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The University of Nottingham
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The impact of attitudes, attachment and partner control on intimate partner violence(IPV): a cross-cultural comparison

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Project Proposal

Title

The impact of attitudes, attachment and partner control on intimate partner violence(IPV): a cross-cultural comparison.

Background

IPV refers to behaviours by a current or ex-partner that cause physical, sexual, or psychological harm (Birkley & Eckhardt, 2015). IPV represents a serious public health concern worldwide, spanning all relationship types (dating, marital, separated or divorced partners), with alarming prevalence rates for both genders (Romito, Beltramini, & Escribà-Aguir, 2013; Young et al., 2017; Swan et al., 2008). In the UK 27.1% of women and 13.2% of men are estimated to have experienced any domestic abuse since the age of 16 (CSEW, 2016), with non-sexual partner abuse reported as the most common type of intimate violence among women (23.8%) and men (11.1%) (ONS, 2014). In Italy 31.5% of women between 16-70 years of age, that is nearly one in three women, reported experiencing some form of physical or sexual violence in their life, in 3 out of 4 cases perpetrated by their current or ex-partner (Istat, 2015). Moreover, physical and psychological abuse tend to be associated, with the latter found to be a significant predictor of physical abuse (Capaldi et al., 2012). Victims of IPV experience serious damage to their psychological, physical and sexual health, and to the quality of their interpersonal relations; importantly, victims of IPV are at increased risk of repeat victimisation (Desai et al., 2002; White & Smith, 2004). Moreover, early IPV perpetration is likely to continue in later life relationships (Wiersman et al., 2010), which calls for a better understanding of IPV causes and risk factors for effective prevention and intervention.

Among risk factors that have been associated with IPV such as depression, substance abuse, childhood victimisation, childhood exposure to parental violence, the psychological variables of insecure attachment, dispositional anger, and need for control have been indicated as strong predictors of IPV (Follingstad et al., 2002; Dutton & White, 2012). Follingstad et al.'s path analysis model found anxious attachment and anger to *indirectly* predict of IPV; in fact need for control was the only *direct* predictor, mediating the relationship between anxious attachment and anger, with IPV frequency and severity. Consistently with the view of controlling behaviour as a key proximal risk factor for IPV *engagement*, Davis, Ace & Andra (2000) reported that whilst both anxious attachment and need for control were related to partner psychological abuse, only need for control had a direct contribution on stalking behaviour.

Dutton et al. (1994) argued that the need to control a partner originates from an insecure attachment style. Bartholomew & Horowitz (1991) proposed four adult attachment styles: secure, characterised by a positive model of self and other in a relationship; preoccupied, which involves a negative model of self and positive model of other; fearful, characterised by a negative model of self and other; and dismissing, involving a positive model of self and negative model of other. Insecure attachment refers to fearful, preoccupied and dismissing types. Whilst securely attached individuals are comfortable with intimacy, have autonomy in close relationships, and are able to resolve conflict constructively, insecurely attached individuals struggle with this balance in intimate relationships. Preoccupied individuals are overly dependent on others, have low self-worth, are demanding and needy for affect and are anxious over relationship ambiguity for fear of abandonment; fearful individuals are dependent on others but also avoid intimacy for fear of rejection, have low self-esteem, experience excessive

anxiety when the relationship is perceived to be under threat and tend to perceive ambiguous cues by the partner negatively; dismissing individuals are downplay the importance of intimacy, are emotionally and physically distant (Dutton, 1998; Henderson et al., 2005).

Numerous researchers have evidenced a link between insecure attachment and IPV: when the attachment needs of insecurely attached individuals are not met, frustration and anger are triggered and their difficulty in dealing with intense anxiety and fear is likely to lead to engagement in aggressive or violent behaviour to manage emotions or retain the partner's proximity (Miga, Hare, Allen & Manning, 2010). Extensive evidence in both cross-sectional and longitudinal studies has indicated a strong association between fearful and preoccupied attachment styles, and aggression and IPV perpetration in adolescent and adult community and incarcerated samples (Henderson et al., 2005; Miga et al., 2010; Dutton & White, 2012). In contrast, a dismissing attachment was found to positively correlate with victimisation, consistent with the view that these individuals may be more emotionally and physically withdrawn during conflict in order to avoid emotional distress, which may be perceived as frustrating by the partner who may react aggressively (Miga et al., 2010).

In contrast to the view of attachment as the factor underlying IPV, several researchers have stressed the influence of social and cultural attitudes, norms and beliefs about gender roles on IPV. This approach coincides with power-and-control-based theories of intimate violence which focus on male-to-female violence, arguing that men's violence is motivated by a desire to control and exert power over the woman, whereas fear and self-defence underlie women's

violence against their partner (Dobash & Dobash, 1979). Hence traditional gender role attitudes are thought to confer men the right to dominate a woman. Men are viewed as cold and calculating, actively choosing to employ a range of tactics to control their female partner. A large to moderate effect size has been evidenced in the literature between attitudes condoning intimate violence (r=.30) and gender role ideology (r=.29) and IPV perpetration (Stith, Smith, Penn, Ward & Tritt, 2004; Archer & Graham-Kevan, 2003; Archer, 2006; Fincham et al., 2008). Nonetheless, attitudes supportive of chivalry were found to be unrelated to IPV (Nabors & Jasinski, 2009). Notably, Nabors & Jasinski (2009) found that attitudes *follow*, rather than *precede*, IPV perpetration, meaning that attitudes may be endorsed to justify controlling and violent behaviour, rather than causally leading to it (Dutton, 1994). However, in their study students' use of violence did not have a significant impact on their subsequent attitudes, which undermines the previous finding, and points to the need to better clarify the directionality of the attitude–behaviour relationship (Nabors & Jasinski, 2009).

Neither power-and-control-based theories nor personality and individual differences-based models are fully able to explain IPV, which may more likely be the result of the interaction of a range of individual, interpersonal, and contextual factors (Birkley & Eckhardt, 2015). Studies have tended to examine the relation of IPV with attitudes and personality variables separately, mainly within samples in North America, the UK, or New Zealand (Archer, 2006). This study aims to understand not only these variables' unique relation with IPV but also their interactive effects on IPV, in a sample of English and Italian young people. Italy is a historically patriarchal country, with religious influences that advocate a subordinate status for women in the household and in society

(Herzog, 2007); the English society, in contrast, is more multi-ethnic and less affected by religious principles subordinating women to men, hence is expected to be less patriarchal than Italian society.

Proposed model of pathway leading to IPV

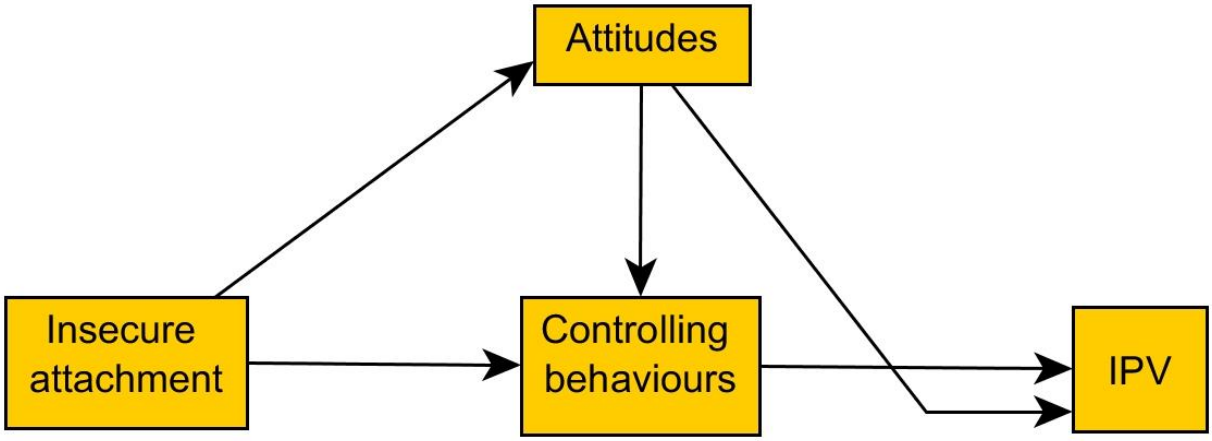


Figure 1. Model representing the hypothesised variables' interaction leading to IPV. The likelihood of
engaging in controlling behaviours is hypothesised to be increased by both insecure attachment and traditional gender role attitudes and attitudes supportive of violence. Greater use of controlling behaviours will be more strongly associated with IPV. Moreover, attitudes are hypothesised to mitigate the relationship between (i) insecure attachment and control and (ii) control and IPV.

Current study: aims and hypotheses

The main aims of the study are: (1) to assess the extent to which psychological (attachment and controlling behaviours) and cultural (attitudes) dynamic risk factors are uniquely predictive of IPV perpetration; (2) to examine the potential interactions and pathways that implicate these variables as conducive to IPV.

Hypotheses

Attitudes:

1) attitudes are predicted to differ between English and Italian samples

2) attitudes are predicted to differ between participants with controlling behaviours and those without.

3) Attitudes are predicted to differ between participants showing IPV and those who do not.

4) Attitudes are predicted to differ between attachment styles

Attachment and controlling behaviours

5) IPV is predicted to differ between attachment style

6) IPV predicted to differ between those with controlling behaviours and those without.

7) Controlling behaviours is predicted to differ between attachment styles

Method

Design

This is a cross-sectional online questionnaires study. There are three independent variables: attachment, partner control and attitudes; and one dependent variable, intimate partner violence.

Participants

English and Italian young adults (age range 16 to 35). They will be recruited online via social media platforms. Participant restrictions are outlined in the online post and participant information sheet, which clearly state a requirement for English or Italian participants only. A question on the demographic questionnaire also aims to control for this by asking participants their nationality.

A a-priori power analysis for a logistic regression model based on chi-squared analysis indicated the need to have a total of 220 participants in order to have

80% power for detecting a medium effect size (f^2=.15) with a .05 criterion of statistical significance (number of predictors=13).

Procedure

An online link to the study/questionnaires will be posted on social media websites (e.g. Facebook, Instagram), including dating website pages on Facebook (e.g. Tinder, Grindr) and participants will also be recruited by word of mouth through both close and distant friends (acquaintances). By clicking on the online link, participants will be taken to the study. First they will be asked to read the information sheet and sign the consent form; afterwards, they will be required to complete the various questionnaires in the following order: (1) demographics; (2) CTS (referred to as "Couple Conflicts"; (3) CBS, referred to as "Relationship behaviours"; (4) RSQ, called "Relationship Questionnaire; (5) GAI, titled "Attitudes". Ultimately, participants will be thanked for their participation and shown the debrief form.

Measures (the questionnaires are to be translated in Italian for Italian sample – they will be ready by the 29th of Nov)

Independent variables

Attachment. The Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994), comprising 30 items, is used to operationalise four adult attachment style dimensions: secure, fearful, preoccupied, dismissing (Roisman et al., 2007). This requires participants to self-report on a number of experiences in close relationships. Cronbach alphas for the four scales have been deemed acceptable, ranging from .41 for the secure scale to .70 for the dismissing scale (Kurdek, 2002; Griffin & Bartholomew, 1994b).

Partner control. The Revised Controlling Behaviours Scale (CBS-R) (Graham-Kevan & Archer, 2008), a 32-item questionnaire, is used to assess the frequency of the use of controlling behaviours in an intimate relationship. Its 7 scales measure: economic, threatening, intimidating, emotional, and isolating control, as well as using children, and minimizing. The scale asks for both self and partner's use of controlling behaviours and the response format consists of a 5-point scale: 0=never, 1=rarely, 2=sometimes, 3=often and 4=always. The CBS-R is scored to derive a mean overall controlling behaviours total, or for each subscale. It has good discriminative ability and reliability (Cronbach for women's reports on partner control α = 0.93; for women's reports of own control α = 0.91; Graham-Kevan et al., 2012).

In the online study, this scale was named "relationship behaviours" rather than "controlling behaviours", as this would result in underreporting.

Attitudes. Three scales from the Gender Attitude Inventory (GAI; Ashmore, Del Boca, & Bilder, 1995) are used to assess (i) traditional gender role stereotypes (10 items – α(male sample)= .86; α(female sample)= .83); (ii) endorsement of chivalry (7 items – α(male sample)= .84; α(female sample)= .57), and (iii) acceptance of male heterosexual violence (8 items – α(male sample) = .86; α(female sample)= .79).

Control variables

Age. Prospective longitudinal studies have found IPV to decrease with age (Kim, Laurent, Capaldi, & Feingold, 2008). Young age is considered a risk-factor for IPV (WHO, 2014).

