modern westernised society.

A unique study was conducted by Straus (2008) and a team of collaborators in 32 countries in all major world regions (Africa, Asia, Australia and New Zealand, Europe, Latin America, the Middle East and North America) with 14, 252 students from 68 universities. Results show high rates of physical assault everywhere with considerable variations between nations, however, a slightly larger percentage of women (26.2%) was found to hit a partner than men (24.8%). Rates of severe physical assault perpetration indicated almost even and high figures (9.1%) for men and (8.5%) for women. Men and women were found to share about the same perpetration rates of psychological aggression (9.2% in males and 9.5% in females, respectively). Sustained Injury rates by intimate partners were slightly higher in women (7.2%) than in men (6.2%). The study concludes that physical assault and psychological aggression perpetration is high around the world, and that the rates in dating samples show symmetry (violence tends to be mutual), while as noted earlier, in some cases, women show higher perpetration. This opposes the basic claim of researchers and practitioners and activists adopting a pure feminist approach (Dixon & Graham-Kevan, 2011), that considered IPV to be exclusively male-perpetrated or that violence on behalf of women is defensive or inconsequential (Dutton, 2006).
A landmark study conducted with 8,033 youths aged 15 – 24 years of age is the National Dating Violence Survey in México (Castro & Casique, 2010). This is the first nationally representative dating violence study in Latin America. Results show 10.3% of men and 3% of women are victims of physical aggression by a partner. This is a starker difference between the sexes than that found in studies conducted with university student samples in English-speaking countries (see Desmarais, Reeves, Nicholls, Telford & Fiebert, 2012b) or in the entire International Dating Violence Study by Straus and collaborators (2008).

**Nested Ecological Model**

Ecological approaches to understanding human behaviour and development have been popular in psychological and health related disciplines since their conceptualisation by Bronfenbrenner (1977). Bronfenbrenner developed an ecological systems theory which acknowledged human development must reflect the influence of several environmental systems upon the individual. An ecological model is a theoretical structure which embraces social and psychological contexts and characteristics.

Similarly, Dutton (2006) has proposed that professionals understand IPV using a ‘Nested Ecological Model’. He has embraced the Gender Inclusive perspective and proposed that professionals need to consider what various theoretical perspectives operating at different levels of the model can offer to our understanding of both male and female perpetration and victimisation. The term “nested” refers to the fact that individual development can be seen to operate within broader levels of society (e.g., cultural norms, subcultures). His model is built to explain the individual or intrapsychic events (behaviour, feelings, and beliefs of the assailter and, those of an
interpersonal nature of social relationships that influence such assaultive behaviour. It consists of five levels:

- The Macrosystem, (broad sets of cultural beliefs and values related to IPV)
- Exosystem (subcultures, e.g. peer group influence, social support, unemployment, etc.)
- Microsystem (refers to interaction patterns existing within the family unit or couple)
- Ontogenetic level (focuses on features of the individual’s developmental experience)
- A fifth interactive level (the Suprasystem, deeper than cultural attitudes) considered by Dutton, includes power conflicts between members of couples

Dutton (1994) considers that no single factor, such as the basic feminist claim of Patriarchy, can sufficiently explain all the data available from different approaches on IPV, and proposes the nested ecological model as a theoretical framework for examining the interactive effects of factors of IPV located at different levels. Hence the convenience of using this model in research as it allows for the investigation of several variables at different levels, rather than single variables, such as the case of Patriarchy which just considers a broader or societal level.

**Prevalence of IPV**

Rates of perpetration/victimisation of IPV are determined to a great extent by the theoretical approach that underlies them. In summary, studies based on a gendered view of partner violence are designed under the assumption that male perpetrated aggression is caused by patriarchal beliefs and the need to exert and control over women even by violent means, whilst motivations of female aggression are deemed primarily self-defensive (Dutton & Nicholls, 2005). As such, this view has primarily focused on male perpetrated aggression/female victimisation (e.g. Dobash & Dobash, 1979; Walker, 1989). Large surveys shaped using the gender-inclusive perspective (e.g. Fergusson,
Horwood, & Ridder, 2005; Kessler, Molnar, Feurer, & Appelbaum, 2001; Moffitt, Caspi, Rutter, & Silva, 2001; Straus & Gelles, 1990) have found roughly symmetrical rates between the sexes, or slightly higher female aggression in the US and other developed nations. A recent comprehensive review of 111 studies conducted in industrialised English-speaking countries and published between 2000 and 2010 (Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012a) found previous perpetration prevalence rates in large population studies for males ranged from 4.8% in a sample of Asian Americans up to 57% in a longitudinal study in New Zealand, whilst female aggression ranged from 8% to 68.9%. The review also reported rates coming from small community samples (male perpetration ranged between 4% and 45%, and female perpetration between 5.7% and 48%), university students or young adults (male perpetration between 3.7% and 42.9%, female perpetration from 8.7% to 41.4%), high schools or adolescent samples (male perpetration ranging from 2.9% to 17.8%, and female perpetration from 8.9% to 38.1%), and clinical samples (male perpetration: 2.3% to 61.6%; female perpetration: 6% to 67.3%). Part of this review tallied the male and female victimisation rates in these nations (Desmarais et al., 2012b). As with perpetration, female and male victimisation rates varied widely in all types of studies, and demonstrated female aggression is not rare violence committed out of self-defence, but rather female and male aggression rates share similar perpetration/victimisation trends across different samples.

Archer (2006) found that developing countries had greater levels of gender inequality than their neighbouring Western countries, and that their lower rates of gender equality were linked to higher female victimisation. Conversely, gender equality achievements in nations such as the US, Canada, and Northern European countries are linked to higher female perpetration and a decline in male perpetration (Dutton & Nicholls, 2005). Archer (2006) suggests the explanation of this relationship is a complex one, and that specific patriarchal belief-systems (embedded in historical
and cultural traditions), are to a great extent, responsible for cross-national variations in male perpetration/female victimisation. Female perpetration/male victimisation has been suggested to be linked to agentic (versus communal) traits in women (e.g. inclination to be independent, assertive, and competent), and belief-systems based on masculinity stereotypes (Archer, 2006).

Furthermore, male and female IPV perpetration and victimisation has been consistently found to be higher in university student samples than in large community samples (Desmarais et al., 2012a; 2012b).

**Risk Factors of IPV**

Important studies have taken place, which test Dutton’s Nested Ecological Model (O’Leary, Smith Slep & O’Leary, 2007; Stith, Smith, Penn, Ward & Tritt, 2004). Stith et al. carried out a meta-analytic study which risk factors were predictive of intimate partner physical abuse. It included 85 studies producing 308 distinct effect sizes (magnitude or strength of the relationships between risk factors and intimate partner physical abuse) for 16 perpetration and nine victimisation risk factors. Perpetration risk factors for men included: income, age, education, career/life stress, employment, jealousy, forced sex, emotional/verbal abuse, history of partner abuse, anger/hostility, and attitudes condoning violence, marital satisfaction traditional sex-role ideology, depression, alcohol use, and illicit drug use. For female offenders the analysis yielded an effect size only for marital satisfaction. Victimisation risk factors were able to be calculated only for women: income, age, education, employment, and number/presence of children, violence towards the partner, fear, depression, and alcohol use.

Their findings suggests risk factors at the ontogenetic (individual) and microsystem (relationship) levels tended to produce the strongest effect sizes (the strongest relationships with
physical partner abuse), while factors in the exosystem level tended to produce the smallest effect sizes, for perpetration and victimisation.

O’Leary et al. (2007) examined the relationship between the most influential theories of partner aggression. They tested a model for men and women separately in 453 nationally representative sampled couples in the United States, highlighting the most salient predictors of partner aggression for both. Factors of dominance/jealousy (microsystem/ontogeny), marital adjustment, power imbalance (microsystem), and partner responsibility attributions, depressive symptoms, emotional flooding (ontogeny), were identified as most important predictors of partner aggression for men and women. Additionally, they highlighted direct paths to aggression for men (exposure to family-of-origin aggression, anger expression and perceived social support), and for women (history of their own aggression as a child or teenager).

These findings along with a recent comprehensive review of the literature on risk factors of physical, psychological and sexual IPV show similarities of risk factors with other risky behaviours in adolescence and young adulthood, and more similarities than differences across the sexes amongst intimate partners (Capaldi, Knoble, Shortt, & Kim, 2012). Sex differences in risk factors for IPV are highlighted to take place mainly in internalising problem behaviours (e.g. depressive symptoms, certain features of PTSD symptoms such as re-experiencing, numbing, etc.). Such findings warrant further attention from researchers to how both men and women experience IPV perpetration and victimisation.

Studies such as Straus’s and collaborators (Medeiros & Straus, 2007; Straus, 2008) highlight the importance of researching different variables (e.g. psychological, sociological), as there is
enough evidence that warrants the investigation of several predictors on intimate partner violence in student samples around the world.

**Typologies of IPV perpetrators (and victims)**

Several classification systems have attempted to identify perpetrators of IPV by an individual’s characteristics (severity and frequency of violence, generality of violence, and a person’s psychopathology - the Holtzworth-Munroe typology); by the physiological reactivity on an individual (Type1 [more violent outside the relationship, higher levels of antisocial behaviour, sadistic aggression, and decreased levels in arousal during conflict] vs. Type 2[more dependent, emotionally volatile, needy, with increased arousal during conflict] – by Gottman and colleagues; or by motivation of the IPV by Johnson. Other typologies have focused on female aggression to identify types of aggression (generally violent vs. partner violent only by Babcock, Miller, & Siard, 2003), or by IPV patterns by women (women as victims, women as aggressors, and mixed relationships, by Swan & Snow (Capaldi & Kim, 2007).

Amongst the aforementioned classification systems the Johnson typology has recently been used to test hypothesis on the aetiology of IPV assessing rates of partner violence, and examining correlates of IPV in selected/clinical (Hines & Douglas, 2010; Leone, 2011), community (Brownridge, 2010), and dating samples (Próspero, 2008a; Straus & Gozjolko, in press). Findings so far appear to show clear differences in prevalence rates, severity of IPV, and impact on risk and mental health factors between what is commonly known as situational couple violence and intimate terrorism. Therefore, an exploration of partner violence cannot lack consideration of important elements such as coercive control in the experiences of men and women in young dating relationships.
In conclusion, the review of the literature outlined throughout this introduction shows the importance of understanding salient risk and mental health factors and types of IPV experienced by men and women, not only in adult relationships but in young intimate relationships also. The usage of dating samples is not only warranted by the high levels of IPV experienced in these kinds of relationships but also because these samples can inform prevention efforts for earlier, less consolidated intimate relationships already facing IPV and relationship issues. Furthermore, the need to understand differences or consistencies in IPV in countries differing in levels of patriarchy is warranted. Hence, a gender-inclusive and nested ecological framework is adopted in this thesis to understanding dating violence in international student populations.

**Structure of the Thesis**

**Aims**

The overarching aim of the thesis is to investigate the rates, aetiology and consequences of physical and psychological IPV in international University student samples. The thesis is sectioned into three parts. Part I presents research that investigates the international rates and experience of IPV by the sexes, in addition to its nature and beliefs / motivations associated with its perpetration in countries with differing levels of gender empowerment. Part II provides empirical investigation into risk and mental factors associated with IPV perpetration and victimisation in young Mexican female and male students in dating relationships. Part III summarises findings, and provides a general discussion of the Thesis.

More specifically, Part I provides the basis upon which the rest of the Thesis is developed. Chapter 1 does this by conducting a review of surveys which have been developed using a gender
inclusive and methodologically sound approach, to investigate the true international prevalence of the problem. Chapter 2 continues the theme of exploring rates of IPV in international samples – but does this by focusing on an English and Mexican University student population. It expands on the rates of IPV to also consider injury and beliefs / motivations held about physical IPV in each sample to examine the role of theoretical perspectives, explained in the introduction and Chapter 1, in the explanation of IPV. Chapter 3 focuses on the scarcely investigated nature of female perpetration in international samples. The prevalence, severity, injury, and collective beliefs about the acceptability of IPV by different types of female IPV perpetrators are examined. Here a coercive-control based typology is introduced into the thesis. Part II moves onto exploring associations of risk and mental health factors of IPV in female and male perpetrators and victims of IPV in Mexican dating samples. The focus here is on one international sample that has not received much exploration in the literature to date. Chapter 4 examines important risk and mental health factors in violent female and male perpetrators of IPV. It also examines how specific types of perpetrators differ in salient correlates such as anger, PTSD, depressive symptoms. It goes beyond analysing sex differences to examine differences associated with different types of IPV perpetrators. Chapter 5 extends this exploration by examining correlates of IPV, such as relationship satisfaction and associated adverse mental health issues, for the victims. It conducts an analysis of how these specific factors relate to physically aggressive and non-aggressive women and men. It furthers this analysis by examining these factors in victims of different types of physically violent and non-violent IPV. Psychological aggression in the form of coercive control, in addition to physical aggression, is investigated in Part I (Chapter 3), and Part II (Chapters 4 and 5).

**Specific aims of thesis**
1. To investigate the magnitude of IPV and important methodological aspects of empirical studies leading to national estimates of IPV.

2. To test theoretical gendered views about the nature of IPV. Specifically:
   a) To investigate physical IPV perpetration and victimisation experiences in men and women, the motivations attached to their physical IPV and the collective beliefs about IPV of men and women from countries with differing levels of gender empowerment.
   b) To explore different types of female aggression and its links with gender and empowerment levels and collective beliefs about the acceptability of female and male perpetrated IPV.

3. To explore associations of risk and mental health factors of IPV linked to different types of female and male perpetration and victimisation experiences.

Part I of the thesis explores aims 1 and 2, whilst Part II examines aim 3.

Samples

Two samples were accessed, providing retrospective data for empirical examination in this thesis:

Chapters 2 and 3 in Part I of the thesis utilised data from 553 students who took part in a survey based study between July and November 2010. Students were from a British university in Birmingham, United Kingdom and two Mexican universities in Toluca and Ixtlahuaca, State of México. Participation was voluntary and all provided informed consent before participating.
Chapters 4 and 5 in Part II of this thesis utilised data of 300 students from a Mexican university in Toluca, State of México. They participated in a survey based study between February and April 2011. Participation was voluntary and all provided informed consent before participating.

**Ethical Approval**

Ethical approval was gained from [redacted]
STATEMENT OF AUTHORSHIP

Chapters 1-2 contain material that has been published\(^1\) or has been submitted\(^2\) for publication to two journals; hence each chapter has its own introduction. Repetition of similar specific material in the Method sections of Chapters 3, 4, and 5 has been avoided, and properly acknowledged in each chapter.

The authorship on the published and submitted articles indicates collaborative working. I clarify I am the senior author and my supervisor Louise Dixon is also a named author. Drs. Gloria M. Gurrola and Patricia Balcázar; and Rogelio Díaz are also named authors in one article because they provided the data for one of the samples used in that study.

CHAPTER 1

INVESTIGATING THE TRUE RATE OF PHYSICAL INTIMATE PARTNER VIOLENCE:
A REVIEW OF NATIONALLY REPRESENTATIVE SURVEYS

Chapter rationale

This chapter sets the context for the issues investigated throughout this thesis. The literature examining rates of intimate partner violence (IPV) in gender-inclusive nationally representative surveys are considered alongside their methodological quality to draw conclusions about the international rates of IPV and the effect of women’s gender empowerment in different countries upon these rates.

The following article was accepted for publication in Aggression and Violent Behavior, volume 17, 208-219 in 2012, and has been modified in its original published format to achieve consistency with the rest of the thesis.
ABSTRACT

This review systematically investigates rates of physical intimate partner violence for both sexes in international samples. Surveys that accessed nationally representative samples, used gender inclusive methodology and neutral contexts are reviewed to determine 12-month and lifetime victimisation and perpetration rates. Discrepancies between international rates, and the impact that gender equality may have upon these differences is also investigated. Electronic databases were systematically searched to identify surveys that met inclusion criteria. Eleven surveys were reviewed. Of these, Family Violence surveys had the highest methodological quality and showed equal rates for both sexes. Surveys of lesser quality typically showed higher female victimisation and male perpetration rates. Countries at the extremes of gender empowerment measure scores differed in their patterns of rates. Gender equality in the US was associated with symmetry for the sexes, and inequality in Uganda associated with higher female victimisation. However, as countries tended to use different methods to investigate the problem it was not possible to compare the effects of gender equality on differences in international rates of IPV. It is concluded that survey methodology needs to be consistent across nations and specifically target family violence if true rates are to be determined and compared across the globe.
Introduction

Statements, such as “One in every four women will experience domestic violence in her lifetime” (National Coalition Against Domestic Violence [NCADV], 2007), are commonplace in the media and in gendered literature, to describe the “facts” about the nature of intimate partner violence (IPV). Such figures are often reported without mention of the rate at which men experience victimisation, or the methodological quality of the study from which these figures were produced. These assertions are typically driven by a theoretical understanding of IPV which conceptualises the social problem as predominantly one of men's violence against women (e.g., Respect, 2008; Ylló, 2005). This approach has received extensive criticism for being ideologically-driven and propagating assertions that are not supported by the evidence (Dixon & Graham-Kevan, 2010; Dutton & Corvo, 2006; Dutton & Nicholls, 2005; Gelles & Straus, 1988; Graham-Kevan, 2007; Hamel & Nichols, 2007). Since advancements in science are made by testing theories against the evidence base (Dixon, Archer, & Graham-Kevan, 2011), it is crucial that empirical studies are carried out in a methodologically sound manner to ensure the data on which policy and practice is based are valid. Despite such misgivings, widespread dissemination of an understanding of IPV as a gender issue has led to a standard conceptualisation of IPV as a male-perpetrated crime (Dutton, 2006).

This review defines IPV as “any form of physical, sexual and psychological aggression and/or controlling behaviour used against a current or past intimate partner of any sex or relationship status” (Dixon & Graham-Kevan, 2011, p.1). It considers one of the most basic, yet controversial questions about IPV: What is the prevalence of this social problem? Although it is recognised that IPV consists of more than one form of aggression, this review examines physical violence for two main reasons: 1) physical violence is the aspect of IPV which has been the focus of most controversy
(and disagreement) in research (Straus, 2008), and 2) unlike psychological and sexual aggression, surveys have consistently investigated physical violence, making it possible to identify and consider aggregate data. However, this focus on physical violence does not imply that physical IPV is more important or damaging than other forms (i.e., psychological aggression and neglect, sexual coercion).

1.1. Factors affecting reported prevalence rates

1.1.1. The influence of theory on research and survey methodology

Theoretical preconceptions about the nature of IPV affect how researchers define the problem and design research to investigate it (Dixon & Graham-Kevan, 2011). If research methodology is not based on sound conceptual principles, resultant findings will only serve to cloud understanding of the problem.

To date, a gendered conceptualisation of IPV has dominated professional and public understanding of IPV (Dutton, 2006). This perspective views IPV as a problem of male violence toward women, directly caused by societal rules and patriarchal beliefs which support male dominance and female subordination (Dobash & Dobash, 1979). An alternative and wider understanding has developed from a number of empirical studies that demonstrate men's and women's violence occur at approximately equal rates, are multifactorial and can be explained in similar ways in heterosexual (e.g., Moffit, Caspi, Rutter, & Silva, 2001; O'Leary et al., 2007) and same sex IPV (Burke & Follingstad, 1999; Stanley, Bartholomew, Taylor, Oram, & Landolt, 2006). Importantly, the definitions and methodology that guide this research are gender-inclusive, which allows hypotheses to be derived and tested concerning the possibility that both sexes can perpetrate this type of aggression. Resultant evidence has led researchers in various disciplines (e.g., family sociology, social work, criminology and clinical and forensic psychology) to view IPV as part
of wider patterns in crime, human relations, aggression and personality (Dixon, Archer, & Graham-Kevan, 2011).

1.1.2. Methodology of surveys

It is important to determine the prevalence of IPV so that professionals can understand the magnitude of the problem over time, judge an appropriate level of response, and monitor the effectiveness of strategies aimed at reducing the social problem. Theoretical discrepancies have resulted in different survey designs (e.g., Straus & Gelles, 1990; Tjaden & Thoennes, 2000). Earlier writings on domestic violence drew upon samples of women in shelters or accident and emergency departments to describe the nature of IPV and detail rates of female victimisation (Dobash & Dobash, 1979; Serran & Firestone, 2004; Walker, 1989). Research with such selected populations unsurprisingly estimates high rates of male to female violence (Dobash, Dobash, Cavanagh, & Lewis, 1998; Gayford, 1975; Kurz, 1996). Straus (1990a) refers to this as the “clinical fallacy”, stating that findings taken from research with clinical samples cannot be assumed to reflect the nature of the problem as experienced by the general population at large.

Accurate prevalence rates of IPV can only be determined by surveying nationally representative community samples (Gelles, 1990). Several surveys to date have accessed representative samples (e.g., Instituto Nacional de Estadística, Geografía e Informática, 2007; Moracco, Runyan, Bowling, & Earp, 2007; Olaiz et al., 2006; Tjaden & Thoennes, 2000; World Health Organization, 2005). However, few are gender-inclusive, that is, most do not ask both men and women about their victimisation and perpetration toward intimate partners. This one-sided approach not only limits knowledge to female victimisation, but also prevents researchers
learning about reciprocal aggression, which has been linked to high rates of injury (Whitaker, Haileyesus, Swahn, & Saltzman, 2007).

Even when surveys do access nationally representative samples and are gender-inclusive in their approach, there are often other methodological problems that compromise the validity of data gathered (Dutton & Nicholls, 2005). For example, the context in which survey questions are posed to participants is very important (Straus, 1999b). Crime surveys are often used to support the view that IPV is a gender issue. However asking respondents about their experiences of IPV in the context of understanding this aggression as a criminal act is not conducive to accurate reporting (Mihalic & Elliot, 1997). Nor are surveys that set the context as personal safety, violence in general, or men's violence against women (Archer, 2000a; Straus, 1999a). People, particularly men, do not typically interpret relationship aggression as a criminal behaviour, violence, or a threat to personal safety (Hoare & Jansson, 2008; Straus, 1999b).

Furthermore, surveys that are explicitly introduced as, or described by a title that implicitly implies they are interested in exploring women's victimisation only, are not conducive to men reporting victimisation from a female partner (e.g., Tjaden & Thoennes, 2000). As with selected samples, surveys incorporating the aforementioned limitations typically report higher levels of female victimisation. In contrast, gender-inclusive and nationally representative surveys (e.g., Straus & Gelles, 1990) do not incorporate any of the above demand characteristics and have found approximately equal rates of physical aggression between the sexes. Such surveys typically normalize aggressive acts as conflict that can commonly arise in response to an argument or disagreement with a partner, and do not assume women's violence is born out of self-defence, which much empirical
research finds to be incorrect (Capaldi, Kim, & Shortt, 2004; Fergusson, Horwood, & Ridder, 2005; LeJeune & Follette, 1994; Milardo, 1998; O'Leary & Slep, 2006).

Some surveys aggregate information on sexual, physical and psychological IPV to provide an overall rate (e.g., Coker, Flerx, Smith, Whitaker, Fadden, & Williams, 2007; Romito & Gerin, 2002). This makes it difficult to identify rates of different forms of aggression experienced by both sexes. A common assertion is that “women make up the majority of victims of sexual violence” (Respect, 2008, p.1). If correct, including this information into an overall category of IPV may skew results for men and women differently. It is important to understand all types of aggression experienced by both sexes so that appropriate responses can be produced to address the spectrum of IPV. This review intends to begin this tall order with an investigation of physical violence, as the majority of surveys to date have included a measure of this.

1.1.3. International differences

Research has also highlighted that prevalence rates of IPV may differ by country. Archer's (2006) cross-national comparison compared studies that included a measure of the rates of IPV by both sexes in western and non-western countries. Men's perpetration of physical aggression was inversely correlated to women's societal power, and positively correlated with attitudes and approval of wife beating. Archer concluded that in countries with high gender empowerment (GEM: an indicator of women's societal power in a nation), men and women aggress against each other at approximately equal rates. Countries with low GEM for women displayed higher rates of male-to-female unidirectional abuse. These findings suggest that patriarchal norms encourage and promote acts of physical aggression by men toward female intimate partners, especially in countries where it is seen as appropriate for men to punish women with physical violence if they violate societal norms. Therefore,
it is important to consider the country and corresponding societal norms from which prevalence rates are gathered.

1.1.4. Objectives of the review

It is clear that theoretical controversies and methodological discrepancies make it difficult to identify accurate rates of IPV. This review aims to investigate the true extent of physical IPV in international samples by systematically identifying surveys of high methodological quality that have produced rates for both sexes. First, surveys that have used nationally representative samples, gender inclusive methodology and neutral contexts are reviewed to determine 12-month and lifetime victimisation and perpetration rates. Research suggests lifetime rates are less accurate than past-year reports, particularly when reporting male victimisation, and therefore it is good practice to collate both (Moffit et al., 2001). Second, the impact that levels of gender equality may have upon discrepancies in rates between countries is investigated. The methodological quality of surveys is considered throughout.

Method

1.2.1 Search criteria

Electronic databases were systematically searched to identify relevant surveys conducted from 1970 to 2009. Searches were performed on the following databases: Science Direct, PsychInfo, MEDline, EMBASE, ASSIA (CSA), Web of Science, PsycArticles, Zetoc, Swetswise, ERIC (CSA), the Home Office Website; and REDALyC (Network of Scientific Magazines from Latin America, the Caribbean, Spain and Portugal). The search process was carried out from March 3rd to 30th, 2009.
To identify relevant surveys, keywords (Intimate Partner Violence, Spouse Abuse, Domestic Violence, Intimate Partner Abuse, Mutual Violence, Reciprocal Violence and Symmetrical Violence) were coupled with specific terms (survey, national studies, rate, severity survey, prevalence survey and incidence survey). This produced a total combination of 42 keywords. Boolean markers were used in the search to screen as many studies as possible using the aforementioned keywords.

The central criterions for inclusion in the review were:

• manuscripts were written in English or Spanish;
• surveys utilised a nationally representative sample, defined as a sample that represents the general population of an entire nation and not one region;
• both men and women were surveyed about their victimisation and/or perpetration of physical IPV at some point in their lives;
• surveys questioned participants within a neutral context (that is they were not framed in the context of gender, crime, general violence or personal safety);
• surveys that spanned a large proportion of an adult population (up to at least age 49) were examined—surveys which sample younger people only (e.g., 18–28 as in Whitaker et al., 2007) may inflate rates, making it difficult to generalise findings to the wider population; and
• A measure of physical violence in isolation was provided.

1.2.2. Search findings

The search produced a total of 3083 hits. Of these, 20 were repeatedly identified in more than one database. Abstracts of the remaining 3063 manuscripts were manually searched to ensure they
met inclusion criteria. Where it was not obvious from the abstract that the manuscript was or was not appropriate, the content of the article was also manually searched. Correspondence with authors did not identify any additional surveys.

Of the 3063 manuscripts, four were not written in English or Spanish; 2974 did not utilise a nationally representative sample; 62 did not survey both men and women about their victimisation and/or perpetration (they most commonly only asked women about their victimisation); 12 did not set the survey in the neutral context described. This left a total of eleven surveys for review (shown in Tables 1 and 2) that assessed IPV rates in six nations.

1.2.3. Gender empowerment measure

In order to compare the effects of gender empowerment on international rates, a gender empowerment measure (GEM) was produced for each country reviewed. GEM scores vary between 0 and 1. Higher scores reflect higher levels of gender equality; lower scores indicate greater inequality for women.

The GEM score is produced from a combination of three indicators of gender equality in the country of interest: the proportion of women in managerial, administrative, professional, and technical posts; women's share or earned income; and women's parliamentary representation. For the purpose of this review, as with Archer's (2006) cross-national comparison, the 1997 GEM's were used for all countries for consistency. Such figures were not available for the Ukraine, or Uganda. The figures for the Ukraine were taken from 2000 United Nations Human Development Reports (United Nations Development Programme, 1997; 2000). Uganda's GEM was approximated
from Sudan's 1997 figure, which was the only neighbouring nation with reported GEM from 1997 to 2004.

1.2.4. Quality assessment

Although all 11 surveys meet the methodological standards outlined by the inclusion criteria, differences between surveys still exist. Table 1 provides a summary of the methodology and its quality in each survey, which are presented under categories of Demographic and/or Health surveys; Family Violence surveys; and Psychiatric and/or Epidemiological surveys. They are listed in ascending chronological order within each category and numbered 1 to 11. Two and three point scales, ranging in values from 0 to 1 or 0 to 2 respectively, are used to quantify the quality of studies according to six methodological factors. An overall quality score ranging from 0 to 9 can therefore be achieved for each survey. A higher score indicates stronger methodology, likely to aid the production of findings that are more robust and generalisable.

Sample age

Research has shown variations in rates of IPV by age group, with higher rates of perpetration found in student, dating or younger populations, especially by women (Stets & Straus, 1990). Studies that use a wide age range will be more representative of the general population than those with a capped age. Surveys that do not limit upper age range are awarded a score of 1; surveys that limit age to a specific age because of the particular aims of the survey (i.e. reproductive age ranges of a majority of women, age cut-off point for active comorbidity for psychiatric disorders, etc.) are awarded a score of 0.

Measures
The Conflict Tactics Scales (Straus, 1990a; d; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) are the most widely used assessment tools for identifying aggression in intimate relationships (Straus, 2008). They assess specific acts of physical aggression used to solve conflict in relationships and as such assess a range of acts that vary in severity, providing a more detailed, less biased, snapshot of IPV than measures assessing a single act and/or one dimension of severity. Therefore, more detailed assessments of acts of physical IPV are considered to be of higher quality and are thus awarded a higher rating. Surveys that used the CTS or a modified version of it and included acts of minor and severe violence gained a score of 2; surveys that used the CTS assessing only one dimension of severity or an alternative less detailed assessment tool, assessing minor and severe IPV together, were assigned a score of 1. Studies that did not use the CTS and only assessed one dimension of severity were assigned a score of 0.

Survey context

Surveys that are presented to participants in a context of assessing matters of mental disorders, alcohol use, sexual behaviour, or reproduction and health matters are less conducive to accurate reporting, as the context does not prime them to think specifically about their relationship. In addition, surveys that prime participants to think about aggression in relationships as violence are not conducive to accurate reporting as many people do not consider aggressive acts in this context as “violence” or even “wrong”, but rather “just something that happens in relationships” (Hoare & Jansson, 2008). Surveys that are introduced in the context of examining relationships in the family are assigned a score of 2 (no surveys met this criteria); surveys that are presented as assessing family violence or family life in very general terms (not relationship specific) are assigned a score of 1; surveys introduced in a context of examining alcohol patterns, sexual behavior, DSM mental disorders, or reproduction and health matters are assigned a score of 0.
These criteria deem that surveys presented in a context of family life and relationships are more conducive to accurate reporting of partner violence than surveys set in a health context (i.e. fertility, psychiatric disorders, etc.) and thus are awarded a higher ranking.

**Framing of family violence questions**

Most surveys assess a range of variables, with IPV being one of many. Therefore, in addition to understanding the general context in which the overall survey is placed, it is important to consider the context in which questions about IPV are introduce within each survey. Providing a context that normalizes relationship aggression (e.g., “No matter how well a couple gets along, there are times when they disagree”; Straus et al., 1996, p. 310) allows participants to legitimize their behaviour and therefore facilitates reporting it (Straus, 1999a). Furthermore, research shows the majority of participants are unlikely to think of relationship aggression as “violence”, particularly male victims (Hoare & Jansson, 2008). Therefore, questions introduced as asking about “violence” or “stressful events” may produce less accurate responses than questions simply framed as asking about how people solve problems in relationships, or which from a list of events do they experience with no connotations attached about how dangerous, stressful or frightening they may perceive these acts. Surveys that normalize violence in relationships, and introduce it as something that they may or may not experience without any connotations about how stressful they may perceive the acts are assigned a score of 2; surveys that do one of the aforementioned are awarded a score of 1; surveys that do neither, or do not provide an introduction to the questions, are scored 0.

**Sex matching**

31
Research investigating the effects of the sex of interviewer and interviewee on participant reports shows that matching sex facilitates communication, which leads to more open responding (Durrant, Groves, Staetsky, & Steele, 2010; Holbrook, Green, & Krosnick, 2003). Therefore, surveys that matched interviewer and interviewee sex score 1, surveys that do not, or have not recorded this methodological point, score 0.

Couples interviewed
Asking couples to report on their own and their partner's perpetration captures self-reports of both members of the couple, allowing cross validation of data. Research (Szinovacz & Egley, 1995) has shown that data of socially undesirable behaviour such as IPV coming from couples is more accurate than data coming from studies that obtained such data only from one partner. Surveys that used couples are given a score of 1; surveys that did not use couples are assigned a score of 0.

Results
1.3. Quality assessment findings
It is clear from Table 1 that methodological differences prevailed between the 11 surveys. The survey ranked as having the lowest methodological quality, as assessed by the six factors detailed in Section 1.2.4, was México's Survey of Psychiatric Epidemiology (Medina-Mora et al., 2005), which achieved the minimum total score of 0. Surveys with the highest quality score were the 1975 and 1985 National Family Violence Survey (NFVS; Straus, 1990a), the 1987–88 National Survey of Families and Households (NFSH; Anderson, 2002; Sweet, Bumpass, & Call, 1988), and the 1995 National Alcohol Survey (NAS; Caetano, Field, Ramisetti-Mikler, & McGrath, 2005; Schafer, Caetano, & Clark, 1998), all three of which scored 6. These surveys were in the Family Violence category: all surveys in this class scored much higher on
methodological quality (5–6) than Demographic and/or Health surveys (2–3) or Psychiatric and/or Epidemiological surveys (0–3).

1.3.1. Demographic and/or Health surveys

These surveys sampled men and women in households to provide nationally representative data on a wide range of monitoring and impact evaluation indicators related to the population in general, their health and nutrition (e.g., child health, education, fertility, domestic violence, HIV/AIDS, maternal health, wealth/socioeconomics, women's empowerment). Two surveys could be grouped into this class.

China's Health and Family Life survey (CHFLS; reported in Parish, Wang, Laumann, Pan, & Luo, 2004; Wang, Parish, Laumann, & Luo, 2009) aimed to study antecedents and outcomes of sexual behaviour in a large nationally representative sample in China, which could serve as baseline data for future longitudinal research. Experiences of physical IPV were investigated as part of a wider survey, alongside risk factors for physical IPV, such as sexual jealousy, patriarchal values, and dependency. Participants were recruited using official community registers of households and temporary migrants via a stratified sampling procedure. Participants responded to an hour-long computer-based, face-to-face interview in a private neighbourhood hotel room, or in a meeting facility with an interviewer entering the responses in the computer.
Table 1

Quality ratings of survey methodology

<table>
<thead>
<tr>
<th>Country and date of survey</th>
<th>Author</th>
<th>Sample age</th>
<th>Measures</th>
<th>Survey context</th>
<th>Framing of questions</th>
<th>Couples interviewed</th>
<th>Sex matching</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic/Health Surveys</td>
<td></td>
<td></td>
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<td></td>
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</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2. Uganda 2006</td>
<td>USAID/UNICEF 2007</td>
<td>w15-40</td>
<td>Modified CTS-2</td>
<td>Reproduction and health</td>
<td>normalised aggression but not specific to relationships, asked to list acts experienced in relationships</td>
<td>No</td>
<td>_</td>
<td></td>
</tr>
<tr>
<td>Quality Assessment</td>
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<td>0</td>
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<tr>
<td>Psychiatric/Epidemiological Surveys</td>
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<td></td>
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<tr>
<td>3. USA 1990-92</td>
<td>Kessler et al 2001; Williams &amp; Hanson-Frieze 2005</td>
<td>15-54</td>
<td>CTS-1</td>
<td>Mental health</td>
<td>asked to list acts done by participants and their spouses relationships</td>
<td>No</td>
<td>_</td>
<td></td>
</tr>
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<td>5. Ukraine 2002</td>
<td>O'Leary et al. 2008</td>
<td>18-over</td>
<td>3 behavioural questions</td>
<td>Epidemiologic and health study</td>
<td>asked to list acts experienced in relationship disagreements</td>
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<td>No</td>
<td></td>
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<tr>
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<td>0</td>
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<td>7. USA 1975</td>
<td>Straus 1990a</td>
<td>18-70</td>
<td>CTS-1</td>
<td>Family violence in American families</td>
<td>normalized relationship conflict, asked to list acts experienced in relationship conflict</td>
<td>No</td>
<td>_</td>
<td></td>
</tr>
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<td>0</td>
<td>0</td>
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<tr>
<td>8. USA 1985</td>
<td>Straus 1990a</td>
<td>18-over</td>
<td>CTS-1</td>
<td>Family violence in American families</td>
<td>As ?</td>
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<td>No</td>
<td></td>
</tr>
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<td>0</td>
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<td></td>
</tr>
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<td>9. USA 187-88</td>
<td>Anderson 2002</td>
<td>19-over</td>
<td>3 CTS items</td>
<td>General family life</td>
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</tr>
<tr>
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<td>1</td>
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<td>2</td>
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<td>0</td>
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<td></td>
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<tr>
<td>10. USA 2000</td>
<td>Kaufman-Kantor et al. 1992</td>
<td>18-over</td>
<td>CTS-1</td>
<td>Alcohol and family violence</td>
<td>As ?</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Quality Assessment</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11. USA 1995</td>
<td>Schaefer et al. 1998</td>
<td>18-over</td>
<td>Modified CTS-1</td>
<td>Alcohol patterns, associated problems and health</td>
<td>As ?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Quality Assessment</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Note. WMH-CIDI = World Mental Health Composite International Diagnostic Interview. WMH-CIDI 15 = World Mental Health Composite International Diagnostic Interview 15th version. CTS1 = Conflict Tactics Scales versions N or R. CTS2 = Revised Conflict Tactics Scales, _ = not recorded
Only one participant per household was interviewed. Questions about sexual behaviour were entered directly by the respondent in the computer. Interviewers were the same sex as interviewees. On introduction to the general questionnaire, participants were told it was a national study about sexual behaviour and health. On introduction to the section that asked about experience of partner violence, no extra or alternate instructions were given: hence it was filled out in the context of sexual behaviour. Respondents were asked to report their own and their partner's perpetration in the previous 12 months and prior to the last 12 months by means of one item “For whatever reason has your partner ever hit you and when did that happen? (Not including in a joking or playful way)” and “For whatever reason have you hit your partner, and when did that happen” (not including in a joking or playful way)?” (University of Chicago Population Research Center, 2003, p.15). Severe IPV was assessed by asking “Has your partner ever hit you hard? (bruised, swelling, bleeding, pain)” (University of Chicago Population Research Center, 2003, p. 15). The survey concluded that a greater proportion of women experienced physical IPV and incurred greater injury than men. On inspection of Table 2, it is apparent that victimisation was the same for men and women for overall IPV. Injuries were inferred from severe physical IPV. However, the survey mixed severe acts of physical violence with injury, making it impossible to distinguish between the two.