Gender. Studies have generally found men and women to be equally likely to engage in physical abuse; nonetheless, men are more likely to cause physical

injuries than women (Archer, 2000; Capaldi et al., 2012)

Socio-economic status. Measured as education level and employment status, as these have been shown to be significant predictors of IPV after other risk factors are controlled for (i.e. substance abuse, childhood abuse, exposure to parental aggression, impulsivity, age, etc. ; Capaldi et al., 2012)

Ethnicity. Some studies found that being a member of an ethnic minority (i.e. African American) increases the risk of IPV.

Relationship status: types of relationship status is significantly associated with IPV victimization, with single, divorced or separated women being at higher risk of IPV victimisation compared to married women.

Length of relationship: the longer the relationship the more likely IPV is, due to the greater commitment to it by both partners and greater barriers to leaving the relationship (Wiersman et al., 2010).

Childhood victimisation. A low to moderate association between child abuse and neglect and later IPV perpetration has been evidenced, especially for men. The following question was used to assess child abuse: "Were your parents ever physically violent with you?". This will be analysed as a dichotomous variable representing any childhood victimisation.

Childhood exposure to domestic violence. Witnessing parental IPV has been found to be significantly associated with adult IPV perpetration and victimisation. The following question was used to measure this factor: "Did your parents or stepparents ever deliver physical blows to the other?". This will be analysed as a dichotomous variable representing any childhood exposure to DV.

Social desirability. The "Lie" subscale of the Culture Free Self-Esteem Inventory (2nd edition, CFSEI-2; Battle, Carson, Ord & Hawkins, 1985), consisting of 8 items related to behaviours considered socially undesirable, was

used to determine participants' defensiveness, that is refusal to disclose personal information. Battle (1992) suggested a score of 4 or less to indicate defensiveness. The 8 items are interspersed across the multiple questionnaires (RSQ, demographics, etc.).

Dependent variable

IPV. The Conflict Tactics Scale Short Form (CTS2S; Straus, 2004), consisting of 20 items, is used to measure the tactics employed to deal with relationship conflict. These are divided into 5 scales: negotiation, physical assault, psychological aggression, injury from assault, and sexual coercion. More generally the CTS assesses the presence of violence, and its severity and frequency. The CTS (and its short version CTS2S) is the most widely used measure for family violence (including intimate partner), capturing different forms of violence (Nabors & Jasinski, 2009). Respondents will be classified into three mutually exclusive categories: 0 = no violence; 1 = minor only; 2 = severe.

The following 2 questions were added at the end of the scale to find out whether the partner was met online, and if so, whether the person felt coerced or bullied by the latter online: (21) Did you meet your partner online? (Yes/No); (22) Have you ever felt bullied or coerced by the person by text or email (before meeting them)? (Yes/No).

Proposed analytical methods

1) First run univariate analysis, frequencies and descriptive stats and prevalence rate (%) of IPV perpetration and victimisation and degree of attitudes endorsement in both English and Italian samples.

2) use chi-squared to determine sample differences and bivariate relationships between the variables
3) use logistic regression to explore multivariate analysis and determine a model to predict IPV or not

Estimated timescale

The proposed study will be sent off to the ethical committee for approval sometime before mid-December. I will start collecting data as soon as I get approval. Data collection is estimated to take max 2 months, so it will probably be collected by May 2018. Analysis will follow soon after collection and will take around 3 weeks. Write-up of results and conclusion will follow and will take max 1 month.

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STUDENT RESEARCH PROJECT ETHICS REVIEW

APPLICATION FORM

The University of Nottingham's *Code of Research Conduct and Research Ethics* (2016) underpins the University's commitment to maintaining the highest standards of integrity, rigour and excellence in all aspects of its research and for all research to be conducted according to the appropriate ethical, legal and professional standards. This is consistent with the national framework published by Universities UK, *The Concordat to Support Research Integrity* (2012). Ethical review and approval is required for all projects where the research involves human participants.

The Faculty of Medicine & Health Sciences Research Ethics Committee reviews projects for D.Foren.Psy and MSc by Research in Forensic and Criminological Psychology where NHS patients are not involved.

PROJECT TITLE: The impact of attitudes, attachment and partner control on IPV: a cross-cultural comparison.

SECTION 1: THE STUDENT

CO-INVESTIGATOR (STUDENT)	Laura Albini
STUDENT ID NUMBER	4301992
EMAIL ADDRESS	msxla15@nottingham.ac.uk
COURSE/PROGRAMME	MSc Forensic and Criminological Psychology
DATES OF COURSE/PROGRAMME	2017/18
PROPOSED RESEARCH PROJECT START	29/01/2018
PROPOSED RESEARCH PROJECT HAND-IN	15/12/2017
DATE OF ETHICS SUBMISSION	15/12/2017

SECTION 2: TYPE OF STUDY

Does your study involve?	Yes	No
National Health Service (NHS), HM Prison and Probation Services (HMPPS) service users, staff, premises, data or records, and Care Homes	☐	☒

Please first contact the University of Nottingham Research Governance team who co-ordinate research done in collaboration with these bodies by students and staff of the University. Please e-mail sponsor@nottingham.ac.uk giving an outline of what and who your study involves. They will then be able to advise you on what you need to do.

You will need to fill in an IRAS form which will be reviewed by the research governance team as your (legal) Sponsor and give Sponsor approval, which is a requirement of both the NHS and HMPPS.

Please tick below the description/s that best fits the proposed study. Multi-method studies may require more than one choice.

1	Literature review or meta-analysis only (no data collection)	☐
2	Secondary analysis of anonymised dataset with existing ethical or organisational approval	☐
3	Secondary analysis of patient identifiable dataset with existing ethical approval	☐
4	Study using data from a study that is underway and has already been granted ethical approval or an application for approval has been submitted to an appropriate Research Ethics Committee (eg. NRES, SRC)	☐
5	Document analyses (eg. of policy documents)	☐

If you have only ticked boxes in numbers 1-5 above (and none in boxes 6-12 below), the study will not require ethical review from the Ethics Committee. Please go to Sections 3 (to outline the study very briefly) and 9 (explain why review is not required).

6	Study to be conducted/data to be collected outside the UK	☒
7	Internet-mediated research	☒
8	Participant contact study in an organisation (other than National Health Service, HMPPS, staff, premises, data or records, and Care Homes) involving questionnaires, interviews, focus groups or observations	☐
9	Participant contact study in an organisation (other than National Health Service or HMPPS service users, staff, premises, data or records, and Care Homes) using methods other than in 8 above (eg. fMRI, EEG)	☐
10	Ecological/observational study in non-private location	☐
11	Health Needs Assessment using routinely collected data	☐
12	Other (give details) *Click here to enter text.*	☐

SECTION 3: OUTLINE OF STUDY (No more than 2 sides of A4)

Project Title: ***The impact of attitudes, attachment, and partner control on IPV: a cross-cultural comparison.***

Background:
IPV refers to behaviours by a current or ex-partner that cause physical, sexual, or psychological harm (Birkley & Eckhardt, 2015) and represents a serious public health concern worldwide, spanning all relationship types (dating, marital, separated or divorced partners), with alarming prevalence rates for both genders (Romito, Beltramini, & Escribà-Aguir, 2013; Young et al., 2017; Swan et al., 2008). In the UK 27.1% of women and 13.2% of men are estimated to have experienced any domestic abuse since the age of 16 (CSEW, 2016), with non-sexual partner abuse reported as the most common type of intimate violence among women (23.8%) and men (11.1%) (ONS, 2014). In Italy 31.5% of women between 16-70 years of age reported experiencing some form of physical or sexual violence in their life, in 3 out of 4 cases perpetrated by their current or ex-partner (Istat, 2015). Moreover, physical and psychological abuse tend to be associated, with the latter significantly predicting physical abuse (Capaldi et al., 2012). IPV victims experience serious damage to their psychological, physical and sexual health, and interpersonal relations and are at increased risk of repeat victimisation (White & Smith, 2004). Moreover, early IPV perpetration is likely to continue in later life relationships (Wiersman et al., 2010). This evidence calls for a better understanding of IPV causes and risk factors for its effective prevention and intervention.

Among the risk factors associated with IPV such as depression, substance abuse, childhood victimisation, childhood exposure to parental violence, the psychological variables of insecure attachment, dispositional anger, and need for control have been indicated as strong predictors of IPV (Follingstad et al., 2002; Dutton & White, 2012). Follingstad et al.'s path analysis model found anxious attachment and anger to *indirectly* predict of IPV; in fact need for control was the only *direct* predictor, mediating the relationship between anxious attachment and anger, with IPV frequency and severity. Consistently with the view of controlling behaviour as a key proximal risk factor for IPV *engagement*, Davis, Ace & Andra (2000) reported that whilst both anxious attachment and need for control were related to partner psychological abuse, only need for control had a direct contribution on stalking behaviour.

Dutton et al. (1994) argued that the need to control a partner (resulting in IPV) originates from an insecure attachment style. Numerous researchers have evidenced a link between insecure attachment and IPV: when the attachment needs of insecurely attached individuals are not met, frustration and anger are triggered and their difficulty in dealing with intense anxiety and fear is likely to lead to engagement in aggressive or violent behaviour to manage emotions or retain the partner's proximity (Miga, Hare, Allen & Manning, 2010). Extensive evidence in both cross-sectional and longitudinal studies has indicated a strong association between fearful and preoccupied attachment styles, and aggression and IPV perpetration in adolescent and adult community and incarcerated samples (Henderson et al., 2005; Miga et al., 2010; Dutton & White, 2012). In contrast, a dismissing attachment was found to positively correlate with victimisation, consistent with the view that these individuals may be more emotionally and physically withdrawn during conflict to avoid emotional distress, which may be perceived as frustrating by the partner, more prone to react aggressively (Miga et al., 2010).

In contrast to the view of attachment as the factor underlying IPV, several researchers have stressed the influence of social and cultural attitudes, norms and beliefs about gender roles on IPV. This approach coincides with power-and-control-based theories of intimate violence which focus on male-to-female violence, arguing that men's violence is motivated by a desire to control and exert power over the woman, whereas fear and self-defence underlie women's violence against their partner (Dobash & Dobash, 1979). Hence traditional gender role attitudes are thought to confer men the right to dominate a woman. Men are viewed as cold and calculating, actively choosing to employ a range of tactics to control their female partner. A large to moderate effect size has been evidenced in the literature between attitudes condoning intimate violence (r=.30) and gender role ideology (r=.29) and IPV perpetration (Stith, Smith, Penn, Ward & Tritt, 2004; Archer & Graham-Kevan, 2003; Archer, 2006; Fincham et al., 2008). Nonetheless, attitudes supportive of chivalry were found to be unrelated to IPV (Nabors & Jasinski, 2009).

Neither power-and-control-based theories nor personality and individual differences-based models are fully able to explain IPV, which may more likely be the result of the interaction of a range of individual, interpersonal, and contextual factors (Birkley & Eckhardt, 2015). Studies have tended to examine the relation of IPV with attitudes and personality variables separately, mainly within samples in North America, the UK, or New Zealand (Archer, 2006). This study aims to understand not only these variables' unique relation with IPV but also their interactive

effects on IPV, in a sample of English and Italian young people. Italy is a historically patriarchal country, with religious influences that advocate a subordinate status for women in the household and in society (Herzog, 2007); the English society, in contrast, is more multi-ethnic and less affected by religious principles subordinating women to men, hence is expected to be less patriarchal than Italian society.

Methods:

Participants. English and Italian young adults (age range 16 to 35) will be recruited online via social media platforms. A a-priori power analysis for a logistic regression model based on chi-squared analysis indicated the need to have a total of 220 participants in order to have 80% power for detecting a medium effect size (f^2=.15) with a .05 criterion of statistical significance (number of predictors=13).

Materials.

- Demographics questionnaire: age, gender, SES (education + employment status), ethnicity, relationship status, length of relationship, childhood victimisation, childhood exposure to domestic violence
- Attachment. The Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994)
- Partner control. The Revised Controlling Behaviours Scale (CBS-R) (Graham-Kevan & Archer, 2008)
- Attitudes. Three scales from the Gender Attitude Inventory (GAI; Ashmore, Del Boca, & Bilder, 1995) are used to assess (i) traditional gender role stereotypes (10 items); (ii) endorsement of chivalry (7 items); and (iii) acceptance of male heterosexual violence (8 items).
- IPV. The Conflict Tactics Scale Short Form (CTS2S; Straus, 2004)
- social desirability. "Lie" subscale of the Culture Free Self-Esteem Inventory (2nd edition, CFSEI-2; Battle, Carson, Ord & Hawkins, 1985), consisting of 8 items related to behaviours considered socially undesirable, was used to determine participants' defensiveness, that is refusal to disclose personal information (Battle, 1992).

Procedure. An online link to the study/questionnaires will be posted on social media websites (e.g. Facebook, Instagram), including dating website pages on Facebook (e.g. Tinder, Grindr) and participants will also be recruited by word of mouth through both close and distant friends (acquaintances). By clicking on the online link, participants will be taken to the study. First they will be asked to read the information sheet and sign the consent form; afterwards, they will be required to complete the various questionnaires in the following order: (1) demographics; (2) CTS (referred to as "Couple Conflicts"; (3) CBS, referred to as "Relationship behaviours"; (4) RSQ, called "Relationship Questionnaire; (5) GAI, titled "Attitudes". The 8 items from the CFSEI-2 are interspersed across the questionnaires. Ultimately, participants will be thanked for their participation and shown the debrief form.