Despite the absence of an exculpatory preamble to normalise conflict in relationships prior to questions about partner violence (Straus, 1990a), items were presented to respondents in a context that was gender-neutral and free from connotations of crime, violence and personal safety. However, contextualising questions about partner violence in the context of sexual behaviour and health may encourage people to report incidents of violence with all people with whom they have had sexual encounters, including one-off ones with strangers or acquaintances, rather than those
deemed to be partners, where an intimacy has ensued over at least a short period of time.

Table 2

Rates of intimate partner violence victimisation and/or perpetration reported in each of the eleven surveys

<table>
<thead>
<tr>
<th>Country and date of survey</th>
<th>GEM</th>
<th>Overall victimisation (v) / perpetration (p) rate (%)</th>
<th>Minor victimisation (v) / perpetration (p) rate (%)</th>
<th>Severe victimisation (v) / perpetration (p) rate (%)</th>
<th>Physical injury rate%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12 mth Lifetime</td>
<td>12 mth Lifetime</td>
<td>12 mth Lifetime</td>
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<td></td>
<td>M</td>
<td>W</td>
<td>M</td>
<td>W</td>
<td>M</td>
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<tr>
<td>Demographic health surveys</td>
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<td></td>
</tr>
<tr>
<td>2. Uganda 2006</td>
<td>.22</td>
<td></td>
<td>13.7p</td>
<td>3.5p</td>
<td>40.1p</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.5v</td>
<td>34.9v</td>
<td>19.5v</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Psychiatric/ epidemiological surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. USA 1990-92</td>
<td>.67</td>
<td></td>
<td>9.6p</td>
<td>16.9p</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.33v</td>
<td>15.5v</td>
<td></td>
</tr>
<tr>
<td>4. México 2002</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ukraine 2002</td>
<td>.42</td>
<td></td>
<td>11.4p</td>
<td>11.3p</td>
<td>18.7p</td>
</tr>
<tr>
<td>6. South Africa 2002</td>
<td>.53</td>
<td></td>
<td>5.8v</td>
<td>12.7v</td>
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<td>Family violence surveys</td>
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<tr>
<td>7. USA 1975</td>
<td>.67</td>
<td></td>
<td>12.1p</td>
<td>11.6p</td>
<td></td>
</tr>
<tr>
<td>8. USA 1985</td>
<td>.67</td>
<td></td>
<td>11.3p</td>
<td>12.1p</td>
<td></td>
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<tr>
<td>9. USA 1987-88</td>
<td>.67</td>
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<td>8.0p</td>
<td>8.0p</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>9.1v</td>
<td>11.5v</td>
<td></td>
</tr>
<tr>
<td>11. USA 1995</td>
<td>.67</td>
<td></td>
<td>9.2p</td>
<td>14.6p</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10.6v</td>
<td>9.8v</td>
<td></td>
</tr>
</tbody>
</table>

Note. GEM = Gender Empowerment Measure. p= perpetration, v= victimisation. - = data not recorded or published

*a*Scores determined by Archer (2006). *b*GEM was not available so it was assigned Sudan’s score, the only neighbouring country with an available GEM, determined by United Nations Development Programme Human Development Report (1997). *c*Self-report of violence initiated by respondent my means of one item: “have you ever hit, slapped kicked, or done anything else to physically hurt your... partner at times when he (she) was not beating or physically hurting you?” (Uganda Bureau of Statistics, 2007: 303). *d*Rates were obtained giving no time frame although the authors consider it to be ‘current’ violence this is why it is here displayed as a 12-month prevalence rate. *e*excluded forced sex.
Questions probing physical intimate partner violence were crude, allowing for subjective interpretation of the word “hit” rather than listing a variety of specific acts that may have occurred. In addition, categorisation of severe violence confuses acts of aggression with injury. A severe act may not necessarily result in a severe injury, and as such the two concepts should be separated. This is especially true for male victims of female violence. Men are less likely to experience severe injury from severe acts than women are, due to sex differences in physical strength and size (Stets & Straus, 1990; Straus, 1990a, b). However, this does not mean to say they are not the victims of severe violence. In addition, injuries categorized as minor by other common research tools (i.e. bruising) have been listed as associated with severe injury in this survey. These methodological issues question the accuracy of measurement of IPV, particularly severe IPV in this survey.

Uganda's Demographic Health survey (Uganda Bureau of Statistics & Macro International Inc, 2007) aimed to provide information on demographic, health and family planning in a nationally representative sample in Uganda. Experiences of physical, psychological and sexual IPV were investigated in the survey. Participants were recruited from the 2002 Ugandan national Census using multi-cluster sampling. Face-to-face interviews were conducted in respondent households by trained interviewers. Only one participant per household was interviewed. The length of interviews is unknown, as well as the sex of interviewer and interviewee. However, all fieldwork teams included three female and one male interviewer. On introduction to the general questionnaire, participants were told that it was a reproductive and health survey. On introduction to the section that asked about experience of partner violence, participants received the following as part of the preamble:
“….. I am going to ask you about some situations which happen to some women (men). Please tell me if these apply to your relationship with your (last) husband… wife/partner?” (Uganda Bureau of Statistics & Macro International Inc, 2007, p. 429, 462).

Respondents were asked to report any victimisation experienced from their partner within the 12 months preceding the survey. They were not asked about their own perpetration. Only one participant per household was interviewed. Physical IPV was assessed via seven items: slap; twist an arm or pull the hair; push, shake, throw something at; punch with the fist or something that could hurt; kick, drag, or beat up; try to choke or burn (the person); and threaten or attack with a knife, gun, or any other weapon. The survey concluded that women were approximately three times more likely to experience physical IPV from a partner in the previous 12-months, and two and half times more likely to have experienced it ever (11.5% vs. 34.9% and 19.5% vs. 48% respectively). The survey additionally asked women and men about violence they had initiated against their spouse or intimate partner, via the following item: “Have you ever hit, slapped, kicked, or done something else to physically hurt your last husband/partner (for women) or wife/partner (for men) at time when he/she was not already beating or physically hurting you” (Uganda Bureau of Statistics & Macro International Inc, 2007, p. 303). Women and men reported having ever initiated physical violence against their current spouse at rates of 7.2% and 40.9% respectively, while their 12-month perpetration was 3.5% and 14.4%.

Although this study set out to investigate partner violence victimisation in a gender-inclusive manner, it contains flaws. It is clear from the Uganda Bureau of Statistics and Macro International Inc. (2007) report that the theory underlying this survey is gender biased, understanding IPV as a health issue predominantly affecting women in a patriarchal society. Such a priori adherence to a
gendered perspective may serve to bias interviewers in the way they frame questions, affecting reporting rates from both sexes (Straus, 1999a). Furthermore, only victimisation rates were studied, making it difficult to understand their true meaning, as high victimisation rates may be happening in the context of high rates of victim perpetration, or not. Only when we understand both figures can the true nature of partner violence be understood. The focus on victimisation may encourage women to report higher rates of this experience and underreport their perpetration. Finally, while the IPV-specific questions were introduced with a preamble to norm their experiences, it only achieved this to a certain extent, saying that “some men and women” may experience victimisation, rather than norm conflict as something that happens to all couples at some point (Straus, 1999a).

1.3.2. Psychiatric and/or Epidemiological surveys

Psychiatric and/or Epidemiological surveys describe nationally representative surveys that focus on investigating the prevalence of psychiatric disorders (via DSM-III and/or DSM-IV criteria) and their common correlates (e.g., IPV) in the population of interest. Four surveys could be classed into this category.

The 1992 National Co-morbidity Survey (described in Keesler, Molnar, Feurer, & Appelbaum, 2001; Williams & Hanson-Frieze, 2005) aimed to research the prevalence, predictors, and social consequences of psychiatric disorders in a nationally representative sample of men and women in the US. Experiences of physical IPV were investigated in the survey as part of the assessment of potential social consequences of mental health disorders alongside other issues such as marital distress and satisfaction, predictors and consequences of DSM-III-R mental disorders. Participants were recruited using US census data via stratified probability sampling. Participants responded to a two-part, face-to-face interview in their homes. Only one participant per household
was interviewed. Each part of the interview lasted approximately 1 hour. Part 1 included a detailed assessment of mental disorders. Part 2 selected a subsample of participants used in part 1 who screened positive for any mental disorder, and a subsample of respondents who had not screened positive for any mental disorder (n = 3537, 1738 men and 1799 women) and asked participants to provide information on risk factors (among them IPV) and social consequences of mental disorders. On introduction to the general questionnaire (Part 1), participants were told it was a national household study about mental health. Sex of the interviewer and interviewee were not matched. On introduction to the section about partner violence (Part 2) participants were simply asked to report on their partner's and their own perpetration from a list of minor (throwing objects, shoving, pushing, grabbing, slapping, and spanking) and severe (kicking, biting, hitting with a fist, hitting or trying to hit with an object, beating up, choking, and burning or scalding) aggressive acts, respondents were asked “how often their spouse (or partner) does any of these things to them and how often they do any of these things to their spouse (or partner)” (Keesler et al., 2001; 489): Hence, victimisation is inferred from the partner's perpetration. IPV-related injuries were not reported. This survey found that women were more likely to perpetrate both minor and severe forms of physical IPV, men to experience slightly greater victimisation of minor acts and women severe acts. Overall, the survey showed that women experienced greater victimisation.

Whilst this study is framed in a different context from other Family Violence surveys (see Section 3.2.3), it has similar methodology and tests a US sample. Therefore, it is perhaps no surprise that rates are depicted in a similar direction across the different types of surveys. One limitation is the lack of assigned time frame, making it impossible to assert whether respondents are reporting IPV within a 12-month or lifetime period, as surveys simply considered “current” IPV.
Therefore, this makes comparison with other studies using specific timeframes difficult. Additionally, reports of IPV were generated from a subsample overrepresented by mental disorder and thus cannot be generalised to the wider US population.

The 2002 National Survey of Psychiatric Epidemiology (Medina-Mora et al., 2005) aimed to investigate several psychiatric disorders in a nationally representative population in urban México. Experiences of physical IPV were investigated in the survey, alongside other types of violence as correlates of Posttraumatic Stress Disorder (PTSD) and other psychiatric disorders. Participants were recruited using 1995 geographical census data of households via stratified probability sampling, and responded to a face-to-face computer-based interview in the respondent's house: the interviewer controlled the computer throughout the interview. Only one person per household was interviewed. Sex of the interviewer and interviewee were not matched. On introduction to the general survey, participants were told it was a national study about health and development. The introduction to the section (PTSD module) that contained questions about experiences of IPV stated: “In the next part of the interview, we ask about very stressful events that might have happened in your life (some of these events are listed on the card)” … “Were you ever badly beaten up by a spouse or romantic partner?” (World Health Organization, 2004a, p. 222–223). Respondents were asked to report their partner's lifetime perpetration of severe physical IPV towards them only, which was used to infer their victimisation. They were not asked about their perpetration. Injuries were not reported for partner violence in isolation. It was concluded that women's victimisation was tenfold that of men's. This finding supports the view that IPV is more frequently characterised by female victimisation.
This survey found the greatest sex disparity in victimisation of those reviewed here. However, despite it fitting the methodological criteria needed to be included, a number of flaws are evident. The focus of the survey was psychiatric disorders and the relationship of all types of violence with posttraumatic stress disorder (PTSD). Therefore, only one crude question was asked to determine rates of severe IPV victimisation. Whilst both sexes answered this question, it was framed as being a “very stressful event”. This assumes that both men and women will interpret these acts as stressful. The literature shows that women are more likely to be psychologically distressed by IPV (Afifi et al., 2009; Anderson, 2002; Golding, 1999; Próspero, 2008; Ruíz-Pérez & Plazaola-Castaño, 2005) and hence may be more likely than men to respond to this question positively. Instead questions to both sexes about IPV events should be posed in a neutral way that does not infer what emotions were experienced by the respondents. In addition, it fails to enquire about a whole range of acts that can be classed as physical violence (e.g., slap, push, grab) and severe physical violence (e.g., kick, choke, use knife or a gun). Indeed, research has demonstrated that whilst both men and women use some severe acts at equal frequency, they are qualitatively different in nature (Archer, 2002). Therefore, the rates depicted by this survey are not unexpected, but should not be used to describe the rate of IPV experienced generally by men and women in the population studied.

The 2002 South African Stress and Health survey (reported in Kaminer, Grimsrud, Myer, Stein, & Williams, 2008) aimed to research the prevalence and severity of specific psychiatric disorders and their demographic and psychosocial correlates. Experiences of physical IPV were investigated in the survey alongside other issues such as PTSD, physical abuse during childhood, criminal assault and rape (perpetrator not specified). Participants were recruited using the 2001 geographical census data of households and hostel quarters via stratified sampling.
Participants responded to three and a half-hour long face-to-face interviews in the respondent's dwelling. Only one participant per household was interviewed, some of them split in more than one session. Sex of the interviewer and interviewee is not reported. On introduction to the general survey, participants were told it was a national study about stress and health. Introduction to the section (PTSD module) about experience of partner violence stated: “In the next part of the interview, we ask about very stressful events that might have happened in your life (some of these events are listed on the card)” (World Health Organization, 2004b, p. 1–2). Respondents were asked to report their partner's lifetime perpetration of severe physical IPV toward them (victimisation) by means of one item: “Were you ever badly beaten up by a spouse or romantic partner?” Injuries as a result of IPV were not assessed. As with the 2002 National Survey of Psychiatric Epidemiology in urban México (Medina-Mora et al., 2005), female rates of victimisation (in this case lifetime prevalence) were ten times higher than male reported rates. Further, the same methodological flaws described in the Mexican study are evident in this survey.

The 2002 Ukraine World Mental Health survey (reported in O'Leary, Tintle, Bromet, & Gluzman, 2008) aimed to investigate psychiatric disorders and their sociodemographic and geographic correlates in a nationally representative sample in Ukraine. Experiences of physical IPV were investigated in the survey, alongside other issues such as witnessing parental aggression, early onset and adult episodes of DSM-IV psychiatric and alcohol disorders. Participants were recruited using geographical census data via multi-cluster sampling, and at a later stage involved randomised addresses. Only one person per household was interviewed. Participants responded to a two-part face-to-face interview. Part 1 assessed several DSM-IV disorders and was given to the entire sample. Part 2 contained a module on marital relationship and was administered to Part 1
respondents who met DSM-IV criteria for mood or anxiety disorder, or alcohol dependence, and a random sample (16%) of the remaining respondents. Participants answering the IPV section received a booklet in which they were able to read the IPV part avoiding potentially embarrassing and personal questions. Sex of the interviewer and interviewee was not matched. On introduction to the general survey, participants were told that it was a national epidemiologic and health study. On introduction to the section asking about IPV, respondents were asked to report whether they and their partners had had a disagreement and carried out any of the listed items (pushed, grabbed, or shoved; threw something; and slapped or hit), and if so their frequency in the previous 12 months or ever in their lifetime. Men and women reported approximately equal rates of perpetration for both 12 month and lifetime prevalence.

Although most of the acts fall into the category of minor violence according to CTS criteria, their last act “hitting” constitutes a severe violent act. Therefore, rates for minor and severe IPV could not be separated. Further, victimisation rates were thought to be underreported because of the difficulty in interviewing respondents in private in their homes. Some participants (particularly women) told interviewers that if their partners found out about their participation, they would be beaten (E. J. Bromet, personal communication, September 3, 2010). Further, methodological problems include 84% of the sample who reported on experiences of IPV met diagnostic criteria for mood or anxiety disorders or alcohol dependence: thus these disorders are overrepresented in this sample and cannot be generalised.

1.3.3. Family Violence surveys

Five could be classed as Family Violence surveys. These constituted surveys whose main focus was specifically to understand family violence matters within a nationally representative
sample of households. All surveys aimed to determine the prevalence and/or 12 month rates of IPV in US samples. Three also investigated the relationship between alcohol abuse and IPV in men and women.

The 1975 National Family Violence Survey (NFVS) had the main objective of collecting information to test causal theories (e.g., decision-making and power in the family). Both the 1975 and 1985 National Family Violence Surveys investigated the 12-month rates of child abuse and spousal violence (Straus, 1990c, d). Physical violence and verbal aggression were investigated. Participants were recruited using census data to identify representative groups of the US population (randomised addresses in the 1975 survey, and randomised telephone numbers in the 1985 study). In the 1975 study, participants took part in a face-to-face interview conducted in their households lasting approximately 1 hour. The 1985 survey interviewed participants over the phone via a random-digit dialing procedure lasting approximately 35 min. Both surveys were introduced as national family violence studies in American families. Sex of the interviewer and interviewee was not matched in either survey. On introduction to the questionnaire, participants were told:

“No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. I'm going to read some things you and your (spouse/partner) might do when you have an argument” (Straus, 1990d, p.33).

Only one person per household was surveyed. Respondents were asked to report their own and their partner's perpetration in the previous 12 months and prior to that time.
Victimisation was calculated on the basis of one partner's perpetration in both surveys. The 1975 and 1985 surveys used slightly different versions of the Conflict Tactics Scale (version N & R respectively - Straus, 1990e). Severe physical IPV was assessed by five CTS items in the 1975 survey (kicked/bit/hit with fist; hit/tryd to hit with something; beat up; threatened with gun or knife; and used gun or knife), and an additional sixth item (choke) was included in the 1985 survey. Physical injury was assessed in the 1985 survey via three separate questions which asked respondents who had been assaulted whether they: had been hurt badly enough as a result of violence that they needed to see a doctor; if they had taken time off from work because of violent incidents; and how many days they had spent in bed due to illness in the last month. From these studies, the authors conclude that during this 10 year period, US men and women's perpetration (and victimisation) of IPV remained relatively stable and symmetrical, with approximately 12% of both men and women engaging in physical violence and 4% severe violence. Although women reported slightly higher perpetration rates of severe IPV across time, injury rates were similar.

These studies are of high methodological rigor. They set out with the purpose of investigating rates of family violence and as such are designed to specifically elicit this information, unlike many other surveys. Despite both members of the couple not being interviewed, having to verbally report answers to interviewers and the sex of participant and interviewer not being matched, the design has few other flaws. Importantly, the context of the survey is presented as common conflict in relationships and the preamble presents a non-judgemental context implying that a certain level of conflict is normal in intimate relationships, encouraging open and accurate responding. Both surveys used the same methods to determine rates of IPV, allowing for comparison of rates across time, as well as a gender-inclusive approach.
The 1987–88 National Survey of Families and Households (NFSH; described in Sweet et al., 1988; Anderson, 2002) aimed to investigate a broad range of family issues in American couples. Experiences of physical IPV were investigated among many other aspects of family life. Participants were recruited using census data to calculate the national probability sample of the US, using additional samples (oversamples) of Hispanic and Black and Puerto Rican men and women to ensure an appropriate size of participants from those ethnic subgroups. Primary participants were surveyed face-to-face on a variety of family life-related topics. However, questions of a sensitive nature such as the three items assessing physical IPV were answered by the primary participants and their partners by filling out a printed questionnaire without the intervention of the interviewer. The spouse/partner of every primary participant was not interviewed but was given a self-report questionnaire to fill out and return to the interviewer. Complete interviews varied in duration, although a mean of 90 min (questionnaire included) was scheduled as standard. Printed questionnaires dealing with more sensitive information lasted an average of 30 min. Participants responded to English and Spanish questionnaires. Both members of the couple were interviewed.

On introduction to the survey, participants were told that it was a national study on family life, issues and processes such as family-living arrangements, histories of marriage, fertility, employment, departures and returns to the parental home, etc. The introduction to the three questions about IPV asked respondents and their partners to report whether any of their arguments had become physical in the past 12 months. If the participants answered positively they were queried on how many arguments during the past year had resulted in “you hitting, shoving or throwing things” at a partner (Anderson, 2002, p. 855). Conversely, respondents were asked how many arguments resulted with their partner hitting, shoving or throwing something at
the respondent. Respondents were asked on their perpetration and victimisation. Lifetime prevalence rates and injuries were not assessed. The introduction to the questions on partner violence was able to normalise partner violence as it was introduced as any argument which resulted in any of the physical acts presented to couples. The survey concluded that IPV physical perpetration is approximately symmetrical, although victimisation rates were slightly higher for men than women. Overall, rates were lower than in the NFVS.

The first NSFH presents the same methodological advantages of the NFVS in the way IPV was contextualised. Additionally it surveyed both members of the couple, asking them about their perpetration and victimisation; hence corroboration of underreporting bias is possible. Although this study was not presented to participants in the words of a family conflict survey, it was presented as a study of family life and family issues. Additionally, the introduction to the IPV questions helped to legitimise respondents’ reports within the context of every day family conflict incidents not associated with clinical conditions. Probably the most important drawback of this study is the low number of acts used to assess IPV. The three items assessing violence in couples refer to “milder” forms of IPV. Other more extreme forms (e.g., choke, beat up, used a knife or a gun) of violence were left out along with other forms of IPV (such as verbal abuse and sexual IPV) because of the already lengthy interview and questionnaires. It is likely then that if a wider array of mild and severe physical aggression acts had been used, victimisation and perpetration would have been higher. Sex of the interviewer and respondent was not matched, and physical injury as a result of IPV was not assessed. The theoretical framework underlying this study was gender-inclusive.

The 1992 National Alcohol and Family Violence Survey (NAFVS; reported in Jasinski & Kaufman-Kantor, 2001; Jasinski, Asdigan, & Kaufman-Kantor, 1997; Kaufman-Kantor, Jasinski,
& Aldarondo, 1994) aimed to investigate IPV and alcohol abuse as a correlate in men and women in different ethnic groups in the US. Experiences of physical IPV and verbal aggression were investigated, alongside other issues considered to be risk factors for IPV, such as work-related stress, alcohol abuse and poverty. Participants were recruited using census data to determine the national probability, with an additional sample (oversample) of Hispanic participants to ensure a sample of sufficient size of that ethnic group and subgroups (Kaufman-Kantor et al., 1994). Participants responded to a 67-minute (in Spanish) and a 56-minute (in English) face-to-face interview in their households. Only one member per household was surveyed. Interviewer and interviewee sex was not matched. On introduction to the survey, participants were told that it was a national study about alcohol and violent family relationships. The introduction to the section that asked about experience of partner violence was the same as the one used in the 1985 NFVS (using the CTS version R). Respondents were asked to report their own and their partner’s perpetration (their rate of victimisation) in the previous 12 months. Individuals indicating an absence of a particular violent act were then asked if it had ever occurred: however, no overall lifetime rates for men and women were published. Injuries from participants or their partners were not assessed. It was concluded that women perpetrated slightly higher rates of physical IPV and were also victimised at a higher rate than men in the prior 12 months. This pattern was also true of minor violence perpetration. For severe violence, women perpetrated higher rates than men and were also victimised at lower rates than men.

While similar to the National Family Violence Studies in its methodological approach, the survey was framed as a study of drinking patterns and family violence. This context may have cued participants to think about alcohol-related violent incidents. In addition, while the
survey was not framed as investigating general violence, it was contextualised as family violence, so that the same principle—that people (particularly men) do not interpret relationship aggression as violence—may apply here. As a result, this framework may have elicited under-reporting of minor forms of physical violence. Indeed overall rates are lower than those reported in both National Family Violence studies. This survey used a gender-inclusive theoretical approach.

The 1995 National Alcohol Survey (NAS; Caetano et al., 2005; Schafer et al., 1998) aimed to investigate alcohol abuse in a nationally representative sample of couples in the US, which allowed comparisons across a 5-year period. Alcohol-related issues were explored alongside experiences of physical (ten items) and sexual (one item) IPV, and other issues such as, approval of marital aggression and childhood violence victimisation in both surveys. The 2000 survey was the follow-up part of this longitudinal study but was not included in this review as only incidence and prevalence rates between ethnic groups (Caetano et al., 2005) were reported, but not by sex. Participants were recruited using census data of 48 contiguous states in the US using multi-cluster sampling. Couples responded to an hour-long face-to-face interview in their households separately (both members were interviewed). Sex of interviewer and interviewee were not matched. The introduction to the general survey was presented as a study on alcohol patterns, associated problems and health. In the 1995 survey, 1635 couples were interviewed. Questions about IPV formed a separate module of the survey. The preamble to this section was phrased in the same way as the 1985 NFVS (again, using the CTS, version R). Respondents were asked to report their own and their partner’s perpetration in the previous 12 months. Severe physical IPV was based on 6 items of the CTS version R: kicked, bit or hit with a fist; hit or tried to hit with something; beat up; choke; threatened to use a knife or gun; and use a knife or a gun (Schafer et al., 1998). Injuries were not reported. Findings showed that, overall, women were
more likely to perpetrate physical IPV and more men experienced victimisation in the 12 month period studied. More men than women were severely victimised (see Table 2). In both overall and severe violence rates men underreported their perpetration and victimisation more than women did. The theoretical approach used in this survey is gender-inclusive.

Again, while similar to the NFVSs in its methodological approach, the survey was framed as a study of drinking patterns and family violence, resulting in the same issues as in the previously discussed 1992 NAFVS (Jasinski & Kaufman-Kantor, 2001; Jasinski et al., 1997; Kaufman-Kantor et al., 1994). However, interviews were conducted with both members of the couple, which was accomplished in only one other study (NSFH; Anderson, 2002; Sweet et al., 1988), allowing comparison of victimisation and perpetration reports by both members of the couple.

1.4. Investigating the role of gender equality on differences on international rates

The GEM figures depicted in Table 2 clearly show that of those countries reviewed, the highest levels of gender equality are found in the US (0.67) followed by South Africa (0.53). Uganda displayed a GEM of 0.22, with women experiencing the highest levels of inequality in this country. China, Mexico and the Ukraine scored 0.48, 0.47 and 0.42 respectively.

Discussion

This review set out to explore the true prevalence rate of IPV, a question that has proved controversial throughout past decades, largely due to discrepancies in theoretical approaches used to understand the nature of the social problem and guide methodology of research surveys. This review aimed to sift through the controversy by systematically identifying surveys of a high methodological standard to answer two research questions.
1.5. Investigating the prevalence of IPV

It is clear that even though methodological standards have been set to screen survey findings in this review, differences in methodology still exist, which make it difficult to determine the true rate of IPV within a particular country. This highlights the need to understand the quality of research methods used before accepting the validity of survey results, and it warns against taking figures commonly reported in popular literature to emphasise the magnitude of men's violence to women, at face value unless it is clear that they have received methodological scrutiny.

Three types of surveys were identified. Family Violence surveys were rated as having the highest methodological standards and it is clear that multiple surveys using this methodology found approximately equal rates of perpetration and victimisation by men and women, and in some instances slightly higher female perpetration. This type of survey is unique to the US, and results across these surveys are consistent enough to conclude that on average the US is characterised by approximately equal rates of perpetration and victimisation of physical IPV by both sexes. For the most part, Demographic and/or Health surveys and Psychiatric/Epidemiological surveys found that women experienced greater IPV victimisation, and perpetrated less physical violence, than men. However, it is evident from this review that the methodology used in demographic and/or health surveys and psychiatric/epidemiological surveys is often not conducive to men and women reporting IPV from an intimate partner, particularly for men. This is largely due to methodological designs that do not manage to fully tap into partner violence in the everyday context it takes place. Therefore, emphasis should be placed on the methodology and resultant rates determined by the Family Violence surveys identified in this review. Family Violence surveys illustrate the importance of designing surveys specifically for the purpose of understanding family violence in its own right,
rather than as a correlate of other mental disorders or as part of a wider investigation of other social problems. However, as Archer (2006) has suggested, rates of IPV between the sexes may vary depending on the patriarchal social structure of the country studied. Therefore, gender equality in the country of interest should also be considered when interpreting rates of IPV and it may not be possible to generalise the rates identified in one nation to a global level.

1.5.1 Investigating the role of gender equality on differences in international rates

It is clear the US had the highest GEM of the six countries studied in this review, and, therefore, perhaps it is no surprise that surveys conducted in this country found rates of approximate symmetry. Indeed, even the Psychiatric/Epidemiological survey conducted in the US (Keesler et al., 2001) revealed higher rates of symmetry between the sexes than other surveys of this type. However, unlike other surveys of this type, it did mimic methodology of the NFVS (Straus, 1990c, d) closely; therefore, the context in which questions were posed was more conducive to reporting of IPV by both sexes. Consequently, while high levels of gender equality could explain why US surveys found symmetry, they were also of the highest methodological rigor that is conducive to identifying symmetry between the sexes if present.

Conversely, the survey conducted in Uganda with the estimated lowest GEM, found much higher rates of female victimisation. These results show that countries scoring at the extremes of the GEM in this review differed in their results, with gender equality in the US associated with symmetry, and gender inequality in Uganda associated with higher female victimisation. Countries with moderate GEM also found high rates of female victimisation (South Africa, China, Mexico, and the Ukraine). However, the methodological rigor of these studies (including Uganda) was of low–moderate quality at best. It is impossible to separate out
the effects of gender equality from methodological rigor. As different countries adopted
different methods to investigate the problem, it is not possible to compare surveys or the
effects of gender equality on differences in international rates of physical IPV.

1.6. Conclusion

This review has demonstrated that the majority of surveys of sound methodology have been
specifically designed to investigate family violence and have been conducted in the US. Further
research of this nature is warranted internationally to determine and compare rates of family violence in
different countries. Only when a consensus is reached about the best methods to adopt across the board,
caan consistency be reached in understanding the magnitude and nature of the social problem in
countries with varying levels of gender equality. Such findings have serious implications for policy
and practice in each nation.

Currently, IPV is commonly understood from a perspective which perceives the problem to
be predominantly one of men's violence to women, and the majority of resultant research, policy
and practice follows this framework (e.g., Respect, 2008). However, as this review highlights, it is
imperative that research surveys adopt a gender inclusive approach, and further methodology
conducive of both sexes reporting their experiences, if the true nature of the problem is to be
understood.
CHAPTER 2

INVESTIGATING THE COLLECTIVE BELIEFS OF PHYSICAL INTIMATE PARTNER VIOLENCE IN TWO COUNTRIES WITH VARYING LEVELS OF GENDER EMPOWERMENT

Chapter rationale

Research on partner violence has made efforts to assess the magnitude of the problem by conducting empirical studies that can be generalisable to the vast population in different countries. Evidence of this is the studies mentioned in Chapter 1, and elsewhere (e.g. Archer, 2000). Controversy with regard the magnitude, and associated risk factors of IPV has arisen from differing theoretical views on the nature of IPV. A gendered view has argued that IPV is explained by structural inequality in societies and patriarchal views that permeates all the way into the family and intimate relationships. Chapter 1 concluded from its review of the literature that it was not possible to compare gender effects on rates of IPV because survey methodology across national studies has been inconsistent. This Chapter intends to address this issue by investigating whether levels of structural inequality have an effect on perpetration and victimisation experiences of IPV. It further endeavours to investigate whether collective beliefs about, and motivations for male-to-female IPV reflect patriarchal views on the position of women and men in society, and to test the often stated assertion that female-to-male IPV is almost exclusively motivated by self-defence.

The following article has been submitted to the Journal of Family Violence for review and is authored by Esteban Eugenio Esquivel-Santoveña, Louise Dixon, Gloria Margarita Gurrola Peña, Patricia Balcázar Nava & Rogelio Díaz Salgado.
ABSTRACT

This study aims to explore the relationship between student collective beliefs about approval of physical intimate partner violence (IPV) in heterosexual relationships and their levels of perpetration in two countries that differ in their levels of gender empowerment. Five hundred seventeen English and Mexican University students self-reported their perpetration/victimisation of physical IPV, motivations and approval of male and female perpetrated physical IPV. Male and female participants in both countries reported higher levels of female perpetration. Mexican women significantly experienced minor physical IPV, and perpetrated minor and severe IPV, and inflicted injury at higher frequencies than English women and reported high levels of reciprocal IPV. A wide array of motivations accounted for male and female perpetration, although Mexican women were significantly more likely to offend for reasons of male threats or female anger levels, or a desire to control their male partner than English women. All men and women approved of female IPV perpetration more than male perpetration. However, English men significantly approved of female IPV more than Mexican men. English women in reciprocally violent relationships significantly approved of male and female IPV more readily than those in other types of violent and non-violent relationships. Considered together results do not support a relationship between the perpetration and beliefs of IPV and a country’s level of female gender empowerment. IPV is complex and perpetrated by both sexes regardless of country, in this sample. Prevention work should be aimed at promoting the message that IPV by both sexes is not acceptable.

Key words: physical intimate partner violence; collective beliefs about aggression; gender empowerment
Introduction

It is frequently proposed that intimate partner violence (IPV) is a common event, primarily enacted by men toward their female partners and is caused by societal norms that encourage male dominance and female subordination (Dobash & Dobash, 1992; Dobash & Dobash, 1998). From this gendered perspective, violence by men is believed to be enacted in order to enforce or maintain a position of authority with regard to women (Dobash & Dobash, 1992), whilst women’s violence is often assumed to be qualitatively different from men’s (Respect, 2008), and is typically used in self-defence or pre-emptive self-defence (Saunders, 1988). As such, patriarchy has been declared by some research to be the risk factor in explaining the aetiology of IPV, rather than one risk factor interacting with many other variables (Dutton, 2006).

However, much research has suggested that a gendered account of the nature and aetiology of IPV is not accurate (Archer, 2000; 2002; Dixon, Archer & Graham-Kevan, 2011; Fergusson, Horwood, & Ridder, 2005; O’Leary, Smith Slep, & O’Leary, 2007; Stith, Smith, Penn, Ward, & Tritt, 2004; Straus, 2009; Straus, 2010; Straus, Kaufman Kantor, & Moore, 1997; Sugarman & Frankel, 1996). Indeed, research investigating the causes of IPV for both sexes shows that a multitude of risk factors contribute to the explanation of IPV and that whilst patriarchy may play a role, it does not play the only role, or the largest role. Indeed, Stith et al’s (2004) meta-analysis of 85 studies that investigated risk factors associated with physical violence in heterosexual, married or cohabiting partners found only a moderate effect size for traditional sex role ideology in explaining male perpetration against a female partner. Large effect sizes were found for other factors such as marital satisfaction, illicit drug use and attitudes condoning marital violence.
In addition to research reporting that patriarchy is not the only risk factor for IPV, some researchers have suggested that in western societies, such as the UK or the US, the societal norm that prevails is one of chivalry (a norm requiring protection of women from harm), instead of patriarchy (Felson, 2002; 2006). Research has demonstrated a relationship between attitudes/beliefs about violence and IPV perpetration and/or victimisation (Archer, 2006; Archer & Graham-Kevan, 2003; Jankey, Próspero, & Fawson, 2011; Sugarman & Frankel, 1996). However, Felson (2002) argues that chivalry is related to IPV and that this normative belief actually fosters protection of women and forbids men’s violence toward them. Thus, such benevolent sexism may actually be a protective factor for women. Indeed, in support of this premise, Straus, Kaufman-Kantor and Moore (1997) found that nationally representative surveys showed rate of approval of slapping a spouse decreased from 1968 to 1994. Approval of a husband slapping his wife’s face in some situations decreased steadily at a statistically significant rate, whilst approval of a wife slapping her husband’s face remained stable across a 26 year span.

Another large nationally representative survey of 5238 adults in the US (Simon, Anderson, Thompson, Crosby, Shelley, & Sacks, 2001) also found that men and women reported less acceptance of a man hitting his wife/girlfriend if she hits him first in comparison to if she retaliated to his violence. A similar trend is observed in recent study with women in New Zealand from different ethnic groups where women believe men’s physical IPV against a female partner is not acceptable under any circumstance (i. e. disobedience, infidelity, refusing to have sex, etc. - Fanslow, Robinson, Crengle, & Perese, 2010). Other research indicates there is empirical evidence that men and women approve more of female perpetrated IPV than male perpetrated IPV, and that this model of violence legitimates physical IPV as correct behaviour for many women, and in turn higher male perpetrated physical IPV (Straus, 2009). Such findings not only do not support the
theory that male violence to women is linked primarily to US patriarchal societal normative beliefs, but also to a myriad of factors that lead to partner violence (Straus, 2009). It also suggests that the main motive for female violence to men is not self-defence. Some research has linked chivalrous beliefs to an increase in rates of female aggression to men. Archer (2000) highlights that studies have found female students initiating partner assaults reported no fear of retaliation, believed men could easily defend themselves and that their physical aggression was therefore acceptable (Fiebert & Gonzalez, 1997). Furthermore, students of both sexes trivialised female violence (Miller & Simpson, 1991). This has also been found in community samples (Carlson & Pollitz Worden, 2005). Archer concludes that in addition to being a protective factor for women, chivalrous norms may also facilitate female to male violence. This is in opposition to the conceptualisation that patriarchy causes men’s violence to women in western societies. However, this may not hold true for countries with greater gender inequality and patriarchal beliefs, whose traditional normative belief system may be associated with men’s violence toward women (Archer, 2000; 2006). Part of the explanation for female perpetration of IPV and its approval may lie on the sole focus and efforts of gendered research on male violence, and the learning and transmittance of norms tolerating “low-level” violence by women (Straus, 2005). Whilst much speculation has taken place about the role of societal beliefs in contributing to IPV, little research to date has actually investigated the relationship between normative beliefs about approval of IPV and perpetration of IPV.

Patriarchal views and gender inequality in England and Mexico

Patriarchy, gender inequality and the women’s liberation movement in Britain

Information of gender inequality in Britain and changes in the cultural, political, and economic aspects of life are inevitably linked to the women’s liberation movement born in the late 1960’s and 70’s. British society was grounded upon patriarchal beliefs about male domination and
female subordination that underlied and supported structures of male control. Chastisement of married women in England for example, was legally permitted up until 1829 when it was abolished and legal support for abused women came between 1850 and 1900. Dobash & Dobash asserted that “attitudes towards legal forms of punishment reveal the values that society takes most seriously” (1979, p. 59). Although physical abuse of women was abolished in England earlier, it was not until 1972 that the first shelter for physically abused women was opened, and from there it went on to become a national movement. The women’s liberation movement meant to be a forum for dealing with basically seven issues affecting gender equality between the sexes, one of them was violence against women (Dobash & Dobash, 1992). The influence and efforts of the women’s liberation movement on British culture in terms of legislation and policy led toward more gender equality and opportunities for women. Women’s rights in Britain are evident in forums such as the Women’s Aid Federation of England, (n. d.) and in the increased levels of gender equality in the United Kingdom reported in the United Nations Human Development Reports (e.g. United Nations Development Programe, 1995; 2000; 2009). Figures on gender empowerment for women from the United Nations Human Development Programme (2009) ranked the United Kingdom # 15 out of 109 nations with a GEM of 0.79 in its latest report. This trend and position indicate advancement of women in economic, political, and legal participation and decision-making. These achievements may be identified as a sign of a decrease in the levels and effect of patriarchal structures and ideology in modern day Britain.

The Mexican case

The early studies of Díaz-Guerrero (1994) noted the hierarchical structure of the Mexican family based in two fundamental patriarchal premises: 1) the power and supremacy of the father, and 2) the love, and absolute and necessary abnegation and sacrifice of the mother. Historic-
sociocultural premises obtained through popular everyday speech, sayings, and proverbs indicate the prevailing “type” of Mexican (passive affiliative obedient) to be most frequently found in women (Díaz-Guerrero, 1994). Díaz-Guerrero (1974) also found that among female high school youths historic-sociocultural premises about relations between men and women, between parents and daughters, and the role of women in Mexican society have suffered slight changes. Women in México were happy with their role of woman, but less satisfied with educational and professional opportunities. Barajas & Ramírez (2007) suggest higher gender inequality levels may be related to beliefs and traditions of older generations whilst younger generations may hold more egalitarian views with regard the role of women in the family and in society. However, recent research assessing structural gender equality in México indicates although women have achieved more power throughout the years, México still is a country where women are far from reaching gender equality in the social structure with men (Frías, 2008). In her study, Frías found women in México have attained an overall level of equality of 44% (being 100% perfect economic, educational, political, and legal equality between men and women). The area where the widest gender inequality is found is in the political sphere (26%). This is confirmed by the United Nations Human Development Reports (e.g. 1995; 2000; 2009).

**Gender Empowerment Measure (GEM)**

The Gender Empowerment Measure (GEM) has been used to estimate a country’s gender inequality level, and provide a proxy measure of a country’s patriarchal status (Archer, 2006). This is a composite index which measures gender inequality in three basic dimensions; empowerment-economic participation and decision-making; political participation; and decision-making and power over economic resources (United Nations Development Programme, 2009). Scores range between 0 and 1. The closer the GEM value is to 1 indicates lower levels of gender inequality, and
thus higher empowerment and opportunities in the areas assessed by the GEM for women. Conversely, a lower GEM figure indicates a higher level of gender inequality and hence lower empowerment levels and opportunities for women in the areas assessed by the GEM. Countries that differ in GEM scores would be expected to differ in levels of societal patriarchal attitudes. By directly comparing countries that differ in GEM scores on like variables (such as rates or approval of men’s violence to women), researchers can associate differences in such variables to variation in gender empowerment levels and patriarchal values.

This study aims to explore the relationship between student collective beliefs about approval of physical IPV and their levels of physical IPV perpetration in two countries that differ in their levels of gender empowerment (i.e. the UK (specifically England) and Mexico). The most recent GEM scores for the UK and Mexico are 0.8 and 0.6 respectively (United Nations Development Programme, 2009). If patriarchy is the risk factor for IPV, as the gendered perspective would suggest, differences in the rates and collective beliefs about the acceptability of IPV to women in students residing in the two countries might be expected. Conversely, lower acceptability of IPV toward women and greater acceptance of IPV perpetrated by women can indicate prevailing chivalrous norms or attitudes in a society. This study will be concerned with the investigation of physical intimate partner violence for sake of consistency, as the majority of research examining the role of patriarchy and chivalry has examined this form of IPV to date. Specifically, the following research questions will be investigated:

1. What are the rates and types of male-to-female (MFPV) and female-to-male (FMPV) physical IPV in a sample of university students from England and Mexico?
2. What are the reasons given by English and Mexican male and female students as to why they initiate physical IPV toward their partner?
3. What are the collective beliefs about the acceptability of male and female IPV for English and Mexican male and female students?

4. Is there a relationship between approval of physical IPV and its perpetration in English and Mexican students?

Method

Participants

In total 553 psychology students took part in the study. This consisted of 231 female and 51 male psychology students attending a University in a large English city, and 139 female and 132 male psychology and engineering students attending a University in two large Mexican cities. Sixteen gay (four English men, five English women; five Mexican men, and two Mexican women) and 20 bisexual (two English men, eight English women; two Mexican men, and eight Mexican women) students completed the questionnaire, but as numbers were too small for meaningful analysis on same-sex relationships these responses were excluded from the study. Samples from both Mexican universities were tested for homogeneity of sociodemographic indicators and responses on questionnaires. No significant differences were found and therefore Mexican University data was aggregated for the purpose of analysis. Therefore the final sample size was 517 students (263 English; 254 Mexican). The mean age of each group was: English women $m = 19.33$ SD (1.4), English men $m = 20.29$ SD (2.3), Mexican women $m = 20.46$ SD (2.2), and Mexican men $m = 20.46$ SD (3.3). No significant differences in the ages of men and women from both countries were found.

Procedure
Participants who were at least 18 years old and had been in a dating/intimate relationship that had lasted for at least one month at some point in their adolescent/adult life were invited to participate in this study, which asked students to anonymously fill out a self-report questionnaire. A written description of the nature of the study and required task was provided and informed consent obtained from all students prior to participation (Appendix B and Appendix C). On completion of the study, all students were provided with debrief information that included details of free appropriate services they could access for advice if the study had raised any personal issues for them (Appendix B and Appendix C). Approval from the University of Birmingham was successfully gained prior to commencement (Appendix A).

Participants in the English sample filled out the questionnaire online as part of a research participation scheme (RPS) where they were remunerated with credits that they could gain to enable them to carry out their own experiments. The RPS is an online system available to all Psychology students at the University of Birmingham where they can choose which study they want to take part in. Information about the study, consent to participate, and debrief information provided to all students is shown in Appendix B. Participants in the Mexican sample completed a paper and pencil version of the questionnaire in classrooms. Participants were not remunerated but rather were invited to voluntarily take part in the study. A researcher obtained permission from lecturers to walk into the psychology classrooms to present the study and invite students to voluntarily take part in it. The researcher then provided general information about the study, matters of anonymity and confidentiality of their information (see Appendix C), in a lecture room where students were invited to participate. Part of the questionnaire (the Beliefs about Relationship Aggression Scales (BaRAS) and the Controlling Behaviour Scales-Revised (CBS-R) was translated by a native
Spanish speaker (the senior author) and piloted with a sample of Spanish native speaking students by two of the authors\(^3\). The Conflict Tactics Scale-2 (CTS2) was adapted from the already translated version by Straus and Ramirez (2007), and was piloted with Mexican participants in order to ensure suitability of the measure with students living in the central part of México. To reiterate, the Spanish version of the CTS2 (Straus & Ramirez, 2007) was reviewed by the senior author with due authorisation of the publisher (for suitability of terminology used and was further reviewed, piloted and adjusted in terminology used by a panel of researchers at the Universidad Autónoma del Estado de México (Autonomous University of the State of Mexico).

Measures

The self-report questionnaire included the following measures:

**Revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996).** The CTS2 is a 78 item self-report questionnaire designed to assess the tactics that people use during times of conflict with an intimate partner. It was used in this study to measure acts and frequency of psychological, physical, and sexual IPV during the 12 months previous to the study. The CTS and CTS2 are the most widely used tools to assess intimate partner violence and have acceptable validity and reliability scores with student and non-student populations (Straus, 2007). The traditional measurement scale of the CTS2 was adapted for this study to simplify responses for students, which has previously been done with success in student populations (Archer & Graham-Kevan, 2003; Harris, 1991; Próspero & Kim, 2009; White & Koss, 1991). Using a 5-point scale (0=never to 5=very frequently) respondents were asked to report how often during the past year they and their intimate partners had used any of the listed behavioural acts against each other at times of confrontation or to settle disagreements. The Spanish version of the CTS-2 was given out

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\(^3\) Gloria Margarita Gurrola Peña & Patricia Balcázar Nava- Universidad Autónoma del Estado de México
to Mexican participants using the same 5-point scale to capture responses (Straus & Ramírez, 2007). In Chapter 1 it was determined that interviewing both partners permits cross-validation of socially undesirable behaviour such as IPV and more accurate reports. This comes however comes at a greater cost of both, human and financial resources. In addition, couples willing to disclose sensitive information of this kind may be more reluctant if proper arrangements to participate separately from their partner are not warranted. Nevertheless, with limited resources, this study focused on obtaining information about both partner’s physical aggression (and controlling behaviour) from each participant in order to carry out insightful analyses on patterns and types of IPV.

In the present study the reliability alpha coefficient for the total CTS2 in the English sample was $\alpha = .93$ (psychological IPV, $\alpha = .90$; physical IPV, $\alpha = .95$; sexual IPV, $\alpha = .86$). Alpha coefficients for the total CTS2 for the Mexican sample was .92 (psychological IPV, $\alpha = .88$; physical IPV, $\alpha = .87$; sexual IPV, $\alpha = .68$). Ideally a Cronbach Alpha coefficient of a scale should be above 0.7 (De Vellis, 2003). All of the CTS-2 scales were above this value ($\alpha = .86-.93$) except the sexual coercion scale in the Mexican sample ($\alpha = .68$). This may be due to the low prevalence of sexual coercive behaviours in that sample (Straus, 2004).

Beliefs about Relationship Aggression Scale (BaRAS- Dixon, 2011). The BaRAS is a self-report questionnaire designed by the second author to assess respondent’s chivalrous or patriarchal beliefs with regard to physically violent episodes by both sexes in heterosexual intimate relationships. Direct yes/no questions have been shown to evoke socially desirable responses (Sorenson & Taylor, 2005), to reduce this artifact the BaRAS utilizes a full factorial design, which combines survey and experimental methods. Brief vignettes are presented to participants, each of
which differ only on manipulated variables of sex of the aggressor (male or female), provocation from the victim (no provocation, infidelity, minor physical violence, severe physical violence, psychological aggression, and disobedience) and severity of the perpetrator’s physical violence (low or high). Hence the questionnaire integrates a 2x6x2 factorial design, necessitating 24 vignettes to provide comparison across all manipulated variables. Vignettes are introduced as always detailing an average size man and a woman involved in a monogamous intimate relationship for over 12 months. Six questions are asked of each vignette immediately after having read it, resulting in a total of 144 questions. An example vignette and the six standard accompanying questions are provided below. It depicts a male aggressor and female victim, no victim provocation and low severity of physical violence, followed by the six questions:

John had a stressful day at work. That evening when Carol was sat on the sofa watching television he approached her and slapped her across the face.

a) To what extent do you approve of (the aggressor’s) actions?

b) To what extent would you approve if (the victim) retaliated with physical aggression to (the aggressor's) actions?

c) How likely is it that (the victim) will be physically injured requiring medical treatment?

d) How likely is that (the victim) will be greatly emotionally distressed?

e) How likely is that (the victim) can defend (himself/herself) against (the aggressor)?

f) Which of the following legal sanctions do you deem suitable punishment for (the aggressor) in this instance?
For the purpose of this study only responses to questions ‘a’ were analysed for each of the 24 vignettes, to provide a measure of respondent’s approval to the aggressor’s actions. English and Spanish versions of the approval of male perpetrated violence and female perpetrated violence scales were used in the present study. The reliability alpha coefficients for the approval scale in the English and Spanish versions of the BaRAS were: .84, and .90 respectively for approval of male aggressor’s actions and .80 and .88 respectively for approval of female aggressor’s actions.

**Initiating physical aggression.** A series of questions were derived to establish ‘if’ and ‘why’ a respondent had initiated physical aggression toward an intimate partner in the last 12 months/ever. Motivations that have been documented in previous research literature by men and women (Babcock, Miller, & Siard, 2003; Fiebert & González, 1997; Follingstad, Wright, Lloyd, & Sebastian, 1991; Hamberger, Lohr, Bonge, & Tolin, 1997; Hettrich & O’Leary, 2007) for initiating physical assault are listed, along with an ‘other’ option. The motives listed were retaliation for insults, threats and controlling behaviour, to gain their partner’s attention, to prove they were not afraid of their partner, to escape, because they were afraid for themselves or someone in their care, pre-emptive self-defence, to prevent them leaving, to make them do something, to get revenge, to express anger (see Table 3 for phraseology of questions posed).

**Treatment of data.** For the purpose of data analysis, responses to the CTS2 were dichotomised into categories of 0 (never happened) or 1 (happened once or more). Dichotomous scores were summed across variables within each of the subscales analysed to produce an overall score for minor physical aggression, severe physical aggression, minor injury and severe injury.
Dichotomised CTS2 minor and severe scales of physical aggression were combined to produce a physical aggression scale for the last 12 months (coded as 0 [never physically perpetrated violence to an intimate partner] and 1 [have physically perpetrated violence toward an intimate partner once or more]) and a physical victimisation scale (coded as 0 [never been physically victimised by an intimate partner] and 1 [have been physically victimised by an intimate partner once or more]). These scales were used to group participants into four groups: Non-violent (did not report any perpetration or victimisation of physical partner violence), reciprocally-violent (reported perpetrating physical violence and being also victimised by their intimate partner), unidirectionally-violent (reported perpetrating physical violence but were not physically victimised), and victim-only (reported being physically victimised but did not perpetrate any physical violence against their partner).

Two scores indicating participant’s approval of male and female aggression were calculated from the BaRAS questionnaire. To produce these scores, responses to question ‘a’ were summed across the 12 questions to create a score for approval of a man hitting his female partner, and for a woman hitting her male partner, across the various levels of victim provocation and physical aggression severity. Thus participants could achieve two approval scores, each ranging between 12 and 60.

Results

Rates of male-to-female (MF) and female-to-male (FM) physical IPV

Table 1 shows male and female reports of the frequency by which they perpetrated, or experienced (victimization), minor and severe physical aggression and injury during times of conflict with their partner in the last 12 months. English and Mexican men and women self-report
higher or equal frequencies of female perpetration (or male victimisation) for minor and severe physical aggression (with the exception of English men reporting slightly higher severe physical IPV perpetration). English women report they experience higher frequencies of injury than they inflict to the opposite sex, whilst the opposite is experienced by English men. Mexican women and men report inflicting more frequently physical injury to their partner than they experience from a partner. Bivariate analysis showed that Mexican women were significantly more likely to report minor ($\chi^2 = 21.7, p = 0.001$) and severe ($\chi^2 = 13.81, p = 0.001$) physical victimisation in comparison to English women, yet were also more likely to report significantly higher levels of perpetration toward men for minor physical aggression ($\chi^2 = 25.11, p=0.001$), severe physical aggression ($\chi^2 = 17.8, p =0.001$), and higher frequency of inflicting injury to a male partner ($\chi^2 = 6.7, p = 0.010$).

No other significant differences arose between females from the two countries. No significant differences were found between English and Mexican men for perpetration or victimisation of minor or severe physical aggression or injury.
Table 1

*Frequency of conflict tactics reported by English and Mexican men and women in last 12 months*

<table>
<thead>
<tr>
<th>Type of IPV</th>
<th>English women n=218</th>
<th></th>
<th>Mexican women n=129</th>
<th></th>
<th>English men n=45</th>
<th></th>
<th>Mexican men n=125</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perp</td>
<td>Victim</td>
<td>Perp</td>
<td>Victim</td>
<td>Perp</td>
<td>Victim</td>
<td>Perp</td>
<td>Victim</td>
</tr>
<tr>
<td>Minor physical aggression n (%)</td>
<td>85 (39)</td>
<td>69 (28.9)</td>
<td>106.69*</td>
<td>86 (66.7)</td>
<td>74 (54.3)</td>
<td>56.85*</td>
<td>17 (37.8)</td>
<td>22 (48.9)</td>
</tr>
<tr>
<td>Severe physical aggression n (%)</td>
<td>31(14.2)</td>
<td>24(11)</td>
<td>112.07*</td>
<td>44 (34.1)</td>
<td>35(27.1)</td>
<td>60.11*</td>
<td>10 (22.2)</td>
<td>9(20)</td>
</tr>
<tr>
<td>Physical injury n (%)</td>
<td>18(8.3)</td>
<td>26(11.9)</td>
<td>118.77*</td>
<td>22(17.1)</td>
<td>20(15.5)</td>
<td>68.52*</td>
<td>8(17.8)</td>
<td>7(15.6)</td>
</tr>
</tbody>
</table>

* p < 0.001
Types of male-to-female (MF) and female-to-male (FM) physical IPV

Table 2 shows how participants were grouped into one of four categories of non-violent, reciprocal, uni-directionally violent or victim only (see treatment of data for elaboration on how people were grouped- page 68).

The majority of students from each group significantly reported belonging to the non-violent typology than other violent types (English women $\chi^2 = 289.92$, $p=0.001$; English men $\chi^2 = 52.87$, $p=0.001$; Mexican women $\chi^2 = 63.63$, $p=0.001$; Mexican men $\chi^2 = 177.72$, $p=0.001$) although Mexican women were approximately equally as likely to belong to either non-violent or reciprocal categories.

Table 2

<table>
<thead>
<tr>
<th>Type of relationship</th>
<th>English women n=218</th>
<th>Mexican women n=129</th>
<th>$\chi^2$</th>
<th>English men n=45</th>
<th>Mexican men n=125</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Non-violent</td>
<td>124</td>
<td>(74.3)</td>
<td>37</td>
<td>(42.6)</td>
<td>24.26</td>
<td>21</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>63</td>
<td>(15.1)</td>
<td>70</td>
<td>(41.1)</td>
<td>21.59</td>
<td>**</td>
</tr>
<tr>
<td>Unidirectional</td>
<td>24</td>
<td>(8.3)</td>
<td>17</td>
<td>(14)</td>
<td>0.211</td>
<td>2</td>
</tr>
<tr>
<td>Victim-only</td>
<td>7</td>
<td>(2.3)</td>
<td>4</td>
<td>(2.3)</td>
<td>0.00</td>
<td>7</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.005

English women were significantly more likely to report belonging to the non-violent group, and less likely to belong to the reciprocal group than Mexican women. They did not significantly differ in unidirectional and victim only status.

No significant differences arose between English and Mexican men in self-reported status.
Reasons given for initiating physical IPV

Table 3 details the frequency of different motivations given to explain why each group of men and women perpetrated physical aggression toward their partner. A range of motives were given for all groups. The most frequent response for women was to express their anger. Mexican women also reported high rates of perpetration in retaliation for their partner’s insults or verbal aggression. The most frequent response for English men was because their partner was trying to leave them/had left them, because he wanted to get revenge for something his partner had done, or because of his partner’s insults or verbal aggression. For Mexican men the most frequent response was to express their anger.

The Bonferroni correction procedure was applied to correct for the chances of gaining a type I error across the 12 tests. This resulted in a new alpha value of 0.004. Bivariate analysis revealed significant differences between Mexican and English women for five motives of: to express their anger; because of their partner’s verbal aggression; because their partners tried to control them; in pre-emptive self-defence; or because they wanted to control their partner. No significant differences between men from the countries in their motives for aggression were found.
Table 3

Violent English and Mexican women who were the first to ever physically lash out in some way

<table>
<thead>
<tr>
<th>Which of the following explain why you physically lashed out first?</th>
<th>English women n= 87 N (%)</th>
<th>Mexican women n=88 N (%)</th>
<th>( \chi^2 )</th>
<th>English men n= 17 N (%)</th>
<th>Mexican men n = 60 N %</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>I did it to express my anger</td>
<td>23(26.4)</td>
<td>35(39.8)</td>
<td>18.97*</td>
<td>2(11.8)</td>
<td>7 (11.7)</td>
<td>1.00</td>
</tr>
<tr>
<td>Because my partner called me names, insulted/spited me or were shouting/yelling at me</td>
<td>18(20.7)</td>
<td>34 (38.6)</td>
<td>23.00*</td>
<td>3(17.6)</td>
<td>2(3.3)</td>
<td>.079FE</td>
</tr>
<tr>
<td>Because my partner was trying to tell me what to do or trying to control me in some way</td>
<td>14(16.1)</td>
<td>22(25)</td>
<td>11.76*</td>
<td>0</td>
<td>5 (8.3)</td>
<td>.588FE</td>
</tr>
<tr>
<td>Because I wanted to gain his/her attention</td>
<td>10(11.5)</td>
<td>9(10.2)</td>
<td>.908</td>
<td>2(11.8)</td>
<td>3 (5)</td>
<td>.323</td>
</tr>
<tr>
<td>Because I was trying to escape from him/her</td>
<td>6(6.9)</td>
<td>10(11.4)</td>
<td>4.543</td>
<td>1(5.9)</td>
<td>2(3.3)</td>
<td>.541FE</td>
</tr>
<tr>
<td>Because I lashed out in pre-emptive self defence</td>
<td>4(4.6)</td>
<td>15(17)</td>
<td>15.37*</td>
<td>1(5.9)</td>
<td>3 (5)</td>
<td>1.00FE</td>
</tr>
<tr>
<td>To prove I was not afraid of him/her</td>
<td>5(5.7)</td>
<td>11(12.5)</td>
<td>7.186</td>
<td>0</td>
<td>4(6.7)</td>
<td>.575FE</td>
</tr>
<tr>
<td>Because my partner was trying to leave me or had left me</td>
<td>4(4.6)</td>
<td>5(5.7)</td>
<td>.951</td>
<td>3(17.6)</td>
<td>2(3.3)</td>
<td>.077FE</td>
</tr>
<tr>
<td>Because I wanted to get revenge for something they had done to me</td>
<td>9(10.3)</td>
<td>15(17)</td>
<td>7.526</td>
<td>3(17.6)</td>
<td>5 (8.3)</td>
<td>.544</td>
</tr>
<tr>
<td>Because my partner was threatening to hurt me or behaving in a threatening manner</td>
<td>4(4.6)</td>
<td>5(5.7)</td>
<td>.964</td>
<td>1(5.9)</td>
<td>3(5)</td>
<td>1.00FE</td>
</tr>
<tr>
<td>Because I wanted to make my partner do something for me</td>
<td>1(1.1)</td>
<td>9(10.2)</td>
<td>11.49*</td>
<td>2(11.8)</td>
<td>2 (3.3)</td>
<td>.222FE</td>
</tr>
<tr>
<td>I was afraid of him/her or afraid for someone else in my care</td>
<td>2(2.3)</td>
<td>1(11.3)</td>
<td>1.00FE</td>
<td>1(5.9)</td>
<td>0</td>
<td>1.00FE</td>
</tr>
</tbody>
</table>

FE = Fishers exact statistic, *p = .004
Investigating the collective beliefs about the acceptability of male and female IPV for English and Mexican male and female students

Table 4 shows the approval scores provided by Mexican and English men and women. Related measures $t$-tests showed that each group was statistically more likely to significantly approve of female perpetration towards a male partner in comparison to male perpetration towards a female partner.

Table 4

<table>
<thead>
<tr>
<th>Groups</th>
<th>Approval of physical MFPV Mean (SD)</th>
<th>Approval of physical FMPV Mean (SD)</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>English women</td>
<td>14.88(3.86)</td>
<td>19.40(5.62)</td>
<td>-16.42(204)*</td>
</tr>
<tr>
<td>Mexican women</td>
<td>15.60(7.32)</td>
<td>19.85(9.07)</td>
<td>-7.59 (122)*</td>
</tr>
<tr>
<td>English men</td>
<td>17.41(6.68)</td>
<td>23.03(6.04)</td>
<td>-6.43(33)*</td>
</tr>
<tr>
<td>Mexican men</td>
<td>16.07(6.41)</td>
<td>19.67(8.68)</td>
<td>-7.37(111)*</td>
</tr>
</tbody>
</table>

$p<0.005$

Further bivariate analysis between groups showed English male participants approved significantly more of female-to-male physical IPV than Mexican men [$t$ (145) = -2.41, $p=0.017$]. No significant differences arose in approval scores of male-to-female physical IPV between Mexican and English men [$t$ (151) = -1.08, $p=0.28$], or in approval of male-to-female [$t$ (162.69) = 1.02, $p=0.31$] and female to-male [$t$ (180.72) = 0.97, $p=0.69$] physical IPV between Mexican and English women.
Investigating the relationship between approval of physical IPV and its perpetration in English and Mexican students

Table 5 shows the approval scores for male and female perpetrated IPV for each type of pattern in the Mexican and English, male and female samples. With the exception of Mexican men’s approval of female aggression scores and Mexican women’s approval of male aggression scores, students in the reciprocal pattern of all groups displayed higher approval scores than other groups. However, the only significant difference was found within the sample of English women. Post hoc $t$–tests showed that women involved in reciprocal IPV significantly approved of male [$t(69.2) = -4.020, p = .001$] and female [$t(175) = -4.282, p = 0.001$] physical IPV more than their non-violent counterparts.
Table 5

Approval of male and female perpetration by patterns of English and Mexican men and women

<table>
<thead>
<tr>
<th>Approval of male aggression</th>
<th>English women</th>
<th>ANOVA English women</th>
<th>Mexican women</th>
<th>ANOVA Mexican women</th>
<th>English men</th>
<th>ANOVA English men</th>
<th>Mexican men</th>
<th>ANOVA Mexican men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non violent</td>
<td>13.8</td>
<td>$F(3,204)=9.704^*$</td>
<td>15.7</td>
<td>$F(3,118)=.296$</td>
<td>16.6</td>
<td>$F(3,31)=.303$</td>
<td>15.9</td>
<td>$F(3,112)=.196$</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>16.8</td>
<td>15.7</td>
<td>15.7</td>
<td>.296</td>
<td>18.9</td>
<td>15</td>
<td>16.4</td>
<td>16.5</td>
</tr>
<tr>
<td>Perpetrators</td>
<td>15.8</td>
<td>14.6</td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td>16.5</td>
<td></td>
</tr>
<tr>
<td>Victims</td>
<td>13.6</td>
<td>12.8</td>
<td></td>
<td></td>
<td>17.3</td>
<td></td>
<td>14.5</td>
<td></td>
</tr>
</tbody>
</table>

| Approval of female aggression | Non violent | $F(3,204)=7.747^{**}$ | 18 | $F(3,119)=1.267$ | 22.1 | $F(3,31)=.215$ | 19.7 | $F(3,106)=.247$ |
| Reciprocal                  | 21.8         | 20.4                | 1.267         | 23.9                | 21.2      |                   | 19.3       |                   |
| Perpetrators                | 21.3         | 21.7                |               |                     | 23        |                   | 21.2       |                   |
| Victims                      | 17.3         | 14.5                |               |                     | 23.6      |                   | 21.5       |                   |

* $p<0.001$
Discussion

This study set out to explore the relationship between University student collective beliefs about approval of physical IPV and their levels of physical IPV perpetration in two countries that differ in their levels of gender empowerment. The first research question examined the rates and types of IPV in English and Mexican students. Both English and Mexican men and women self-report higher or equal frequencies of female perpetration (or male victimisation) for minor and severe physical aggression (with the exception of severe physical IPV in English men). In terms of injury, most female and male participants report inflicting more injury to the opposite sex. This is with the exception of English women that report experiencing more injury compared to injury they inflicted to their male partners. On the whole this pattern conforms to the typical results found in other studies carried out in developed countries such as the US, UK, Canada commonly characterised by symmetrical or higher levels of female perpetration (or male victimisation).

Comparison of sexes from both countries showed no differences in male IPV. Mexican women, however, were significantly more likely to experience minor physical victimisation than English women, but also reported higher levels of minor and severe perpetration, and inflicting more injury on a male partner than English women. Furthermore, Mexican women reported high levels of reciprocal IPV compared to English women and were just as likely to report non-violent and reciprocal relations, as all other groups. This higher level of IPV in the lives of Mexican women who live in a country with lower levels of female gender empowerment does not support the theory that patriarchy is the risk factor for almost exclusive male IPV, as the gendered perspective would suggest. Rather, female reports are suggesting higher levels of minor physical victimisation, minor and severe
perpetration, inflicted injury, and resultant reciprocally violent relationships, in comparison to their English comparison group.

The second research question showed that perpetration by men and women in both countries occurred for a wide variety of reasons, and were most commonly reported to arise from the motive “I did it to express my anger” by women in both countries and Mexican men. This finding is in accordance with research that has suggested anger expression is a salient correlate of IPV in both, men and women (Medeiros & Straus, 2007; O’Leary, Smith Slep, & O’Leary, 2007, Stith et al., 2004).

The second most common reasons were in response to psychological aggression from their partner or forms of controlling behaviours and threats for women in both countries, and a partner’s psychological aggression for English men. This confirms female aggression is carried out for a number of different reasons and not entirely as self-defence from coercive control from a male partner. However, using a stringent alpha value, between-group comparisons showed a proportion of Mexican women (more than one third) were significantly more likely to offend for reasons of anger, in retaliation for their partner’s verbal aggression and control, and to control their partner than English women. Therefore, in comparison to English women, some female aggression in the Mexican sample is fuelled by male threats or female anger levels, or a desire to control their male partner. Males did not differ in their motivations for initiating a physical assault. This suggests the effect of gender inequality levels on motivations for physical IPV and its perpetration is very small and motivations of physical IPV are more likely to be affected by a diverse set of variables rather than only by socio-structural levels/differences of gender empowerment being mimicked in or extrapolated to intimate relationships. Again these results do not support the premise that
IPV results from patriarchal motives. The high levels of female aggression (reciprocal and uni-directional) in the low GEM country, together with motives for this, confirm that IPV is not a pervasive issue derived solely from male aggression toward female victims, and that the men and women from countries with differing levels of gender inequality, express a wide range of shared motivations for their physical IPV which is in accordance with previous research (Follingstad et al., 1991; Harned, 2001; Hettrich & O’Leary, 2007).

These findings do not support the gendered view that men and women’s physical IPV is qualitatively different, where men are driven solely by a control motive and women are solely lashing out in self-defence. It is a more complex set of motivations that appears to govern men and women’s decisions to use physical IPV in their relationships, and which point out at other risk factors (i.e. anger expression, verbal abuse, psychological dependency on the partner-negative attachment patterns) rather than only coercive control.

The third research question endeavoured to investigate whether patriarchal or chivalrous beliefs about the acceptability of male and female aggression prevailed, and how they related to experiences of IPV. Male and female students in both countries significantly approved of female aggression more than male aggression. No statistically significant differences were found between men or women in both countries in their approval of male physical IPV. English men approved of female physical IPV more readily than Mexican men, suggesting a higher level of acceptance of female aggression in a country with higher levels of gender empowerment. However, a norm of chivalry and not patriarchy, in regard to IPV, prevails in these samples. This is particularly important because the men and women who reported such beliefs come from two distinct cultural settings with different socio-cultural premises that define their identity (Díaz-Guerrero, 1994), and with differing levels of
gender empowerment and social and economic development (United Nations Development Programme, 2009). Gender inequality and social/economic position in the family or in intimate relationships has usually been attached in some of the literature (i.e. Ellsberg, Peña, Herrera, Liljestrand, and Winkvist, 2000) to higher levels of male dominance, and a more acceptable view of male aggression fostered by patriarchal norms. Our findings do not support the assertion that higher levels of gender inequality bring forward more acceptability of male aggression by means of patriarchal norms.

It is interesting to note that high levels of acceptance of female IPV correspond to the high rates of female perpetrated IPV across the samples. This trend has been found in previous research with measures of hostility against an intimate partner (Dutton, Straus, & Medeiros, 2006). However, despite men in both England and Mexico showing scores that approve of IPV by either sex at a higher rates than women, reports of male perpetration (by men or women) were still not as high as female perpetration, particularly in the country with higher gender inequality. It is therefore plausible that chivalrous beliefs are a protective factor for female victimisation, as previous researchers have concurred (e.g., Felson, 2002).

Whilst significant differences did not result, analyses by perpetration patterns showed a trend for Reciprocal types to approve of male and female aggression more readily than other types. It is plausible that higher approval of both male and female perpetrated IPV leads to reciprocal violence. Indeed, research shows that female initiation of physical aggression is the biggest risk factor for her victimisation from a male partner (Stith et al., 2004). Therefore, a norm that approves of female IPV over and above male IPV may actually be serving to increase rates of IPV through reciprocally violent relationships.
Conclusion

Generalisation of results to the general community or clinical samples should be cautioned, as this study was conducted with University students. Furthermore, the administration methods of the study to English (online questionnaires) and Mexican students (printed questionnaires in a classroom) may have had an effect on self-reporting. For example, students responding to the printed questionnaires in a classroom may have felt less at ease disclosing sensitive information than students responding to an online questionnaire at their convenience. However, this study provides for the first time, data on types of physical violence and the motivations and beliefs attached to this in two countries with differing levels of gender empowerment. Together, the results of this study suggest that IPV perpetration (and victimisation) is not the sole result of patriarchy. Rates, motives and beliefs in two countries with differing GEM scores do not reflect this premise. Instead, results show that high rates of female perpetrated IPV are prevalent, especially in Mexican samples where lower levels of female gender empowerment exist. It is more plausible that IPV is a result of a complex web of risk factors (e.g. depression, PTSD, dyadic adjustment, anger, etc.) as shown by much previous research (Magdol, Moffitt, Caspi, Newman, Fagan, and Silva, 1997; Medeiros and Straus, 2007; O’Leary, et al., 2007; Sabina and Straus, 2008; Straus, 2010).

Considering the normative beliefs held by students in the two countries about acceptability of female IPV over and above male IPV, and its tentative links to reciprocal aggression, it is important to consider the need to promote the message that IPV by both sexes is not acceptable. Anything other may indvertibly increase rates of reciprocal aggression, and therefore female and male victimisation. Considering that where children are present in the household with two violent parents, their risk of being physically harmed
increases three fold (Slep & O’Leary, 2005), it is clear the implications of this message are important for the reduction of family violence (Dixon and Graham-Kevan, 2011) in general.
CHAPTER 3
INVESTIGATING THE RATES OF AND DIFFERENCES BETWEEN TYPES OF HETEROSEXUAL FEMALE INTIMATE PARTNER VIOLENCE PERPETRATORS FROM ENGLAND AND MEXICO WHO VARY IN THEIR USE OF CONTROL

Chapter rationale

Control has been assumed to be an integral part of physical intimate partner violence (IPV) in many research writings over the years (e.g. Pence & Paymar, 1993). It was not until fairly recently that authors began to understand that IPV could also occur in the absence of control, for reasons such as anger, or poor communication (Johnson, 1995; 2011, Medeiros & Straus, 2007) and that such distinctions could be made in research. As such, the role of control in intimate partner violence has not been heavily studied. As research has shown a link between controlling behaviours and physical violence perpetration (Graham-Kevan & Archer, 2003; 2008) it is evident that there is a growing need to examine the role of control further. Chapter 2 showed that heterosexual Mexican women were more likely to perpetrate higher rates of physical aggression to their male partners than English women. This Chapter intends to examine this finding in more depth and understand the role of control in relation to female IPV in both countries. It has been suggested that control may be more prevalent in male IPV offenders from cultural backgrounds that are more traditionally patriarchal (such as Papua New Guinea or México compared to those higher in gender equality such as the US or UK; Archer, 2006). If true, conversely, we may expect control to be less prevalent in female IPV offenders who reside in more patriarchal countries, in this case, México compared to England. Either way, it is plausible to assume that perpetrators who aggress out of the need for control may hold more skewed attitudes about IPV being an acceptable act in relationships compared to those who aggress out of self-defence or other situational motives.
that drive aggression. This Chapter aims to investigate the rates of different types of female IPV offenders who differ in levels of control compared to non-aggressive comparison groups in both countries. Specifically, the rate of each type, the severity of physical violence and level of injury perpetrated and experienced by each type, and the attitudes about the acceptability of IPV in each type will be examined.
Introduction

Intimate partner violence and control

Historically, feminist activists and researchers have assumed control to be an integral motive of intimate partner violence (IPV) perpetrators (e.g. Pence & Paymar, 1993). Only fairly recently have authors begun to understand that IPV can occur along with or in the absence of control, for reasons such as anger, substance abuse, attachment difficulties, or poor communication (Johnson, 1995; 2010, Medeiros & Straus, 2006). Therefore, the role of control in IPV has not been heavily researched. The partner violence literature has made the distinction between controlling behaviours and physical violence as forms of IPV (e.g., Graham-Kevan & Archer, 2003; Johnson, 1995; 2006). Controlling behaviours involve different subtle forms of behaviours falling along a continuum of abusiveness. They can include economic and emotional control, possessive and jealous behaviours, insults, threats and intimidation (Graham-Kevan, 2007). Measures such as the Controlling Behaviour Scales-Revised (CBS-R, Graham-Kevan & Archer, 2003) systematically assess behaviours related to several coercive forms of control (i.e. economic and emotional control, isolation, threats, intimidation). The CBS-R was developed based on the literature about the well-known, feminist oriented, Duluth domestic violence intervention programme and uses behavioural categories that do not include any items assessing physical violence (Graham-Kevan & Archer, 2003).