Measurable endpoints/statistical power of the study

- frequencies and descriptive stats and prevalence rate (%) of IPV perpetration and victimisation and degree of attitudes endorsement in both English and Italian samples
- sample differences and bivariate relationships between the variables
- determine a model to predict IPV or not

References

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SECTION 4: PARTICIPANT INFORMATION

School of Medicine, Faculty of Medicine & Health Sciences

Project Title: The impact of attitudes, attachment and partner control on emotional relationships: a cross-cultural comparison.

Researcher: Laura Albini (email: msxla15@nottingham.ac.uk)
Supervisor: Kevin Browne (email: lwzkdb@nottingham.ac.uk)

Ethics Reference Number: 242-1803

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you.

What is the purpose of the study?
This study aims to better understand how attitudes, attachment (ways of thinking about and relating to oneself and others) and controlling behaviours affect romantic relationships. A romantic relationship is defined as any romantic and/or sexual relationship between two non-biologically-related people, including dating or courtship relationships, relationships in which the romantic partners live together in the same household (cohabiting), relationships in which two people have children in common but are no longer formally romantically or sexually involved with one another, and marital relationships.

Why have I been invited?
You are being invited to take part because you are a 16-35 year-old English or Italian young person potentially dating, in a relationship, or with previous experiences of intimate relationships. I am inviting 220 participants like you to take part, by sharing a link to the study on social media websites and other online platforms.

Do I have to take part?
It is up to you to decide whether or not to take part. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen to me if I take part?
If you decide to take part, you will be asked to complete a series of online questionnaires, which cover socio-demographic information, information about potential relationship conflicts and how you and your partner may have dealt with them; information about your and your partners' use of control in the relationship; information about your perception of close relationships; and attitudes regarding gender roles, chivalry and romantic relationships. The study will last between 15-20 minutes.

What are the possible disadvantages and risks of taking part?
Possible responses to the study may involve sensitive information about the quality of one's own intimate relationship but this information is anonymous and confidential.

What are the possible benefits of taking part?
The information we get from your participation in this study may help understand the factors that are likely to influence romantic relationships. The research will benefit anyone having dating or intimate relationships.

Will my taking part in the study be kept confidential?
All of the information that you provide during the research will be kept confidential and anonymous. Only collective data from the questionnaires will be used when reporting the research findings. You will not be asked for your name or any other personal details, so

it will not be possible for you to be identified or linked with the data. The UK Data Protection Act 1998 will apply to all information gathered within the questionnaires.

We will follow ethical and legal practice and all information about you will be handled in confidence.

Data collected for the study will be looked at by researchers from the University of Nottingham who are organising the study. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

In the study you will not be asked about any personal information that can identify you. Thus your personal data will not be accessible to the researchers. The research data you provide will be kept securely for 3 years. After this time your data will be disposed of securely.

We would also like to seek your consent so that the data may be stored and used in possible future research during and after 10 years– this is optional (please indicate you agree to this on the consent form).

What will happen if I don't want to carry on with the study?
Your participation is voluntary and you are free to withdraw at any time, without giving any reason. If you decide not to complete the full questionnaire, your data will not be stored.

What will happen to the results of the research study
The data will contribute to the researcher's MSc thesis. The results of the study may be published in scientific journals and presented at scientific conferences. The data will be reported anonymously, with any identifying information removed. If you would like a summary of the results then you can contact the researchers using the contact details above.

Who is organising and funding the research?
This research is being organised by the University of Nottingham.

Who has reviewed the study?
All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Faculty of Medicine & Health Sciences (FMHS) Research Ethics Committee.

What if there is a problem?
If you have a concern about any aspect of this study, you should contact the Chief investigator (Kevin Browne) e-mail: lwzkdb@nottingham.ac.uk. The full contact details of the research team are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the FMHS Research Ethics Committee Administrator, c/o The University of Nottingham, Faculty PVC Office, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH or via E-mail: FMHS-ResearchEthics@nottingham.ac.uk

THANK YOU FOR YOUR PARTICIPATION

SECTION 5: PARTICIPANT CONSENT

PARTICIPANT CONSENT

- I have read and understood the Participant Information. YES/NO
- I know how to contact the researcher if I have questions about this study? YES/NO
- I understand that my participation is voluntary I am free to withdraw at any time? YES/NO
- I understand that for anonymous questionnaire studies, once you have completed the study and submitted your questionnaire, the data cannot be withdrawn? YES/NO
    - I understand the overall anonymised data from this study may be used by other researchers in the future for research and teaching purposes? YES/NO
    - I understand that non-identifiable data from this study might be used in academic research reports or publications? YES/NO
    - I am 16 or over YES/NO

I indicate my willingness to take part in the study voluntarily YES/NO

SECTION 6: ORGANISATIONAL PERMISSIONS and/or EXTERNAL ETHICAL REVIEW

[List and insert below all documents detailing permissions obtained to collect data. To insert scanned copies of documents or emails, go to INSERT tab. Select the OBJECT drop down menu, and OBJECT. Select the CREATE FROM FILE tab and browse for the relevant document. Select Ok. Repeat this process for each document that needs to be submitted into this section.]

SECTION 7: ADDITIONAL DOCUMENTATION

[List and insert below all materials such as questionnaires, draft interview guides, advertisements, marketing materials, initial email invitations to participate, cover letters and translations that will be used in this study. Ensure that the purpose of each document will be clear to the Committee. To insert files, go to INSERT tab. Select the OBJECT drop down menu, and OBJECT. Select the CREATE FROM FILE tab and browse for the relevant document. Select Ok. Repeat this process for each document that needs to be submitted into this section.]

(i) Invitation will be done online: an introduction of who I am and a brief explanation of the study will be provided attached to the web link participants can click on in order to take part (they will first be taken to the information sheet and consent form).

(ii) **Data collection instruments**

Questionnaires listed in the order they are given to participants

(1)Demographics Questionnaire

What is your gender?

- Male
- Female

What is your age?

- 16 or 17
- 18 to 24
- 25 to 34
- 35 to 44
- 45 or older

What is your nationality?
[Blank space for participants to write it out]

What is your ethnicity?

- Asian Sub-continent (India, Pakistan, Bangladesh , Sri Lanka etc)
- South East Asian (China, Malaysia, Thailand etc)
- Black or African American, African.
- Hispanic or Latin American
- White/Caucasian
- Other

What is your current employment status?

- Employed, working full-time or part-time
- Not employed
- Retired
- Disabled, not able to work

Which of the following best describes your current relationship status?

- Single, never married
- Dating
- In a relationship, living with partner
- In a relationship, not living with partner
- Married
- Widowed

- Divorced/Separated

How long have you and your partner been in a relationship? (if currently single, you may relate this to a past relationship)

- Less than 1 year
- 1-3 years
- 3-5 years
- 5-10 years
- More than 10 years

Were your parents or step-parents ever physically violent with you?

- No
- Yes, 1 to 5 times a month
- Yes, 6 to 10 times a month
- Yes, more than 10 times a month

Did your parents or step-parents ever deliver physical blows to the other?

- No
- Yes, 1 to 5 times a month
- Yes, 6 to 10 times a month
- Yes, more than 10 times a month

(2)THE CTS2S SHORT FORM (Straus, 1979)

COUPLE CONFLICTS

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each to these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" on your answer sheet for that question. If it never happened, mark an "8" on your answer sheet.

How often did this happen?
1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year

5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
8 = This has never happened

1. I explained my side or suggested a compromise for a disagreement with my partner	1 2 3 4 5 6 7 8
2. My partner explained his or her side or suggested a compromise for a disagreement with me	1 2 3 4 5 6 7 8
3. I insulted or swore or shouted or yelled at my partner	1 2 3 4 5 6 7 8
4. My partner insulted or swore or shouted or yelled at me	1 2 3 4 5 6 7 8
5. I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with my partner	1 2 3 4 5 6 7 8
6. My partner had a sprain, bruise, or small cut or felt pain the next day because of a fight with me	1 2 3 4 5 6 7 8
7. I showed respect for, or showed that I cared about my partner's feelings about an issue we disagreed on	1 2 3 4 5 6 7 8
8. My partner showed respect for, or showed that he or she cared about my feeling about an issue we disagreed on	1 2 3 4 5 6 7 8
9. I pushed, shoved, or slapped my partner	1 2 3 4 5 6 7 8
10. My partner pushed, shoved, or slapped me	1 2 3 4 5 6 7 8
11. I punched or kicked or beat-up my partner	1 2 3 4 5 6 7 8
12. My partner punched or kicked or beat-me-up	1 2 3 4 5 6 7 8
13. I destroyed something belonging to my partner or threatened to hit my partner	1 2 3 4 5 6 7 8
14. My partner destroyed something belonging to me or threatened to hit me	1 2 3 4 5 6 7 8
15. I went see a doctor (M.D.) or needed to see a doctor because of a fight with my partner	1 2 3 4 5 6 7 8
16. My partner went to see a doctor (M.D.) or needed to see a doctor because of a fight with me	1 2 3 4 5 6 7 8

17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex	1 2 3 4 5 6 7 8
18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex	1 2 3 4 5 6 7 8
19. I insisted on sex when my partner did not want to or insisted on sex without a condom (but did not use physical force)	1 2 3 4 5 6 7 8
20. My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force)	1 2 3 4 5 6 7 8

- Did you meet your partner online?
- Have you ever felt bullied or coerced by the person by text or email (before meeting him/her in person)?

(3)Revised Controlling Behaviors Scale (CBS-R) (Graham-Kevan & Archer, 2008).

Here is a list of things you and your partner may have done during your relationship. Taking the previous year, or last year of the relationship, indicate how frequently each of you did the following. Using the following code, circle the number which best describes your actions toward your partner and your partner's actions toward you. 0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = always

	Partner Did This to Me	I Did This to Partner
Economic control	0 1 2 3 4	0 1 2 3 4
1. Made it difficult for the other to work or study	0 1 2 3 4	0 1 2 3 4
2. Control the other's money	0 1 2 3 4	0 1 2 3 4
3. Keep own money matters secret	0 1 2 3 4	0 1 2 3 4
4. Refuse to share money/pay fair share	0 1 2 3 4	0 1 2 3 4
Threatening control	0 1 2 3 4	0 1 2 3 4
5. Threaten to harm the other one	0 1 2 3 4	0 1 2 3 4
6. Threaten to leave the relationship	0 1 2 3 4	0 1 2 3 4
7. Threaten to self-harm	0 1 2 3 4	0 1 2 3 4
8. Threaten to disclose damaging or embarrassing information	0 1 2 3 4	0 1 2 3 4
Intimidating control	0 1 2 3 4	0 1 2 3 4

9. Try to make the other do things he or she did not want to	0 1 2 3 4	0 1 2 3 4
10. Use nasty looks and gestures to make the other one feel bad or silly	0 1 2 3 4	0 1 2 3 4
11. Smash the other one's property when annoyed/angry	0 1 2 3 4	0 1 2 3 4
12. Be nasty or rude to other one's friends or family	0 1 2 3 4	0 1 2 3 4
13. Vent anger on pets	0 1 2 3 4	0 1 2 3 4
Emotional control	0 1 2 3 4	0 1 2 3 4
14. Try to put the other down when getting "too big for his or her boots"	0 1 2 3 4	0 1 2 3 4
15. Show the other one up in public	0 1 2 3 4	0 1 2 3 4
16. Tell the other he or she was going mad	0 1 2 3 4	0 1 2 3 4
17. Tell the other he or she was lying or confused	0 1 2 3 4	0 1 2 3 4
18. Call the other unpleasant names	0 1 2 3 4	0 1 2 3 4
Isolating control	0 1 2 3 4	0 1 2 3 4
19. Try to restrict time one spent with family or friends	0 1 2 3 4	0 1 2 3 4
20. Want to know where the other went and who he or she spoke to when not together	0 1 2 3 4	0 1 2 3 4
21. Try to limit the amount of activities outside the relationship the other engaged in	0 1 2 3 4	0 1 2 3 4
22. Act suspicious and jealous of the other one	0 1 2 3 4	0 1 2 3 4
23. Check up on the other's movements	0 1 2 3 4	0 1 2 3 4
24. Try to make the other feel jealous	0 1 2 3 4	0 1 2 3 4
Do you have children? If your answer is YES, please complete questions 25-29. If your answer is NO, please skip to question 30.	YES	NO
Using children (for respondents with children)	0 1 2 3 4	0 1 2 3 4
25. Make the other feel bad about the children	0 1 2 3 4	0 1 2 3 4
26. Use the children to pass messages to the other when he or she did not want to speak to him or	0 1 2 3 4	0 1 2 3 4

her		
27. Threaten to take the children away from the other	0 1 2 3 4	0 1 2 3 4
28. Argue in front of the children	0 1 2 3 4	0 1 2 3 4
29. Strike, push, or kick the other in front of the children	0 1 2 3 4	0 1 2 3 4
Minimizing (all respondents)	0 1 2 3 4	0 1 2 3 4
30. Falsely accuse the other of using violence	0 1 2 3 4	0 1 2 3 4
31. Made the strikes seem worse than they were	0 1 2 3 4	0 1 2 3 4
32. Blame the other for being hit	0 1 2 3 4	0 1 2 3 4

(4)Relationship Scale Questionnaire (Griffin & Bartholomew, 1994)

Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about close relationships.