This distinction is important as physical IPV is only one form of abuse that can co-exist with other forms (sexual, psychological, emotional and controlling behaviours – (see Dixon & Bowen, 2011), and indeed controlling behaviours have been shown to correlate with, and be a precursor for, physical violence (Graham-Kevan, 2008). Other research on very large community samples ($n = 23,766$; Laroche, 2005) has found controlling men and
women (Intimate Terrorists-ITs) to perpetrate higher frequencies of severe physical IPV and
greater severe physical injury than partner’s whose primary motive is not control (Situational
Couple Violent-SCV).

However, despite these links, research into the domain of control and IPV is not prevalent, possibly because controlling behaviours do not carry the same social stigma as psychological or physical aggression, (Graham-Kevan & Archer, 2009). In particular, there is scant research into controlling behaviours of female perpetrators, which is surprising because women have been shown to use hostile forms of verbal and psychological aggression at the same rate (Straus & Sweet, 1992) or more frequently than men (Straus, 2008; White & Koss, 1991) and controlling behaviours have been related to physical IPV in both sexes (e.g. Ehrensaft & Vivian, 1999; Stets & Pirog-Good, 1990; Straus, 2008; Sugihara & Warner, 2002). While previous research has suggested that control may be more prevalent in male IPV offenders from cultural backgrounds that are more traditionally patriarchal (such as Papua New Guinea or México compared to those higher in gender equality such as the US or UK; Archer, 2006), not much thinking around the role of control in female IPV has been documented. Based on the aforementioned, it may be expected that control will be less prevalent in female IPV offenders who reside in a more male patriarchal country, in this case, México.

**Attitudes about the acceptability of IPV**

The relationship between people’s beliefs and behaviour has long been established (Grissio, Davis, Vesselinov, Appelbaum, & Monahan, 2000; Howells, 2004; Simmons & Griffiths, 2009). Indeed many offender treatment programmes aimed at reducing violent behaviour (Blacker, Watson, & Beech, 2008; Howells, 2004) and prevention campaigns
targeting problem behaviours, such as smoking (Hafstad, Aaró, & Langmark, 1996; Liu & Tan, 2009; McVey & Stapleton, 2000), have attempted to shift specific beliefs in order to change associated negative behaviours. Little empirical investigation has examined population and/or perpetrator cognitions about the nature or acceptability of intimate partner violence (IPV).

To date, IPV prevention and intervention programmes have typically targeted men’s violence to women (and sometimes children) based on the assumption that this is what constitutes the majority of IPV, which is caused by wider societal patriarchal beliefs (Dobash & Dobash, 1979; 1992). However, much literature reports that men and women aggress against each other at approximately equal rates in community and student samples (see Archer 2000; Esquivel-Santoveña & Dixon, 2012). The scant research that has examined the normative beliefs of large community samples in the US does not support the concept of patriarchy; rather it shows that community samples approve of female to male aggression more readily than male to female aggression (Simon, Anderson, Thompson, Crosby, Shelly, & Sacks, 2001; Sorenson & Taylor, 2005; Steward-Williams, 2002). For example, Sorenson & Taylor (2005), in a sample of 3679 adults in the state of California, found that female IPV against a male partner is deemed less harsh and wrong than the opposite. Simon et al. (2001), in a nationally representative survey of 5238 adults in the US, found attitudes of IPV to be an important correlate of physically violent behaviour to an intimate partner.

Such findings have led some researchers to assert that such chivalrous beliefs, or benevolent sexism, may actually be a protective factor for female victimisation and a risk factor for male victimisation in heterosexual relationships (Archer, 2006; Felson, 2002). Indeed, some studies show higher rates of female uni-directional aggression to male partners
than vice versa (Laroche, 2005; Magdol, Moffitt, Caspi, Newman, Fagan, & Silva, 1997; Morse, 1995; Schafer, Caetano, & Clark, 1998). Furthermore, although limited in magnitude, research into the cognition of IPV perpetrators shows male IPV is related to positive attitudes about violence in general (Dibble & Straus, 1990), positive attitudes about violence to women (Sugarman & Frankel, 1996) and instrumental beliefs about aggression (Archer & Graham-Kevan, 2003) in men and women. Although patriarchal beliefs may play a small role for some male offenders, many other schema exist that are related to IPV and other forms of aggression, such as beliefs centred on entitlement in relationships (Pornari, Dixon & Humphreys, 2012). Female IPV perpetrators are thought to mirror male cognitive processes (Pornari et al., 2012) and there is some evidence to suggest that female offenders may assume a violent role against men because they believe their aggression is trivial and that men can easily defend themselves (Archer, 2000; Fiebert & Gonzalez, 1997). Indeed, research has identified that male aggression against female partners is rated more negatively than vice versa (Harris, 1991). Hence, it may actually be the case that patriarchal countries, high in benevolent sexism, may exhibit higher rates of female aggression and control.

**Typologies of IPV perpetrators based on control**

As research has shown that IPV perpetrators are a heterogeneous group with different psychosocial characteristics (see Dixon & Brown, 2003; Johnson, 1995), it is plausible that different types of perpetrators may exhibit different beliefs about IPV. In an attempt to accommodate research findings which highlight the high frequency of reciprocal aggression in heterosexual relationships, Johnson (1995) derived a typology of couples who experience different levels of IPV aggression and victimisation. His typology is based on the premise that IPV can take place under a context of general control or within an argument/conflict specific context that leads to aggression. He proposed four different types of couples. The
term Common Couple Violence (later termed Situational Couple Violence (SCV; Johnson & Leone, 2005) was coined to refer to those partners who engage in low level control violence by either or both of them (Johnson, Leone, & Xu, in press). Instead, their aggression is borne out of “common”, everyday conflict (Johnson, 2010; Johnson et al., in press). The Intimate Terrorist (IT) was coined to refer to those perpetrators whose aggression is characterised by a general pattern of control over one partner and the relationship, and violence is used as a part of that control (Johnson et al., in press). IT’s could be in a couple with two other types of aggressive partner. The Violent Resistant (VR) person, who responds and resists the coercive controlling violence of their IT partner, and thus is generally violent in self-defence known as the IT-VR couple (Johnson, 2010; Johnson et al., in press). When two IT people come together it results in Mutual Violent Control (MVC) which is suggested to be rare (Johnson et al., in press). In a community sample of 330 violent individuals (recruited from the community, shelters, and through court filed reports), Johnson (2006) found slightly more men (56%) than women (44%) to be categorised as SCV perpetrators. Alternatively, he found that women make up a very small amount of ITs (3%) and therefore MVC couples are few and far between, with the majority of women in couples with IT partners categorised as VR (96%) status. However, other researchers using community samples (Graham-Kevan, 2003; Laroche 2005) have found that women are just as likely to be ITs as men (Laroche, 1999) and recent research (Hines & Douglas, 2010) has found men seeking help for IPV victimisation resemble VR women who are in a relationship with an IT.

Based on the aforementioned differences between IT and SCV perpetrators it could be expected that those individuals who perpetrate IPV out of a general pattern of control (ITs) would hold more skewed views about the acceptability of IPV than persons who perpetrate IPV in the context of conflict (SCV).
Study Objectives

The aforementioned review shows that little research has investigated female IPV perpetration or its relationship with controlling behaviours, or beliefs about IPV. This study aims to address these needs by investigating the prevalence of, and differences between, various types of heterosexual female IPV offenders who differ in levels of control in countries that differ in gender empowerment (GEM) scores (a proxy measure for patriarchy; see Chapter 2, pages 59-60 for a description of GEM). Specifically, the prevalence of each type, the severity of physical violence and level of injury perpetrated and experienced by each type and the attitudes about the acceptability of IPV in each type, will be examined. Self-reported aggression by English and Mexican female university students categorised into types that vary in their level of control (high/low) and physical aggression (yes/no) is examined.

Specifically the following research questions will be investigated:

1. What is the rate at which English and Mexican women are categorised into Non-aggressive/High Control, Non-aggressive/ Low Control, SCV (Aggressive, Low Control), IT (Aggressive, High Control), and VR (Self-defensive Aggression and Low Control) perpetrator types?

2. What are the levels of physical violence perpetrated and/or injury levels experienced by English and Mexican women in each type?

3. What are the collective beliefs about the acceptability of male-to-female and female-to-male IPV associated with English and Mexican women in each type?

Method
Participants

The samples of female university students used in the present chapter are part of the same samples used and described in Chapter 2 on page 63. To recapitulate, a total of 218 English and 129 Mexican heterosexual female students constituted the final sample used in the present chapter. Mean age, and sexual preference of the female groups have been previously discussed in Chapter 2 (see page 63 for a description). Other sample characteristics with regard relationship status, occupation and educational attainment are described in Table 1.

Measures

The Revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), and the scales of approval of male-to-female and female-to-male physical aggression of the Beliefs about Relationship Aggression Scales (BaRAS) (Dixon, 2011) were used in the present study and have been described in Chapter 2. Please see pages 65-68 for a description.

Controlling Behaviour Scales-Revised (CBS-R) (Graham-Kevan & Archer, 2003)

The CBS-R is a 48 item self-report questionnaire designed to assess controlling behaviour by either member of the couple. It was inspired in the literature of the Domestic Abuse Intervention Project (DAIP). The CBS-R uses behavioural categories and does not include items addressing physical aggression. Using a 5-point scale (0 = never to 4 = very frequently) respondents were asked to report how often during the past year they and their intimate partners had used any of the listed behavioural acts against each other. The CBS-R subscales cover different forms of controlling behaviour (economic and emotional abuse, coercion, threats, intimidation, and isolation) used against an intimate partner. The CBS-R
was used in this study along with the CTS-2 to analyse types of violent perpetrators according to Johnson’s typology of violent perpetrators (Johnson, 2006). The reliability alpha coefficients for the CBS-R overall perpetration scale in the English and Spanish versions were $\alpha = .89$ and $\alpha = .87$ respectively. The overall victimisation alpha coefficients were $\alpha = .92$ and .90 for the English and Spanish versions, respectively.

**Procedure**

The procedure for the administration of questionnaires has been described in Chapter 2. Please see pages 63-65 for a description.

**Treatment of Data**

**Grouping respondents**

To classify respondents into the study groups of interest, first, the same procedure followed in Chapter 2 (see page 68-69 for a description of dichotomising the CTS2 physical aggression scales) was used. Respondents were classified as physically aggressive if they answered they had perpetrated any minor or severe physical violent act on the CTS2, or as non-aggressive if they had not, within the 12 months prior to the study. Of the 347 women tested, 120 (34.6%) were aggressive and 227 (65.4%) were non aggressive.

Next, a cut off score on the CBS-R was identified that could be used to classify the identified aggressive and non-aggressive respondents further into high and low control. To do this we followed the procedure used in previous research (Johnson, 2006; Johnson & Leone, 2005; Johnson, Leone, & Xu, in press). Ward’s method cluster analysis was performed on the reports of the CBS-R to verify a two-cluster solution (low control, high control). The two cluster solution identified 72% of physically aggressive women as low control and 28% as
high control. A $k$-means cluster analysis was conducted with the resulting two-cluster solution, grouping 75% of the sample as low control and 25% as high control. A cross tabulation of Ward’s and $k$-means cluster solutions (not shown) agreed on the placement of 95% of the sample. The cut-off point for dichotomisation of the CBS-R (low and high control) was obtained by cross tabulating the results of $k$-means method cluster analysis with scores of the CBS-R. A cut-off point of 5 or more acts on the CBS-R minimised “misclassification” of 1 (0.4%) case from the low control group and 3 (3.6%) cases from the high control cluster.

Therefore, respondents were classified as Non-aggressive Low control if they could be classified as non-aggressive using the CTS2 and exhibited 0 to 4 controlling behavioural acts on the CBS-R. Participants were classed as Non-aggressive High control if they could be classified as non-aggressive using the CTS2 and perpetrated 5 or more acts of coercive control. To clarify, respondents identified as Non-aggressive Low Control included participants that did not perpetrate any controlling behaviour and individuals that used one to four coercive controlling acts in the previous 12 months. This is due to the focus of the effect of coercive/controlling behaviour (in the Johnson typology) in identifying the nature of partner violence perpetrators. Respondents classified as Aggressive and who had perpetrated five or more acts of coercive control were categorised ITs. Aggressive respondents that perpetrated 0 to 4 controlling behavioural acts, but whose partner was classified as an IT were grouped as VR. Respondents classified as Aggressive who perpetrated 0 to 4 controlling acts against their partner and were victims of an aggressive partner that also perpetrated 0 to 4 controlling behaviours within the previous 12 months were categorised as SCV. It is important to emphasise that Johnson’s typology considers the dyadic nature of the relationship to identify patterns of controlling behaviour and physical aggression to define the
types of perpetrators. Hence information on both partner’s perpetration is required to identify the different types of perpetrators. For example, to distinguish a SCV from a VR perpetrator it is not only necessary to obtain information on the respondent’s perpetration, but also, the respondent’s perception of the perpetration patterns of their partner.

**Deriving data from measures**

Treatment of data related to CTS-2 and BaRAS measures have been addressed in Chapter 2. Please see page 68-69 for a description.

Physical injury data was calculated by combining the minor injury and severe injury scales of the CTS-2 obtaining a measure of overall physical injury.

**Results**

**Group demographics**

Sample demographics are shown in Table 1. Significantly more Mexican women were single ($\chi^2 [1, n = 343] = 12.684, p =.001$) at the time of study and more English respondents were in a stable relationship but not cohabiting ($\chi^2 [1, n = 343] = 8.762, p =.003$) and this remained significant at the adjusted alpha level of 0.008 to correct for the increased risk of Type I error due to multiple tests (6) being calculated, using the Bonferroni correction procedure. Significantly more English women were in part time employment ($\chi^2 [1, n = 337] = 7.680, p =.006$) and more Mexican women were not in employment ($\chi^2 [1, n = 336] = 8.783, p =.003$). No significant differences in age or education level were evident.
Table 1

*English and Mexican student’s demographics*

<table>
<thead>
<tr>
<th>Categories</th>
<th>English women N=218</th>
<th>Mexican women N=129</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years/SD)</strong></td>
<td>19.33 (1.377)</td>
<td>20.46 (2.158)</td>
</tr>
<tr>
<td><strong>Relationship status n (%):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Single</td>
<td>87(39.9)</td>
<td>77(59.7)</td>
</tr>
<tr>
<td>b) Dating (not cohabiting)</td>
<td>14(6.4)</td>
<td>3(2.3)</td>
</tr>
<tr>
<td>c) Stable relationship (not cohabiting)</td>
<td>105(48.1)</td>
<td>39(30.2)</td>
</tr>
<tr>
<td>d) Cohabiting</td>
<td>10(4.6)</td>
<td>3(2.3)</td>
</tr>
<tr>
<td>e) Married</td>
<td>1(0.5)</td>
<td>3(2.3)</td>
</tr>
<tr>
<td>f) Married (separated)</td>
<td>1(0.5)</td>
<td>1(0.8)</td>
</tr>
</tbody>
</table>

**Occupation:**

<table>
<thead>
<tr>
<th></th>
<th>English women N=218</th>
<th>Mexican women N=129</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Not in employment</td>
<td>150(68.8)</td>
<td>102(79.1)</td>
</tr>
<tr>
<td>b) In part time employ</td>
<td>66(30.3)</td>
<td>18(14)</td>
</tr>
</tbody>
</table>

**Ongoing education level:**

<table>
<thead>
<tr>
<th></th>
<th>English women N=218</th>
<th>Mexican women N=129</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Undergraduate</td>
<td>201(92.2)</td>
<td>129(100)</td>
</tr>
<tr>
<td>b) Master’s</td>
<td>6(2.8)</td>
<td></td>
</tr>
<tr>
<td>c) Doctoral degree</td>
<td>5(2.3)</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Where n values do not add up to total sample size investigate this was due to missing data

**Rates of perpetrator group status**

Table 2 depicts the number of females categorised into perpetrator type for both countries. The rare prevalence of respondents classified as Non-aggressive High Control and VR perpetrators in both samples was not suitable to conduct meaningful statistical analyses, thus these participants were not included in subsequent analyses.

As multiple tests (3) were performed for within and between country analyses, the Bonferroni correction procedure was used to correct for possible type I error. An adjusted alpha value of 0.017 was used.

Females in the English sample are significantly more likely to be categorised as Non-aggressive Low Control than SCV ($\chi^2 [1, n = 170] = 37.647, p = .001$) and IT perpetrators ($\chi^2$
Further within-country comparisons indicated a higher prevalence of SCV over IT perpetrators ($\chi^2 [1, n= 216] = 88.861, p = .001$).

Conversely, Mexican women were more often categorised as ITs and SCVs than Non-aggressive Low Control, however these differences were not significant. Additionally, female respondents were found to be more frequently categorised as ITs than SCVs however these differences were not significant.

For between country analysis inter-country comparisons show significantly more English women were categorised as Non-aggressive Low control ($\chi^2 [1, n = 337] = 31.160, p = .001$), and more Mexican women classified as ITs ($\chi^2 [1, n = 337] = 20.045, p = .001$). Mexican women were more frequently categorised as SCV perpetrators; however this difference was not significant.

Table 2

*Prevalence of perpetrator type in English and Mexican participants*

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-aggressive Low Control</th>
<th>Non-aggressive High Control</th>
<th>SCV</th>
<th>IT</th>
<th>VR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>English sample</td>
<td>125 (57.3)</td>
<td>6 (2.8)</td>
<td>45 (20.6)</td>
<td>34 (15.6)</td>
<td>6(2.8)</td>
</tr>
<tr>
<td>Mexican sample</td>
<td>31 (24)</td>
<td>7 (5.4)</td>
<td>33 (25.6)</td>
<td>46 (35.7)</td>
<td>4(3.1)</td>
</tr>
</tbody>
</table>

**Perpetrated and experienced physical violence and physical injury**

Within-country bivariate analyses were conducted to test for perpetration and victimisation differences between aggressive perpetrators (see Table 3). As multiple tests
were performed, the Bonferroni adjustment procedure was used to correct for possible type I error. This was again across 3 tests for within country analysis of victimisation statistics resulting in a new alpha level of 0.017 for tests of victimisation. For within country analysis of perpetration statistics only one test was conducted within each category of minor, severe aggression and injury levels, to explore differences between IT and SCV perpetrators and so an alpha of 0.05 was used.

Of the Mexican sample all ITs and almost all SCVs perpetrated minor physical IPV with no significant differences between these two groups. More ITs perpetrated severe physical IPV ($\chi^2[1, n = 479] = 8.468, p = .004$), and inflicted a higher injury frequency to their partner than SCV perpetrators; however this last comparison was not significant.

In the English sample, almost all SCVs and ITs perpetrated minor physical IPV with no significant differences between these two types of perpetrators. More ITs perpetrated severe physical IPV ($\chi^2[1, n = 79] = 5.598, p = .018$), and inflicted more physical injury on a partner than SCV perpetrators; however this last difference was not significant.

These figures were mirrored in terms of the victimisation experienced by groups within each country. Mexican ITs significantly experienced more minor physical IPV than SCV ($\chi^2[1, n = 78] = 5.718, p = .017$) and respondents classed as Non-aggressive Low Control ($\chi^2[1, n = 76] = 43.711, p = .001$). Mexican ITs experienced more severe physical IPV than respondents categorised as Non-aggressive Low Control ($\chi^2[1, n = 77] = 12.911, p = .001$), and SCV perpetrators, although this last difference was not significant. ITs experienced higher physical injury than Non-aggressive Low Control and SCV perpetrators, however these differences were not significant.
Table 3

*Prevalence of minor and severe aggressive acts and injuries experienced by different types of female Mexican and English perpetrators*

<table>
<thead>
<tr>
<th>IPV</th>
<th>Perpetrator type</th>
<th>Perpetration Mexican Perpetration n (%)</th>
<th>Perpetration English Perpetration n (%)</th>
<th>Victimisation Mexican victimisation n (%)</th>
<th>Victimisation English victimisation n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Aggressive Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Control Mx (31), En (135)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Non-aggressive High</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Control Mx (7), En (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aggressive perpetrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT Mx (46), En (34)</td>
<td>46 (100)</td>
<td>33 (97.1)</td>
<td>40(87)</td>
<td>24(70.6)</td>
</tr>
<tr>
<td></td>
<td>SCV Mx (33), En (45)</td>
<td>32 (97)</td>
<td>44 (97.8)</td>
<td>21(63.6)</td>
<td>31 (68.9)</td>
</tr>
<tr>
<td></td>
<td>VR Mx (4), En (6)</td>
<td>4 (100)</td>
<td>6(100)</td>
<td>4 (100)</td>
<td>5 (83.3)</td>
</tr>
<tr>
<td></td>
<td>Severe physical IPV</td>
<td></td>
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<td></td>
<td>Non-aggressive low</td>
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<td></td>
<td>control Mx (31), En (135)</td>
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<td></td>
<td>Non-aggressive high</td>
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<td></td>
<td>control Mx (7), En (6)</td>
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<tr>
<td></td>
<td>Aggressive perpetrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT Mx (46), En (34)</td>
<td>29 (63)</td>
<td>18 (52.9)</td>
<td>22 (47.8)</td>
<td>15 (44.1)</td>
</tr>
<tr>
<td></td>
<td>SCV Mx (33), En (45)</td>
<td>9 (27.3)</td>
<td>11 (24.4)</td>
<td>8 (24.2)</td>
<td>8 (17.8)</td>
</tr>
<tr>
<td></td>
<td>VR Mx (4), En (6)</td>
<td>4 (100)</td>
<td>2 (33.3)</td>
<td>4 (100)</td>
<td>4 (66.7)</td>
</tr>
<tr>
<td></td>
<td>Physical injury</td>
<td></td>
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<tr>
<td></td>
<td>Non-aggressive low</td>
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<td></td>
<td>control Mx (31), En (135)</td>
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<td></td>
<td>Non-aggressive high</td>
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<td></td>
<td>control Mx (7), En (6)</td>
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<tr>
<td></td>
<td>Aggressive perpetrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT Mx (46), En (34)</td>
<td>12 (26.1)</td>
<td>13 (38.2)</td>
<td>13 (28.3)</td>
<td>12 (35.3)</td>
</tr>
<tr>
<td></td>
<td>SCV Mx (33), En (45)</td>
<td>4 (12.1)</td>
<td>8 (17.8)</td>
<td>4 (12.1)</td>
<td>6 (13.3)</td>
</tr>
<tr>
<td></td>
<td>VR Mx (4), En (6)</td>
<td>3 (75)</td>
<td>1 (16.7)</td>
<td>2 (50)</td>
<td>1 (16.7)</td>
</tr>
</tbody>
</table>

*Note. Mx = Mexican; En = English*
In the English samples, IT and SCV victims experienced the highest rate of minor physical IPV \( (\chi^2 [1, n = 68] = 28.301, p = .005) \), although there were no significant differences between these two groups. ITs experienced more minor physical IPV than respondents classified as Non-aggressive Low Control \( (\chi^2 [1, n = 159] = 64.574, p = .001) \). ITs also experienced more severe physical IPV \( (\chi^2 [1, n = 159] = 50.736, p = .001) \), and experienced more physical injury \( (\chi^2 [1, n = 159] = 42.795, p = .001) \) than respondents classed Non-aggressive Low Control, or than SCVs, although the difference between ITs and SCVs was not significant.

Inter-country bivariate analyses were conducted to test for perpetration and victimisation differences between aggressive perpetrators. This results in 2 tests for inter-country analysis of perpetration and 3 tests for victimisation yielding new alpha values of 0.025 and 0.017 for perpetration and victimisation comparisons, respectively.

Inter-country comparisons showed more minor physical IPV perpetration was symmetrical amongst SCVs and slightly higher by Mexicans ITs. It also indicates Mexican ITs and SCVs perpetrated more severe physical IPV, whilst more English ITs and SCVs inflicted physical injury on their partners; however all these differences were not significant.

Inter-country victimisation comparisons indicate Mexican IT females more frequently experienced minor and severe physical IPV. Mexican SCVs experienced more severe physical IPV. Conversely, more English SCV perpetrators experienced more minor physical IPV and physical injury. Likewise more English ITs experienced physical injuries; however none of these differences were significant.

Acceptability of female-to-male and male-to-female aggression
Table 4 displays the mean scores that each type of IPV perpetrator rated on the BARAS. All types in both the Mexican and English samples approved of female-to-male aggression more than male-to-female aggression. Correcting for error across 3 tests using the Bonferroni correction procedure required using a new alpha level of 0.017, it was evident that this reached significance for the Mexican IT ($t[43] = -6.073, p = .001$); SCV ($t[30] = -3.558, p = .001$), and for English Non aggressive Low Control group ($t[119] = -10.889, p = .001$); IT ($t[32] = -8.604, p = .001$); SCV ($t[38] = -7.466, p = .001$) groups.

Correction for error across 3 tests using the Bonferroni adjustment resulted in using a new alpha level of .017 for within group comparisons. For questions assessing approval of male-to-female aggression in the English sample, Non-aggressive Low Control individuals approved significantly less than ITs ($t[152] = -2.720, p = .010$) and SCV ($t[161] = -3.101, p = .003$) female perpetrators. Amongst aggressive perpetrators English ITs approved higher of male-to-female aggression than SCVs, however this difference was not significant. In the Mexican sample no statistical differences were found between Non-aggressive Low Control and IT or SCV female perpetrators. Amongst violent perpetrators ITs approved higher than SCVs, however this difference was not significant.

For questions assessing approval of female-to-male aggression in the English sample the Non aggressive Low Control group approve significantly less than IT ($t[153] = -4.227, p = .001$) and SCV perpetrators ($t[161] = -3.613, p = .001$). Further bivariate tests indicated English ITs approved higher of female-to-male aggression than SCVs, but this difference was not significant. Comparisons between aggressive and non-aggressive individuals in the Mexican sample showed persons categorised as Non-aggressive Low Control approved higher of female aggression than ITs, but lower than SCVs, however these differences did not
reach significance. Amongst aggressive perpetrators, ITs did approve significantly more of female aggression than SCVs ($t [74] = 2.998, p = .004$).

Table 4

**Female perpetrator’s collective beliefs: Approval of male and female perpetrated aggression by each type**

<table>
<thead>
<tr>
<th>Collective beliefs</th>
<th>Type of perpetrator ($n$)</th>
<th>English sample $M$ (SD)</th>
<th>Mexican sample $M$ (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Male-to-female aggression</td>
<td>Non-aggressive low control Mx(31), En(135)</td>
<td>14 (2.6)</td>
<td>16.5 (8.9)</td>
</tr>
<tr>
<td></td>
<td>Non-aggressive high control Mx(7), En(6)</td>
<td>13 (.9)</td>
<td>12.4 (.8)</td>
</tr>
<tr>
<td></td>
<td>IT Mx(46), En(34)</td>
<td>17.1 (6.3)</td>
<td>17 (9.4)</td>
</tr>
<tr>
<td></td>
<td>SCV Mx(33), En(45)</td>
<td>16.1 (4.1)</td>
<td>13.8 (2.3)</td>
</tr>
<tr>
<td></td>
<td>VR Mx(4), En(6)</td>
<td>16.6 (2.3)</td>
<td>14.3 (2.1)</td>
</tr>
<tr>
<td>Approval of Female-to-male aggression</td>
<td>Non-aggressive low control Mx(31), En(135)</td>
<td>18 (4.9)</td>
<td>18.7 (8.6)</td>
</tr>
<tr>
<td></td>
<td>Non-aggressive high control Mx(7), En(6)</td>
<td>17.8 (4.3)</td>
<td>14.1 (3)</td>
</tr>
<tr>
<td></td>
<td>IT Mx(46), En(34)</td>
<td>22.3 (6)</td>
<td>23.1 (11.1)</td>
</tr>
<tr>
<td></td>
<td>SCV Mx(33), En(45)</td>
<td>21.5 (6.4)</td>
<td>17.1 (6.4)</td>
</tr>
<tr>
<td></td>
<td>VR Mx(4), En(6)</td>
<td>22 (3.3)</td>
<td>20.3 (1.5)</td>
</tr>
</tbody>
</table>

*Note. Mx = Mexican sample; En = English sample.*

Inter-country comparisons for approval of male to female aggression revealed no significant differences amongst Non-aggressive Low Control, and IT perpetrators, however, English SCV perpetrators approved significantly more than their Mexican peers ($t [71] = 3.053, p = .003$).
Likewise for approval of female-to-male aggression no significant differences were found between Non-aggressive Low Control and IT perpetrators, whilst SCV perpetrators in the English sample approved significantly more than their Mexican counterparts ($t [70] = 2.903, p = .005$).
Discussion

The present study provides insight into an under researched area, and sheds light on the rates and differences between various types of heterosexual female IPV perpetrators who differ in levels of control in two countries. Specifically, the frequency of each type, the severity of physical violence and level of injury perpetrated and experienced by each type and the attitudes about the acceptability of IPV by each type, are examined.

Summary of results

With regard to the first research question, respondents in the English sample were most frequently of Non-aggressive Low Control status – the most common form of aggressor was the SCV (aggressive, low control). Conversely, the most frequent type of perpetrator in the Mexican sample was the Intimate Terrorist (IT), who displays physical aggression and high levels of control, followed by the SCV perpetrator, followed by Non-aggressive Low Control. Cross country comparisons further verified these differences, with English women having significantly more of their sample categorised as Non-aggressive Low Control, and Mexican women significantly more ITs. Both countries had a significantly low rate of women classed as Violent Resistant (VR) or Non-aggressive-High Control. Thus, while participants from both countries were classed as IT and SCV types, Mexican women residing in a country with a lower GEM score than England (a proxy measure for patriarchy) displayed significantly higher frequency of ITs and significantly lower frequency of Non-aggressive Low control types. Neither country had high rates of females aggressing toward a partner out of self-defensive motives. This result highlights, not only that women are not aggression solely due to self-defence, but also that the relationship between patriarchal social norms and female to male IPV is not as straightforward as often assumed. This result does not support the idea that female victimisation (male perpetration) increases as traditional patriarchal
values increase – but rather that such a societal atmosphere provides a context for heightened female aggression and control in intimate relationships. Perhaps benevolent sexism (closely linked to patriarchy) actually serves as a protective factor to women and as a risk factor to men, as aggression by the weaker female sex is seen by society as trivial and inconsequential opposed to men’s potentially damaging violence. Indeed, work by Felson (2002) would suggest this is the case.

Another point arising from this first research question is that the low rates of Non-aggressive High Control and high rates of ITs (aggressive, high control) shows there is a relationship between control and physical aggression. That is, if control exists in the relationship, it is also likely that physical aggression also exists - indeed the majority of participants displaying high levels of control in this study also enacted physical aggression.

With regard to the second research question, it is clear that ITs in both the Mexican and English sample perpetrate significantly higher frequencies of severe IPV and higher rates of injury than SCV groups. In addition, IT perpetrators in both countries are significantly more likely to experience higher rates of severe IPV victimisation and injury rates. Therefore, being an IT perpetrator not only means that a person will deliver more severe violence and injury – but that they will also be more likely to experience these high levels of victimisation in return, in comparison to SCV or Non-aggressive Low Control types. However, overall IT and SCV female perpetrators from both countries perpetrate more severe physical IPV than the one they experience from their male partners. This is further consistent with research findings on dating samples that has shown females to display higher rates of heterosexual IPV than men (Archer, 2000; Straus, 2004).
Inter-country comparisons of frequency and levels of physical IPV and injury perpetration by specific types of perpetrators were not statistically different. Comparisons of victimisation experiences indicated Mexican IT perpetrators sustain more minor physical violence than their English counterparts. Findings in this study suggest levels of gender empowerment for women are not associated with lower levels of female perpetration and higher levels of female victimisation (male perpetration) of IPV. Rather it is the type of IPV, as categorised by the control-physical violence typology that is of importance. Findings here encourage the need for further research different types of perpetrators and victims of IPV (particularly in dating samples) in countries with differing levels of gender empowerment to confirm the present findings. Furthermore, research of less frequently observed types such as Non-aggressive High Control and VR perpetrators in these kinds of samples is needed.

In answering the final research question, results clearly showed that female students in both countries approved more readily of female-to-male than male-to-female physical aggression. This is in line with results from Chapter 2 and suggests a norm of chivalry prevails to some extent in both samples. It was clear that aggressive women (ITs and SCVs) in both countries approved of both male to female and female-to-male IPV at higher rates than non-aggressive low controlling level groups, but these differences were statistically significant only for the English sample. Thus, approval of aggression of IPV by both sexes is statistically related to IPV perpetration by women in a country with lower levels of gender inequality (England).

The IT groups in both countries had higher approval scores than all other categories – while this didn’t always reach statistical significance. However, it is clear that a trend for this group of women to approve of any form of IPV (especially female to male IPV) is evident.
For the English students approval rates for both male-to-female and female to male aggression did not significantly differ between IT and SCV groups. Therefore while English aggressive women approve more of male and female IPV in general – there were no differences between IT and SCV groups. This was not the case for Mexican women who showed differences in approval rates for female to male perpetration between IT and SCV groups. ITs approved of female IPV aggression more, showing that for Mexican women ITs do have higher levels of approval of IPV than SCVs.

**Implications and Limitations**

Women categorised as ITs are more likely to perpetrate and experience higher levels of injury and show trends for higher approval of IPV in general. Therefore, perpetrators committing IPV motivated by control experience IPV in very different ways to SCV or VR perpetrators. Johnson (2011) has suggested physical violence can be an element present in relationships characterised by low and high levels of coercive control, however, he distinguishes that low-level controlling persons will tend to use less violence than people who use higher levels of coercive control. This is an important distinction because although other studies at the community level (i.e. Laroche, 2005) show higher levels of physical IPV associated with higher levels of coercive control, this may not apply to younger dating relationships. This could be in part because high-level coercive controlling perpetrators (ITs) in these young dating relationships may be more successful in the use of coercive control tactics with their partners requiring the use of less physical violence to maintain control of the relationship. It is also plausible, that relationship dynamics in more stable dyads which may also involve parenthood may be considerably different. Perhaps it is in those more formal relationships in which other collective norms of acceptability or beliefs of entitlement have a greater impact. Nevertheless, this study provides data that indicates not only that, important
levels of coercive control (high and low) are prevalent in female perpetrators in these kind of samples, but also that distinctions made between levels of coercive control may be more useful in helping us to better understand the rates and attitudes about violence than when broader categories of violent and non-violent people are used.

The implications of this work indicate the need to screen for specific types of perpetrators/victims of partner violence in order to provide more efficient and empirically-guided research to develop and deliver prevention and intervention efforts.

Findings here may apply only to university students (mostly in dating relationships) within the two countries examined and further generalisation to students from other cultural backgrounds or to respective general populations should be treated with caution. Nevertheless, this investigation succeeded in being the first study to provide data on female perpetrators from different sociocultural backgrounds who differ in their levels of control. Research should focus on further investigating differences in beliefs about aggression, particularly from Non-aggressive High Control and VR types who tend to be far less commonly found than other types in dating relationships. Further research with such typologies should explore other commonly held beliefs of entitlement, in dating and more stable dyads to further understanding of different types of perpetrators in different kinds of relationships.

**Conclusion**

This study has demonstrated the importance of considering the role of control in female perpetrated IPV. In summary, the results of this study show that females residing in countries with higher degrees of patriarchal societal values (lower GEM scores) do not
experience higher levels of female IPV perpetration due to motives centred on self-defence. On the contrary, Mexican females have shown significantly higher levels of controlling physical aggression (IT) and less non-aggressive, low controlling behaviours than English females. In addition, females with high levels of control and physically aggressive behaviours perpetrate and experience higher rates of severe IPV and injury and tend to view IPV as more acceptable, especially female-to-male aggression, regardless of country of origin. Therefore, it can be concluded that it is important to understand the type of perpetration, as perpetrators exhibiting high levels of IPV and control (IT) are most likely to put themselves and their partner at greatest risk of harm – this is especially true of the Mexican sample as they showed the highest prevalence of the IT category.

Therefore, are countries typified by higher levels of patriarchy and benevolent sexism actually serving to protect women from men’s violence – and at the same time increase men’s risk of victimisation from physically violent and controlling female partners? This has implications for understanding the impact that societal norms can have on family aggression and the appropriate prevention strategies that should be put in place accordingly. For example, promoting women as the weaker, victimised sex in family situations, may actually serve to increase female-to-male aggression. As female aggression is one of the biggest risk factors for female victimisation (Stith, Smith, Penn, Ward, & Tritt, 2004; Straus, 2005; 2008), this may, ironically, in turn serve to increase female victimisation in the long run (Dixon & Graham-Kevan, 2011). The true nature and motives for IPV should be understood according to what the evidence tells us, rather than assuming IPV takes place in the context of male control over women if effective prevention and intervention strategies are ever to be achieved.
CHAPTER 4

INTIMATE PARTNER VIOLENCE PERPETRATION AND ASSOCIATED RISK
AND MENTAL HEALTH FACTORS IN MEN AND WOMEN IN DATING
RELATIONSHIPS

Chapter rationale

Extensive research in the field of intimate partner violence (IPV) has been conducted to understand risk and mental health factors associated with IPV, for female victims (e.g., Ellsberg, Jansen, Heise, Watt, & García-Moreno, 2008) and male perpetrators (e.g., Hall, Walters, & Basile, 2012). However, few studies have actually studied female perpetration in relation to these issues. Additionally, most research has focused on factors associated with physical victimisation and to a lesser degree other important and widespread forms of partner violence perpetration, such as psychological aggression (O’Leary, 1999). As such, research examining factors associated with male and female perpetration, especially forms other than physical violence, is limited. Chapter 3 explored the rates of IPV and physical consequences for women who perpetrated physical and/or controlling behaviours in relation to non-aggressive controls. This Chapter intends to extend this work, by first examining mental health factors associated with female and male physical aggression in comparison to non-aggressive controls. In addition, it will take this analysis one step further and explore risk and mental health factors associated with types of perpetrators using physical and/or controlling behaviours in relation to controls. Only the Mexican sample is studied here because of the small sample size of male respondents recruited in the English sample, which precluded conducting sex comparisons which is one of the central aims of this Chapter. The limitations of this are properly acknowledged in this Chapter.
Introduction

Research has recently shown the frequency of male and female intimate partner violence (IPV) perpetration is approximately equal, with higher rates of perpetration/victimisation typically found in young dating couples than in men and women from community populations (Straus, 2010). Research exploring male and female IPV perpetration has found more common, than unique, risk factors shared by the different sexes (Medeiros & Straus, 2007; O’Leary, Smith Slep, & O’Leary, 2007; Stith et al., 2004), although examination of female perpetration is rare. Research has also begun to explore the mental health factors associated with IPV perpetration in female victims, but to a lesser extent in male victims or male and female perpetrators. This Chapter aims to address some of these deficiencies by exploring risk and mental health factors associated with male and female perpetration. The following introduction briefly summarises some important findings related to IPV and mental health in women and men to set the context for this Chapter.

Risk and mental health factors associated with Intimate Partner Violence

The literature on partner violence in dating samples has shed some light on risk and mental health factors related to IPV. Recent research has started to study these correlates within young men and women victims, and even with specific types of perpetrators of IPV.

Anger expression

Anger has been defined as an experience arousing from a set of feelings that originate from internal physiological reactions and involuntary emotional expressions that link the unpleasant negative situation with unpleasant memories and thoughts (Berkowitz, 1993). There is direct and indirect evidence for the existence of these factors in partner violent
relationships. For instance, anger management and antisocial personality have been linked to an increased probability of using minor and severe physical IPV in dating couples (Medeiros & Straus, 2006). Low levels of gender hostility by men and women in dating samples have been previously reported (Dutton & Straus, 2006). Another study has found female youths have higher anger control scores than males (Musante, Treiber, Davis, Waller, & Thompson, 1999). Próspero (2008b) found higher levels of hostility against a partner by individuals categorised as IT than by SCV perpetrators in dating relationships.

Research with married and cohabiting couples further supports this link, and has found anger uniquely predicts male partner aggression (O’Leary, et al., 2007). In their exploratory model O’Leary et al. found anger expression is directly related to male IPV and indirectly linked to it through dominance and jealousy of an intimate partner (2007). Other research (Margolin, John, & Gleberman, 1988) has found physical violence perpetrators to differ from verbally aggressive and withdrawing males in their heightened anger, fear, sadness, feeling attacked, and more physiologically aroused. Married women who are physically violent also differ from verbally aggressive or withdrawing females in patterns of offensive negative behaviours (i.e. signs of dismissal, waving arms, pointing one’s finger at the other, threatening or mimicking gestures, etc.) and show escalation in the middle of a discussion and de-escalation during the final part of the discussion. Research with assaultive men (i.e. court-mandated men to treatment) shows anger and borderline personality organisation, trauma symptoms and jealousy are correlated with verbal and physical IPV directed at women (Dutton, Saunders, & Starzomski, & Bartholomew, 1994).

Furthermore, a meta-analysis of studies using clinical and community samples has found IPV male perpetrators have moderately higher levels of anger expression than non-violent and
relationship discordant non-violent men (Norlander & Eckhardt, 2005). Yet another meta-analysis (Stith, et al., 2004) has linked anger/hostility to physical IPV perpetration in men.

Therefore, it is clear that anger is an important risk factor to be researched not only because of the impact it can have on mental health, but also because anger has been found by some research as part of men’s and women’s motives for perpetration of physical IPV in dating samples (Fiebert & Gonzalez, 1997; see also Chapter 2). It can therefore be expected that young men and women who perpetrate physical IPV have higher levels of anger than non-physically aggressive individuals.

Partner jealousy

Partner jealousy has been defined as feelings of insecurity and loneliness in intimate relationships and has been defined as “the negative emotion resulting from actual or threatened loss of love due to a rival” (Mathes & Severa, 1981, p. 23). Partner jealousy has also been linked to physical violence and coercive control in intimate relationships (Dutton, Saunders, Starzomski, & Bartholomew, 1994). In dating samples jealousy of an intimate partner has been found to be an important problem among aggressive persons (Riggs, 1993), particularly for women (Manchikanti Gomez, Speizer, & Moracco, 2011) and to have increased odds for severe physical IPV perpetration independently of the sex of the person (Medeiros & Straus, 2007). Other studies with community samples further support partner jealousy directly (Brownridge, 2009; Foran & O’Leary, 2008; O’Leary et al., 2007) and indirectly linked to IPV perpetration through other correlates such as personality traits (i.e. trait anger- Costa & Babcock, 2008). Meta-analyses with studies using married/cohabiting couples have found a small effect of partner jealousy ($r = .17$) on men perpetrating physical IPV to a female partner (Stith et al., 2004).
Therefore, it is plausible to expect physically aggressive men and women to have higher levels of partner jealousy than non-violent individuals. Additionally, partner jealousy levels are hypothesised to be higher in female perpetrators than in male perpetrators of IPV.

_Emotionally flooding_

Multivariate models of IPV in married or cohabiting couples (O’Leary et al., 2007) have also found emotional flooding to be strongly associated to physical IPV perpetration in men and women. Emotional flooding also known as diffuse physiological arousal (DPA) has been described in the literature as an alarm mechanism the body has in which “many systems are simultaneously activated to mobilize the body, so that we can cope effectively with emergencies and situations perceived to be dangerous” (Gottman, 1999, p. 75). The basis of this altered and diffuse physiological arousal state corresponds to altered higher order cognitive processes such as the ones required to resolve conflict. These processes are compromised by negative cognitions and emotions that arise from conflict with a partner (Gottman, 1999; O’Leary et al., 2007). The physiological basis of this state lies within the activation of the sympathetic “branch” of the autonomic nervous system which “floods” the body with “stress hormones” called catecholamines (dopamine, epinephrine, norepinephrine) when danger is perceived. This accelerates functions such as heart rate and attention processes. This heightened state of alert within couple conflict reduces the individual’s ability to process information and the person becomes more reactive (Gottman, 1999). This state may be contributed to, and/or exacerbated by previous traumatic experiences in the form of trauma symptoms (i.e. Posttraumatic Stress Disorder-PTSD) that activate anger structures and dysregulation also characterised by heightened arousal and cognitive biases (Taft, Schumm, Orazem, Meis, & Pinto, 2010).
It is plausible therefore, that physically violent men and women will experience more intense experiences of feeling “flooded” and overwhelmed by conflict than non-aggressive individuals. Furthermore, the frequent association in research of higher angered states in men may well involve male perpetrators of IPV to experience higher levels of emotional flooding symptoms than female perpetrators. It is one of several goals of this chapter to explore such relationships.

Posttraumatic Stress Disorder (PTSD)

PTSD has been described as a condition “characterised by the re-experiencing of an extremely traumatic event accompanied by symptoms of increased arousal and avoidance of stimuli associated with the trauma” (American Psychiatric Association, 1994, p. 369). PTSD has been documented to be linked to physical IPV perpetration in clinical (Taft, Street, Marshall, Dowdall, & Riggs, 2007), and dating samples (Taft et al., 2010). As explained by Taft et al. (2010) trauma symptomatology stemming from traumatic experiences are (in part) responsible for aggression through salient risk factors for partner violence such as trait anger. A meta-analysis of 31 studies has found severity of symptoms of Posttraumatic Stress Disorder (PTSD) to be linked to physical IPV perpetration and suggest PTSD has a stronger association with anger and hostility in men than in women (Taft, Watkins, Stafford, Street, & Monson, 2011). It has been proposed that women may internalise PTSD symptomatology whilst men may be more likely to externalise it (Taft et al., 2010). Recent research has linked PTSD to physical and psychological IPV perpetration through anger arousal and anger expression in female college students (Kendra, Bell, & Guimond, 2012), and to psychological IPV perpetration in men and women in dating relationships (Taft et al., 2010). Therefore we may expect PTSD to feature as a factor that differentiates aggressive and non-aggressive IPV perpetrators in this study.
Depressive symptoms

Depression has been found to be another important mental health indicator related to partner violence. Depressive symptomatology (e.g. feelings of sadness, loss of pleasure and interest over things or people, feelings of guilt, suicidal thoughts or wishes, changes in appetite, and sleeping patterns etc.) has also been linked in multivariate models of partner aggression in men and women (O’Leary et al., 2007). Depressive symptoms have not only been linked to female physical IPV victimization through an impact on maturational processes and assortative mating (Lehrer, Buka, Gortmaker, & Shrier, 2006), but also to physical IPV perpetration by younger women involved in mutually-violent relationships (Caetano, Vaeth, & Ramisetty-Mikler, 2008; Vaeth, Ramisetty-Mikler, & Caetano, 2010), and in youths, particularly in male perpetration (Banyard et al., 2006).

Male and female 21-year old perpetrators of physical IPV in a study in New Zealand reported significantly higher scores for mental health problems such as depression and anxiety disorders than non-violent peers (Magdol, et al., 1997). Conversely, other recent research shows depressive symptoms is not a salient risk factor distinguishing violent from non-violent male and female IPV perpetrators (Renner & Whitney, 2012) or a risk factor for severe physical IPV perpetration (Keenan-Miller, Hammen, & Brennan, 2007). Studies using married or cohabiting samples do support the link between depressive symptomatology and physical IPV perpetration. For example, elevated rates of depression have been found in men and women from a nationally representative survey in the US, but particularly higher in female perpetrators of physical IPV (Vaeth et al., 2010). Multivariate models show depressive symptoms to be linked to male-to-female physical IPV through dyadic adjustment, dominance, and jealousy, whilst depressive symptomatology is indirectly related to female-to-male physical IPV via dyadic adjustment and this latter to partner responsibility.
attributions and dominance/jealousy which leads to female aggression (O’Leary et al., 2007). Research has also shown depression and other enduring vulnerabilities are linked to couple conflict and to the occurrence of men’s and women’s IPV perpetration. Particularly, men’s depression and antisocial behaviour has been associated with women’s occurrence and frequency of physical IPV perpetration, whilst depression in women has been associated with frequency of men’s physical IPV perpetration (Marshall, Jones, & Feinberg, 2011).

Based on the above account, it is therefore of interest to explore depressive symptomatology across the sexes and between physically aggressive and non-aggressive women and men.

Alcohol use/abuse

Alcohol abuse is another important mental health condition that has been declared to be both an important risk factor for IPV (Stith et al., 2004) and to have a less salient direct role and act as a risk marker (O’Leary et al., 2007) in triggering IPV perpetration. Whilst some studies have found alcohol abuse to be linked to male perpetration of IPV (Bromet, Gluzman, Paniotto, Webb, Tintle, Zakhozha, Havenaar, Gutkovich, Kostyuchenko, & Schwartz, 2005; Dossi, Saliba, Saliba Garbin, & Isper Garbin, 2008; Schumacher, Feldbau-Kohn, Smith Slep, & Heyman, 2001) some other studies have linked alcohol-related problems to both men and women (Brownridge, 2008; 2009; Caetano, Schafer, & Cunradi, 2001; Schafer, Caetano, & Cunradi, 2004). Some research (i.e. Foran & O’Leary, 2008) has found alcohol abuse to be related to IPV by means of other key factors such as partner jealousy and anger control. The relationship of alcohol consumption and perpetration of IPV has been suggested to be stronger and more straightforward for men than for women with heavy drinking problems in dating relationships (Fossos, Neighbors, Kaysen, & Hove, 2007),
however, some longitudinal research indicates alcohol use is an important predictor of (physical and sexual) dating violence perpetration by women, but not by men (Foshee et al., 2001). Research with dating samples has also linked alcohol problems and risky alcohol drinking with physical IPV perpetration and victimisation in men and women (Baker & Stith, 2008; Rothman, Stuart, Greenbaum, Heeren, Bowen, Vinci, Baughman, & Berstein, 2011). Meta-analytic procedures indicate higher levels of alcohol consumption are positively associated to IPV perpetration in dating samples (Rothman, McNaughton-Reyes, Johnson, & LaValley, 2012). Based on the aforementioned literature, it is important to examine this ambiguous factor in this sample of young men and women.

A coercive control typology

The importance of making distinctions between different types of IPV has bolstered research that investigates the contexts in which IPV takes place. One type of distinction made is that by Johnson (1995; 2006) who posits that IPV can be better understood by distinguishing different types of IPV based on the motives of perpetrators, and the social location of partners (Johnson & Ferraro, 2000). Johnson has suggested these distinctions should not rely on the severity of physical IPV but rather on the motivations behind violent and controlling behaviour (Johnson & Ferraro, 2000). This typology makes coercive control a central element of understanding and distinguishing between different types of IPV. From this perspective, Situational Couple Violence (SCV) is thought to predominate in “general” or community samples, whilst Intimate Terrorism (IT) in clinical or selected samples (i.e. victims from shelters, court-mandated perpetrators; Johnson, 2006). A recent study confirms levels of coercive control to be associated with male and female perpetrators of physical IPV (Graham-Kevan & Archer, 2008). The strongest associations for coercive control and physical IPV was found in the IT category. A more restricted range of controlling behaviour
was found in the SCV and Violent Resistant (VR) categories which are typically associated with a partner trying to win control over an argument rather than control over the relationship and the partner’s life itself. For a description of Johnson’s typology see Chapter 3, pages 87-88. This study is interested in exploring perpetrators of IPV, not people who are violent in an attempt to deflect another’s violence. This Chapter will therefore examine those types that are characterised by instigating perpetration – namely ITs and SCV.

The central implication of Johnson’s (1995; 2006) typology overlaps with other existing typologies (i.e. Holtzworth-Munroe & Stuart, 1994), that is they have been shown to be related to a wider set of factors, such as personality or psychopathological disorders and childhood precursors of IPV, and thus can aid understanding about the aetiology of IPV in different kinds of perpetrators (Johnson & Ferraro, 2000). From mapping Holtzworth-Munroe’s typology onto Johnson’s it is possible to hypothesise which aforementioned risk and mental health factors associated with male IPV may relate to categories of perpetrators based on levels of coercive control and physical aggression. Table 1 shows which psychological characteristics we may expect to find associated with Johnson’s categories. Characteristics of the GVA and DB offender are likely to be reflected in Johnson’s IT perpetrator – whilst characteristics of the FO offender are likely to be reflected in Johnson’s SCV offender (Johnson, 2008). As research has shown, female perpetrators have similar risk factors (e.g., Dutton, Nicholls, & Spidel, 2005; Medeiros & Straus, 2006) it is plausible that similar factors will be found for the same female categories.

Based on the aforementioned then, it is possible that IT perpetrators will experience higher levels of anger expression, partner jealousy, emotional flooding symptoms, PTSD symptomatology, depressive symptomatology, riskier drinking patterns than Non-aggressive
respondents and SCV perpetrators. No significant sex differences are expected amongst perpetrators from the different categories.

**Study objectives**

The aforementioned review of the literature shows there is a dearth of studies investigating mental health and other associated risk factors of male and female IPV perpetration, and also by different types of perpetrators in dating samples. This study aims to address these needs by investigating risk and mental health factors associated with physical violence and coercive control in female and male perpetrators of dating violence.

The first part of this chapter focuses on examining differences between self-reported aggressive and non-aggressive female and male university students. The second part of this chapter endeavours to categorise respondents into IT and SCV types that vary in their level of control in comparison to non-aggressive controls. Specifically the following research questions will be investigated:

1. What frequency do women and men perpetrate physical IPV in this sample?
2. What are the differences between aggressive female and male perpetrators, in comparison to non-aggressive persons, for
   a). anger expression;
   b). partner jealousy;
   c). emotional flooding symptoms;
   d) PTSD symptomatology;
   e) depressive symptoms;
   f). alcohol abuse.
3. What frequency are women and men categorised into IT and SCV types?

4. Do IT, SCV and non-aggressive respondents differ in measures of:
   
a). anger expression;
   
b). partner jealousy;
   
c). emotional flooding symptoms;
   
d) PTSD symptomatology;
   
e) depressive symptoms;
   
f). alcohol abuse.

Table 1

Psychological characteristics of perpetrators based on two typologies of partner violence

<table>
<thead>
<tr>
<th>Johnson’s typology</th>
<th>Holtzworth-Munroe &amp; Stuart typology(1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of perpetrator</td>
<td>GVA (moderate-high control)</td>
</tr>
<tr>
<td>IT (high control)</td>
<td>Anger (moderate)</td>
</tr>
<tr>
<td></td>
<td>Depression (low)</td>
</tr>
<tr>
<td></td>
<td>Emotional flooding/distressed (high)</td>
</tr>
<tr>
<td></td>
<td>PTSD (high)</td>
</tr>
<tr>
<td></td>
<td>Alcohol abuse (high)</td>
</tr>
<tr>
<td>SCV (low control)</td>
<td>Anger (low-moderate)</td>
</tr>
<tr>
<td></td>
<td>Depression (low-moderate)</td>
</tr>
<tr>
<td></td>
<td>flooding/distressed (low)</td>
</tr>
<tr>
<td></td>
<td>PTSD (low-moderate)</td>
</tr>
<tr>
<td></td>
<td>Alcohol abuse (low-moderate)</td>
</tr>
</tbody>
</table>

Note. GVA = generally violent/antisocial; DBP = dysphoric/borderline; FO = family-only
Method

Participants

The sample consisted of 300 (151 male and 149 female) Mexican University Psychology and Engineering students. Three gay/lesbian (two men, and one woman) and 14 bisexual (10 men and four women) students completed the questionnaire but as numbers were too small for meaningful analysis on same-sex relationships these responses were excluded from the study. One participant did not provide information on his/her sexual orientation and was thus also removed from subsequent analyses. The final sample therefore included 282 students (139 males and 143 women) with a mean age of 19.53, $SD = 2.6$. At the time of participating in the study 61.7% of respondents were single, 5.3% were dating someone, 28.7% were in a stable relationship but not cohabiting, 2.1% cohabiting, 0.4% was married, 0.4% was divorced, and 0.7% data corresponded to a past spouse.

Procedure

The same procedure as that outlined in Chapter 2 was used, with regard the presentation and delivery of the study questionnaire (see pages 63-65 for a description) used in the present chapter. The questionnaire (Controlling Behaviours Scales-Revised-CBS-R, PTSD symptom scale, Partner Flooding Scale, Beck Depression Inventory-II-BDI-II, and the Drinking Index) was translated by the author of this thesis, revised by a panel of researchers at the Universidad Autónoma del Estado de México, and piloted with a sample of Spanish native speaking students by one of the research collaborators in México. Part of the first section of the questionnaire (the CTS-R) was adapted from Straus & Ramírez, (2007) and piloted with Mexican participants in order to ensure suitability of the measure with students

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4 Gloria Margarita Gurrola Peña
living in the central part of México. Other items in the CTS-R that were not part of the CTS-2 followed the same procedure observed with the rest of the scales.

The written description of the nature of the study, required task provided, and informed consent obtained from all students prior to participation is included in Appendix D. The debrief information provided to students once they completed the study is available in Appendix D. Approval from the and collaboration letters between the English and Mexican universities are provided in Appendix A and Appendix E.

Measures

**Controlling Behaviour Scales-Revised (CBS-R; Graham-Kevan & Archer, 2003)**

The CBS-R has been previously described in Chapter 3, pages 92-93. The reliability alpha coefficients for the CBS-R overall perpetration scale in the English and Spanish versions in this study were $\alpha = .89$ and $\alpha = .80$ respectively. The overall victimisation alpha coefficients were $\alpha = .92$ and $\alpha = .80$ for the English and Spanish versions, respectively. The Controlling Behaviour Scales-Revised (CBS-R; Graham-Kevan & Archer, 2003), was used in analyses in the present chapter and was described in detail in Chapter 3 (see pages 92-93). In addition, the following measures were used in this chapter, and thus are here described:

**Conflict Tactics Scales-Revised (CTS-R; Straus, 1990b)**

The CTS-R is a 38-item self-report questionnaire designed to access the tactics that people use during times of conflict with an intimate partner. It was used in this study to measure perpetration and victimisation of physical violence in male and female students in dating relationships. It was additionally used to measure individual acts of verbal aggression
of different types of violent perpetrators of IPV. The Conflict Tactics Scales is the most widely used instrument to assess IPV with acceptable validity and reliability scores with students and non-student populations (Straus, 1990c; 2007). The traditional measurement scale of the CTS-R was adapted for this study to simplify responses for students, which has been previously done with success in student populations (Archer & Graham-Kevan, 2003; Harris, 1991; Próspero & Kim, 2009; White & Koss, 1991). Using a 5-point scale (0 = never to 4 = very frequently) respondents were asked to report how often during the past year they and their intimate partner had used any of the listed behavioural acts against each other at times of confrontation or to settle disagreements. The Spanish version of the CTS-R was given out to Mexican participants using the same 5-point scale to capture responses (Straus & Ramírez, 2007). In the present study the reliability alpha coefficient for the total CTS-R perpetration in the English sample was α = .82 and α = .80 for the total victimisation scale. Alpha coefficients for the total CTS-R perpetration scale for the Mexican sample was α= .88 and α= .86 for the complete victimisation scale.

State-Trait Anger Expression Inventory-2 (STAXI-2, Spielberger, 1988)

The STAXI-2 is a 57-item self-report measure that uses a 4-point scale (0 = almost never-3 = almost always) to assess state and trait anger, as well as two dimensions of anger expression and anger control. The STAXI-2 has been used extensively in behavioural medicine and health psychology reporting appropriate convergent and divergent validity. The Anger Expression-In, Anger Expression-Out, and Anger Control scales of the STAXI-2 used in this study constituted a 24-item anger expression measure. A total score of the level of expressed anger ranges 0-72. The reliability alpha coefficients for the complete anger expression scales in the Spanish version was α=.74.
Normally a score above the 75th percentile of the total STAXI could be regarded as a clinical cut-off point for anger (Spielberger, 1988). Since the study is of an exploratory nature, only the above mentioned scales were used, hence this study does not aim at creating a diagnosis on this variable of the sample here studied.

**Psychological Maltreatment Inventory (PMI- Kasian & Painter, 1992)**

The PMI is a 58-item modified version of the Psychological Maltreatment of Women Inventory (PMWI) assessing psychological abuse in men and women in dating relationships. For the purposes of this study only the Jealousy measure that uses a 7-point scale (0 = never - 6 = more than twenty times) was used to assess respondent’s jealous behaviours perpetration. This scale has been shown to have appropriate reliability and has been successfully used in previous studies (e.g. O’Leary et al., 2007; Smith Slep and O’Leary, 2001). Level of partner jealousy behaviours score ranges 0-42. The reliability coefficient of the Jealousy scale used in this study for partner’s and respondent’s subscales were α= .79 and α= .78 for partner’s and respondent’s subscales, respectively in the Mexican sample.

**Partner Flooding Scale (Heyman and Smith Slep, 1998)**

This is a 15-item measure that uses a 5-point scale (0 = never – 4 = almost always) that allows for enquiry of emotional flooding symptoms (diffuse physiological arousal). They refer to symptoms of psychological distress triggered by another person’s negative attitudes. The person’s higher order cognitive processing is overwhelmed by the distressing and aversive experience being unable to resolve conflict rationally, but rather reactively (O’Leary, Smith Slep, and O’Leary, 2007; Portland Relationship Institute, 2010). The severity of emotional flooding symptoms scores range 0-60. The reliability coefficients of the Partner Flooding Scale was α = 96 in the English sample and α = 96 in the Mexican sample.
A question using a 5-point scale (0 = Not at all fearful- 4 = very highly fearful) enquires participants about how fearful about their partner they generally felt was included. This question was included as some of the research on partner violence (Andersson, Cockcroft, Ansari, Omer, Ansari, Khan, & Ulla Chaudhry, 2010; Cascardi, O’Leary, & Schlee, 1999) suggests that victims of higher levels on coercive control and/or physical aggression experience more fear of an intimate partner at the expense of their wellbeing (Brown, McDonald, and Krastev, 2008).

**Post-traumatic Symptom Scale- PSS (Foa, Riggs, Dancu, & Rothbaum 1993)**

This 12-item self-report measure uses a 4-point scale (0 = not at all- 3 = five or more times) that allows for enquiry of symptoms of PTSD. It addresses re-experiencing symptoms (i.e. distressing thoughts or images, flashbacks, emotional upset in response to trauma reminders), avoidance (i.e. cognitive and behavioural avoidance, psychogenic amnesia, loss of interest, detachment from others, etc.), and arousal (i.e. irritability, concentration problems, hypervigilance). The PSS has been used with victims of rape and non-sexual assault victims and has shown satisfactory internal consistency, high test-retest reliability and concurrent validity (Foa, Riggs, Dancu, and Rothbaum, 1993). Severity of PTSD symptoms scores range from 0-48. The reliability coefficient of the PSS was $\alpha = 95$ in the Mexican sample.

A clinical diagnosis of PTSD involves a rating of 1 or greater in the three symptom groups (re-experiencing, avoidance and arousal) rather than a greater rating of one or two symptom groups. Because the present study intends to explore levels of typical PTSD symptoms in different types of perpetrators no PTSD diagnosis is herein presented.
Beck Depression Inventory II- (BDI-II; Beck, Steer & Brown, 1996)

It is a widely used 21-item measure of depressive symptoms. It has satisfactory validity and reliability scores with psychiatric and non-clinical populations. Severity of depressive symptoms scores range 0-63. The reliability coefficients of the BDI-II was $\alpha = 93$ in the present sample.

Suggested scores on levels of depression based on clinical samples (Beck et al., 1996) are as follows: minimal depression (total score ranging 0 -13), mild depression (scores between 14 -19), moderate depression (a score from 20 -28) and severe depression (a score from 29 -63). Because the nature of the present study is exploratory, these clinical cut-off points should be taken as a general trend in participants rather than a complete diagnosis of depression.

Drinking Index (Kaufman-Kantor & Straus, 1990)

This is a modified index which enquires about the quantity and frequency of an individual’s alcohol consumption providing patterns and levels of drinking. It also includes an additional question which asks individuals whether they were drinking at the time of the conflict. It classifies participants according to their drinking patterns grouping them in six categories: 1) Abstinent (never drinks), 2) Low drinking (ranging from less than once a month up to 2 times a week; never more than one drink at a time/ less than once a month and no more than two drinks at a time), 3) Low Moderate (one to three time a month up to daily; never more than two drinks at a time), 4) High Moderate (less than once a month up to two times a week; three to four drinks at a time), 5) High drinking (Three to four times a week up to daily; three or more drinks a day), and 6) Binge drinking (Drinks infrequently- once a month up to two times a day; five or more drinks a day). For the present Mexican sample we used the equivalent denominations specified in millilitres to match suitability of drinkers in
México. Such quantity-frequency index has been used successfully in other studies including the 1985 National Family Violence Survey.

Treatment of data

To obtain a categorisation of different types of perpetrators the CBS-R was used and a similar procedure used in previous research was followed (Johnson, 2006; Johnson & Leone, 2005; Johnson, Leone, & Xu, in press), and as indicated in Chapter 3, pages 93-95. A cut-off point of five or more acts on the CBS-R classifies participants in either low or high control in the present study. The typologies of perpetrators were obtained by comparing perpetration and victimisation scores using the aforementioned cut-off of the CBS-R and perpetration and victimisation rates of the CTS-R.

Results

**RQ 1: Investigating the frequency that men and women perpetrate physical IPV**

**Rates of perpetrator status**

Table 2 shows the frequencies of physical aggression perpetration respondents by sex. Women perpetrated significantly more severe physical IPV than men ($\chi^2 [n = 1, 38] = 6.737, p = 0.009$). Men perpetrated more minor physical IPV ($\chi^2 [n = 1, 76] = 0.842, p = 0.359$), but this difference was not significant.
Table 2

*Frequency of physical IPV perpetration amongst female and male Mexican respondents*

<table>
<thead>
<tr>
<th>Type of IPV</th>
<th>Aggressive Women (n=51)</th>
<th>Aggressive Men (n=34)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/%</td>
<td>n/%</td>
</tr>
<tr>
<td>Minor</td>
<td>42 (82.4)</td>
<td>34 (100)</td>
</tr>
<tr>
<td>Severe</td>
<td>27 (52.9)</td>
<td>11 (32.4)</td>
</tr>
</tbody>
</table>

**RQ2a: Investigating differences in levels of anger expression**

Table 3 displays mean scores of anger expression of female and male respondents. Physically aggressive women and men had higher scores of anger expression than non-aggressive women and men; however these within sex differences were not significant. Both aggressive women and non-aggressive women displayed higher anger levels than their male counterparts; however, again these differences were not significant.

**RQ2b: Investigating differences in levels of partner jealousy**

Table 3 also displays mean scores of partner jealousy. Physically aggressive female and male perpetrators experienced higher levels of partner jealousy than non-aggressive members of the same sex; however these within sex differences were not significant. Between sex comparisons showed that whilst women had higher jealousy scores than men; these were not significantly different for either aggressive or non-aggressive comparisons.
Table 3

**Male and female scores for anger, jealousy, emotional flooding, PTSD and depressive symptoms measurements**

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td>30.2 (12.5)</td>
<td>27.5 (13.4)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>31 (7.7)</td>
<td>28.5 (12.5)</td>
</tr>
<tr>
<td>Partner jealousy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td>9.3 (6.9)</td>
<td>8.5 (7.1)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>9.8 (6.4)</td>
<td>9 (6.8)</td>
</tr>
<tr>
<td>Emotional flooding symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td>9.7 (13)</td>
<td>9.1 (12.4)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>15.9(12.9)</td>
<td>22.1(16.5)</td>
</tr>
<tr>
<td>PTSD symptomatologty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td>7.3 (8.7)</td>
<td>6.7 (9.4)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>17.1(13.4)</td>
<td>14(12.7)</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td>4.7 (5.9)</td>
<td>6.4 (8.3)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>9.7 (8.3)</td>
<td>10 (11.6)</td>
</tr>
</tbody>
</table>

**RQ 2c: Investigating differences in levels of emotional flooding**

Table 3 also shows levels of emotional flooding symptoms. Within sex comparisons showed aggressive male ($t_{114} = -4.484, p = 0.001$) and female ($t_{127} = -2.640, p = 0.009$) respondents had higher scores than non-aggressive counterparts for males and females. No significant between sex differences in the levels of emotional flooding symptoms were found for non-aggressive men and women or physically aggressive men and women.

**2d: Investigating differences in levels of PTSD symptoms**
Table 3 also contains the mean scores for levels of PTSD symptomatology of female and male respondents. Within sex comparisons showed that physically aggressive female ($t_{[110]} = -4.114, p = 0.005$) and male ($t_{[106]} = -3.059, p = 0.003$) respondents experienced significantly higher levels of PTSD symptoms than their non-aggressive counterparts. Between sex comparisons showed non-aggressive and physically aggressive female perpetrators experienced higher levels of PTSD symptoms than their male counterparts, however these differences were not significant.

**2e: Investigating differences in levels of depressive symptoms**

Table 3 also displays the levels of depressive symptoms of respondents. Overall, both male and female physically aggressive perpetrators experienced higher levels of depressive symptoms than non-aggressive respondents. However, this difference was significant only for female respondents ($t_{[113]} = -3.446, p = 0.001$). Whilst men showed higher scores than women in both aggressive and non-aggressive categories, no significant differences between the sexes were found.

**2f: Investigating differences in levels of alcohol abuse patterns**

The most frequent drinking pattern reported by non-aggressive and physically aggressive female and male respondents was a “Low moderate” drinking pattern (Table 4).

Within sex analysis showed that more male and female physically non-aggressive respondents were categorised as Low-moderate drinkers than their physically aggressive counterparts, however these differences were only significant for men ($\chi^2_{[1, n = 63]} = 13.349, p = 0.001$). Between sex analysis showed in non-aggressive people, men were more likely to be classed as Low-moderate drinkers more frequently than women, whilst in
aggressive people, more women reported this drinking pattern than men, however these differences were not significant.

Table 4

*Drinking patterns of non-aggressive and physically-aggressive female and male respondents*

<table>
<thead>
<tr>
<th>Drinking pattern</th>
<th>Perpetrator status</th>
<th>Women n = 82 (%)</th>
<th>Men n = 94(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinent</td>
<td>Non-aggressive</td>
<td>1 (1.2)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>1 (1.2)</td>
<td>0</td>
</tr>
<tr>
<td>Low level drinking</td>
<td>Non-aggressive</td>
<td>8 (9.8)</td>
<td>9 (9.6)</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>3 (3.7)</td>
<td>5 (5.3)</td>
</tr>
<tr>
<td>Low moderate</td>
<td>Non-aggressive</td>
<td>35 (42.7)</td>
<td>46 (48.9)</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>24 (29.3)</td>
<td>17 (18.1)</td>
</tr>
<tr>
<td>High moderate</td>
<td>Non-aggressive</td>
<td>5 (6.1)</td>
<td>9 (9.6)</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>5 (6.1)</td>
<td>5 (5.3)</td>
</tr>
<tr>
<td>High level drinking</td>
<td>Non-aggressive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>0</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>Non-aggressive</td>
<td>0</td>
<td>2 (2.1)</td>
</tr>
<tr>
<td></td>
<td>Physically-aggressive</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*NOTE.* Percentages reflect the proportion from the total of women or men, and not proportion from the perpetrator status or drinking pattern columns.

**RQ3: Rates men and women are categorised into types characterised by physical aggression and coercive control patterns**

Table 5 shows the rates at which men and women are grouped into categories based on physical aggression and coercive control status. Perpetrators categorised as VR were infrequent and not of interest to further analysis in this Chapter. The Bonferroni adjustment procedure was used to control for the increased risk of Type I error as a result of multiple tests (6) for within group comparisons, and between group comparisons (4); therefore new alpha levels of 0.008 and 0.013 (respectively) are adopted for this analysis.

The majority of females were significantly more frequently classified as Non-aggressive Low Control in comparison to Non-aggressive High Control ($\chi^2 [1, n = 134] =$
25.639, \( p = 0.001 \) ), SCV \( (\chi^2 [1, n = 134] = 15.690, p = 0.001) \), or IT \( (\chi^2 [1, n = 134] = 16.603, p = 0.001) \) perpetrators. Women were more frequently categorised Non-aggressive High Control than SCV \( (\chi^2 [1, n = 134] = 7.541, p = 0.006) \) or IT \( (\chi^2 [1, n = 134] = 8.005, p = 0.005) \). Females were just as likely to be classed into SCV as the IT category – no significant difference in frequency was found.

Similarly, male respondents were more frequently categorised as Non-aggressive Low Control than Non-aggressive High Control \( (\chi^2 [1, n = 123] = 33.758, p = 0.001) \), SCV \( (\chi^2 [1, n = 123] = 9.290, p = 0.002) \), or IT perpetrators \( (\chi^2 [1, n = 123] = 27.948, p = 0.001) \). Males were more often in the Non-aggressive High Control category than in SCV or IT types; however these differences were not significant. No significant differences were found in the frequencies of male SCV and IT perpetrators.

Sex comparisons indicated male respondents were more frequently classified as Non-aggressive Low Control \( (\chi^2 [1, n = 257] = 8.455, p = 0.004) \). In general, female respondents were more frequently categorised into violent categories, however, most of these differences were not significant, with the exception of SCV perpetrators who were more likely to be female \( (\chi^2 [1, n = 31] = 7.258, p = 0.007) \).

**RQ4: Investigating differences in emotional and mental health measurements**

The Bonferroni adjustment procedure was used to control for the increased risk of Type I error as a result of multiple tests (4) between the sexes, resulting in a new alpha level of 0.013, and multiple tests within the sexes (6), resulting in a new alpha level of 0.008. This formula is applied for research questions 4a – 4e.
Table 5

*Perpetrators typology status: Aggressive and non-aggressive perpetrators*

<table>
<thead>
<tr>
<th>Type of perpetrator</th>
<th>Women (n/%)</th>
<th>Men (n/%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-aggressive Low Control</td>
<td>52 (38.8)</td>
<td>71 (57.7)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>33 (24.6)</td>
<td>22 (17.9)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>23 (17.2)</td>
<td>8 (6.5)</td>
</tr>
<tr>
<td>(SCV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimate Terrorism (IT)</td>
<td>24 (17.9)</td>
<td>19 (15.4)</td>
</tr>
<tr>
<td>Violent Resistant</td>
<td>2 (1.5)</td>
<td>3 (2.4)</td>
</tr>
</tbody>
</table>

**RQ4a: Investigating differences in levels of anger expression**

Table 6 shows levels of anger expression. No significant differences were found between the different types of perpetrators within female or male groups. For between sex analyses, female respondents experienced higher levels of anger than male respondents, particularly for SCV perpetration, however, no significant sex differences were found in any category.

**RQ4b: Investigating differences in levels of partner jealousy**

Table 6 also shows levels of partner jealousy. Within sex analysis showed that female respondents categorised as Non-aggressive Low Control, and male respondents categorised as Non-aggressive High Control experienced the highest levels of partner jealousy however, differences between groups within each sex were not significant. No significant differences were found between members of the opposite sex for each category.