	1 - Not at all like me	2	3 - Somewhat like me	4	5 - Very much like me
I find it difficult to depend on other people.					
It is very important to me to feel independent.					
I find it easy to get emotionally close to others.					
I want to merge completely with another person.					
I worry that I will be hurt if I allows myself to become too close to others.					
I am comfortable without close emotional relationships.					
I am not sure that I can always depend on others to be there when I need them.					
I want to be completely emotionally intimate with others.					

I worry about being alone.					
I am comfortable depending on other people.					
I often worry that romantic partners don't really love me.					
I find it difficult to trust others completely.					
I worry about others getting too close to me.					
I want emotionally close relationships.					
I am comfortable having other people depend on me.					
I worry that others don't value me as much as I value them.					
People are never there when you need them.					
My desire to merge completely sometimes scares people away.					
It is very important to me to feel self-sufficient.					
I am nervous when anyone gets too close to me.					
I often worry that romantic partners won't want to stay with me.					
I prefer not to have other people depend on me.					
I worry about being abandoned.					
I am somewhat uncomfortable being close to others.					
I find that others are reluctant to get as close as I would like.					
I prefer not to depend on others.					
I know that others will be there					

when I need them.					
I worry about having others not accept me.					
Romantic partners often want me to be closer than I feel comfortable being.					
I find it relatively easy to get close to others					

(5)Gender Attitude Inventory (GAI; Ashmore, Del Boca, & Bilder, 1995)

Please indicate how much you agree or disagree with the following statements.

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
(Acceptance of) Traditional Gender Stereotypes							
Men are more competitive than women.							
Men are generally more adventurous than women are.							
Men are generally more egotistical than women.							
On the average, men are more arrogant than women.							
Women are more gentle than men.							
Men are more independent than women.							
Men are more sure of what they can do than women are.							

Compared to men, women tend to be gullible.							
Compared to men, women are more able to devote themselves completely to others.							
Compared to men, women tend to be weak.							
Acceptance of Male Heterosexual Violence							
Most of the women who get raped have invited it in some way.							
Women provoke rape by their appearance or behaviour.							
In most cases, when a woman gets raped, she was asking for it.							
In most cases of wife beating, the woman is just as much at fault as the man.							
Most charges of "wife beating" are made up by the woman to get back at her husband.							
If a woman is making out and she lets things get out of hand, it's her own fault if the man forces							

sex on her.							
In forcible rape, the victim never causes the crime.							
A man is sometimes justified in hitting his wife.							
Endorsement of Chivalry							
Men should continue to show courtesies to women such as holding open the door or helping them on with their coats.							
Special attentions like standing up for a woman who comes into a room or giving her a seat on a crowded bus are outmoded and should be discontinued.							
Chivalrous gestures toward women on the part of men should be encouraged.							
The special courtesies extended to women are demeaning because they keep women feeling helpless and in their place.							
A man should protect a woman							

from physical harm, even at his own expense.							
Chivalry is generally demeaning to women.							
In an emergency, women and children should be evacuated first.							

(6) Culture Free Self-Esteem Inventory (2nd edition, CFSEI-2)
Lie subscale items (interspersed across the questionnaires)

Do you like everyone you know?
Have you ever taken anything that did not belong to you?
Do you always tell the truth?
Do you gossip at times?
Do you ever get angry?
Are you ever shy?
Do you ever lie?
Are you ever sad?

(7) Debrief Sheet

Thank you for your participation. The aim of this study was to understand how attitudes (about traditional gender roles, chivalry in intimate relationships), insecure attachment and use of control over the partner affect intimate relationships.

We would like to remind you that all information will be kept confidential and used for research purposes only.

If you would like to know more about the study or you feel affected in any way by the questions asked and the topics raised in this study, please do not hesitate to contact any of us on the email addresses below.

Researcher (Laura Albini) email: msxla15@nottingham.ac.uk
Supervisor (Kevin Browne) email: lwzkdb@nottingham.ac.uk

SECTION 8: ETHICAL CONSIDERATIONS

Please answer every question with a YES or NO by selecting the appropriate box to create a cross. If a question is not applicable to this study (eg. it concerns interviews and this study does not involve interviews) tick the box in the 'N/A' column to the right.

If you tick any response that is shaded, you must explain how that risk will be allayed in the box below.

Issues relating to the topic of study

Risk No.		Yes	No
1	Will this research expose participants to risk of physical harm?	☐	☒
2	Are drugs, placebos or other substances to be administered or will the study involve any physically invasive procedures or collection of bodily samples?	☐	☒
3	Will participants be asked to discuss anything that might be considered sensitive?	☒	☐
4	Will this research expose participants to risk of emotional harm, or induce stress or anxiety beyond the risks encountered in normal life?	☒	☐
5	Could the study cause offence to participants?	☐	☒
6	Will the study involve prolonged or repetitive testing?	☐	☒
7	Will this research involve deception of any kind (for example, people taking part without their knowledge or consent)?	☐	☒
8	Will this research involve access to personal information about identifiable individuals without their knowledge or consent?	☐	☒
9	Will this research expose the researcher to risk of physical or emotional harm?	☐	☒

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*

Risk no. 3, disclosure of sensitive information, will be allayed by clearly informing participants that they will be asked about sensitive information, so that they can make an informed choice on whether to take part or not and are aware of this if they provide consent. Furthermore, for both risks no. 3 and 4, the contact details of the researcher and the supervisor will be provided in case participants want to discuss their involvement in the study, any negative effect experienced as a result of it, or if they would like guidance on where to go for support.

Procedural Issues N/A = not applicable for this study

		Yes	No	N/A
10	I have discussed the student researcher's personal safety and any risk of physical harm (while undertaking this study) with him/her and we have agreed suitable strategies to avoid or mitigate them	☐	☐	X
11	I have discussed the student researcher's personal health and well-being and any risk of emotional distress or psychological harm (while undertaking this study) with him/her and we have agreed suitable strategies to avoid or mitigate them	☒	☐	

12	I have explained to the student the need to inform me immediately if any change in research methods is required: e.g., changes to the method of data collection, proposed sites of data collection, means by which participants are accessed, or any other significant changes to the research enquiry	☒	☐	
13	I have informed the student of the need to read and understand the University of Nottingham's Code of Research Conduct and Research Ethics (2016) and to agree to abide by it	☒	☐	
14	I have informed the student about the need to adhere to the British Psychological Society's Code of Human Research Ethics and other guidance I have advised	☒	☐	
15	I have discussed with the student the need to handle and store data securely as advised in the University's *Code of Research Conduct and Research Ethics* (2016)	☒	☐	
16	For internet mediated studies, I confirm I have discussed particular risks with the student and agreed suitable strategies to avoid or mitigate them	☒	☐	☐
17	For studies involving lone working: I have advised the student to read and abide by the University of Nottingham's Health & Safety Arrangements for Lone Working	☒	☐	☐
18	For studies involving vulnerable populations: I confirm that I have seen proof that the student has successfully completed a Disclosure and Barring Service (DBS) check to cover the period of study	☒	☐	☐
19	For studies in countries outside the UK, the student has explored and discussed with me the ethical, cultural and practical issues (for example, insurance) that are relevant for the participants and/or organisations in the relevant country, and we have taken them into account in the study's design	☒	☐	☐
20	I have explained to the student that if undertaking a study in an organisation, he/she is not permitted to approach potential participants or gather data until I have seen written permission from a manager/gatekeeper with appropriate authority.	☒	☐	☐
21	I have explained to the student that he/she is not permitted to approach potential participants or gather data until I have received written notification that the project has passed ethical review.	☒	☐	

How will risks be allayed? *[If you have ticked any shaded boxes you must explain how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

Before starting data collection

		Yes	No
22	Will written authorisation be obtained in advance from an appropriate individual for research conducted as a visitor within, or concerning, organisations (e.g., companies, universities, schools)?	☒	☐
23	Will the study require the cooperation of a gatekeeper (eg manager) for access to participants?	☐	☒
24	Will the study involve those with whom the student researcher has an existing relationship or where there is an actual or perceived imbalance of power?	☐	☒

25	Will participants be under any coercion (direct or indirect or implied) to participate?	☐	☒
26	Will incentives (other than travel expenses or a suitable inconvenience allowance for their time) be offered to potential participants as an inducement to participate in the research?	☐	☒
27	Will each participant be given written Participant Information with details about the nature of the research, the purposes to which the data will be put, and the Ethics Reference Number?	☒	☐
28	Will written consent be obtained from each participant or relevant third party (eg. parent) using an approved Participation Consent form (or appropriate wording for internet-mediated studies)?	☒	☐
29	Will it be made clear that declining to participate will have no negative consequences for the individual?	☒	☐
30	Will it be made clear that participation is unlikely to be of direct personal benefit to the individual?	☒	☐
31	Will participants be asked for permission for their data from this study to be shared with other researchers in the future provided that their anonymity is protected?	☒	☐
32	Will participants be advised that non-identifiable data from this study might be used in academic research reports or publications?	☒	☐

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*

During the process of data collection

		Yes	**No**	N/A
33	The student researcher will provide participants with his/her name and University contact details, and those of the supervisor, so that they may get in touch about any aspect of the research if they wish to do so	☒	☐	
34	Participants will be guaranteed anonymity (only insofar as they do not disclose any illegal activities, and where there is disclosure or evidence of significant harm, abuse, neglect or danger to participants or to others)	☒	☐	
35	The student researcher will inform his/her supervisor of any incidents of actual or suspected harm (as above) which are disclosed to him/her during the course of data collection	☒	☐	
36	All participants will be informed that they are free to withdraw from the study at any time, without explanation, and that they may ask for the withdrawal of their data after collection (within a specified period)	☒	☐	
37	The student researcher will undertake data collection in a safe and appropriate place as discussed and agreed in advance with his/her supervisor.	☒	☐	
38	Research participants will be informed when observations and/or recording is taking place	☒	☐	☐
39	Participants will be treated with dignity and respect at all times.	☒	☐	

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

After data collection

		Yes	No	NA
40	Where anonymity has been agreed with the participant, data will be anonymised as soon as possible after collection and all steps taken to protect participants from direct or indirect identification	☒	☐	☐
41	All data collected will be stored in accordance with the requirements of the University's *Code of Research Conduct and Research Ethics* (2016)	☒	☐	
42	For qualitative studies where recordings involve third party transcription, I confirm that there will be a confidentiality agreement with the transcriber/s	☐	☐	☒
43	Data will only be used for the purposes outlined within the participant information and consent forms	☒	☐	
44	I confirm that details which could identify individual participants will not be disclosed to anyone other than the student researcher, their supervisor/s and (if necessary) transcription and translation services, internal and/or external examiners without participants' explicit consent	☒	☐	

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

After completion of research

		Yes	No
45	Will each participant be offered the opportunity to know about the overall research findings?	☒	☐
46	Will raw data be submitted to the supervisor after completion of the study?	☒	☐
47	Will all hard copies of data collection tools and data which enable the identification of individual participants be destroyed at the end of the project (when results – pass or fail- of the programme of study are decided)?	☒	☐

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

SECTION 9. STUDENT DECLARATION

STUDENT NAME Laura Albini
STUDENT ID NUMBER 4301992
DATE: 22/11/18

		Yes	N/A
1	I confirm I have discussed my personal safety and any risk of physical harm (while undertaking this study) with my supervisor and we have agreed suitable strategies to avoid or mitigate them	☐	
2	I confirm I have discussed my personal health and well-being and any risk of emotional distress or psychological harm (while undertaking this study) with my supervisor and we have agreed suitable strategies to avoid or mitigate them	☐	
3	I will immediately inform my supervisor if I change method(s) or proposed sites of data collection, means by which participants are accessed, or make any other significant changes to my research	☒	
4	I have read and understood the University of Nottingham's Code of Research Conduct and Research Ethics (2016) and agree to abide by it	☒	
5	I will adhere to the British Psychological Society's Code of Human Research Ethics and other guidance advised by my supervisor	☒	
6	For internet mediated studies, I confirm I have discussed risks with my supervisor and agreed suitable strategies to avoid or mitigate them	☐	☐
7	For studies involving lone working: I confirm I have read and will abide by the University of Nottingham's Lone Working Policy	☐	☒
8	For studies involving vulnerable populations: I have successfully completed a Disclosure and Barring Service (DBS) check to cover the period of my study and emailed a scanned copy to my supervisor.	☐	☒
9	For studies in countries outside the UK: I have explored and discussed with my supervisor the ethical and cultural issues that are relevant for the participants and/or organisations in that country, and taken them into account in the study's design	☒	☐
10	I understand that if undertaking a study in an organization, I am not permitted to approach potential participants or gather data until I have given my supervisor written permission from a manager/gatekeeper with appropriate authority.	☐	☒
11	I understand that I am not permitted to approach potential participants or gather data until I have received written notification that my project has passed ethical review.	☒	☐