**RQ4c: Investigating differences in levels of emotional flooding**

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5 The difference between SCV on Table 5, Chapter Four and Reciprocal perpetrators on Table 2, Chapter Two is that although both types involve reciprocal IPV the former is based on a coercive control typology (low levels of control and physical aggression) and the latter type is based only on patterns on physical aggression, hence it may contain SCV, IT and/or VR types. This can be one of the reasons both samples have different rates (in essence they are different types represented in the two tables).
Table 6 also shows mean scores for levels of emotional flooding in female and male respondents. Within sex categories, it is evident that female and male respondents categorised as IT’s experienced the highest levels of emotional flooding symptoms, however, these differences were not significant, with the exception of male IT perpetrators who differed significantly from Non-aggressive Low Control men ($t [80] = 4.806, p = 0.001$). Additionally, male participants categorised as Non-aggressive High Control experienced significant higher levels of emotional flooding than their peers classified Non-aggressive Low Control ($t [82] = -3.574, p = 0.001$). Analysis between the sexes showed women categorised as Non-aggressive Low Control experienced higher levels of emotional flooding symptoms, and males of Non-aggressive High Control, SCVs, and ITs scored higher than females, however, these differences between the sexes were not significant.

**RQ4d: Investigating differences in levels of PTSD symptoms**

Table 6 also shows mean scores for levels of PTSD symptoms in female and male respondents. Within sex analyses showed that male and female respondents categorised as IT scored the highest levels of PTSD symptoms. Specifically, female IT perpetrators experienced significantly higher levels of PTSD symptomatology than Non-aggressive Low Control ($t [61] = 3.620, p = 0.001$). There were no significant sex differences between men and women of the same categories in their levels of experienced PTSD symptomatology.

**RQ4e: Investigating differences in levels of depressive symptoms**

Table 6 also shows frequencies for levels of depressive symptoms in female and male respondents. Amongst female respondents IT perpetrators experienced the highest levels of depressive symptoms, and they were significantly more likely to display higher levels than females classified as Non-aggressive Low Control ($t [60] = 3.309, p = 0.002$). Amongst male
Table 6

*Levels of Partner jealousy, anger expression jealousy, emotional flooding, PTSD and depressive symptoms measurements in different types of perpetrators*

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Women (132) M (SD)</th>
<th>Men (120) M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anger expression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
<td>30.2 (12.3)</td>
<td>26.9 (14.3)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>31.7 (14.2)</td>
<td>29.4 (10.3)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>30.3 (8.8)</td>
<td>20.9 (16.5)</td>
</tr>
<tr>
<td>Intimate Terrorism</td>
<td>31 (6.6)</td>
<td>31.4 (8.6)</td>
</tr>
<tr>
<td><strong>Partner jealousy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
<td>10.6 (7.5)</td>
<td>8.3 (6.4)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>6.9 (5.6)</td>
<td>11.5 (8.7)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>10 (6.6)</td>
<td>9.4 (9)</td>
</tr>
<tr>
<td>Intimate Terrorism</td>
<td>10.2 (6.4)</td>
<td>9.1 (6.3)</td>
</tr>
<tr>
<td><strong>Emotional flooding symptoms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
<td>8.1 (12.3)</td>
<td>5.9 (9.9)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>10.9 (14.1)</td>
<td>17.7 (13.9)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>14.4 (13.2)</td>
<td>19.6 (24.7)</td>
</tr>
<tr>
<td>Intimate Terrorism</td>
<td>16.6 (13.2)</td>
<td>22.6 (14.1)</td>
</tr>
<tr>
<td><strong>PTSD symptoms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
<td>6.9 (8.6)</td>
<td>4.6 (7.7)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>8.2 (9.7)</td>
<td>12.8 (10.7)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>15.9 (13.9)</td>
<td>11.4 (15.4)</td>
</tr>
<tr>
<td>Intimate Terrorism</td>
<td>16.5 (11.7)</td>
<td>15.4 (13.4)</td>
</tr>
<tr>
<td><strong>Depressive symptoms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
<td>4.8 (5.5)</td>
<td>4.8 (7.3)</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
<td>5 (6.8)</td>
<td>12.2 (9.6)</td>
</tr>
<tr>
<td>Situational Couple Violence</td>
<td>8.5 (7.6)</td>
<td>6.8 (9)</td>
</tr>
<tr>
<td>Intimate Terrorism</td>
<td>10.7 (8.4)</td>
<td>11.1 (12.5)</td>
</tr>
</tbody>
</table>

respondents, those classified as Non-aggressive High Control, followed closely by IT perpetrators, experienced the highest levels of depressive symptoms, however, no differences arose between the categories. Males classified as Non-aggressive High Control experienced
significantly higher levels of depressive symptoms than their Non-aggressive Low Control peers ($t [77] = -3.050, p = 0.006$).

Between sex comparisons showed male respondents classified as Non-aggressive High Control experienced higher levels of depressive symptoms than women also classified into this group ($t [42] = 2.742, p = 0.010$). No other significant differences were found amongst other categories.

**RQ4f: Investigating differences in levels of alcohol drinking patterns**

Table 7 shows mean scores for levels of alcohol drinking patterns in female and male respondents. The most frequent drinking pattern amongst female and male respondents in all categories is Low moderate.

Amongst women, significantly more female Non-aggressive Low Control ($\chi^2 [2] = 21.929, p = 0.005$), Non-aggressive High Control ($\chi^2 [2] = 11.412, p = 0.003$), SCV ($\chi^2 [3] = 16.286, p = 0.001$), and IT ($\chi^2 [2] = 12.875, p = 0.002$) perpetrators reported a Low moderate drinking pattern than any other type. For male respondents Non-aggressive Low Control ($\chi^2 [2] = 35.787, p = 0.005$), and IT perpetrators ($\chi^2 [2] = 7.625, p = 0.022$) reported more frequently a Low moderate drinking pattern. Male participants classified as Non-aggressive High Control reported more frequently as Low moderate drinking pattern than other drinking types, however, this difference was not significant. No significant sex differences were found in the frequencies at which respondents reflected a low moderate drinking pattern.
Table 7

*Alcohol drinking patterns of different types of perpetrators*

<table>
<thead>
<tr>
<th></th>
<th>Abstinent</th>
<th>Low level</th>
<th>Low moderate</th>
<th>High moderate</th>
<th>High level</th>
<th>Binge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-agg LC</td>
<td>_</td>
<td>3 (5.8)</td>
<td>21 (40.4)</td>
<td>4 (7.7)</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Non-agg HC</td>
<td>_</td>
<td>4 (12.1)</td>
<td>12 (36.4)</td>
<td>1 (3)</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>SCV</td>
<td>1 (4.3)</td>
<td>1 (4.3)</td>
<td>10 (43.5)</td>
<td>2 (8.7)</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>IT</td>
<td>_</td>
<td>1 (4.2)</td>
<td>12 (50)</td>
<td>3 (12.5)</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-agg LC</td>
<td>_</td>
<td>6 (8.5)</td>
<td>35 (49.3)</td>
<td>6 (8.5)</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Non-agg HC</td>
<td>_</td>
<td>3 (7.1)</td>
<td>10 (23.8)</td>
<td>2 (4.8)</td>
<td>_</td>
<td>2 (4.8)</td>
</tr>
<tr>
<td>SCV</td>
<td>_</td>
<td>2 (25)</td>
<td>3 (37.5)</td>
<td>_</td>
<td>1 (12.5)</td>
<td>_</td>
</tr>
<tr>
<td>IT</td>
<td>_</td>
<td>1 (5.3)</td>
<td>10 (52.6)</td>
<td>5 (26.3)</td>
<td>_</td>
<td>_</td>
</tr>
</tbody>
</table>

*NOTE:* Non-agg LC = Non-aggressive Low Control, Non-agg HC = Non-aggressive High Control, SCV = Situational Couple Violence, IT = Intimate Terrorism
**Discussion**

This study set out to investigate salient risk and mental health factors for IPV perpetration by both sexes in dating samples. In investigating research questions 1 and 2, information about risk factors for IPV perpetration in comparison to non-aggressive controls was determined, in addition to differences between the sexes in these risk factors. In investigating research questions 3 and 4, information about risk factors associated with commonly derived typologies is noted and how this relates to both sexes.

**Summary of findings**

Firstly, higher rates of female physical IPV perpetration (particularly severe physical IPV) found in the present chapter are consistent with findings in Chapter 2 and previous research with dating samples indicating this trend (Ehrensaft & Vivian, 1999; Straus, 2004; Straus & Ramirez, 2007). This tendency was also confirmed with the findings of more physically aggressive IT and SCV female perpetrators.

Exploration of risk factors between aggressive and non-aggressive men and women showed that PTSD was significantly more prevalent in both male and female aggressive respondents. Depressive symptomatology was significantly more prevalent in female aggressors than no-aggressors. Levels of depressive symptoms in male and female perpetrators can be deemed to be within a minimal depression level if compared with clinical samples (Beck et al., 1996). Low to moderate drinking patterns (surprisingly higher in Non-aggressive perpetrators) and emotional flooding symptoms significantly differentiated male aggressors from non-aggressors. The remaining risk factors tested did not reach significance, but all were more prevalent in aggressors of both sexes. This provides support for previous research that has highlighted the importance of investigating multiple risk factors for
perpetrators of IPV (e.g. Capaldi et al., 2012; Medeiros & Straus, 2007; O’Leary et al 2007) – and in particular female perpetrators (Babcock et al., 2003; Carney, Buttel, & Dutton, 2007; Ridley & Feldman, 2003).

When exploring differences between male and female IPV perpetrators it was evident that not many significant differences arose. The majority of risk factors were more prevalent in women (anger, jealousy, PTSD, emotional flooding, drinking), however, these did not reach significance. Exceptions to this rule were depressive symptoms which were significantly more elevated in men categorised as Non-aggressive High Control than women in the same category. However, the direction of their prevalence lends some support at least for research that has suggested female IPV offenders may have higher levels of mental health needs in comparison to male offenders (Vaeth et al., 2010; White & Widom, 2003), although the extent to which this is true or just a reflection of the willingness for females to report emotional and mental health issues more willingly than men remains to be seen. Indeed no significant differences between the sexes were found in this study which is consistent with research that finds similar mental health factors for women and men in dating relationships (Medeiros & Straus, 2007).

Finally, whilst no significant findings differentiated IT from SCV groups for men and women, it was evident that the prevalence of each variable in these categories was in line with how variables would map onto types in the introduction of this Chapter. Variables of anger, emotional flooding, PTSD, depression and drinking patterns were all higher in male and female IT groups in comparison to their SCV counterparts. While no grand conclusions should be made from this tentative data, it is evident that further research into this avenue is warranted. Findings here suggest an overlap of the IT perpetrator with the psychological
distress levels linked to dysphoric-borderline perpetrators, in addition to the GVA perpetrator, (see Table 1) in several mental health issues such as higher levels of emotional distress/flooding, depressive symptoms, PTSD symptoms, and moderate use of alcohol. SCV perpetrators appear to overlap the Family-only type with lower levels of depression and distress in comparison with IT perpetrators. This highlights the advantage that the usage and comparison of typologies can bring forth, to better discriminate adverse mental health issues with specific types of perpetrators, and to identify the needs of specific types of perpetrators approaching and to better inform intervention delivery efforts.

Of great interest is the finding that physically-aggressive women and men do not experience significantly higher levels of anger expression and partner jealousy in comparison with non-assaultive women and men as suggested in the literature (Margolin et al., 1988). Furthermore, female perpetrators of physical IPV were found to experience slightly higher levels of anger than men; however these differences were not significant, and are not in line with research associating experiences of higher levels of anger to men (Musante et al., 1999). Indeed, it is surprising that higher levels of coercive control (IT) were not significantly associated with increased levels of anger. It is clear anger expression and partner jealousy levels in these dating samples are in general lower than perhaps in other studies with dating samples and/or more consolidated relationships (Dutton et al., 1994) in which assaultive female and/or male perpetrators have reported higher levels (Medeiros & Straus, 2007). Perhaps these risk factors in these samples are acting as risk markers linked to IPV perpetration through other risk factors. Caution with findings here on these measures should be considered exploratory at best, and more research on anger and partner jealousy is needed in these kinds of samples with specific types of perpetrators.
It was interesting that, more adverse mental health issues are linked to IPV perpetrators than non-aggressive females and males. For example, female perpetrators of physical aggression experienced significantly higher levels of PTSD symptomatology and depressive symptoms, and emotional flooding symptoms than their non-aggressive counterparts, whilst male perpetrators of physical aggression experience higher levels of PTSD symptomatology and emotional flooding symptoms than their non-aggressive peers. An exception to these findings was found for low moderate drinking which was higher in non-aggressive than in aggressive males. This finding is perhaps due in part to the influence of alcohol as a coping mechanism in this sample as has been suggested in some of the literature where individuals resort to drinking as a form of coping or enduring conflict rather than resorting to violence. The second part of the analysis confirmed this trend, with female IT perpetrators that were found to experience significantly higher levels of PTSD symptomatology and depressive symptoms than controls. In this part of the analysis higher levels of coercive control (Non-aggressive High Control and IT) in males were associated with higher levels of emotional flooding symptoms compared to non-aggressive low controlling men.

Whilst some research has found physical IPV perpetration associated to risky alcohol drinking in dating samples (Rothman et al., 2012), the present study does not support this hypothesis. In general, most female and male perpetrators of physical aggression as well as non-aggressive respondents reported a “Low moderate” drinking pattern. A second analysis by perpetration patterns corroborated the previously found Low moderate drinking pattern. All physically aggressive and non-aggressive female respondents more readily reported a low-moderate drinking pattern over riskier drinking patterns as did Non-aggressive and IT male perpetrators. As such, it appears drinking may be acting as a risk marker for IPV
perpetration at best in these samples. One of the advantages of the drinking index used in the present study is that it combines frequency of drinking with quantity of alcohol consumed and hence is a more comprehensive measure of alcohol abuse than isolated correlations of physical IPV measures with number of alcohol units consumed.

The hypothesis that PTSD symptomatology is associated to physical aggression and higher levels of coercive control was supported by female and male perpetration in the current study. Findings from these analyses indicate that IT perpetration is linked to experiencing higher levels of PTSD particularly by women in comparison with non-aggressive respondents, and is consistent with recent research with dating samples of the importance of PTSD experiences at such an early stage of relationships (Kendra et al., 2012, Taft et al., 2010). It also highlights the saliency of this IPV perpetration (and very possibly victimisation as well) risk factor in non-clinical or selected samples for prevention and intervention purposes. It has been hypothesised that female and male perpetrators experience PTSD symptoms differently (externalising/internalising them). In the present study, only female respondents categorised as Non-aggressive High Control experienced significantly higher levels of PTSD than men. Amongst aggressive types (IT, SCV) males and females did not differ significantly in their levels of experienced PTSD, and is also consistent with past previous research with dating samples (Medeiros & Straus, 2007).

**Implications**

Adverse mental health conditions related to IT perpetration in dating samples is an important consideration with practical educational and preventive implications for informing and tackling IPV in young dating relationships. The usage of a typology like the one adopted here can provide insights on specific prevention and educational approaches with different
types of perpetrators. Johnson (2010) has suggested these efforts could aim at issues on gender equality and respect amongst intimate partners, particularly within couples with both partners involved in IT perpetration. Individuals typified as SCV could benefit from an approach based on conflict resolution, and communication strategies, as well as anger management tactics.

**Limitations**

Generalisations of results to general or community samples should be treated with caution as this study was conducted using university students, stronger findings may be produced from clinical samples (as suggested by the level of depressive symptoms found in this dating sample in this study and common levels of depression found in clinical sample) typified by more severe levels of physical and controlling IPV. Additionally, VR perpetrators were not investigated. Findings derived from the present study should be taken as exploratory and further research to confirm this and other risk factors of specific types of IPV perpetration, particularly amongst female perpetrators is encouraged. This study, however, provides for the first time data on the prevalence of types of female and male perpetrators of IPV characterised by differing levels of coercive control and physical aggression patterns, their associated levels with salient individual (anger expression) and relationship variables (partner jealousy), as well as important mental health concerns (depressive symptoms, PTSD symptomatology, emotional flooding symptoms, and alcohol abuse).

**Conclusion**

The results of this study show promise in avenues of research that investigate multiple risk factors between IPV perpetrators of both sexes. In addition, the role of coercive control in understanding the aetiology of IPV has proved somewhat useful, supporting previous
typological research. IT perpetration in dating samples is often overlooked, as usually women and men are regarded to be less aggressive or more frequently involved in what Johnson (2006) terms Situational Couple Violence. Findings here suggest that although IT in these kinds of samples is not as common as in clinical or selected samples, it bears important mental health associated effects in female and male perpetrators of IT. As such, Johnson’s typology based on levels of coercive control proves to be helpful in identifying specific kinds of female and male perpetrators of IPV and related adverse mental health effects in young dating samples, and the use of specific typologies to explore mental health related factors amongst different types of perpetrators and victims is strongly advised.

Of importance, the need to examine mental health factors is indicated by high levels of PTSD, emotional flooding and moderate drinking patterns in this sample of perpetrators of dating violence. Limiting exploration of these factors to victims, or predominantly one gender, is not warranted.
CHAPTER 5

DIFFERENT TYPES OF IPV VICTIMISATION IN DATING SAMPLES AND ITS RELATIONSHIP WITH MENTAL HEALTH INDICATORS AND RELATIONSHIP SATISFACTION

Chapter rationale

Research in the field of female partner violence victimisation has devoted effort to elucidate mental health outcomes and relationship satisfaction (i.e. Ellsberg, Jansen, Heise, Watt, & García-Moreno, 2008; Kishor & Johnson, 2004; Krug, Dahlberg, Merci, Zwi, & Lozano, 2002) whilst studies on male victimisation of physical violence are far more scarce. Most of this research has focused on analysing the outcomes of physical aggression and to a lesser degree other important and widespread forms of partner violence, such as psychological aggression (O’Leary, 1999), and how they impact upon partner violence victim’s mental health and relationship satisfaction. As such, research examining outcomes for victims who experience other forms of partner aggression than physical violence is limited, especially for men. Chapter 4 explored the rates, risk and adverse mental health effects in female and male perpetrators of physical violence and/or controlling behaviours in relation to non-aggressive controls in Mexican university students. This Chapter intends to further develop this work, by examining the effects of different types of male and female victimisation experiences, other than physical injury in university students. It aims to understand the types of physical victimisation and/or control experienced by both sexes and how these impact on mental health and relationship satisfaction. Specifically, the relationship between physical violence, different types of control based typologies with adverse mental health conditions (PTSD symptomatology, depressive symptoms, emotional flooding symptoms and fear of an intimate partner), alcohol problems and levels of relationship satisfaction are investigated.
Introduction

Research examining victimisation has largely focused on female victims (e.g., Ellsberg, Jansen, Heise, Watt, & García-Moreno, 2008) and male perpetrators (e.g., Hall, Walters, & Basile, 2012) to great extent because of the risks associated with physical aggression outcomes in the form of physical injuries in women (Straus, 2009). Hence it does not come as a surprise that most data also related to other forms of partner violence victimisation such as psychological and sexual aggression and neglect is limited, particularly for male victims (e.g., Carmo, Grams, & Magalhães, 2011). Psychological aggression has been shown to generally precede physical aggression, and to have more deleterious effects on mental health than physical aggression (O’Leary, 1999; Próspero, 2008b). The scant research available on mental health conditions on partners that use different kinds of IPV and different levels of coercive control suggests there are differences not only in the levels of perpetration by different kinds of offenders (e.g. intimate terrorists-ITs, situational couple violence perpetrators-SCVs; Johnson, 2006), but also that physical and mental health effects may take different forms in the different types of victims (e.g. victims of IT, SCV). Research in this area could further understanding of the role of coercion in IPV and improve the delivery of mental health services (Próspero, 2008b). Recent research has started directing efforts in understanding different types of IPV not only in perpetrators (Johnson, 2006), but also in victims (e.g. Leone, 2011), whilst only a few have focused on male victims (e.g. Hines & Douglas, 2010). There is dearth of research investigating relationship and mental health factors, linked to IPV victimisation in women and men, particularly linked to specific kinds of victims. The present Chapter aims to examine the mental health factors and relationship satisfaction associated with male and female victimisation. The following section summarises
key findings related to, IPV, relationship satisfaction, and mental health in Mexican men and women.

**Partner violence, relationship satisfaction, and mental health**

One of the main objectives of this chapter is to further investigate mental health factors and relationship satisfaction levels that have been shown to be important correlates of IPV in men and/or women, but have not been addressed in previous research on different kinds of control-mediated victimisation in dating samples. These are now discussed below.

*Relationship satisfaction*

Research has provided some insight to understanding how relationship satisfaction and mental health factors relate to IPV victimisation in dating samples. Recent research has started to examine these correlates in violent women and men and also in specific types of victims. Dyadic satisfaction, which is one component of dyadic adjustment, has also been deemed to be a key risk factor of IPV and has mostly been investigated within married or cohabiting couples from community and clinical samples (Hotaling & Sugarman, 1986; Stith, Green, Smith, & Ward, 2008) and seldom using dating samples (see as an example Katz, Washington Kuffel, & Coblentz, 2002). Relationship satisfaction, has been found to be an important risk factor for perpetrators of physical IPV as reviewed by a comprehensive meta-analysis of 85 studies (Stith et al., 2004). Stith, Green, Smith, & Ward’s (2008) meta-analysis of 32 studies involving 12,740 individuals found relationship satisfaction/discord in married and cohabiting couples was related to their partner violence. They found male perpetrators to have lower relationship satisfaction than female perpetrators and at the same time female victims reported lower relationship satisfaction than male victims. In such analysis, clinical samples have been found to have lower levels of dyadic satisfaction than
community samples. However, studies with community couples such as O’Leary et al. (2007) have found dyadic adjustment to have strong and direct paths to partner aggression for men and women in married couples.

Recent research has found male and female physical IPV victimisation in dating relationships to be related to lower levels of relationship satisfaction and increased depression, anxiety and somatisation (Kaura & Lohman, 2007). Shorey, Febres, Brasfield, and Stuart’s study (2012), with male victims of dating violence showed also having lower levels of relationship satisfaction associated with experience of physical and psychological IPV victimisation. It would be interesting to examine levels of relationship satisfaction in male and female victims of IPV, particularly how relationship satisfaction is related to male and female victims of low and high level control IPV in dating samples – as this has not been examined to date.

*Emotional flooding*

Stressful environments (i.e. a violent relationship) and poor health have also been found to develop in victims on a number of levels (Brewer, Roy, & Smith, 2010). Some researchers have indicated that emotional or psychological flooding (which characteristically involves a diffuse physiological aroused state) is an important correlate of IPV victimisation or perpetration (Gottman, 2007; O’Leary et al., 2007). It is characterised by a feeling of being swamped or flooded by distress (by inner negative scripts about a partner which in turn exacerbate negative feelings) that results in a difficulty of resolving conflict rationally as explained in detail in Chapter 4. It is this experience brought by negative cognitions and emotions about an intimate partner that results in an aversive and overwhelming experience and an inability to cope with this. Emotional flooding has been related to IPV in multivariate
models of partner violence perpetration of men and women in a community sample (O’Leary et al. 2007). It could be expected then that victims of partner violence, particularly those subjected to higher levels of coercive control and possibly physical violence (victims of IT), possess more negative scripts about a partner and will be more prone to become more readily flooded by a partner’s IPV than victims of SCV, and non-physically victimised controls. It would also be interesting to explore levels of emotional flooding symptoms in those respondents who are victims of higher levels of coercive control but do not experience any physical violence.

Posttraumatic Stress Disorder and depressive symptomatology

A great deal of research has largely found that various mental health conditions are linked to IPV perpetration/victimisation in men and women, in a variety of samples. Such research has identified physical and mental health conditions in victims or perpetrators of IPV with selected/clinical samples and community/non-clinical samples. For instance, in women seeking group psychotherapy for marital difficulties (Cascardi, O’Leary, & Schlee, 1999) it has been found that PTSD symptom frequency is predicted by their husband’s dominance/isolation tactics and the intensity of the husbands physical aggression, whilst depressive symptoms are predicted by marital discord and the intensity of the husbands physical IPV. Frequency and severity of physical IPV and controlling/isolating tactics are likely to increase a woman’s fear, stress, and consequently increase the likelihood of developing PTSD (Cascardi et al., 1999). Physical violence appears to add or contribute to marital adjustment/discord in predicting depressive symptoms. PTSD appears to be related to violent and non-violent coercive partner behaviour. Depression bears a strong relationship with global relationship distress and physical IPV (Cascardi et al., 1999).
Male and female physical IPV victimisation is also reported to be associated with an increased risk of poor mental health, depressive symptoms, substance use, developing a chronic disease (i.e. hypertension or heart disease, diabetes, arthritis, asthma, emphysema, cancer) or mental illness (i.e. chronic depression or schizophrenia) and injury in community samples (Coker, Davis, Arias, Desai, Sanderson, Brandt, & Smith, 2002).

Threats of violence, the use of non-violent control tactics, isolation, and emotional abuse have been found to predict a myriad of psychological difficulties independent of, or in combination with physical abuse (Cascardi et al., 1999). For example, women victims of ITs (subjected to higher levels of control) experience more frequent, more severe IPV, are more likely to be physically injured, to experience more PTSD symptoms, to use painkillers and miss work than women victims of SCV (Johnson & Leone, 2005). Female victims of IT have also been found to be more likely to threaten or attempt suicide and more likely to possess poor mental health than women victimised by SCV (Leone, 2011). Younger victim age (for example 18-25 versus 26 years or older) and low income are also associated with IT victimisation in women.

Some of the scarce research on male victims of IPV indicates those victimised by female ITs are more injured than their female partners (as reported by men) or than their male counterparts in a community sample (Hines & Douglas, 2010). More male victims of IT (58%) were found to exceed a clinical cut off point for PTSD symptomatology (i.e. re-experiencing, numbing/avoidance, hyperarousal) in comparison with male victims of SCV (8%) and those who did not sustain physical IPV [either SCV or IT] (2%). Physical IPV has been linked to PTSD but only through coercive control in a male community (mostly SCV)
sample. In a sample of help-seeking males (IT victims) physical IPV is directly and indirectly (through controlling behaviour) linked to PTSD (Hines & Douglas, 2011).

For some time now psychological aggression, as an inherent characteristic of coercive control in IPV, has been suggested to be as strong as, or more strongly related, to PTSD and depression than physical violence (Taft, Schumm, Orazem, Meis, & Pinto, 2010; Vaeth, Ramisetty-Mikler, & Caetano, 2010). On its own, psychological abuse is seen to be as damaging as physical violence (Schumacher, Smith Slep, Heyman, 2001). Higher levels of coercion have been found to be associated with greater PTSD but not depression, even after controlling for physical, sexual and psychological IPV and injury. Research of IPV carried out within a generalised pattern of control has been suggested to represent more extreme cases.

Some research (i.e. Fergusson, Horwood, & Ridder, 2005), indicates there are no gender differences in the mental health of men and women in problems such as depression, anxiety and suicidality; and IPV can act as a provoking factor leading to depression and suicidality in those exposed to domestic violence, particularly in young people. Investigating mental health conditions such as depression and PTSD mediated by differing levels of coercive control is key to better understand IPV and its impact in intimate relationships (Próspero, 2008a). Depression has been found to have a strong positive impact on the odds of experiencing SCV and IT in men and women, whilst its effects are indicated to be similar for men and women from community samples (Brownridge, 2010).

Men and women in young dating relationships involved in mutual IT (mutual violent control-MVC) have been found to perpetrate more physical, psychological, and sexual IPV
and to report worse physical and mental health (higher anxiety, depression, hostility, and somatic symptoms) than couples involved in SCV. Sex differences in this research indicates men report more sexual IPV perpetration than women whilst women report more psychological aggression perpetration and are more likely to report somatic symptoms than men (Próspero, 2008a). Overall, the inclusion of coercive control victimisation has been found to significantly increase the explained variance of mental health problems in relation to IPV than when coercive control is not included in an IPV victimisation-mental health problems model (Próspero, 2008b). It can then be expected that victims of physical aggression will experience higher levels of PTSD and depressive symptoms than non-victimised men and women. Particularly, experiences of victims of IT are expected to be more acute than the experiences of victims of SCV.

**Fear of an intimate partner**

In the partner violence literature most research has linked fear of an intimate partner as a motive for aggression (particularly female physical aggression), as a risk factor for not disclosing female physical victimisation (Cross & Campbell, 2011; Valente & Jensen, 2000), or as a health concern for both women and men (Brown, McDonald, & Krastev, 2008; Olson, Kerker, McVeigh, Stayton, Van Wye, & Thorpe, 2008). Whilst some research reports higher levels of fear of an intimate partner by female victims than by male victims (Kar & O’Leary, 2010), other research has found similar levels of fear in both sexes (Olson, Kerker, McVeigh, & Stayton, 2008). One of the challenges of this investigation is to examine the level of fear of an intimate partner between aggressive and non-aggressive male and female victims of IPV. In a more specific analysis it could be expected victims of IT, and possibly victims of high level of coercive control (but no physical violence) will be more likely to experience fear of an intimate partner than victim of SCV or low levels of coercive control.
Alcohol abuse

Alcohol abuse and its relationship with IPV have been extensively investigated. Some research suggests alcohol abuse is associated with an increased risk of male perpetration, and female victim’s use may increase as part of their coping mechanism (Avila-Burgos, Valdez-Santiago, Híjar, del Río Zolezzi, Rojas-Martínez, & Medina-Solís, 2009; Coker, Hall Smith, McKeown, & King, 2000; Martino, Collins, & Ellickson, 2005; Rothman, Stuart, Greenbaum, Heeren, Bowen, Vinci, Baughman, & Bernstein, 2011). Partner’s alcohol abuse is indicated to increase the odds of SCV and IT for both men and women (Brownridge, 2010). It could be expected that victims of Non-aggressive High Controlling individuals and ITs would be more prone to riskier drinking patterns than victims of Non-Aggressive Low Control and SCV.

In general, this indicates that the mental health of victims of physical and psychological aggression appear to become more affected than victims of physical aggression with low or no levels of coercion or psychological aggression. The literature suggests important differences in relationship satisfaction levels and mental health in different types of victims; hence more research investigating these correlates in male and female victims of different types of partner violence in dating relationships is needed.

Study Objectives

The lack of consensus between the findings of past research on male and female victims of IPV and particularly of the few previous studies that have categorised IPV by differing levels of control and explored the mental health effects for different types of victims, indicate a need to further investigate this phenomenon. Since most of the few studies available have been carried out with married or cohabiting dyads recruited from victim
shelters or other victim services or community samples, it is necessary to investigate partner violence arising in dating samples. This is especially necessary as younger couples have been documented to report higher levels of IPV (Stets & Straus, 1990; Straus, 2004; Taft et al., 2010).

This study aims to investigate the relationship between mental health outcomes (PTSD, depression, emotional flooding and fear of an intimate partner, and alcohol abuse) and relationship satisfaction in male and female victims of IPV that differ by their type of victimisation (characterised by different levels of control (high and low) and physical violence (aggressive/non-aggressive). Specifically the following research questions will be investigated:

1. What is the prevalence of type of physical aggression and victimisation patterns, of female and male university students?
2. What is the prevalence of mental health factors and relationship satisfaction of female and male university students who are classed as victims of physical IPV compared to non-victims?
3. What is the prevalence of mental health factors and relationship satisfaction of female and male university students who are victims of different patterns of physical and controlling IPV?
4. Is there an increased likelihood of experiencing physical violence in male and female victims of the IT pattern (IT, VR) compared to victims of the SCV pattern?
5. Is there an increased likelihood of male and female victims of physical IPV (versus non-victims) experiencing:
   a) PTSD symptoms;
b) depressive symptoms;
c) emotional flooding symptoms;
d) fear of an intimate partner and e) alcohol consumption;
f) and a decreased likelihood in experiencing relationship satisfaction?

6. Is there an increased likelihood of victims of different patterns of physical and controlling IPV in experiencing:
   a) PTSD symptoms;
   b) depressive symptoms;
   c) emotional flooding symptoms; d) fear of their intimate partner;
   e) alcohol consumption;
   f) and a decreased likelihood in experiencing relationship satisfaction?

Method

Participants

The sample used in this Chapter is the same one used in Chapter 4. Characteristics of the participants are described in Chapter 4, page 122.

Measures

The Conflict Tactics Scales-Revised (CTS-R; Straus, 1990a), Controlling Behaviour Scales-Revised (CBS-R; Graham-Kevan & Archer, 2003), Partner Flooding Scale (Heyman and Smith Slep, 1998), PTSD Symptom Scale- PSS (Feeny & Foa, 2002), Beck Depression Inventory II- (BDI-II; Beck, Steer & Brown, 1996) and the Drinking Index (Kaufman-Kantor & Straus, 1992) were described in Chapter 4, pages 123-128.
The following measure not described in previous chapters that is used in this Chapter is:

**Dyadic Adjustment Scale (DAS; Spanier, 1976)**

This scale assesses the quality of several aspects related to the adjustment of intimate partners to their relationship. It is the most widely used scale to investigate dyadic adjustment (Spanier, 1986). The scale is composed of four subscales (dyadic satisfaction, dyadic cohesion, affectional expression and dyadic consensus) that can be used separately without concerns over validity and reliability (Spanier, 1976). For the purpose of this study the Dyadic satisfaction subscale was used. The alpha coefficient of reliability of the dyadic satisfaction subscale $\alpha = .71$ in the present study.

Based on the importance the literature has found with regard fear as a mental health factor, a question based on a 5-point scale (0 = not at all fearful – 4 = very highly fearful) was formulated to assess the degree to which female and male victims of partner violence experience fear of their partner: “In general, how fearful do you feel about your partner?”

**Procedure**

This section is addressed in Chapter 4, page 122-123. The additional section of the questionnaire used in the study in this Chapter that contains the Dyadic Adjustment Scale (DAS; Spanier, 1976) and the question that enquires on the degree of fear of a partner was subject to the same procedure other sections of the questionnaire followed as indicated in Chapter 4, page 122-123.

**Treatment of Data**

**Grouping respondents**
Results

Research Question 1: What is the prevalence of type of physical aggression and victimisation patterns, of female and male university students?

Table 1 shows there were more male victims of minor and severe physical IPV than female victims, although these differences were not significant. It also shows the rates at which men and women were grouped into categories based on physical aggression and coercive control. Victims categorised as VR were infrequent and thus not included in subsequent analyses. The Bonferroni adjustment procedure was used to control for the increased risk of Type I error as a result of multiple tests (6) for within group comparisons, and between group comparisons (4); therefore new alpha levels of 0.008 and 0.013 (respectively) are adopted for this analysis.

Within group analysis showed that the male sample was characterised by a majority of males classified as Non-aggressive Low Control than Non-aggressive High Control ($\chi^2 [1, n = 123] = 17.090, p = 0.005$), SCV ($\chi^2 [1, n = 123] = 14.056, p = 0.005$) or IT perpetrators ($\chi^2 [1, n = 123] = 41.973, p = 0.005$). Male respondents were classified more readily as victims of IT than victims of SCV; however, this difference was not significant. Similarly, female comparisons showed more women were classified as victims of Non-aggressive Low Control than Non-aggressive High Control ($\chi^2 [1, n = 134] = 40.516, p = 0.005$), SCV ($\chi^2 [1, n = 134] = 13.781, p = 0.005$), or IT perpetrators ($\chi^2 [1, n = 134] = 12.747, p = 0.005$). There are similar numbers of victims of IT as victims of SCV. Between group sex comparisons indicated female respondents were more frequently categorised as victims of Non-aggressive High Control than their male counterparts ($\chi^2 [1, n = 257] = 10.424, p = 0.001$). Male
respondents were more frequently categorised as victims of IT than women, however this
difference did not reach significance.

Table 1

<table>
<thead>
<tr>
<th>Prevalence of victimisation type amongst male and female respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of victimisation</td>
</tr>
<tr>
<td>Minor physical violence</td>
</tr>
<tr>
<td>Severe physical violence</td>
</tr>
<tr>
<td>Total(minor and severe)</td>
</tr>
<tr>
<td>Non-aggressive Low Control</td>
</tr>
<tr>
<td>Non-aggressive High Control</td>
</tr>
<tr>
<td>Situational couple violence (SCV)</td>
</tr>
<tr>
<td>Intimate terrorism (IT)</td>
</tr>
<tr>
<td>Violent resistant (VR)</td>
</tr>
</tbody>
</table>

*Note: Patterns of IPV do not add up the total n because of missing data.*

Research question 2: Prevalence of mental health factors and relationship satisfaction of
female and male university students who are classed as victims of physical IPV
compared to non-victims in:

a. PTSD symptoms

Table 2 shows the levels of PTSD symptoms experienced by male and female respondents. Results indicate female ($t[104] = -3.166, p = 0.003$) and male ($t[104] = -2.195, p = 0.030$) victims of physical aggression experience significantly higher levels of PTSD symptoms than their non-victimised counterparts. Generally, victimised and non-victimised females experienced higher levels of PTSD symptoms than males; however these differences were not significant.

b. Depressive symptoms

Similarly, levels of depressive symptoms experienced by female and male respondents are shown in table 2. Findings show female ($t[113] = -3.051, p = 0.004$) and male ($t[102] = -$
4.000, \( p = 0.001 \) victims of physical aggression experience significantly higher levels of depressive symptoms than non-victimised respondents. No significant sex differences were found in either victims of physical aggression or non-victimised respondents.

c. Emotional flooding symptoms

Table 2 displays respondents’ levels of emotional flooding symptoms. Female (\( t[127] = -4.030, p = 0.001 \)) and male (\( t[114] = -3.385, p = 0.001 \)) victims of physical aggression were found to experience significantly higher levels of emotional flooding than non-victimised females and males. No significant sex differences were found in the levels of emotional flooding of victimised or non-victimised respondents.

d. Fear of an intimate partner

The question enquiring participants on their fear of an intimate partner indicated male (70.6%) and female (53.3%) victims of physical aggression reported fear of an intimate partner more often (amongst males: \( \chi^2[1, n = 121] = 11.358, p = 0.001 \); amongst females: \( \chi^2[1, n = 130] = 4.992, p = 0.025 \)) than non-victimised respondents (29.4% of males and 46.7% of females). Amongst non-victimised respondents, females (77.4%) reported more frequently not experiencing fear of an intimate partner than non-victimised men (65.2%), whilst amongst victims of physical IPV more men (34.8%) reported not experiencing fear of an intimate partner than women (22.6%), however these differences were not significant.
Table 2

Levels of mental health conditions by type of victim

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Women M (SD)</th>
<th>Men M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PTSD symptoms</td>
</tr>
<tr>
<td>Non-aggressivea</td>
<td>8.5 (9.6)</td>
<td>6.7 (9.9)</td>
</tr>
<tr>
<td>Physically aggressivea</td>
<td>17.3 (13.9)</td>
<td>11.7 (11.7)</td>
</tr>
<tr>
<td>Non-aggressive Low Controlb</td>
<td>7.1 (9.3)</td>
<td>5.3 (8.3)</td>
</tr>
<tr>
<td>Non-aggressive High Controlb</td>
<td>14.7 (13)</td>
<td>12 (10.1)</td>
</tr>
<tr>
<td>Situational couple violenceb</td>
<td>13.4 (12)</td>
<td>7.3 (12.1)</td>
</tr>
<tr>
<td>Intimate terrorismb</td>
<td>15.9 (11.5)</td>
<td>13.7 (10.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depressive symptoms</td>
</tr>
<tr>
<td>Non-aggressivea</td>
<td>5.2 (6.2)</td>
<td>4.6 (6.9)</td>
</tr>
<tr>
<td>Physically aggressivea</td>
<td>10.1 (8.5)</td>
<td>13.3 (11.2)</td>
</tr>
<tr>
<td>Non-aggressive Low Controlb</td>
<td>4.6 (5.9)</td>
<td>4.5 (7.1)</td>
</tr>
<tr>
<td>Non-aggressive High Controlb</td>
<td>6.6 (7)</td>
<td>5.4 (6.4)</td>
</tr>
<tr>
<td>Situational couple violenceb</td>
<td>8.7 (6.9)</td>
<td>7 (6.7)</td>
</tr>
<tr>
<td>Intimate terrorismb</td>
<td>11.8 (10.1)</td>
<td>16.1 (11.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional flooding symptoms</td>
</tr>
<tr>
<td>Non-aggressivea</td>
<td>8.9 (11.4)</td>
<td>9 (13.6)</td>
</tr>
<tr>
<td>Physically aggressivea</td>
<td>20(14.6)</td>
<td>18.3 (14.9)</td>
</tr>
<tr>
<td>Non-aggressive Low Controlb</td>
<td>6.4 (6.8)</td>
<td>7.9 (13.1)</td>
</tr>
<tr>
<td>Non-aggressive High Controlb</td>
<td>12.1 (15.8)</td>
<td>13.8 (14)</td>
</tr>
<tr>
<td>Situational couple violenceb</td>
<td>18.9 (16.6)</td>
<td>11.6 (16.2)</td>
</tr>
<tr>
<td>Intimate terrorismb</td>
<td>17.9 (13.1)</td>
<td>21.2 (13.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relationship satisfaction</td>
</tr>
<tr>
<td>Non-aggressivea</td>
<td>32.5 (5.7)</td>
<td>31.1 (7)</td>
</tr>
<tr>
<td>Physically aggressivea</td>
<td>28.9 (5.9)</td>
<td>27.7 (7.1)</td>
</tr>
<tr>
<td>Non-aggressive Low Controlb</td>
<td>32.2 (6.6)</td>
<td>31.4 (7.2)</td>
</tr>
<tr>
<td>Non-aggressive High Controlb</td>
<td>33 (4.5)</td>
<td>29.2 (7.1)</td>
</tr>
<tr>
<td>Situational couple violenceb</td>
<td>27.8 (6.5)</td>
<td>27.7 (5.1)</td>
</tr>
<tr>
<td>Intimate terrorismb</td>
<td>31.5 (4.6)</td>
<td>27.8 (7.9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear</td>
</tr>
<tr>
<td>Not fearful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressivea</td>
<td>89 (77.4)</td>
<td>7 (46.7)</td>
</tr>
<tr>
<td>Physically aggressivea</td>
<td>26 (22.6)</td>
<td>8 (53.3)</td>
</tr>
<tr>
<td>Non-aggressive Low Controlb</td>
<td>52 (48.1)</td>
<td>4 (28.6)</td>
</tr>
<tr>
<td>Non-aggressive High Controlb</td>
<td>33 (30.6)</td>
<td>2 (14.3)</td>
</tr>
<tr>
<td>Situational couple violenceb</td>
<td>11(10.2)</td>
<td>5 (35.7)</td>
</tr>
<tr>
<td>Intimate terrorismb</td>
<td>12 (11.1)</td>
<td>3 (21.4)</td>
</tr>
</tbody>
</table>

*Categories used for research question 2a-2d, and 2f. +Categories used for research question 3a-3c, and 3f.

e. Alcohol abuse
Table 3 shows the frequency of drinking patterns by type of victim. The abstinent category was the least frequently reported. Amongst female and male respondents, victims of physical aggression were more frequently categorised to have both a Low level and High level drinking patterns than non-victimised females and males, however, this difference was significant only for the Low level drinking category level in female ($\chi^2 [1, n = 70] = 9.657, p = 0.002$) and male ($\chi^2 [1, n = 77] = 4.688, p = 0.030$) victims of physical aggression. There were no significant sex differences in the frequencies at which victims of physical aggression or non-victimised respondents were categorised as either Low or High level drinkers.

f. Relationship satisfaction

Table 2 shows female ($t [113] = 2.982, p = 0.004$) and male ($t [109] = 2.259, p = 0.026$) victims of physical aggression have significantly lower levels of relationship satisfaction than their non-victimised counterparts. No significant sex differences in their levels of relationship satisfaction were found neither in victims of physical aggression nor in non-victimised respondents.

Research question 3: What is the prevalence of mental health factors and relationship satisfaction of female and male university students who are victims of different patterns of physical and controlling IPV?

a) PTSD symptoms

The Bonferroni adjustment procedure was used to control for the increased risk of Type I error as a result of multiple tests (4) between the sexes, resulting in a new alpha level of 0.013, and multiple tests within the sexes (6), resulting in a new alpha level of 0.008. This formula is applied for research questions 3a – 3d, and 3f.
Table 2 shows female and male victims of IT experience higher levels of PTSD symptoms than victims of SCV, Non-aggressive High Control, and Non-aggressive Low Control, however, only the differences between victims of IT and Non-aggressive Low Control was significant for both female ($t [59] = 3.098, p = 0.003$), and male ($t [80] = 3.446, p = 0.001$) victims. Although female victims scores were higher than male’s, no significant differences were found in the levels of experienced PTSD symptoms in any type of victim.

Table 3

Low and High level drinking patterns in different types of victims of partner violence

<table>
<thead>
<tr>
<th></th>
<th>Abstinent $n$ (%)</th>
<th>Low level $n$ (%)</th>
<th>High level $n$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive*</td>
<td>1 (1)</td>
<td>48 (46.2)</td>
<td>6 (5.8)</td>
</tr>
<tr>
<td>Physical IPV*</td>
<td>1 (2.6)</td>
<td>22 (57.9)</td>
<td>4 (10.5)</td>
</tr>
<tr>
<td>Non-agg Low Control</td>
<td>_</td>
<td>26 (43.3)</td>
<td>5 (8.3)</td>
</tr>
<tr>
<td>Non-agg High Control</td>
<td>_</td>
<td>18 (47.4)</td>
<td>1 (2.6)</td>
</tr>
<tr>
<td>SCV</td>
<td>1 (4.3)</td>
<td>10 (58.8)</td>
<td>1 (5.9)</td>
</tr>
<tr>
<td>IT</td>
<td>_</td>
<td>9 (56.3)</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-aggressive</td>
<td></td>
<td>48 (52.7)</td>
<td>11 (12.1)</td>
</tr>
<tr>
<td>Physical IPV</td>
<td></td>
<td>29 (65.9)</td>
<td>6 (13.6)</td>
</tr>
<tr>
<td>Non-agg Low Control</td>
<td>_</td>
<td>41 (60.3)</td>
<td>8 (11.8)</td>
</tr>
<tr>
<td>Non-agg High Control</td>
<td>_</td>
<td>5 (35.7)</td>
<td>2 (14.3)</td>
</tr>
<tr>
<td>SCV</td>
<td>_</td>
<td>5 (41.7)</td>
<td>1 (8.3)</td>
</tr>
<tr>
<td>IT</td>
<td>_</td>
<td>22 (78.6)</td>
<td>5 (17.6)</td>
</tr>
</tbody>
</table>

*Categories used in research question 2e

b) Depressive symptoms
Levels of depressive symptoms are presented in Table 2. Levels of depressive symptomatology amongst female victims of IT were generally higher than in victims of SCV, Non-aggressive High Control, and Non-aggressive Low Control; however these differences were not significant. Amongst male respondents victims of IT experienced higher levels of depressive symptoms than victims of SCV, Non-aggressive High Control, and Non-aggressive Low Control, however, the only the difference between victims of IT and Non-aggressive Low Control was significant ($t [79] = 5.414, p = 0.001$). No significant sex differences were found in the levels of experienced depressive symptoms in victims of physical aggression or non-victimised respondents.

c) Emotional flooding symptoms

Table 2 shows in general victims of IT experienced higher levels of emotional flooding than other types of victims, however, only the difference between female ($t [64] = 3.164, p = 0.006$) and male ($t [88] = 4.424, p = 0.001$) victims of IT and Non-aggressive Low Control was significant. No significant sex differences were found in any if the types of victims.

d) Fear of an intimate partner

Table 2 shows the frequencies of female and male respondent’s fear of an intimate partner by different types of victims. Male and female victims of physical IPV (SCV and IT) expressed very infrequently to have experienced fear of an intimate partner in order to conduct meaningful statistical analyses. There is, however, a pattern of female and male victims of IT that showed symmetry in the rates of fear, whilst slightly more men victims of SCV expressed fear of an intimate partner. Most respondents reported not experiencing any fear at all of a partner. Both female ($\chi^2 [3, n = 108] = 42.296, p = 0.001$) and male ($\chi^2 [3, n =
victims of Non-aggressive Low and Non-aggressive High Control were more frequently categorised as not experiencing fear of an intimate partner than were victims of physical aggression (victims of IT and SCV). Sex comparisons indicated women victims of Non-aggressive High Control ($\chi^2[1, n = 44] = 11.000, p = 0.001$), reported more frequently not feeling fear of a partner than their male counterparts. No other significant sex differences were found amongst the other types.

e) Alcohol abuse

An examination of mental health factors revealed male and female victims of physical aggression and non-victimised respondents were seldom categorised into the various drinking patterns examined. A dummy variable of alcohol abuse was therefore created to conduct subsequent meaningful analyses to answer the research questions posed about alcohol consumption (Table 3). This new dichotomous variable identified Low level drinking (grouping the Low level and Low moderate drinking patterns together) and the High level drinking (grouping the High moderate, High level and Binge drinking patterns together).

Table 3 shows frequencies for levels of drinking patterns in male and female respondents. Respondents in the Abstinent and High level categories were rare and not suitable to conduct meaningful statistical analyses. The Low level category was explored statistically for differences between and within sex categories. The Bonferroni adjustment procedure was used to control for the increased risk of Type I error as a result of multiple tests (4) between the sexes, resulting in a new alpha level of 0.013 and multiple tests within the sexes (6), resulting in a new alpha level of 0.008.
Within sex comparison indicated most female ($\chi^2 [3, n = 63] = 11.984, p = 0.007$) and male ($\chi^2 [3, n = 73] = 48.370, p = 0.001$) victims of physical aggression reported a Low level drinking pattern. Specifically, female victims of SCV and male victims of IT were classified as Low level drinkers than any other type of victims. Comparisons between the sexes indicated significantly more female victims of Non-aggressive High Control were found to have a Low level drinking pattern compared to their male peers ($\chi^2 [1, n = 23] = 7.348, p = 0.007$). No other significant differences in the levels of Low level drinking were found.

f) Relationship satisfaction

Table 2 shows the levels of relationship satisfaction of victims of physical aggression and non-victimised women and men. There were no significant differences found in the levels of experienced relationship satisfaction neither between different types of female or male respondents, nor between females and males victims and/or non-victims of physical aggression

Research Question 4: Is there an increased likelihood of experiencing physical violence in male and female victims of the IT pattern (IT, VR) compared to victims of the SCV pattern?

Binary logistic regressions (Table 4) computed by type of aggressive perpetrator indicated female victims of IT are seven times more likely to be subject to minor physical IPV than victims of SCV. No significant effects of severe physical aggression in women, or minor and severe physical aggression in male victims were found.
Table 4

*Odd ratios of experiencing physical aggression by victims of IT and SCV*

<table>
<thead>
<tr>
<th>Victims by type of violence</th>
<th>B</th>
<th>SE</th>
<th>Wald statistic</th>
<th>Odds ratio</th>
<th>95% confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.082</td>
<td>0.152</td>
<td>0.290</td>
<td>0.921</td>
<td>0.684 - 1.241</td>
</tr>
<tr>
<td>Severe</td>
<td>0.097</td>
<td>0.098</td>
<td>0.984</td>
<td>0.907</td>
<td>0.748 - 1.110</td>
</tr>
<tr>
<td>Minor</td>
<td>1.948</td>
<td>0.975</td>
<td>3.994</td>
<td>7.013*</td>
<td>1.038 - 47.374</td>
</tr>
<tr>
<td>Severe</td>
<td>-0.600</td>
<td>0.344</td>
<td>3.045</td>
<td>0.549</td>
<td>0.280 - 1.077</td>
</tr>
</tbody>
</table>

*NOTE:* The reference group is IT, *p = 0.05

Research Question 5: Is there an increased likelihood of male and female victims of physical IPV (versus non-victims) experiencing: a) PTSD symptoms, b) depressive symptoms, c) emotional flooding symptoms, d) fear of an intimate partner and e) alcohol consumption; f) and a decreased likelihood in experiencing relationship satisfaction?

Table 5 shows binary logistic regressions calculated to examine the likelihood of male and female victims of physical aggression experiencing more mental health problems. The model included PTSD symptoms, depressive symptomatology, emotional flooding symptoms, fear of an intimate partner and alcohol abuse.

Male victims of physical aggression had an increased likelihood of experiencing depressive symptoms and emotional flooding symptoms when the rest of the mental health factors in the model were controlled than non-victimised male respondents. Female victims of physical aggression were at increased odds of experiencing emotional flooding symptoms than non-victimised females when the rest of the mental health factors were controlled. Male (1/0.935 = 1.06 factor) and female (1/0.901 = 1.10 factor) non-victimised respondents had an
increased likelihood of experiencing relationship satisfaction than male and female victims of physical aggression.

Table 5

Likelihood of experiencing relationship and adverse mental health by victims of physical aggression

<table>
<thead>
<tr>
<th>Mental health and relationship satisfaction risk</th>
<th>B</th>
<th>SE</th>
<th>Wald statistic</th>
<th>Odds ratio</th>
<th>95% confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptoms</td>
<td>.004</td>
<td>.037</td>
<td>.012</td>
<td>1.004</td>
<td>0.933</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>0.221</td>
<td>.073</td>
<td>9.225</td>
<td>1.248***</td>
<td>1.082</td>
</tr>
<tr>
<td>Emotional flooding</td>
<td>.085</td>
<td>.032</td>
<td>7.106</td>
<td>1.089*</td>
<td>1.023</td>
</tr>
<tr>
<td>Fear of a partner</td>
<td>-2.135</td>
<td>1.383</td>
<td>2.385</td>
<td>0.118</td>
<td>0.008</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>0.672</td>
<td>1.148</td>
<td>0.343</td>
<td>0.511</td>
<td>0.054</td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>-0.067</td>
<td>0.031</td>
<td>4.711</td>
<td>0.935*</td>
<td>0.880</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptoms</td>
<td>0.001</td>
<td>0.047</td>
<td>0.001</td>
<td>1.001</td>
<td>0.912</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>0.120</td>
<td>0.090</td>
<td>1.753</td>
<td>1.127</td>
<td>0.944</td>
</tr>
<tr>
<td>Emotional flooding</td>
<td>0.067</td>
<td>0.034</td>
<td>3.988</td>
<td>1.070*</td>
<td>1.001</td>
</tr>
<tr>
<td>Fear of a partner</td>
<td>0.624</td>
<td>1.673</td>
<td>0.139</td>
<td>1.866</td>
<td>0.070</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>1.400</td>
<td>1.045</td>
<td>1.795</td>
<td>4.054</td>
<td>0.523</td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>-0.105</td>
<td>0.038</td>
<td>7.747</td>
<td>0.901***</td>
<td>0.837</td>
</tr>
</tbody>
</table>

*p < 0.05**p < 0.010, ***p < 0.005

Research Question 6: Is there an increased likelihood of victims of different patterns of physical and controlling IPV in experiencing: a) PTSD symptoms, b) depressive symptoms, c) emotional flooding symptoms, d) fear of their intimate partner and e) alcohol consumption; f) and a decreased likelihood in experiencing relationship satisfaction?

Multinomial logistic regressions indicated victims of IT are more likely to be affected in their mental health than non-victimised respondents (Table 6 and 7), particularly men.

Male victims of IT are more likely to experience emotional flooding symptoms and depressive symptoms than Non-aggressive Low Control, and more likely to experience emotional flooding symptoms than male victims of Non-aggressive High Control when the
other mental health factors are controlled. No significant effects between male victims of IT and SCV or between victims of SCV and Non-aggressive Low Control/Non-aggressive High Control were found.

Female victims of Non-aggressive High Control were at significantly higher risk (1/0.007 = 142.85) of experiencing fear of an intimate partner than victims of IT. No significant effects in mental health factors were found between victims of IT and victims of Non-aggressive Low Control or SCV. Logistic regression analyses (not shown) did not find any significant effects in mental health factors between female victims of SCV and victims of Non-aggressive Low Control or Non-aggressive High Control.

Table 6

Likelihood of male victims of IT experiencing different mental health effects in comparison with other types of victims

<table>
<thead>
<tr>
<th>Victims by type of violence</th>
<th>B</th>
<th>SE</th>
<th>Wald statistic</th>
<th>Odds ratio</th>
<th>95% confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-aggressive Low Control/IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptomatology</td>
<td>0.029</td>
<td>0.043</td>
<td>0.443</td>
<td>1.029</td>
<td>0.946 - 1.119</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>0.252</td>
<td>0.086</td>
<td>8.568</td>
<td>1.287**</td>
<td>1.087 - 1.523</td>
</tr>
<tr>
<td>Emotional flooding</td>
<td>0.104</td>
<td>0.036</td>
<td>8.227</td>
<td>1.110**</td>
<td>1.034 - 1.192</td>
</tr>
<tr>
<td>Fear of a partner</td>
<td>-1.023</td>
<td>0.665</td>
<td>2.365</td>
<td>0.359</td>
<td>0.098 - 1.324</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>-2.134</td>
<td>1.546</td>
<td>1.906</td>
<td>0.118</td>
<td>0.006 - 2.448</td>
</tr>
<tr>
<td>Non-aggressive High Control/IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptomatology</td>
<td>0.054</td>
<td>0.070</td>
<td>0.584</td>
<td>1.055</td>
<td>0.919 - 1.211</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>0.106</td>
<td>0.126</td>
<td>0.706</td>
<td>1.112</td>
<td>0.868 - 1.423</td>
</tr>
<tr>
<td>Emotional flooding</td>
<td>0.163</td>
<td>0.064</td>
<td>6.445</td>
<td>1.177*</td>
<td>1.038 - 1.335</td>
</tr>
<tr>
<td>Fear of a partner</td>
<td>-3.802</td>
<td>2.764</td>
<td>1.892</td>
<td>0.022</td>
<td>0.000 - 5.032</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>1.662</td>
<td>1.434</td>
<td>1.343</td>
<td>5.270</td>
<td>0.317 - 87.585</td>
</tr>
</tbody>
</table>

*Reference group* p = 0.05, **p < 0.005
Table 6 shows males victims of Non-aggressive Low Control had a small but significant effect in increased likelihood of experiencing more relationship satisfaction than male victims of IT by a factor of 1.07 (1/0.932). Table 7 indicates female victims of Non-aggressive Low Control and Non-aggressive High Control were more likely than female victims of SCV to experience satisfaction in their relationship by a factor or 1.13 (1/0.883) and 1.16 (1/0.861). No other significant effects of relationship satisfaction were found between victims of IT/SCV and victims of non-aggressive coercive control.

Table 7

<table>
<thead>
<tr>
<th>Victims by type of violence</th>
<th>B</th>
<th>SE</th>
<th>Wald statistic</th>
<th>Odds ratio</th>
<th>95% confidence intervals</th>
<th>Victims by type of violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-aggressive High Control/IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptomatology</td>
<td>0.024</td>
<td>0.075</td>
<td>0.100</td>
<td>1.024</td>
<td>0.884</td>
<td>1.187</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>0.256</td>
<td>0.141</td>
<td>3.298</td>
<td>1.292</td>
<td>0.980</td>
<td>1.703</td>
</tr>
<tr>
<td>Emotional flooding</td>
<td>0.123</td>
<td>0.068</td>
<td>3.231</td>
<td>1.131</td>
<td>0.989</td>
<td>1.294</td>
</tr>
<tr>
<td>Fear of a partner</td>
<td>-4.972</td>
<td>2.364</td>
<td>4.425</td>
<td>0.007*</td>
<td>0.000</td>
<td>0.712</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>-1.738</td>
<td>1.842</td>
<td>0.890</td>
<td>0.176</td>
<td>0.005</td>
<td>6.508</td>
</tr>
<tr>
<td>Non-aggressive Low Control/SCV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>-0.124</td>
<td>0.053</td>
<td>5.429</td>
<td>0.883*</td>
<td>0.795</td>
<td>0.980</td>
</tr>
<tr>
<td>Non-aggressive High Control/SCV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>-0.150</td>
<td>0.057</td>
<td>6.791</td>
<td>0.861*</td>
<td>0.769</td>
<td>0.964</td>
</tr>
</tbody>
</table>

*Reference group* $p = 0.05$, **$p < 0.005$
Discussion

This study set out to investigate the relationship between different types of female and male victims of physical and controlling IPV and important mental health indicators, as well the levels of relationship satisfaction in dating samples.

In summary, the results again confirm that both sexes experience physical and different variants of patterns of IPV in heterosexual relationships. What is more, this study goes onto show there are mental health and relationship factors associated with physical IPV and different patterns of physical and controlling IPV for both sexes. Little differences were found between the sexes - both experienced more debilitating factors associated with depressive symptoms, emotional flooding symptoms and fear of an intimate partner if they experienced IPV, whilst non-victimised males and females experienced higher relationship satisfaction (research question 2). In particular young men and women who were victims of IT perpetration fared worse in terms of experiencing greater mental health problems (research question 3). Importantly, female victims of IT were found to have odds of experiencing minor physical aggression seven times higher than female victims of SCV (research question 4). This was corroborated by the increased likelihood of female victims of physical aggression to be at increased risk of experiencing emotional flooding symptoms. Victimised males were at increased risk of experiencing depressive symptoms and emotional flooding symptoms than non-victimised males (research question 5). Deleterious effects were also found when participants were broken down into categories of victims. For example, male victims of IT were at increased risk of experiencing emotional flooding symptoms than victims Non-aggressive Low Control and Non-aggressive High Control; and at increased risk of experiencing depressive symptoms than male victims of Non-aggressive Low Control. Female victims of Non-
aggressive High Control were at significantly higher risk of experiencing fear of their intimate partner than female victims of IT. This correspondence in results was corroborated by a greater likelihood of male and female non-victimised respondents in experiencing more relationship satisfaction than victims of IT and SCV (respectively). The findings highlight two points. First, that both sexes should be considered when exploring IPV victimisation and second, that controlling behaviours should be considered in the role of IPV victimisation in addition to physical aggression. This is in keeping with the new Home Office definition of Domestic Violence, due to be updated in March 2013, which recognises that this form of family aggression should take into account controlling behaviours in addition to the fact that it can happen to people younger than 18 years:

“Any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexuality” (Home Office, 2012).

**Interpretation of results**

With regard to the first research question, the sample was characterised by a higher pattern of male victims of physical IPV, however these differences were not significant. Prevalence rates here are within the range of IPV reported in dating relationships (17%-45%; Straus, 2004). In general, rates of physical IPV indicate the majority of females and males were not victims of physical aggression. Generally, female respondents reported experiencing higher level of coercive control without physical aggression (victims of Non-aggressive High Control) than IT or SCV victimisation or than their male counterpart’s victimisation. Other differences indicate more males experiencing IT victimisation and females experiencing SCV victimisation but these differences were not significant. In general, the frequency of female victims of IT was lower compared to
previous research findings with dating samples (27.5%- Straus & Gozjolko, in press), whilst male IT victimisation was just slightly lower than previous findings (25.4%- Straus & Gozjolko, in press). Prevalence of situational couple violence is in general lower than estimates of physical IPV reported in dating samples (Straus, 2004).

The second research question shows that victims of physical IPV, compared to non-victims, fare significantly worse in terms of mental health issues and relationship satisfaction. In this phase of the analysis no significant sex differences in the levels of experienced adverse mental health issues were found except for alcohol use, which showed only a low level drinking pattern to be more associated with victims of physical aggression. These findings suggest drinking in this sample as a whole may be better explained as a risk marker linked to IPV victimisation through interactions with proximal risk factors (O’Leary et al., 2007) instead of playing a more causal role. In correspondence with these findings non-victimised men and women fare better in terms of experienced relationship satisfaction than victims of IT in the case of men and better than victims of SCV in the case of women.

The third research question examined the aforementioned mental health and risk factors in specific types of victims. Findings show victims of IT experienced higher levels of PTSD symptomatology, depressive symptoms and emotional flooding symptoms than victims of Non-aggressive Low Control. These significant differences were not found between victims of SCV and Non-aggressive Low Control and thus supports findings from previous research linking worse mental health outcomes to IT victimisation (Hines & Douglas, 2011; Leone, 2011; Próspero, 2008a). Sex comparisons did not find significant differences in the levels of experienced PTSD symptoms, depressive symptomatology and emotional flooding symptoms. Female victims of Non-
aggressive High Control reported more frequently not experiencing fear of an intimate partner and were more frequently classed as low level drinkers than their male counterparts. Findings here are in line with previous research showing various similarities in mental health adverse experiences between the female and male victims of IPV (Medeiros & Straus, 2007). It is interesting indeed that a majority of respondents declared not experiencing fear of an intimate partner, and that this was reported more often by women than by men. Disclosure of experiences of fear of an intimate partner by men is usually a challenge in research because it involves in many cases acknowledging experiences that do not conform to hegemonic masculinity (e.g. Durfee, 2011). Findings here, however are true for a category that included high levels of coercive control victimisation but no experiences of physical aggression (Non-aggressive High Control), and is perhaps still a challenge that research that have typically found higher fear by women (e.g. Kar & O’Leary, 2010) still faces. Fear, a risk factor for partner violence commonly associated with women (e.g. Brown, McDonald, & Krastev, 2008; Valente & Jensen, 2000), requires further study, particularly how rates of experienced fear versus no fear fit and make sense.

 Victims of IT did not experience significantly less relationship satisfaction than victims of SCV or non-violent types. In other words, when coercive control is controlled (via categories of IPV-e.g. IT, SCV, and Non-aggressive Low Control) the effect that partner violence had on victims of physical aggression (research question 2) disappears. This is the first time such a comparison of levels of relationship satisfaction between different types of male and female victims is made and requires further testing in dating samples.

 The fourth research question sought to investigate whether IT victimisation was linked to a higher likelihood of experiencing physical violence than SCV victimisation. Female IT victims
were at a sevenfold increased likelihood of experiencing minor physical IPV than victims of SCV. This suggests that in these young dating relationships a substantial difference between these two types of victimisation focuses on increases of coercive control levels and minor physical aggression. It is important to highlight that although victims of IT in this sample experience lower levels of severe physical IPV than victims of IT in clinical settings, findings here suggests that victims of IT in these young predecessor relationships whose partners use higher levels of coercive control and minor physical aggression are indeed at higher risks of becoming injured and more emotionally affected than other types of victims as it was confirmed by the final research questions.

The fifth research question also proved the above. Findings indicate male victims of physical aggression are more likely to experience depressive symptoms and emotional flooding symptoms than respondents who were not victims of physical aggression, while female victims of physical aggression were at higher risk for experiencing emotional flooding symptoms than non-victimised women. As expected these non-victimised individuals were more likely to experience higher relationship satisfaction than victims of physical aggression. As has been suggested, trauma related to different kinds of physical victimisation may have important differential effects on a person’s mental health because of the anticipated “threat background” that IT has over its victims in comparison with SCV (Johnson, 2009).

To examine this, the sixth research question explored the levels of PTSD symptomatology, depressive symptoms, emotional flooding symptoms, fear of an intimate partner and alcohol consumption (in the form of drinking patterns) in male and female victims of Non-aggressive Low Control, Non-aggressive High Control, SCV, and IT. Male victims of IT in general are more likely to experience higher depressive symptomatology and to be more physiologically aroused
(emotionally flooded; controlling for the effect of other mental health factors) than non-victimised males (Non-aggressive Low Control, Non-aggressive High Control), however, these effects were not found between male victims of IT and SCV. An important finding was that amongst females victims of Non-aggressive High Control were at a very high risk (OR = 142 times more likely) of experiencing fear of an intimate partner than victims of IT, yet they did not differ significantly in their odds of experiencing PTSD symptomatology which is what would be expected from such a traumatising experience that leaves a victim at such a great risk of experiencing high levels of fear. Since logistic regression models using a forced entry method (as the one used in this chapter for exploratory purposes) to control for the effect of predictors introduced in the analysis when calculating odd ratios, it is possible that fear-PTSD symptomatology link may be mediated by another other factors such as SES and income playing an important role amongst victims of more severe physical aggression (Capaldi, Knoble, Shortt, & Kim, 2012). In general, more adverse mental health effects in women and men linked to IT are consistent here with the findings in the literature that important differences in levels of coercion in combination with physical aggression characteristic of IT (Hines & Douglas, 2010; Leone, 2011). It was surprising that such effect was not found for PTSD symptoms. It is plausible that the impact of lower levels of physical IPV used by the IT victim’s partners in this sample is not as extreme as that used by IT perpetrators found in clinical or selected samples so as to leave a traumatic impact (e.g. re-living the incident, experiencing great fear on a partner, etc.).

This study took these findings a step further by analysing sex differences in the levels of adverse mental health conditions and relationship satisfaction in victims of IPV (research questions 5 and 6).
Findings from association analyses here suggest drinking can be more adequately understood in the context of the impact of other mental health issues (risk marker) than rather by itself as a salient risk factor. Similarly, male and female victims of physical aggression and non-victimised respondents show no significant differences in their levels of experienced relationship satisfaction. This is consistent with findings associating similar mental health and risk factors of IPV to women and men (Medeiros & Straus, 2007) and find broad support to Johnson’s findings related to important differences between types of victimisation and the impact that IT has over other types of victims, even in young dating relationship. This study, however, did not find the majority of victims of IT to be female, but rather the opposite in these samples. More research is encouraged to inform prevention. Male IT victimisation in these samples is in line with previous research (Straus & Gozjolko, 2007). This is important as past research has commonly linked IT victimisation to women.

Methodological considerations and implications

There are several considerations to bear in mind when interpreting results here presented. First of all, the sample used is a convenience sample and thus findings should not be generalised to all university students in other cultural contexts or the general population itself. Secondly, exploring and analysing different typologies of victims is born at the cost of breaking down a sample in smaller groups/categories. Caution then should be observed when drawing conclusions for example on gender effects. The cross-sectional design of the study imposes further restrictions on how results should be interpreted. Ideally a longitudinal design is preferred because of the antecedent-consequence conclusions than can be drawn from it, however these designs are expensive and its logistics imposes further restrictions to access to such designs. Nevertheless, this study is successful in exploring and presenting data that highlights the importance of level of coercive control in
partner violence research, and suggests important mental health differences linked to different types of victims of IPV. This was also the first study to examine emotional flooding symptoms related to different types of victims of IPV in young dating relationships.

**Conclusion**

It is clear that the experience of coercive control is not exempt from young adult dating relationships. Although a substantial amount of males and females in these relationships are characterised by “non-aggressive” coercive control, it is a concerning proportion of intimate partners who are physically victimised, alongside higher levels of coercion. Differences in the experiences of victimisation type need to be recognised alongside the fact that both sexes are experiencing this aggression. Both young men and women who were victims of IT experienced greater levels of and mental health problems than non-victimised individuals, whilst additionally women were at greater risk of sustaining physical aggression. It is encouraging that Governmental departments are recognising the role of controlling behaviours in young dating samples, in addition to adults (Home Office, 2012). However, the history of IPV is steeped in understanding it as a crime of men’s violence against women (Straus, 1999a), and therefore more needs to be done to raise awareness of men’s experiences and their need to be responded to as victims in their own right.
CHAPTER 6

GENERAL DISCUSSION

This thesis aims to investigate the rates, aetiology and consequences of physical and psychological IPV in international University student samples. This thesis provides the reader with a comprehensive guide to the complexities of IPV terminology, theory, prevalence rates, aetiological risk with consideration given to how it manifests in different countries and genders. This final part of the thesis intends to summarise how the body of work included in this thesis has specifically contributed to this aim. The reader is reminded of the specific aim of each part of the thesis and the key findings followed by theoretical and practical implications and their limitations. Finally, the overall implications and conclusions are stated, with specific focus on research and practice with young women and men in dating relationships.

Part I: The prevalence of IPV and methodological considerations of empirical studies

This part of the thesis provided research that investigates the international rates and experience of IPV by the sexes, in addition to its nature and beliefs / motivations associated with its perpetration in countries with differing levels of gender empowerment. Chapter 1 conducted a review of surveys which have been developed using a gender inclusive and methodologically sound approach, to investigate the true international prevalence of the problem. Findings showed studies with the highest methodological rigour (Family violence surveys) tend to reflect symmetry in rates of IPV perpetration/victimisation, and in some cases higher rates of female-perpetrated IPV, and that these surveys tend to be common to the US. Studies with lower (low to moderate) methodological rigour are prone to be less conducive to eliciting IPV by both partners, particularly for men, and to report higher rates of female victimisation. Gender equality was associated with symmetry in rates of IPV whilst gender inequality was linked to greater female victimisation. It was
found that it is necessary to reach consensus on sound methodological aspects by researchers around the world adopting a gender inclusive approach, in order to conduct studies that can be comparable. This would greatly enable researchers and other professionals to control for effects of important risk/protective factors (e.g. gender inequality) and more effectively draw conclusions of the magnitude of this problem.

Chapter 2 continued the theme of exploring rates of IPV in international samples – but did this by focusing on an English and Mexican University student population, countries with different levels of gender empowerment. It expanded on the rates of IPV to also consider injury and beliefs / motivations held about physical IPV in each sample in order to examine the validity of the different theoretical perspectives, explained in the introduction and Chapter 1. Findings indicate women in a country with higher levels of gender inequality were victims of less severe physical IPV whilst they were found to perpetrate more minor and severe IPV than women in a country with lower levels of gender inequality. Men from both countries do not show any significant differences in their perpetration/victimisation of physical IPV. Motivation attached to physical IPV by men and women outline a wide array of reasons for their IPV perpetration (e.g. to express their anger, in response to a partner’s verbal aggression, etc.). Furthermore, approval of female-to-male aggression amongst men and women was higher than approval of male-to-female aggression. Overall, Chapter 2 concluded rates, motivations, and collective beliefs about physical IPV in the samples studied do not support IPV perpetration/victimisation is the sole result of patriarchal norms and structural gender inequality. The Chapter suggests that IPV is a result of other existing norms (e.g. chivalrous beliefs), and a complex web of risk factors (e.g. depression, PTSD, dyadic adjustment, etc.).

Chapter 3 further explored physical IPV and beliefs about aggression and focused on the under researched nature of female-to-male physical aggression by extending its analysis on prevalence,
severity, injury, and collective beliefs about the acceptability of IPV by different types of female IPV perpetrators. Findings show more women in the country with higher levels of gender inequality are found more frequently to be perpetrators of higher levels of coercive control and physical aggression (IT) and less frequently found to be non-aggressive in comparison with more structurally empowered women. In neither of the two countries studied the main motivation of female perpetrators for aggressing toward a male partner was that of self-defence (VRs). Findings in Chapter 3 focused on the scarcely investigated nature of female perpetration in international samples. The prevalence, severity, injury, and collective beliefs about the acceptability of IPV by different types of female IPV perpetrators were examined. Here a coercive-control based typology was introduced into the thesis. Findings corroborated that more aggressive female perpetrators are also more likely to be victimised and suffer more physical injuries. It also highlighted important differences in the rates and beliefs about aggression provided by different types of perpetrators, with aggressive females, particularly ITs approving more of female and male aggression against a partner than female SCVs.

**Part II: Associations of risk and mental health factors of IPV in female and male perpetrators and victims of IPV in dating samples**

Up to this section, this thesis has examined IPV perpetration/victimisation and the deleterious effects that physical IPV has on male and female perpetrators/victims in terms of physical injury. Part II moved forward to explore the associations of risk and mental health factors of IPV in female and male perpetrators and victims of IPV in Mexican dating samples.