SECTION 9: DECLARATION BY SUPERVISOR(S)

PRINCIPAL INVESTIGATOR (LEAD SUPERVISOR 90%) NAME	Prf. Kevin Browne
EMAIL ADDRESS	kevin.browne@nottingham.ac.uk
2nd SUPERVISOR NAME	Dr Simon Duff
EMAIL ADDRESS	simon.duff@nottinghaxm.ac.uk
SCHOOL/LOCATION	*Click here to enter text.*
3rd SUPERVISOR NAME	*Click here to enter text.*
EMAIL ADDRESS	*Click here to enter text.*
SCHOOL/LOCATION	*Click here to enter text.*

Box A or B below to be completed by principal investigator (lead supervisor):

EITHER:

A I confirm that in my view this project does not require ethical review for the reasons outlined below. Click here to enter text.	☐
I confirm that I have discussed procedural issues and code of conduct with the student. He/she has completed STUDENT DECLARATION form to me to indicate his/her understanding and agreement to abide by appropriate working procedures	☐

OR:

B	
This project has my approval	☒
I confirm that in my view the Participation Information is fit for purpose	☒
I confirm that in my view the Participant Consent form is fit for purpose	☒
I confirm that I have discussed procedural issues and code of conduct with the student. He/she has completed and emailed the STUDENT DECLARATION form to me to indicate their understanding and agreement to abide by appropriate working procedures	☒

To submit an application, students should email this completed form (cc. their supervisor) in **PDF format** from their University of Nottingham email address (which functions as a signature) to the Faculty of Medicine & Health Sciences Ethics Committee Administrator at fmhs-researchethics@nottingham.ac.uk. Please submit one form per email, with subject header format: **Jim Smith 1234567 Ethics Application** (Student First Name, Student Last Name, Student Number, Ethics Application)

Correspondence with the Ethics Committee

From: MZ-FMHS-ReschEthics
Sent: 04 April 2018 14:47:06
To: Laura Albini
Cc: Kevin Browne
Subject: FMHS 242-1803 Impact of attitudes on IPV - approval

Dear Laura

Thank you for your application which has been reviewed and approved. I am pleased to attach a letter confirming this. Please can you make the following minor changes to your information and consent sheet:

Paragraph: What will happen if I don't want to carry on with the study?

Please revise to read:
You can withdraw at any point during the questionnaire for any reason, before submitting your answers by clicking the Exit button/closing the browser. The data will only be uploaded on completion of the questionnaire by clicking the SUBMIT button. You are free to omit any question.

Paragraph: What are the possible disadvantages and risks of taking part?
Please revise to read:
We believe there are no known risks associated with this research study; however, the questions are very personal and possible responses will be sharing personal and sensitive information about the quality of one's own intimate relationship. As with any online related activity the risk of a breach is always possible. We will do everything possible to ensure your answers in this study remain anonymous. We will minimize any risks by not asking for your name or any other personal details, your IP address will not be collected by the research team so it will not be possible to link you with the data. We will store all information in password-locked computer files so that the data can only be accessed by the researcher and supervisors.

Consent statements:
Please revise to read:

I understand that my participation is voluntary and I am free to withdraw at any time by closing the browser and my data will not be saved.

Please add:
Optional: I agree for my non-identifiable data to be stored by the current team and being used and shared with other researchers for possible future research (with ethics approval) including those working outside the University during and after 10 years.

Please submit a revised Participant Information and consent for our records. No additional review or approval is necessary and can be acknowledged by e-mail.

With best wishes

Louise

Louise Sabir
Committee Administrator

Faculty of Medicine & Health Sciences
Research Ethics Committee
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Ethics Committee Approval Letter

University of Nottingham
UK | CHINA | MALAYSIA

Faculty of Medicine & Health Sciences
Research Ethics Committee
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29 March 2018

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Laura Albini
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Address

Dear Ms Albini

Ethics Reference No: 242-1803 **– please always quote**
Study Title: The impact of attitudes, attachment and partner control on IPV: a cross-cultural comparison.
Chief Investigator/Supervisor: Professor Kevin Browne, Director of the Centre for Forensic and Family Psychology, Division of Psychiatry and Applied Psychology, School of Medicine.
Lead Investigators/student: Laura Albini, MSc Forensic & Criminological Psychology

Type of Study: MSc, internet mediated	
Proposed Start Date: 01/03/2018	**Proposed End Date:** 30/08/2018 6 mths
No of Subjects: 220	**Age:** 16-35 years

Thank you for submitting the above application and the following documents were received:

- FMHS REC Application form and supporting documents version 1.0: 29.01.2018

These have been reviewed and are satisfactory and the study has been given a favourable opinion. A favourable opinion has been given on the understanding that:

1. The protocol agreed is followed and the Committee is informed of any changes using a notice of amendment form (please request a form).
2. The Chair is informed of any serious or unexpected event.
3. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

Yours sincerely



Professor Ravi Mahajan
Chair, Faculty of Medicine & Health Sciences Research Ethics Committee

Research Paper

Title

The impact of attitudes, attachment and partner control on intimate partner violence(IPV): a cross-cultural comparison

Abstract

Attitudes regarding gender roles and acceptance of violence, attachment style and need for control have been strongly implicated in IPV perpetration. However, arguments have been raised regarding the weight of these variables in relation to IPV. The present online cross-sectional study aimed at comparing these variables' strength of association between Italian and English participants to better discern attitudinal dispositions. Analyses relied on data from 194 participants collected via an online questionnaire. Logistic regression aimed at predicting IPV indicated parental violence and control as significant contributors to the likelihood of perpetrating IPV, with a moderate to strong influence of attitudes supportive of violence and lack of chivalry, and the implication of fearful attachment style and childhood experiences of violence. Important differences were found on attitude endorsement across nationalities, and on the relationship between fearful attachment and control/violence across gender. These are discussed in relation to risk assessment and interventions.

Introduction

Attitudes regarding gender roles and acceptance of violence, attachment style and need for control have been strongly implicated in IPV perpetration. However, arguments have been raised regarding the weight of these variables in relation to IPV. The present study set out to investigate these variables' strength

of association in a cross-sectional, comparative study of Italian and English participants to better discern attitudinal dispositions.

Intimate partner violence (IPV) refers to behaviours by a current or ex-partner that cause physical, sexual, or psychological harm (Birkley & Eckhardt, 2015). IPV represents a serious public health concern worldwide, spanning all relationship types (dating, marital, separated or divorced partners), with alarming prevalence rates for both genders (Romito, Beltramini, & Escribà-Aguir, 2013; Young et al., 2017; Swan *et al.*, 2008).

In the UK 27.1% of women and 13.2% of men are estimated to have experienced any domestic abuse since the age of 16, which is equivalent to 4.5 million female victims and 2.2 million male victims aged 16 to 59 (CSEW, 2016). Non-sexual partner abuse has been reported as the most common type of intimate violence among women (20.7%), followed by stalking (20.2%) and sexual assault (19.0%); among men stalking (9.8%) and non-sexual partner abuse (8.6%) were most prevalent (ONS, 2015). Younger age groups – between 16 and 35 – are significantly more likely to experience any type of domestic abuse (psychological, sexual, physical, stalking) compared to those aged 55 or older (ONS, 2015). In addition, women are estimated to be four times more likely than men to be victims of threats by a partner, and twice as likely to experience non-sexual abuse in intimate relationships (ONS, 2015).

In Italy 31.5% of women between 16-70 years of age reported experiencing some form of physical or sexual violence in their life, in three out of four cases perpetrated by their current or ex-partner (Istat, 2015). Sexual violence is the most commonly perpetrated violence, with current or former partners being responsible for 62.7% of rapes. However, a reduction in all types of partner violence was observed from 2006 to 2011, thanks to increased awareness of

protection tools by women, societal condemnation of such crimes, and increased confidence in the work of the police, which resulted in more crimes being reported (from 9.9% to 28.5%). Nonetheless, figures remain shocking, with 6,788,000 women experiencing domestic violence each year (Istat, 2015). Beside statistics regarding victimisation of women, it is important to highlight those regarding men. Female-to-male violence has seen little investigation on behalf of statistics institutes and little discussion within the Italian society, with a tendency to focus on male perpetrated violence. However, it is paramount to recognise the existence of male victims of intimate violence, in order to challenge gender stereotypes and prejudices that see men as strong and aggressive and women as docile and victimised; hence to look at the dynamics of relationship violence more objectively. The only statistic available was provided by the University of Siena based on a survey conducted in 2012 on Italian men aged 18-70, which highlighted more than 5 million men victims of female violence the previous year. Emotional abuse was most common (verbal abuse to injury, denigrate, humiliate the partner for economic reasons, jealousy, or bullying regarding family matters), followed by physical (pushing, tugging, pulling hair, kicking, punching), sexual and harassment, and stalking (Macrì *et al*., 2012).

The different forms of violence can occur in isolation, however often times they are associated: physical and psychological abuse tend to co-occur, with the latter found to frequently precede and/or follow both physical and sexual abuse, and sexual and non-sexual physical abuse also often co-occur in intimate relationships (Capaldi *et al*., 2012; Mouradian, 2014). Victims of IPV experience serious damage to their psychological, physical and sexual health, and to the quality of their interpersonal relations; in addition, victims are at increased risk

of repeated victimisation (Desai *et al*., 2002; White & Smith, 2004). Importantly, research has indicated that early IPV perpetration is likely to continue in later life relationships (Wiersman *et al*., 2010), which calls for a better understanding of IPV causes and risk factors for effective prevention and intervention of violence in young and adult intimate relationships.

Among risk factors that have been associated with IPV such as depression, substance abuse, childhood victimisation, and childhood exposure to parental violence, the psychological variables of insecure attachment, dispositional anger and anger control, and need for control have been indicated as strong predictors of IPV (Follingstad *et al.*, 2002; Dutton & White, 2012; Giordano, Copp, Longmore, & Manning, 2016; Lafontaine & Lussier, 2005). In a sample of 412 college students Follingstad *et al.* (2002)'s found anxious attachment and anger to indirectly predict IPV, whilst need for control was the only direct predictor, mediating the relationship between anxious attachment and anger with IPV frequency and severity (Follingstad *et al.,* 2002). Consistent with the view of controlling behaviour as a key proximal risk factor for IPV, David, Ace & Andra (2000) highlighted need for control as directly related to both psychological abuse and stalking behaviour, whilst anxious attachment only predicted psychological abuse.

Dutton *et al*. (1994) argued that the need to control a partner originates from an insecure attachment style. Bartholomew & Horowitz (1991) proposed four adult attachment styles: secure, characterised by a positive model of self and other; preoccupied, which involves a negative model of self and positive model of other; fearful, characterised by a negative model of self and other; and dismissing, involving a positive model of self and negative model of other. Insecure attachment refers to fearful, preoccupied and dismissing types. Whilst

securely attached individuals are comfortable with intimacy, have autonomy in close relationships and are able to resolve conflict constructively, insecurely attached individuals struggle with this balance. Preoccupied individuals are overly dependent on others, have low self-worth, are demanding and needy for affect and are anxious over relationship ambiguity for fear of abandonment; fearful individuals are dependent on others but also avoid intimacy for fear of rejection, have low self-esteem, experience excessive anxiety when the relationship is perceived to be under threat and tend to perceive ambiguous cues by the partner negatively; dismissing individuals downplay the importance of intimacy and are emotionally and physically distant (Dutton, 1998; Henderson *et al.,* 2005).

A link has been evidenced between insecure attachment and IPV: when the attachment needs of insecurely attached individuals are not met, frustration and anger are triggered and their difficulty dealing with intense anxiety and fear is likely to lead to engagement in aggressive or violent behaviour to manage emotions or retain the partner's proximity (Miga, Hare, Allen & Manning, 2010). Both cross-sectional and longitudinal studies have indicated a strong association between fearful and preoccupied styles, and aggression and IPV perpetration in adolescent and adult community and incarcerated samples of male batterers (Henderson *et al*., 2005; Miga *et al*., 2010; Dutton & White, 2012; Doumas, Pearson, Elgin, & McKinley, 2008). Besides, a dismissing attachment was found to be associated with psychological violence (e.g. in an attempt to distance from a partner who may wish to be too close) (Lafontaine & Lussier, 2005), and also to positively correlate with victimisation: this is consistent with the view that dismissing individuals may be more emotionally and physically withdrawn during

conflict in order to avoid emotional distress; this may be perceived as frustrating by the partner, likely to react aggressively (Miga *et al*., 2010).

In contrast to the view of attachment as the factor underlying IPV, several researchers have stressed the influence of social and cultural attitudes, norms and beliefs about gender roles (Archer, 2006; Fincham, Braithwaite, & Pasley, 2008). This approach coincides with power-and-control-based theories of intimate violence which focus on male-to-female violence, arguing that men's violence is motivated by a desire to control and exert power over the woman, whereas fear and self-defence underlie women's violence against their partner (Dobash & Dobash, 1979). Traditional gender role attitudes are thought to confer men the right to dominate a woman; men are viewed as cold and calculating, actively choosing to employ a range of tactics to control their female partner. A moderate effect size has been evidenced in the literature between attitudes condoning intimate violence (r=.30) and gender role ideology (r=.29) and IPV perpetration (Stith, Smith, Penn, Ward & Tritt, 2004; Archer & Graham-Kevan, 2003; Archer, 2006; Fincham *et al*., 2008). Besides, attitudes supportive of chivalry have been found to be unrelated to IPV (Nabors & Jasinski, 2009). Notably, Nabors & Jasinski (2009)'s analyses of a longitudinal study's data found that attitudes *follow*, rather than *precede*, IPV perpetration, meaning that attitudes may be endorsed to justify controlling and violent behaviour, rather than causally leading to it (Dutton, 1994). However, in their study students' use of violence did not have a *significant* impact on their subsequent attitudes, which points to the need to better clarify the directionality of the attitude–behaviour relationship (Nabors & Jasinski, 2009).

McDermott & Lopez (2013) may be able to provide an answer to the above question. In a sample of 419 college men acceptance of IPV resulted from an

association between anxious attachment style and a tendency to experience stress from violations of internalised male role norms. Hence, a perceived threat to their gender role beliefs, coupled with an anxious attachment style, would enhance the risk of engaging in IPV to re-establish one's sense of masculinity and align the behaviour with the traditional, internalised gender norms (Loveland, 2017). Acceptance of traditional gender role attitudes not only was found to relate to acceptance of IPV, but also IPV engagement: Herrero *et al.* (2017), using data from 20663 women living with their partners, reported that male partners' traditional gender role attitudes and their level of general violence were highly predictive of physical and psychological IPV against their female partners, with the greatest violence found when both variables were present. However, these studies did not examine attachment, which may have partially accounted for the relationship between attitudes and IPV. Nonetheless, these studies show the potent role of attitudes supportive of violence and gender roles in IPV.

Beside the independent influence of power-and-control theories and personality and individual differences models in IPV explanation, researchers are increasingly acknowledging IPV as resulting from the interaction of a range of individual, interpersonal, and contextual factors (Birkley & Eckhardt, 2015). Bratanch (2017) examined this range of variables concomitantly, investigating the role of gender role attitudes and attachment style in physical violence and coercive control in the intimate relationships of 154 male batterers enrolled in a domestic violent program. Results paralleled previous findings with regard to attachment style: fearful attachment was significantly associated with both physical abuse and emotional-verbal coercive control, and preoccupied attachment was significantly related to emotional-verbal coercive control.

However, surprisingly, self-reported gender role attitudes did not have a statistically significant impact on physical violence nor coercive control, possibly due to social desirability or an effect of involvement in the program. Nonetheless, analyses of in-depth interviews with the participants showed a clear connection between traditional views of how males and females should behave in a relationship, and the use of physical violence (Bratanch, 2017). Further examination of the inter-relationship between attitudes, attachment, control, and IPV is needed.

The research evidence suggests that the likelihood of engaging in controlling behaviours is increased by both insecure attachment and traditional gender role attitudes and attitudes supportive of violence. Greater use of controlling behaviours will be more strongly associated with IPV. Moreover, attitudes are suggested to mitigate the relationship between (i) insecure attachment and control and (ii) control and IPV (see Figure 1).

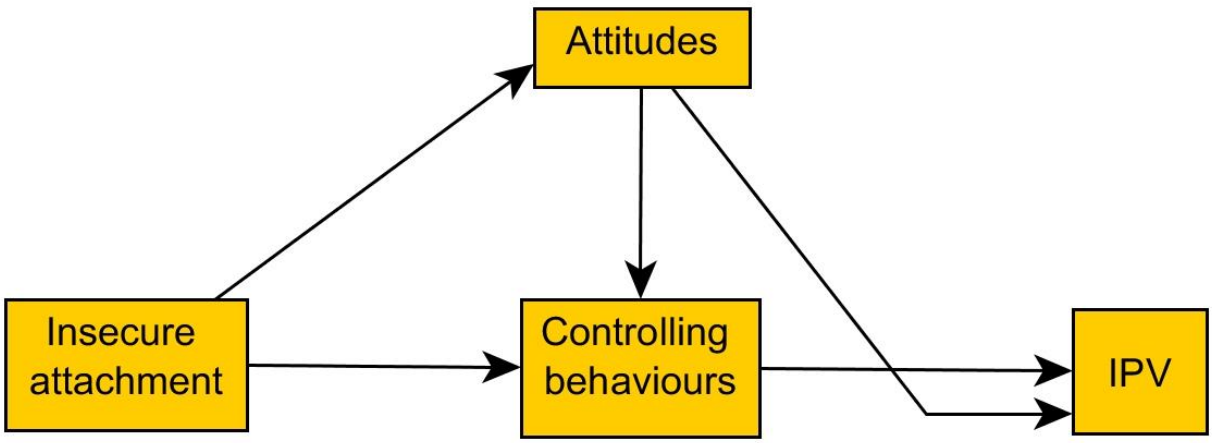


Figure 1. Proposed model of pathway leading to IPV.

Current study: aims and hypotheses

This study aims to understand the unique relation and interactive effects of attachment, attitudes and need for control, on IPV in a comparative study of

English and Italian young people. Italy is a historically patriarchal country, with religious influences that advocate a subordinate status for women in the household and in society; the English society, in contrast, is more multi-ethnic and less affected by religious principles subordinating women to men, hence is expected to hold less patriarchal beliefs than Italian society.

Therefore, the main aims of the study are: (1) to assess the extent to which psychological (attachment and controlling behaviours) and cultural (attitudes) risk factors are predictive of IPV perpetration; (2) to examine the potential interactions and pathways that implicate these variables as conducive to IPV.

Hypotheses

Attitudes:

1) attitudes are predicted to differ between English and Italian samples

2) attitudes are predicted to differ between participants with controlling behaviours and those without.

3) Attitudes are predicted to differ between participants showing IPV and those who do not.

4) Attitudes are predicted to differ between attachment styles

Attachment and controlling behaviours

5) IPV is predicted to differ between attachment style

6) IPV predicted to differ between those with controlling behaviours and those without.

7) Controlling behaviours is predicted to differ between attachment styles

Method

Ethics

Ethical approval was obtained from the University of Nottingham Research Ethics Committee for a cross-sectional online questionnaires study.

Design

A cross-sectional online questionnaires study was designed to explore the aims and hypotheses. There are three independent, predictor variables: attachment, partner control and attitudes; 9 control variables (outlined in the *measures* section below); and one dependent variable, IPV.

Participants

In total, 241 participants were recruited via social media platforms; 11 were excluded due to a lack of basic information, such as gender, age, nationality, or a nationality which was not the focus of the study (e.g. Polish, Bolivian). In addition, 16 participants were excluded due to being of a non-white ethnicity – the sample mainly comprised white Caucasian participants (=214), hence the former may have had a confounding influence due to cultural differences. Furthermore, 21 participants were also excluded due to their score on the Social Desirability Scale being less or equal to 4, which indicates a defensive responding – thus their validity is questionable. Ultimately the sample comprised a total of 194 participants. Of these 33% were males and 67% females, 51.5% Italians and 48.5% British.

Measures

Independent variables

Attachment. The Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994), comprising 30 items, is used to operationalise four adult attachment style dimensions: secure, fearful, preoccupied, dismissing (Roisman *et al*., 2007). This requires participants to self-report on a number of experiences in close relationships. Cronbach alphas for the four scales have been

deemed acceptable, ranging from .41 for the secure scale to .70 for the dismissing scale (Kurdek, 2002; Griffin & Bartholomew, 1994b).

Partner control. The Revised Controlling Behaviours Scale (CBS-R) (Graham-Kevan & Archer, 2008), a 32-item questionnaire, is used to assess the frequency of the use of controlling behaviours in an intimate relationship. Its 7 scales measure: economic, threatening, intimidating, emotional, and isolating control, as well as using children, and minimizing. The scale asks for both self and partner's use of controlling behaviours and the response format consists of a 5-point scale: 0=never, 1=rarely, 2=sometimes, 3=often and 4=always. The CBS-R is scored to derive a mean overall controlling behaviours total, or for each subscale. It has good discriminative ability and reliability (Cronbach for women's reports on partner control α = 0.93; for women's reports of own control α = 0.91; Graham-Kevan *et al*., 2012).

Attitudes. Three scales from the Gender Attitude Inventory (GAI; Ashmore, Del Boca, & Bilder, 1995) are used to assess (i) traditional gender role stereotypes (10 items – α(male sample)= .86; α(female sample)= .83); (ii) endorsement of chivalry (7 items – α(male sample)= .84; α(female sample)= .57), and (iii) acceptance of male heterosexual violence (AMV; 8 items – α(male sample) = .86; α(female sample)= .79).

Control variables

Age. Prospective longitudinal studies have found IPV to decrease with age (Kim, Laurent, Capaldi, & Feingold, 2008). Young age is considered a risk-factor for IPV (WHO, 2014).

Gender. Studies have generally found men and women to be equally likely to engage in physical abuse; nonetheless, men are more likely to cause physical injuries than women (Archer, 2000; Capaldi *et al*., 2012)

Socio-economic status. Measured as employment status, this has been shown to be a significant predictor of IPV after other risk factors are controlled for (i.e. substance abuse, childhood abuse, exposure to parental aggression, age, etc.; Capaldi *et al.,* 2012; Tran, Nguyen & Fisher, 2016)

Ethnicity. Some studies found that being a member of an ethnic minority increases the risk of IPV (Stockman, Hayashi, & Campbell, 2015). A homogeneous sample of white-Caucasian origin was designed to limit the influence of this variable.

Relationship status. Type of relationship status is significantly associated with IPV victimization, with single, divorced or separated women being at higher risk of IPV victimisation compared to married women (Browne, Hamilton-Giachritsis & Vettor, 2007).

Length of relationship. The longer the relationship the more likely IPV is, due to the greater commitment by both partners and greater barriers to leaving the relationship (Wiersman *et al*., 2010).

Childhood victimisation. A low to moderate association between child abuse and neglect and later IPV perpetration has been evidenced, especially for men (Browne, Hamilton-Giachritsis & Vettor, 2007). The following question was used to assess child abuse: "Were your parents ever physically violent with you?". This will be analysed as a dichotomous variable representing any childhood victimisation.

Childhood exposure to domestic violence. Witnessing parental IPV has been found to be significantly associated with adult IPV perpetration and victimisation (Browne, Hamilton-Giachritsis & Vettor, 2007). The following question was used to measure this factor: "Did your parents or stepparents ever deliver physical blows to the other?". This will be analysed as a dichotomous variable

representing any childhood exposure to domestic violence.

Social desirability. The "Lie" subscale of the Culture Free Self-Esteem Inventory (2nd edition, CFSEI-2; Battle, Carson, Ord & Hawkins, 1985), consisting of 8 items related to behaviours considered socially undesirable, was used to determine participants' defensiveness, that is refusal to disclose personal information. Battle (1992) suggested a score of 4 or less to indicate defensiveness. The 8 items are interspersed across the multiple questionnaires.

Dependent variable

IPV. The Conflict Tactics Scale Short Form (CTS2S; Straus, 2004), consisting of 20 items, was used to measure the tactics employed to deal with relationship conflict. These are divided into 5 scales: negotiation, physical assault, psychological aggression, injury from assault, and sexual coercion. More generally the CTS assesses the presence of violence, and its severity and frequency. The CTS (and its short version CTS2S) is the most widely used measure for family violence (including intimate partner), capturing different forms of violence (Nabors & Jasinski, 2009).

The following 2 questions were added at the end of the scale to find out whether the partner was met online, and if so, whether the person felt coerced or bullied by the latter online: (21) Did you meet your partner online? (Yes/No); (22) Have you ever felt bullied or coerced by the person by text or email (before meeting them)? (Yes/No).