Chapter 4 examined salient risk and mental health factors for IPV perpetration by both sexes in dating samples. It particularly examined how specific types of perpetrators differ in salient
correlates such as anger, PTSD, depressive symptoms. It went beyond analysing sex differences to examine differences associated with different types of IPV perpetrators. Chapter 4 corroborated high rates of physical IPV (particularly severe IPV) perpetration that were also found in other samples studied in Chapters 2 and 3. Analyses indicated there were no significant sex differences in the levels of experienced anger and partner jealousy. Surprisingly, experiences of these two risk factors were not significantly more elevated in IPV perpetrators than in non-aggressive controls. In general, IPV perpetrators showed more adverse mental health experiences than non-aggressive males and females. Furthermore there were important distinctions within types of perpetrators. Male IT perpetrators generally experienced higher levels of emotional flooding symptoms, and were found to have a moderate drinking pattern more often than other types of perpetrators (e.g. SCVs, Non-aggressive Low and High controlling persons). Female IT perpetrators experienced higher levels of PTSD and depressive symptoms. Findings suggest an overlap with other typologies of perpetrators (e.g. Holtzworth-Munroe & Stuart, 1994). Sex comparisons confirm adverse mental health issues in male and female IPV perpetrators tend to be similar (Medeiros & Straus, 2007).

Chapter 5 extends this exploration by investigating the relationship between different types of female and male victims of physical and controlling IPV and important mental health indicators, as well the levels of relationship satisfaction in dating samples. It conducts an analysis of how these specific factors relate to physically aggressive and non-aggressive women and men. It furthers this analysis by examining these factors in victims of different types of physically violent and non-violent IPV. Generally victims of physical aggression experienced more adverse mental health issues and were less satisfied with their relationship than victims of non-physically aggressive coercive control, particularly than victims of Non-aggressive Low Control. Analyses found important differences in victims of IPV. For example, female victims of IT are more likely to
experience minor physical IPV than victims of SCV and female victims of Non-aggressive High Control are 142 times more likely to experience fear of their partner than victims of IT. Male victims of IT are at higher risk of experiencing emotional flooding symptoms and depressive symptoms than victims of non-physically aggressive low coercive control. Moderate drinking levels were associated more closely with victims of physical aggression than with victims subjected to non-physically aggressive coercive control. No significant sex differences (with the exception of fear experiences and drinking in non-victimised women) in these relationships in adverse mental health issues and relationship satisfaction indicate more severe forms of IPV such as IT have an important impact in both sexes.

**Theoretical and practical implications and limitations**

*Part I: The prevalence of IPV and methodological considerations of empirical studies*

This thesis has made several contributions to the understanding of intimate partner violence and confirmed previous findings, strengthening their existence in international and UK student samples. Chapter 1 was able to determine that studies designed purposefully to assess IPV by both partners (gender-inclusive approach) can give a less biased estimate of IPV. Indeed the standardisation of a minimum of criteria (e.g. appropriate definition of IPV, the framing of questions about IPV, collecting data from both partners) in research across different cultural settings will allow not only for a more realistic snapshot of the problem in a particular region, but will also enable cross-national comparisons to be made controlling for the effect for broader socio-cultural variables. The National Dating Violence Survey in México (Castro & Casique, 2010) is an example of a methodologically sound study conducted with dating samples. More studies following the recommendations made in this thesis in regard to methodological aspects are needed in México and in Latin America in general. This in turn, will avoid generalisations of the magnitude and
nature of IPV, and will provide other researchers, practitioners, and policy makers a better understanding upon which they direct primary and secondary prevention efforts more effectively to reduce IPV (particularly the widespread minor IPV by men and women). It will also prevent its negative consequences on relationships (Straus, 2009). Whilst having less biased estimates of IPV and a better comprehension of the phenomenon is a first step toward reducing its prevalence, identifying and tackling different cases of IPV should logically be the next step. Findings in this part of the thesis apply to studies that met minimum criteria on methodological aspects for assessing IPV in the general population, and do not necessarily apply to studies conducted with specific clinical or selected samples whose aim is not the above stated.

Having found support to study IPV from a gender-inclusive perspective to better understand the problem and its magnitude across cultural settings, Chapter 1 also opened the question to whether structural inequality would have a significant effect on the prevalence of IPV if a similar methodology was applied to studies with different socio-cultural background. Chapter 2 investigated this question and furthered understanding on male and female perpetrated IPV and its attached motivations and collective beliefs.

The research in Chapter 2 demonstrates normative chivalrous beliefs rather than patriarchal beliefs about aggression prevail in young dating relationships, and that reciprocal IPV in these relationships takes place under a wide web of motivations. Structural gender inequality levels are not in line with rates, motivations, and beliefs about IPV. This is important because it involves the re-conceptualisation of IPV at the levels of the public, mental health professionals, and policy makers. This re-conceptualisation should raise awareness in societies about the nature of IPV as men and women are socialised differently (Próspero, 2009; Straus, 2009). For example men can
perceive reporting their victimisation not adjusting to commonly held stereotypes of masculinity (Straus, 2009), whilst female perpetrated IPV can be viewed by men and women as more acceptable and inconsequential (e.g. Fiebert & Gonzalez, 1997). Indeed, since the study of Díaz-Guerrero (1994), matriarchal and patriarchal norms within the family have been identified to co-exist in societies such as the Mexican (and perhaps in other Latin American countries too). This is of particular relevance in this thesis because prevention and policy in countries such as México are usually addressed under a broader international trend whose origins date back to a different family unit configuration of other more developed nations. This has resulted in an understanding of IPV in societies such as the Mexican, as exclusively a gender issue instead of a human and relational issue (Esquivel-Santoveña, Lambert, & Hamel, in press) for prevention and treatment purposes. Furthermore, there is also the influence that women’s rights protection groups and activists have achieved through the years which have served to create changes in modern families in practically all societies.

Therefore, important emphasis in messages publicly acknowledging IPV as a problem which both sexes can be subject to can be a first step for victims (particularly males) to come forward and seek help. At the level of mental health professionals working in college campuses, this is relevant and warrants a thorough screening process of relationship dynamics and conflict by both members of the couple. Furthermore, a clear message led by mental health professionals and policy makers should be stressed to all the public that both, male or female aggression is not acceptable.

The research in Chapter 3 confirmed that perpetrators of physical IPV hold views that tolerate violence against a partner. Furthermore, acceptance is larger in perpetrators of IT and that this applies to female perpetrators as well. It additionally confirmed that female aggression
(particularly IT) poses a higher risk for women’s victimisation as suggested in the literature (Straus, 2009).

The above is important and, as it has been stated, implies the need for screening for different types of IPV problems in dating samples to deliver appropriate services to victims and perpetrators of IPV (Próspero, 2008), and therefore screening for types of IPV should become universal. Also important for counselling professionals at colleges is the attached implication that higher levels of “innocuous” or “minor” female physical IPV may be seen by perpetrators to “legitimise” male aggression, and in some cases translate into higher risk of victimisation and injury (Straus, 2009). Hence, careful, specific, and distinctive approaches should be considered for efforts aimed at preventing (Johnson, 2009) and appropriately counselling for IPV problems (Próspero, 2008).

Although the levels of injury and severe physical IPV found in these samples are not as critical as in selected/clinical samples (e.g. shelter samples, victims from emergency services in hospitals) they are of interest to health care professionals because these are not samples selected for IPV yet they display important levels of aggression and injury. Therefore, attention to these men and women in young and less consolidated relationships is warranted (Próspero & Kim, 2008) to ensure better possibilities of healthier more consolidated future relationships or marriages. This information is particularly interesting for policy and prevention efforts in countries such as México where the conceptualisation of IPV includes married and more recently cohabiting relationships but has not yet moved forward to include dating violence in its legal and public health codes.

Applications here described may not apply to general population or clinical samples. For example, views about and tolerance of violence may be more skewed in cases where emotional
dependence (negative attachment patterns) has become ingrained in the relationship dynamics. Experiences of and beliefs about physical aggression may not apply to relationships with different relationship dynamics (e.g. couples with children), or where conflict has evolved into riskier patterns of IPV that vary according to the type of IPV present in the relationship (e.g. clinical/selected samples), therefore conclusions should be made with caution.

Whether motivations and acceptance of IPV changes as a relationship progresses into a more stable or intimate stage it is still an under researched area that warrants the attention of researchers and practitioners, particularly by longitudinal research.

**Part II: Associations of risk and mental health factors of IPV in female and male perpetrators and victims of IPV in dating samples**

Chapter 4 demonstrated there are important differences between types of perpetrators in terms of associated mental health issues, regardless of the sex of the perpetrators. This finding is critically twofold for researchers and professionals working to disentangle the seriousness of cases of partner violence because a) it confirms the convenience of distinguishing between different types of IPV, and b) because this was found to apply to men and women. Setting this as a basis for prevention and intervention strategies is fundamental as has been suggested previously. For example, identifying between different kinds of perpetrators could help the health professional focus its interventions. Johnson (2009) has suggested, for example that for cases of SCV an appropriate identification of external stressors (e.g. unemployment, financial problems, and workload), conflict stemming from relationship dynamics (poor communication skills, conflict management), individual issues (e.g. personality problems, poor anger management, negative attachment patterns), or individual issues upon which both partners have agreed it is a problem (e.g.
a partner’s alcohol or drug abuse, or addictions such as gambling, etc.) is essential for effective secondary prevention programs. Part of the challenges that variations that different types of IPV impose, is to determine the effectiveness of intervention strategies. This is particularly an under research area. Johnson (2009) suggested for instance, that cases of IT can bear important differences on perpetrator characteristics (e.g. an anti-social IT versus an emotionally dependent IT), and that approaches (e.g. an educational approach vs. psychodynamic approach) that consider these differences are more likely to be effective in reducing recidivism. Furthermore, the knowledge of overlapping typologies in terms of characteristics of perpetrators and victims can allow for a focus on different aspects of the individual (e.g. the Holtzworth-Munroe & Stuart typology). This, in turn, can give more elements to the health care professional to conduct interventions, and can provide more fruitful insights for primary prevention.

Chapter 5 showed important differential mental health effects amongst victims of different types of IPV in both male and female victims, particularly amongst victims of IT. This is important for prevention efforts because it indicates that although several preventive approaches have been suggested to be applicable to primary and secondary prevention (e.g. brief motivational interventions, dialectical behaviour therapy, and bystander intervention- Shorey, Zucosky, Brasfield, Febres, Cornelius, Sage, & Stuart, 2012) of IPV in dating samples, the insights brought by the analyses of different types of victims (and perpetrators) such as the ones presented in this part of the thesis support previous recommendations that these approaches should be tailored to specific types of IPV, and that such efforts should have a gender-inclusive approach. Such considerations should foresee practical risks for the victim (Johnson, 2009; Straus, 2009), and implicit efficacy of such strategies used with different kinds of perpetrators (Próspero, 2008).
Overall Thesis implications

This thesis has demonstrated that IPV in dating relationships is an issue that effects both women and men, and that its origins and prevalence go beyond lower levels of structural gender inequality; and arises from a complex network of risk factors (e.g. anger, alcohol abuse, difficulties regulating emotions and poor anger management, childhood abuse, attitudes accepting violence-Shorey et al., 2012). Findings in this thesis on male and female beliefs about and motivations for aggression by either member of the couple, and advances in the levels of human development worldwide indicate that the impact of broader exosystem risk factors of IPV (e.g. patriarchal beliefs, socio-cultural premises, structural inequality) play a more modest role in the occurrence of IPV in dating relationships. Research on IPV in dating relationships indeed confirm that more proximal variables to the individual are accountable or affect both men and women (Dutton, 2006; Stith et al., 2004).

To my knowledge, no important distinctions about types of partner violence have yet echoed in the institution of prevention programs aimed at reducing dating violence. Furthermore, the lack of integration on data of salient risk factors such as mental health in prevention approaches is in part responsible for the low success of recidivism rate (Ehrensaft, 2008). This thesis has provided empirical evidence on how IPV is experienced by men and women in dating relationships, either as victims or perpetrators, and underscores the importance that an adequate methodologies have when assessing IPV. The interest of providing mental health professionals and policy makers and advocates specific insights on prevention challenges for tackling IPV should be one guided by empirical evidence, in order to achieve the main objective of prevention: reduce the levels of IPV experiences and its associated issues that pertain mental health and relationship dynamics.
In Britain, partner violence prevention programme’s effectiveness has been criticised for being an ideology-based rather than an empirically-based understanding of IPV (Dixon, Archer, & Graham-Kevan, 2011; Graham-Kevan, 2007). In México, prevention (primary and secondary) guidelines which are gendered outlined in the Programa de Prevencion y Atención a la Violencia Familiar y de Género [Attention and Intervention Programme for Family and Gendered Violence; Secretaría de Salud, 2006] is the standard to which prevention efforts adhere to despite empirical evidence that indicates IPV in dating relationship is a problem effecting both men and women (Castro & Casique, 2010; Rivera-Rivera, Allen-Leigh, Rodríguez-Ortega, Chávez-Ayala, & Lascano-Ponce, 2007). Some of the keypoints of the Programa de Prevencion y Atención a la Violencia Familiar y de Género (Secretaría de Salud, 2006) that indicate how partner violence should be construed are:

- The construction on masculinity and femininity
- Power and the intimate relationship
- Family violence
- An integrated model (an ecological model and a theoretical framework of social representations within a gendered perspective) for the prevention of and attention to partner violence
- A proposal of psychological intervention of women victims of family violence

It is of utmost importance that findings derived from empirically-tested approaches (Dixon & Graham-Kevan, 2011) and typologies (e.g. Holtzworth-Munroe & Stuart, 1994; Johnson, 1995; 2009) be considered when establishing guidelines that target specific sectors of the population and
consequently achieve the aims to which they were originally designed: to reduce the prevalence of IPV.

There are several novel aspects of the work presented in this thesis in regard to the study of IPV in a more traditional, collectivist society: 1) It has shown that beliefs about IPV in a more traditional society (usually stigmatised as being patriarchal and IPV as a problem female victimisation by males) also reflect chivalrous attitudes that may actually be serving as a protective risk factor for women and a risk factor for men; 2) different types of IPV affect men and women, and it is more violent and controlling men and women that have more acceptance of violence than less controlling (and violent) people; 3) Both men and women participate actively as perpetrator and victims of different types of IPV that have differential effects by type in both sexes. These findings here are new in a Latin American country where research has usually turned its focus to victimised women (e.g. Castro, Casique, & Brindis, 2008; Gómez-Dantés, Vázquez-Martínez, & Fernández-Cantón, 2006; Olaíz, Rojas, Valdez, Franco, & Palma, 2006) and hence are worthy of future research that can aid practitioners, advocates and policy makers conceive effective and integral prevention efforts that actually reduce (and ultimately eliminate) the problem.

This thesis regards the issue of partner violence as not only a matter of public health, but also an education issue that starts early, in less consolidated relationships that demands further attention, particularly in societies where IPV has not been researched in a more comprehensive way.

Conclusion

This thesis is the first study to have conducted analyses on rates, motivations for and collective beliefs about IPV and associated risk and mental health factors in different types of
victims and perpetrators involved in dating relationships in a developing country. Despite its limitations, it is an important step to encourage further research in diverse ethnic groups with specific types of IPV. Collectively the results of this thesis stress some important theoretical and practical lessons about understanding and responding to intimate partner violence in young adult samples.

Firstly, despite opposing views in the field of partner violence about how to understand its aetiology and approach its assessment and prevention, empirical studies have repeatedly demonstrated the need to understand the phenomenon from a gendered inclusive and multifactor perspective. Together the body of work in this thesis supports this standpoint and highlights the need to adopt this approach in the international samples studied here. This confirms the view that research should always acknowledge unwarranted generalisations of findings to avoid drawing flawed conclusions and stress the importance of making evidence-based suggestions to establish the link between research and practice (e.g. Jeffrey, 2005). Indeed, this thesis acknowledges that findings here cannot be extrapolated to clinical samples or samples from the community.

Second, the role of patriarchy in the aetiology of IPV in developing countries may not be as straightforward as researchers have recently suggested - that is countries with low gender empowerment for women will have higher rates of male to female aggression (e.g., Archer, 2006). It was clear that this was not the case in the developing country studied in this thesis, in comparison to the English sample. Rather, rates of female to male aggression were higher in Mexican than English samples. It is unclear why this may be the case, although it has been suggested in Chapter 2 that with patriarchy, benevolent sexism exists, which fuels the assumption that women are the weaker sex, whose violence is trivial and inconsequential, and who need male protection. This
could in turn lead rise to higher rates of female uni-directional violence, as women will assume their violence to be acceptable in this context of understanding them as unable to physically harm males or be punished for it, and also because it is deemed unacceptable for men to hit women under any circumstance. Such findings are new and exciting and have important implications for practice and the reduction of this social problem. As such, further large scale research into this international jigsaw needs to be completed.

Finally, this thesis also provided confirmation throughout its chapters on the heterogeneity of IPV applicable to both men and women, and the implicit implications and challenges it presents to preventive work. It is imperative to recognise the role of control in IPV and how it can manifest itself in some types of relationship violence, but not others. As different risk factors, levels of physical violence and mental health outcomes are associated with perpetration and victimisation by different types of perpetrators it is clear that different approaches to intervention may be necessary with different types. It is pleasing to see the recognition of controlling behaviours form a formal part of the Home Office definition of domestic violence at the time of writing this thesis (Home Office, 2012) in addition to a lowering of the age of recognition of who can experience domestic violence. This is one example of using the evidence base to move forward in the response to this form of family violence. Something that research needs to continue in the twenty first century.
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APPENDIX B - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF
SECTION THAT APPEARED ONLINE FOR THE BRITISH SAMPLE FOR THE FIRST
STUDY
1a) Initial advertisement that students will view online:

ONLINE SURVEY asking about your experience & perceptions of aggression in intimate relationships.

This study investigates how people manage conflict and view the use of aggression between intimate or dating partners. If you choose to take part in this study it will ask you questions about how you solve conflict and whether you have experienced aggression or control in your past and current relationships. In addition, it will ask you about how you have felt in the last 12 months and require you to read short scenarios which describe partners aggressing against each other and comment on which behaviours you think are acceptable.

This study is an online survey administered by the system.

You must be at least 18 years old and have been in a dating/intimate relationship that has lasted for at least one month at some point in your adolescent/adult life.

1b) Brief introductory text that students will see prior to deciding to go any further with the online study:

This study consists of an online survey and investigates how people manage conflict and view aggression between intimate partners. If you choose to participate, it is important that you understand you may experience some discomfort due to the content of some questions. It will ask you about how you solve conflict and whether you have experienced aggression or control in your past and/or current relationships. In addition it will ask you about how you have felt in the last 12 months and require you to read short scenarios which describe partners aggressing against each other and comment on which behaviours you think are acceptable.

In order to participate in the study, you must be at least 18 and have been in a dating/intimate relationship that has lasted for at least 1 month at some point in your adolescent/adult life.

Completion of the questionnaire will take approximately 35 minutes. You will receive 1 research credit for taking part in this study. You will receive credit immediately upon completion of the survey. You must complete all sections in one sitting, as you are not allowed to resume at another time from where you left off. While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses.

If you choose to continue with this study you will view two further windows next which contain more descriptive information about this study. You can therefore find out more detailed information before agreeing to participate. You will be informed when the questionnaire begins, so please follow the instructions and withdraw before this stage if you do not want to take part.

It is important that any information received is accurate. You are therefore asked to complete this in private and consider the questions carefully and honestly. Your co-operation in this research will be greatly appreciated and as this is an under researched area you will be contributing to knowledge in this field.
1c) More detailed study information that students will read in the next window prior to deciding to go ahead with the study and provide their consent to take part

Study Information - please read before going any further.

This study will ask you about how you solve conflict and whether you have experienced aggression or control in your past and/or current relationships.

Your participation is voluntary and you may refuse to participate or choose to withdraw from the study at any time, either during or after completing the questionnaire, until results are published. You are under no obligation from the University to participate. However, to receive the credits the online system requires you to complete the questionnaire – but do not worry, if you do not want to answer some, or all of the questions asked, simply choose the option which states that you do not wish to provide a response ("No Response").

Your participation in this project is anonymous to the researchers, your responses will be identified by a unique ID number only and you will be among several hundred other participating students. Your anonymous responses will only by accessed by the principal investigator and researcher of this project. The results from this study are confidential and will be presented in aggregate form in a doctoral research thesis and may be published in scientific journals, presented at professional conferences or used to develop violence prevention programs. At no point will your individual responses be published.

The first question asks you to give a code name of your choice, please make sure you fill this in and make a note of it for yourself. This code name enables you, and only you, to identify your responses. At no point will the researchers be able to identify who you are. You are free to withdraw during and after completing the questionnaire up until publication of results by contacting Dr. Louise Dixon anonymously. Do not give your name in correspondence or use an identifiable e-mail account. You can withdraw by either writing to

Be sure to indicate your wish to withdraw from the study along with your code name. If you require further information please contact her. Remember to save or print off this web page so that you have a record of these details.

Please confirm that you have read this information and understand the nature of the study by checking one of the options below:

If you want to continue with the study check 'Yes' if you do not want to continue check 'No' and then choose to withdraw by checking the 'withdraw' option at the top of this web page.

1d) Further detailed study information that students will read in the next window prior to deciding to go ahead with the study and provide their consent to take part

Study Information Continued - Please read before going any further.
After this information window, there are six questionnaire sections. The first asks for general demographic information. The second asks you to consider ways in which you may have solved conflict in your relationships. For example, one question will ask if you have ever punched/kicked your partner or been punched/kicked by a partner. The third and fourth asks you about how you may have acted toward your partner in certain situations. The fifth asks you to consider and comment on a series of hypothetical scenarios where aggression arises within a couple. Aggressive acts are briefly described here, for example it may say ‘Carol punched him repeatedly in the face’. Finally, the sixth asks you questions about you have felt in the last 12 months.

If you find the contents of this questionnaire upsetting and wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as The Samaritans (Tel: 08457 90 90 90), National Domestic Violence Helpline (0808 2000 247), NHS direct (Tel: 08457 46 47), University student counselling service (Tel: 0121 414 5130) or Niteline (Tel: 08000 274750). If you are upset and require further help or advice around any of the issues presented in this questionnaire please do take advantage of the available support.

You may now participate in this study. By filling-out the questionnaire, you consent to participate in the study. Therefore, you understand that your participation in this survey is voluntary and you are free to withdraw from the study at any time. You can withdraw without giving a reason and without any cost to you. However, please remember to receive the credits the online system requires you to complete the questionnaire. If you want to receive credits but do not want to answer any/some of the questions you may simply check the ‘No Response’ option for each relevant question.

Please confirm that you have read this information and understand the nature of the study by checking one of the options below:

If you want to continue with the study check 'Yes' if you do not want to continue check 'no' and then choose to withdraw by checking the 'withdraw' option at the top of this web page.
Debrief information after study completion

Thank you for participating in this research study.

May I take this opportunity to remind you that you can withdraw your data at any point after completing this questionnaire up until the publication of results. Do not give your name in correspondence or use an identifiable e-mail account. You can withdraw by either writing to [BLANK] Be sure to indicate your wish to withdraw from the study along with your code name.

If you found the contents of this questionnaire upsetting and wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as The Samaritans (Tel: 08457 90 90 90), National Domestic Violence Helpline (0808 2000 247), NHS direct (Tel: 08457 46 47), University student counselling service (Tel: 0121 414 5130) or Niteline (Tel: 08000 274750). If you are upset and require further help or advice around any of the issues presented in this questionnaire please do take advantage of the available support.
APPENDIX C - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF
SECTION OF THE PRINTED QUESTIONNAIRE FOR THE MEXICAN SAMPLE FOR
THE FIRST STUDY
1b) Información y Consentimiento de participación

Información del Estudio

Estudio observando cómo estudiantes resuelven conflictos en relaciones de pareja y su postura en cuanto a la agresión en la relación de pareja

Por favor lea la información en esta hoja y considere si le gustaría continuar participando en esta investigación. Si Usted después de haberla leído aún desea participar, sírvase abrir el sobre que contiene el cuestionario y comenzar.

¿Quién puede participar?
Usted debe contar con al menos 18 años de edad y haber estado en alguna relación de pareja que han durado por lo menos un mes durante algún período de su vida adolescente o adulta.

¿Qué tanto tiempo me tomará?
Aproximadamente 35 minutos.

¿De qué se trata el estudio?
Este estudio investiga cómo la gente maneja el conflicto de pareja y su postura u opinión acerca de la agresión entre compañeros de pareja. Si usted decide participar, se le preguntará acerca de cómo ha resuelto conflictos de pareja y si ha experimentado agresión en su relación de pareja pasada o presente, se le requerirá lea “escenarios cortos los cuáles detallarán actos agresivos entre compañeros de pareja.

Hay cinco secciones en este cuestionario. La primera trata de información demográfica en general. La segunda le pide que considere formas mediante las cuales usted puede haber resuelto conflictos en su relación de pareja. Por ejemplo, una pregunta le podrá cuestionar si usted alguna vez ha golpeado / pateado a su pareja ó si ha sido golpeado / pateado por su pareja. La tercera y la cuarta preguntan cómo puede usted haber actuado contra de su pareja en ciertas situaciones. Finalmente, las quinta le pide considere y comente acerca de una serie de escenarios hipotéticos donde la agresión está presente en la pareja. Actos agresivos son brevemente descritos aquí, por ejemplo, puede decir ‘Carolina lo golpeó repetidamente en la cara’.

¿Tengo que participar?
No. Su participación es voluntaria y usted puede negarse a participar o decidir retirarse del estudio –ya sea durante o después de haber completado el estudio (hasta tres meses después). Usted no está bajo ninguna obligación de la Universidad de participar. Si usted opta por participar y decide que no quiere contestar algunas preguntas por favor señálelo en la opción de no respuesta (NR)

¿Me afectará negativamente mi participación en el estudio?
Si usted desea participar, es importante que tenga presente que usted puede potencialmente experimentar algún incomodidad debido al contenido de alguna de las preguntas, o de igual manera, puede que esto no suceda. Si usted encuentra el contenido de este cuestionario molesto o desagradable y desea hablar de ciertos problemas con alguien, hay algunas avenidas de apoyo, el Centro de Investigación y Servicios Psicológicos Integrales (CESPI) en la Facultad de Ciencias de la Conducta, Universidad Autónoma del Estado de México (52-722-2720076). Si Usted se encuentra molesto y requiere de ayuda o consejo acerca de cualquiera de las problemáticas presentadas en el cuestionario, por favor siéntase libre de aprovechar este apoyo disponible a través de la UAEMex.
¿Serán anónimas mis respuestas?
Su participación en este proyecto es de manera anónima para con los investigadores, usted se encontrará participando así cómo varios cientos de estudiantes lo están haciendo. Sus respuestas serán tratadas de manera confidencial y únicamente la información en conjunto será utilizada para la publicación de resultados. En ningún caso sus respuestas individuales serán publicadas.

¿Cómo puedo retirar mi información del estudio si decido cambiar de opinión ya habiendo participado?
Los cuestionarios tienen un código impreso; por favor asegúrese de tomar nota del mismo. Este código le permitirá únicamente a usted identificar sus respuestas. En ningún caso los investigadores serán capaces de identificar quién es. Usted podrá utilizar este código para retirar sus respuestas del estudio contactando a los investigadores anónimamente. NO dé su nombre en la correspondencia ni utilice una cuenta de correo electrónico identificable.

Usted también puede retirarse del estudio llamando por teléfono a la . Asegúrese indicar que desea retirar su información del estudio empleando su código asignado. Si usted hace esto, su información será localizada en la base de datos a través de su código y será borrada –el investigador borrara sus respuestas sin examinar las mismas.

Le sugerimos conservar esta hoja informativa con usted o bien, anotar los datos de contacto del investigador en caso que Usted quiera retirar su participación del estudio más adelante

¿Cómo puedo proveer consentimiento en participar?
Contestando el cuestionario es cómo usted consiente su participación en el estudio. No se le pide su firma de consentimiento por escrito para de esa manera no contar con sus datos que lo puedan identificar. De esta manera se entiende que su participación en esta encuesta es voluntaria y usted es libre de rehusarse a contestar cualquier pregunta o retirarse completamente del estudio en cualquier momento (hasta tres meses después de haber completado el cuestionario). Usted puede retirarse del estudio sin dar explicación alguna.

¿Quién verá mis respuestas?
Sus respuestas anónimas serán únicamente accesadas por los investigadores involucrados en este proyecto. Los resultados (información) en conjunto en tesis de estudiantes y puede ser publicada en revistas científicas, presentadas en conferencias profesionales o empleadas en el desarrollo de programas de prevención de violencia. Si usted requiere mayor información acerca de este estudio, por favor contacte a Esteban Eugenio Esquivel Santoveña en .

¿Es importante esta investigación?
Sí. Esta es un área actualmente sujeta de investigación y su cooperación en este estudio será grandemente apreciada. Con esperanza, esta investigación en conjunto con otros proyectos informarán a las autoridades pertinentes de política y tratamiento en el área de agresión y conflicto en la pareja. Por lo tanto, es importante que cualquier información recibida sea precisa. De manera que se le pide que al completar el cuestionario, considere sus respuestas de manera cuidadosa y honesta.

Si decidio tomar parte en el estudio – qué hago después de haber completado el cuestionario?
Una vez que Usted haya completado el cuestionario por favor métnalo en el sobre que se le proveyó, séllelo y devuélvalo al investigador colocándolo en la caja grande situada en ’X’ en la biblioteca. Si usted decide no completar el cuestionario o parte del mismo, no hay problema, pero por favor devuélvalo en el sobre sellado de manera que podamos determinar una cifra de respuesta en el estudio.
1f) Texto Final que los estudiantes verán al final del cuestionario

Gracias por participar en esta investigación.

Aprovecho esta oportunidad para recordarle que Usted puede retirar su información del estudio aún hasta tres meses después de haber completado el cuestionario. No proporcione su nombre en correspondencia ni utilice una cuenta de correo electrónico identificable. Usted puede retirar su información del estudio escribiendo a la

Si usted es/ha sido una víctima o perpetrador de violencia en la pareja, o si de hecho por alguna otra razón usted encuentra los contenidos de este cuestionario molestos o desagradables y desea platicar con alguien problemas concernientes con agresión en relaciones de pareja existe una avenida de apoyo: el Centro de Investigación y Servicios Psicológicos Integrales (CESPI- Tel: 52-722-2720076) Si usted se encuentra molesto y requiere de mayor ayuda o consejo en cuanto a las problemáticas presentes en el cuestionario por favor sírvase hacer uso de tal avenida de apoyo.
APPENDIX D - STUDY INFORMATION, PARTICIPATION CONSENT AND DEBRIEF
SECTION OF THE PRINTED QUESTIONNAIRE FOR THE MEXICAN SAMPLE FOR
THE SECOND STUDY
Información del Estudio

Estudio observando cómo estudiantes resuelven conflictos en relaciones de pareja y aspectos de su relación de pareja

Por favor lea la información en esta hoja y considere si le gustaría continuar participando en esta investigación. Si usted después de haberla leído aún desea participar, sírvase abrir el sobre que contiene el cuestionario y comenzar.

¿Quién puede participar?
Usted debe contar con al menos 18 años de edad y haber estado en alguna relación de pareja que haya durado por lo menos un mes durante algún período de su vida adolescente o adulta.

¿Cuánto tiempo me tomará?
Aproximadamente 75 minutos.

¿De qué se trata el estudio?
Este estudio investiga cómo la gente maneja el conflicto de pareja y explora diferentes aspectos entre compañeros de pareja. Si usted decide participar, se le preguntará acerca de cómo ha resuelto conflictos con su pareja y si ha experimentado agresión en su relación de pareja pasada o presente por lo se le requerirá lea "escenarios cortos los cuáles detallarán actos agresivos entre compañeros de pareja.

Hay doce secciones cortas en este cuestionario. La primera trata de información demográfica en general. La segunda le pide que considere formas mediante las cuales usted puede haber resuelto conflictos en su relación de pareja. Por ejemplo, una pregunta le podrá cuestionar si usted alguna vez ha golpeado / pateado a su pareja o si ha sido golpeado(a) / pateado(a) por su pareja. La tercera y la cuarta preguntan acerca de la dinámica en su relación de pareja. La quinta le pide considere diferentes razones que pueden ser causa del comportamiento negativo de su pareja. Posteriormente, la sección seis indaga si usted y/o su pareja han tenido acciones o actitudes para controlar o dominar a su pareja. La sección siete le pregunta cómo se ha sentido psicológicamente después de algún incidente o episodio agresivo en su relación de pareja. Las secciones octava y novena investigan cómo reacciona usted cuando está molesto o enojado y cuáles son sus hábitos de consumo de bebidas alcohólicas, respectivamente. La antepenúltima sección le pregunta si usted y su pareja se han demostrado celos el uno al otro en diferentes situaciones, la penúltima parte del cuestionario le cuestiona acerca de varios aspectos de su estado de ánimo, y finalmente la sección doce le preguntará si ha experimentado algún síntoma relacionado con algún evento traumático, su frecuencia, así como si usted siente o ha experimentado miedo de su pareja.

¿Tengo que participar?
No. Su participación es voluntaria y usted puede negarse a participar o decidir retirarse del estudio –ya sea durante o después de haber completado el estudio (hasta tres meses después). Usted no está bajo ninguna obligación de la Universidad de participar. Si opta por participar y decide que no quiere contestar algunas preguntas por favor señálelo en la opción de no respuesta (NR).

¿Me afectará negativamente mi participación en el estudio?
Si usted desea participar, es importante que tenga presente que puede potencialmente experimentar alguna incomodidad debido al contenido de alguna de las preguntas, o de igual manera, puede que esto no suceda. Si usted encuentra el contenido de este cuestionario molesto o desagradable y desea hablar de ciertos problemas con alguien, hay algunas avenidas de apoyo, el Sistema para Desarrollo Integral de la Familia-DIF (52-722-226-1170, 52-722-215-90-00), y el Centro de Atención Juvenil
¿Serán anónimas mis respuestas?
Su participación en este proyecto es de manera anónima para con los investigadores por lo que usted se encontrará participando así cómo varios cientos de estudiantes lo están haciendo. Sus respuestas serán tratadas de manera confidencial y únicamente la información en conjunto será utilizada para la publicación de resultados. En ningún caso sus respuestas individuales serán publicadas.

¿Cómo puedo retirar mi información del estudio si decidí cambiar de opinión ya habiendo participado?
Los cuestionarios tienen un código impreso; por favor asegúrese de tomar nota del mismo. Este código le permitirá únicamente a usted identificar sus respuestas. En ningún caso los investigadores serán capaces de identificar quién es. Usted podrá utilizar este código para retirar sus respuestas del estudio contactando a los investigadores anónimamente. NO dé su nombre en la correspondencia ni utilice una cuenta de correo electrónico identificable.

Usted puede retirar su información del estudio llamando por teléfono al 01-800-696-9696. Asegúrese indicar que desea retirar su información del estudio empleando su código asignado. Si usted hace esto, su información será localizada en la base de datos a través de su código y será borrada – el investigador borrará sus respuestas sin examinar las mismas.

Le sugerimos conservar esta hoja informativa con usted o bien, anotar los datos de contacto del investigador en caso que usted quiera retirar su participación del estudio más adelante.

¿Cómo puedo proveer consentimiento en participar?
Contestando el cuestionario es cómo usted consiente su participación en el estudio. No se le pide su consentimiento por escrito para de esa manera no contar con datos que lo puedan identificar. De esta manera se entiende que su participación en esta encuesta es voluntaria y usted es libre de rehusarse a contestar cualquier pregunta o retirarse completamente del estudio en cualquier momento (hasta tres meses después de haber completado el cuestionario). Usted puede retirarse del estudio sin dar explicación alguna.

¿Quién verá mis respuestas?
Sus respuestas anónimas serán únicamente accesadas por los investigadores involucrados en este proyecto. Los resultados (información) en conjunto serán empleados en una tesis de doctorado y puede ser publicada en revistas científicas, presentadas en conferencias profesionales o empleadas en el desarrollo de programas de prevención de violencia. Si usted requiere mayor información acerca de este estudio, por favor contacte a Esteban Eugenio Esquivel Santoveña en

¿Es importante esta investigación?
Sí. Esta es un área actualmente sujeta a investigación y su cooperación en este estudio será grandemente apreciada. Se espera que esta investigación en conjunto con otros proyectos informaran a las autoridades pertinentes de política y tratamiento en el área de agresión y conflicto en la pareja. Por lo tanto, es importante que cualquier información recibida sea precisa. De manera que se le pide que al completar el cuestionario, considere sus respuestas de manera cuidadosa y honesta.
Texto Final que los estudiantes verán al final del cuestionario

Gracias por participar en esta investigación.

Aprovecho esta oportunidad para recordarle que usted puede retirar su información del estudio aún hasta tres meses después de haber completado el cuestionario. No proporcione su nombre en correspondencia ni utilice una cuenta de correo electrónico identificable. Usted puede retirar su información del estudio escribiendo al de manera anónima, indicando únicamente que desea retirar su información del estudio, y proporcionando su código.

Si usted es/ha sido una víctima o perpetrador de violencia en la pareja, o si de hecho por alguna otra razón encuentra los contenidos de este cuestionario molestos o desagradables y desea platicar con alguien problemas concernientes con agresión en relaciones de pareja existe algunas avenidas de apoyo: el Sistema para Desarrollo Integral de la Familia-DIF (52-722-226-1170, 52-722-215-90-00), y el Centro de Atención Juvenil Telefónica-CETU (01-800-696-9696). Si usted se encuentra molesto y requiere de mayor ayuda o consejo en cuanto a las problemáticas presentes en el cuestionario por favor sírvase hacer uso de tales avenidas de apoyo.
APPENDIX E - COLLABORATION LETTERS BETWEEN UNIVERSITY OF BIRMINGHAM (UB), UNIVERSIDAD AUTONOMA DEL ESTADO DE MEXICO AND THE CENTRO UNIVERSITARIO DE IXTLAHUACA