Procedure

An online link to the study alongside a brief description of its aims and participant requirements were posted on social media websites, including dating websites (Meetic, Tinder) and pages on Facebook (e.g. Tinder, Grindr, Lovoo), and participants were also recruited by word of mouth through friends and

acquaintances. Once participants clicked on the link they were taken to the questionnaire, which first asked them to read the information sheet and sign the consent form; afterwards, they were required to complete the scales in the following order: (1) demographics; (2) CTS (referred to as "Couple Conflicts"; (3) CBS, referred to as "Relationship behaviours"; (4) RSQ, called "Relationship Questionnaire; (5) GAI, titled "Attitudes". Ultimately, participants were thanked for their participation and shown the debrief form.

Treatment of data

Statistical analysis. SPSS (Statistical Package for the Social Sciences) version 24 was used for the analysis. Where appropriate 95% confidence intervals (CI) were reported (Tiwari *et al*. 2015).

Data collation. Participants' data were downloaded from Bristol Online Survey as SPSS documents. Data were handled and analysed on SPSS. Firstly, data were converted to fit SPSS format, and secondly participants' responses to the different measures (social desirability, IPV, attitudes, control, attachment) were scored to determine their presence and level of endorsement.

Variables scoring system

IPV: A score for total violence and individual subscales was obtained for each participant, by summing the following frequency codes, assigned to the CTS's responses: Once in the past year = 1; Twice in the past year = 2; 3-5 times in the past year = 4; 6-10 times in the past year = 8; 11-20 times in the past year = 15; more than 20 times in the past year = 25; not in the past year but it has happened before = 0; this has never happened = 0. In addition, IPV was analysed in terms of severity (3 categories: severe, minor only, and none): participants were allocated to one of the three categories based on the following:

(i) if any physical assault OR injury were present, then relationship violence was classified as severe and given code 2; (ii) if physical assault and injury were not present, and psychological aggression OR sex coercion were present, then a code of 1 was assigned implying minor violence only; (iii) if none of the above are present, a code of 0 was given, corresponding to no violence between the partners. IPV was also broken down into self/respondent and partner violence, in order to discern the relationship of each with controlling behaviours.

Controlling behaviour: A total mean score for self and partner was calculated, as well as a total score for the relationship. In addition, individual means for each subscale were calculated (economic control, threatening control, isolating control, etc.). The subscale "use of children" was excluded given the weak presence of participants with children within the sample.

Attachment style: Specific items in the RSQ correspond to the four attachment styles (these are reported in appendix 1). To assign an attachment pattern to participants, items for each subscale were averaged and the highest rating was taken as the best-fitting category for the subject (Bartholomew & Horowitz, 1991). 9 participants met two categories and were classified as '*Other'* and excluded from the analysis. It is important to highlight that the RSQ was designed as a continuous, not a categorical, measure of adult attachment. However, it was necessary to categorise participants in order to examine the relationship between attachment and other variables of interest. This use of the RSQ makes interpretation of findings more cautious and questionable (Griffin & Bartholomew, 1994).

Attitudes: The sub-scales were scored by summing responses to all the items, and interpreted such that a low value indicates a traditional attitude (items scored from 1 – strongly agree – to 7 – strongly disagree).

Analyses:

First, univariate analysis was run, including frequencies and descriptive statistics on the control, independent and dependent variables. Secondly, Mann-Whitney U test, Kruskal-Wallis H test, and correlation analyses were used to determine sample differences and bivariate relationships between the variables. Thirdly, multivariate analysis (binary logistic regression) was conducted to explore the relationship between IPV and attitudes, controlling behaviour and attachment style, and determine a model able to predict IPV or not.

Results

Descriptive statistics

First, descriptive analyses of participants data on the control variables were conducted (see Table 1).

Table 1. *Frequencies (%) concerning the control variables (N=194)*.

Gender	male	64 (33%)
	female	130 (67%)
Nationality	IT	100 (51.5%)
	EN	94 (48.5%)
Age	16-24	154 (79.4%)
	>24	40 (20.6%)
Employment	employed	83 (42.8%)
	unemployed	110 (56.7%)
Relationship_status	single	57 (29.4%)
	dating	100 (51.5%)
	living together	37 (19.1%)
Relationship_length	< 1 year	52 (26.8%)
	1-3 years	86 (44.3%)
	>3 years	56 (28.9%)

Parent_violence	Yes	18 (9.3%)
	No	175 (90.2%)
Parent_abuse	Yes	27 (13.9%)
	No	167 (86.1%)
Partner_met_online	Yes	40 (20.6%)
	No	154 (79.4%)
Partner_coercion	Yes	8 (4.1%)
	No	185 (95.4%)

Attachment patterns

Table 2. *Frequency (%) of attachment styles across nationalities and in total.*

	IT n=100	EN n=94	Tot n=194
Secure	8 (8)	29 (30.9)	37 (19.1)
Preoccupied	18 (18)	19 (20.2)	37 (19.1)
Fearful	12 (12)	20 (21.3)	32 (16.5)
Dismissing	61 (61)	21 (22.3)	82 (42.3)
Other (meeting two styles)	1 (1)	5 (5.3)	6 (3.1)

A chi-square test comparing nationality and attachment styles (2X4 table) was significant (χ^2 (3)= 33.02, p<.001). Disparities rested on the secure and dismissing styles: Italians were significantly more likely to be dismissing and less likely to be secure, whilst the opposite held true for English participants.

The current sample is unusual in terms of attachment patterns, given that prevalence rates in non-clinical populations typically indicate 3/5th as securely attached and a 2/5th minority insecurely attached (van IJzendoorn & Sagi-Schwartz, 2008), whilst clinical populations are generally characterised by higher

rates of insecure patterns (Ravitz *et al*., 2010). This sample is more aligned with the latter (see Table 2), with dismissing attachment being the most prevalent style, especially among Italian participants. This resonates with previous studies exploring attachment patterns in Italian non-clinical adults, which indicated higher rates of dismissing style, and lower rates of preoccupied, compared to an American comparison population (Rosalinda, van Ijzendoorn, & Sette, 2013). Differences in the approach mothers use to raise their children – Italian mothers stimulate early independency and social interaction and adjustment, whilst American childrearing is more individualistic and interactions are more centred on the mother-child relationship – have been highlighted as potential cultural determinants of attachment disparities (Rosalinda *et al*., 2013). This explanation may apply to the present cultural sample comparison, given that British childrearing is more analogous to the American. Another observation is that most of the dismissing individuals belong to the 16-24 age range (=69, against 13 in the 25+ age range). According to evolutionary theory, this may be due to adolescence and early adulthood being characterised by more low-investment, short-term relational strategies (i.e. avoidance), compared to adulthood (Del Giudice, 2009).

Attitudes, control and violence

Table 3. *Means (and standard deviations) pertaining to attitude scales, total control and subscales, and total violence and CTS subscales, across gender and nationality*.

	IT	EN	M	F
	n=100	n=93	n=64	n=129
Tradit gender roles	42.44 (10.60)	45.69 (12.35)	42.50 (10.85)	44.75 (11.87)
Male violence	49.87 (3.82)	50.00 (2.96)	48.75 (3.69)	50.52 (3.14)

Chivalry	26.58 (4.74)	29.39 (5.02)	25.80 (4.92)	28.99 (4.81)
Tot CBS (control)	.33 (.40)	.34 (.34)	.36 (.41)	.32 (.36)
Economic_control	.45 (.42)	.64 (.51)	.58 (.54)	.52 (.44)
Threatening_control	.15 (.35)	.19 (.28)	.19 (.40)	.15 (.27)
Intimidating_control	.22 (.43)	.24 (.35)	.26 (.43)	.22 (.37)
Emotional_control	.38 (.56)	.38 (.52)	.36 (.50)	.39 (.56)
Isolating_control	.53 (.58)	.46 (.53)	.56 (.61)	.46 (.53)
Minimizing	.11 (.42)	.04 (.18)	.09 (.34)	.07 (.33)
Tot violence	9.87 (21.35)	10.59 (19.37)	10.95 (28.45)	9.85 (14.99)
Negotiation	35.16 (27.98)	38.28 (25.91)	30.00 (24.59)	39.95 (27.57)
Physical assault	1.63 (10.16)	.95 (5.51)	2.89 (14.02)	.52 (1.89)
Psych_aggression	5.04 (8.41)	8.40 (13.58)	4.17 (7.76)	7.90 (12.55)
Injury	.78 (3.89)	.33 (1.95)	.91 (4.70)	.39 (1.88)
Sex_coercion	2.42 (6.93)	.90 (3.68)	2.98 (8.37)	1.05 (3.46)

Mean attitude scores tend towards the non-traditional end for both nationalities (see Table 3), however means are lower for Italians on all three subscales, indicating higher traditional beliefs. The most prevalent controlling behaviour among Italian participants is isolating control, whilst that is economic control among the English. In addition, psychological aggression is the most prevalent form of violence among both nationalities, followed by sex coercion for Italians, and physical assault for the English.

Mann-Whitney tests comparing mean scores on the above variables across nationality indicated significant differences on measures of chivalry (U=6125.5, p<.001), economic control (U=5746, p=.007), threatening control (U=5397.5, p=.045), and sex coercion (U=4088.5, p=.031).

Mann-Whitney tests comparing mean scores of the above variables across gender indicated significant differences on acceptance of male violence (U=5303, p=.001), chivalry (U=5848, p<.001), negotiation (U=5046, p=.016), and psychological aggression (U=4913, p=.036).

Prevalence of violence (see Table 4)

Table 4. *Prevalence (%) of violence by severity type across nationality*.

	IT	EN	Tot
None	18	23.4	20.6
Minor	56	59.6	57.7
Severe	26	17	21.6

A 2X3 chi-square test examining the relation between severity type and nationality resulted non-significant (χ^2(2, N=194)=2.598, p=.273).

Hypothesis 1: Attitudes differ between English and Italian samples.

Given that the normality assumption was violated within the attitudes' scores, Mann-Whitney tests were carried out to compare the mean attitude scores across nationality and gender.

Nationality. The Mann-Whitney test indicated that Italian participants endorsed significantly more chivalrous attitudes than the English (U=3174.5, p<.001), and differences on traditional gender roles also approached significance, with Italians endorsing more of those as well (U=5310, p=.089). The two groups did not differ on acceptance of male violence (AMV) attitudes (U=4597.5, p=.886).

Gender. Mann Whitney test indicated that males and females differ significantly on AMV (U=2953, p=.001) and chivalrous attitudes (U=2408, p<.001), with males endorsing higher attitudes on both scales than females.

Control variables. AMV attitudes differed based on whether participants met their partner online or not. Table 5 shows that 1 in 5 participants met online for both genders. English participants are significantly more likely to meet online compared to Italians. Females who met their partner online endorsed significantly higher attitudes accepting of male violence compared to those who did not meet their partner online (U=1020.5, p=.039). This finding is difficult to explain, given that females who reported to have met their partner online (i) endorsed (non-significantly) less traditional gender role attitudes; (ii) did not display a more insecure attachment pattern; (iii) did not perpetrate nor experience more control or violence in their relationship, compared to those who did not meet their partner online.

Table 5. *Frequencies regarding meeting partner online across nationality and gender, and chi-square comparisons*.

		Partner met online			
Variable		**Yes**	**No**	**χ^2 (df)**	**Sig.**
Nationality	Italian	10.0%	90.0%	14.22 (1)	<.001
	English	31.9%	68.1%		
Gender	Male	21.9%	78.1%	.092 (1)	.762
	Female	20.0%	80.0%		

In addition, within British participants, those who reported being abused by parents as a child endorsed significantly higher attitudes accepting of male violence compared to those who reported no abuse (U=342.5, p=.029). This relationship was not found among Italian participants.

Hypothesis 2: Attitudes differ between participants with controlling behaviour and those without.

Traditional gender roles were found not to be a significant predictor of controlling behaviour (r(192)=.003, *p*=.962).

Regression showed AMV to significantly predict controlling behaviour in the male sample (r(64)=-.301, *p*=.008; F(1,62)=6.183, *p*=.016). The female group did not show significant relationships between the two variables.

Pearson correlation indicated a significant relationship between chivalry and perpetrated control (r(26)=.463, *p*=.017) in the male British group only, suggesting that the less chivalrous the attitudes, the more control perpetrated. In particular, chivalry was related to economic control among British males (r(26)=.405, *p*=.040; F(1,24)=4.703, *p*=.040).

Hypothesis 3: Attitudes differ between participants showing IPV and those who do not.

Traditional gender role attitudes were not significantly related to IPV in the regression analysis (F(1,191)=.021, *p*=.884, r=.011). AMV attitudes within the male sample showed a significant negative relationship with violence (r(64)=-.232, *p*=.033). In particular, AMV was moderately associated with physical assault (r(64)=-.24,*p*=.057) and sexual coercion (r(64)=-.26, *p*=.039). Chivalry was significantly strongly correlated with respondent-perpetrated violence (r(26)=.699, p<.001) and total IPV within male British participants (r(26)=.731, p<.001).

Hypothesis 4: Attitudes predicted to differ between attachment styles.

There were no statistically significant differences between attachment styles on endorsement of any attitude subscale.

Hypothesis 5: **IPV is predicted to differ between attachment styles.**

The Kruskal-Wallis H test, run to compare levels of total and respondent-perpetrated violence across attachment styles, indicated no significant differences between the categories across the whole sample (respectively, $\chi^2(3)=4.98$, $p=.173$ and $\chi^2(3)=6.02$, $p=.111$). Nonetheless, a chi-square was used to assess the relationship between the IPV severity categories and attachment styles: χ^2 approached significance ($\chi^2(6, N=194)=12.26$, $p=.057$), with fearful individuals being more likely, and preoccupied individuals less likely, to experience severe IPV in their relationship.

An analysis of the relationship between attachment style and violence in males and females separately highlighted that fearful males, but not females, were significantly more likely to *perpetrate* violence compared to other attachment styles ($\chi^2(3)=8.20$, $p=.042$).

Hypothesis 6: IPV differs between those with controlling behaviour and those without.

Pearson's regression analysis indicated a significant positive correlation ($r(194)=.566$, $p<.001$) between IPV and control, with participants reporting controlling behaviour exhibiting more violence in their relationships. In particular, psychological aggression was significantly related to physical assault ($r(193)=.214$, $p=.003$).

Hypothesis 7: Controlling behaviour differs between attachment styles.

Kruskal-Wallis H test showed a statistically significant difference in *total control* score between attachment styles within the British sample only ($\chi^2(3) =, 8.074$, $p =.045$). Dunn's pairwise tests indicated a significant difference ($p=.029$, adjusted using the Bonferroni correction) between fearful and dismissing styles with the former experiencing more control in their relationship.

Furthermore, significant differences in *perpetrated* control were found across attachment styles in the Italian sample ($\chi^2(3)=8.52$, $p=.036$), between secure and fearful patterns ($p=.025$) and fearful and dismissing ($p=.019$), with fearful participants perpetrating more control. Across the whole sample fearful, compared to dismissing individuals, reported significantly more control by the partner($\chi^2(3)=835.56$, $p=.008$), and specifically more economic ($p=.017$) and threatening control ($p=.004$) in their relationship. Moreover, when comparing fearful males and females, only the latter experienced significantly more control by their partner compared to other attachment styles ($\chi^2(3)=8.69$, $p=.034$).

Logistic regression – IPV model

Binary logistic regression was performed on the variables: age, parental abuse, parental violence, total relationship control, acceptance of male violence attitudes, and chivalry, to establish a model to predict IPV, the outcome variable. IPV was dichotomised, with participants who experienced none or minor violence in one category, and those who experienced severe violence in another. Table 6 shows the frequencies for both IPV categories across the whole sample.

Table 6. *IPV outcome variable, with total frequencies*.

		Tot
Violence	None + minor	152 (78.4%)
	Severe	42 (21.6%)

The predictor variables entered were chosen based on their attested individual significant relationship with IPV. Table 7 reports these relationships.

Table 7. *Reported chi-square coefficient and respective significance value regarding significant relationships between age, parental abuse, and parental violence, with IPV.*

		IPV severe			
Variable	Levels	Yes	No	χ^2 (df)	Sig.
Age	16-24	18.8%	81.2%	3.50 (1)	.061
	25+	32.5%	67.5%		
Parental abuse	No	18%	82%	9.61 (1)	.002
	Yes	44.4%	55.6%		
Parental violence	No	17%	82.9%	18.86 (1)	<.001
	Yes	61.1%	38.9%		

Regression model. Only parental violence and total control resulted significant contributors to the model, able to predict IPV (B=1.29, OR=3.62, *p*=.046 and B=2.09, OR=8.06, *p*<.001, respectively). However, the model overall was not a good fit to the data, as can be observed from the contingency table below. The model correctly classified 34.1% of participants reporting severe violence. Moreover, Cox & Snell R square indicated a 16.6% probability that severe IPV is explained by the model.

Table 8. *Contingency table for predictive studies*.

	IPV predicted		
	None+minor	Severe	% Total correct
IPV observed None+minor	150	1	99.3

	Severe	27	14	34.1
Total				85.4

Further analyses were conducted to clarify the relationship of parental abuse and exposure to parental violence with the other variables in the model. Mann-Whitney U tests indicated respondent and partner control (U=2966.5, *p*=.008; U=2751.5, *p*=.002), as well as total relationship control (U=3082, *p*=.002) to be significantly different between those who experienced parental abuse and those who did not, with the former perpetrating and experiencing more control. Similar results were observed for parental violence, with participants who reported witnessing parental violence being significantly more likely to perpetrate and experience control in their relationship (U=2173, *p*=.008; U=2224.5, *p*=.004). The observed relationships between the variables are represented in Figure 2.

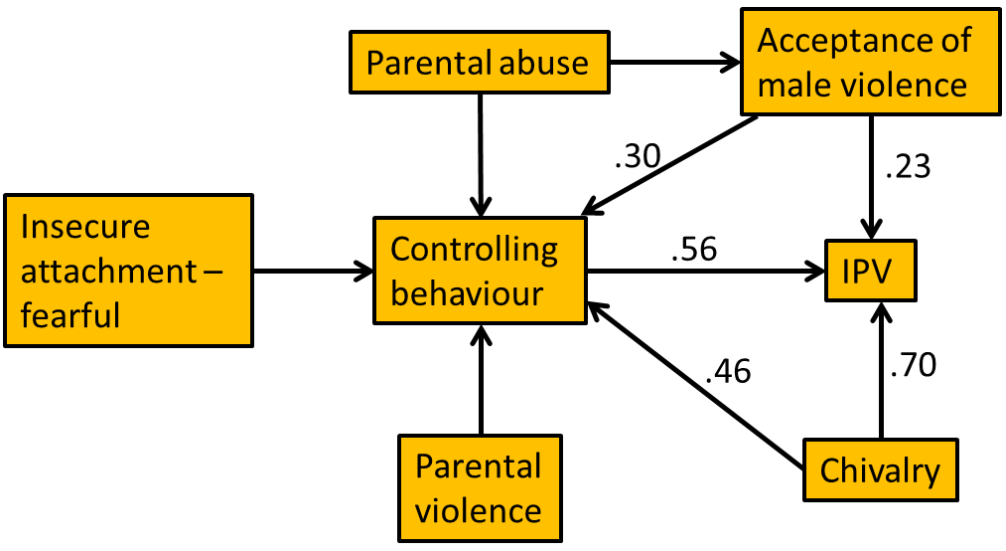


Figure 2. Model of pathways leading to IPV resulting from the analyses. Numbers represent Pearson's r strength of association.

Discussion

The present data enabled to create a model of IPV perpetration and experience

in intimate relationships. The strongest predictor of IPV was controlling behaviour; in particular, psychological aggression was found to be strongly associated to physical assault. These results parallel previous findings which suggested that a high degree of control and psychological abuse are concomitant features of intimate violence (Dutton & White, 2012; Capaldi *et al.,* 2012; Giordano, Copp, Longmore, & Manning, 2016).

Furthermore, the model highlighted concomitant influences of social learning, individual-based and power-and-control theories of relationship violence. Little endorsement of chivalrous attitudes was strongly associated with controlling behaviour and IPV. Chivalry may be considered a potential protective factor against control and violence, given that its relation with these variables was not significant among Italian participants, who reported significantly more chivalry than the British. Moreover, acceptance of male violence was moderately associated with control and weakly with violence, which is consistent with previous findings (Archer, 2006; Fincham *et al*., 2008). Unlike chivalry and acceptance of male violence attitudes, traditional gender role subscale was not associated with control nor violence. Herzog (2007) stressed the complexity of the relationship between gender role attitudes and IPV. These attitudes, once blatantly expressed, hostile or negative, have become more covert and overly benevolent towards women (Herzog, 2007; Swim & Cohen, 1997). Hence the type of traditional gender role attitude assessed and the measure of assessment may shape the ability to find significant associations with violence. The items included in the Gender Attitude Inventory (GAI; Ashmore, Del Boca, & Bilder, 1995) could be considered blatant in the differentiation of gender roles, thus making the scale less likely to identify individuals who hold covert gender role attitudes.

Attachment was not significantly related to attitudes, which contrasts with McDermott & Lopez (2009)'s findings indicating a higher likelihood of accepting male violence in males with an insecure attachment and traditional gender role beliefs. Differences in the present study may be due to the measure used to assess gender role beliefs, as well as the fact that females were more likely than males to have an insecure (mainly fearful) attachment style.

Current results were partially consistent with attachment theory of IPV (Miga *et al*., 2010; Dutton & White, 2012; Doumas *et al.,* 2008). Fearful, but not preoccupied, participants were significantly more likely than dismissing ones to perpetrate and experience control and severe violence. In fact, fearful individuals, who hold a negative model of self and other, are likely to experience a greater closeness-distance struggle with their partner, which increases the likelihood of resorting to violence to regulate the socio-emotional distance between the partners (Doumas *et al*., 2008).

In particular, differences arose between males and females: whilst fearful males were found to *perpetrate* more violence, fearful females reported *experiencing* more control by the partner. Hence the way males and females deal with and respond to threat or anxiety in a relationship may differ; males may feel worthless, powerless, and pressured by societal stereotypes to "be the man", thus resorting to violence to assert their masculinity and feel in control; in contrast, fearful females may feel both unworthy, which would make them more accepting of abuse in that it is consistent with their perception of deservedness, and show inconsistent approach-avoidant behaviour, which may frustrate and anger the partner, possibly leading to abuse.

Furthermore, contrary to Lafontaine & Lussier (2005)'s findings, participants with a dismissing style were not at increased risk of victimisation, nor were they

more likely to perpetrate psychological abuse. However, the present study did not collect data on the attachment style of the respondents' partners, hence the current results may be due to the partner not being insecurely attached or extremely close or needy. Also most participants (51.5%) were dating (not living together) at the time of data collection, which supposedly gives dismissing individuals the freedom to distance themselves more easily, reducing the chances of doing so in an abusive manner – this may be more likely to occur when partners live together.

The model also incorporates arguments pertaining to social learning theory, related to what is brought into the relationship via early modelling or social exposure (Giordano *et al*., 2016). Parental abuse was significantly associated with attitudes accepting of male violence, and both parental abuse and exposure to parental violence were significantly associated with controlling behaviour. These relationships are in line with previous literature which has stressed the influence of early violent experiences on the likelihood of perpetrating relationship control or violence (Browne, Hamilton-Giachritsis & Vettor, 2007). Nonetheless, the processes underlying these associations have not been explored: an individual's use of control may be a learned response to early exposure to violence, or rather the result of developed difficulties in anger control and expression. Giordano *et al*. (2016)'s longitudinal study indicated that one's background experiences and gender role beliefs are not exhaustive explanation of control and violent behaviour, and highlighted anger as a key factor in guiding controlling and violent actions.

Limitations

This study has various limitations. First, the sample size limited the number of variables analysed at any one time, which reduced the power of the study in

detecting significant effects in the relationships between more than two variables. Secondly, despite controlling for defensive responding via the Social Desirability Scale, self-report and recall biases may still have played a role in the accuracy of reported information. Thirdly, the model created left questions about the presence of other variables that may have a stronger influence on IPV. One of these is anger, which has been shown to mediate and moderate the association between insecure attachment and physical and psychological violence in couples (Lafontaine & Lussier, 2005), and to significantly increase the risk of IPV perpetration, especially when coupled with high levels of respondent and partner control (Giordano *et al*., 2016).

A number of limitations also concern the measures used in the study: (i) alongside a measure of acceptance of male-to-female violence, it would be important to develop and use one regarding acceptance of female-to-male violence as an additional measure of traditional attitudes. Research has been focussing mainly on male-to-female violence, despite an acknowledged increase in female-to-male violence (Johnson, Giordano, Manning & Longmore, 2015). This additional scale may be examined in relation to attachment style and controlling behaviour to better understand the relationship of female-to-male violence attitudes with other attitudes and attachment styles, and ultimately their influence on the likelihood of IPV perpetration and victimisation in both males and females. (ii) Furthermore, studies could use alternative measures of traditional gender roles to the one used in the present study (GAI), such as the Attitudes Towards Women Scale or the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995) in order to maximise the likelihood of detecting traditional gender role attitudes, both overtly and covertly held.

Given that all the variables were assessed simultaneously it was not possible to determine a causal order of processes that are very likely related (Giordano *et al*., 2016). For example, it was not possible to understand whether attitudes precede or follow IPV, or whether controlling behaviours stem from an episode of IPV or precede it.

Recommendations for future research are to examine the variables included in the present model, whilst incorporating a measure of relationship-based anger in order to better elucidate the dynamics between individual emotional reactivity, attitudes, need for control, and attachment style in relation to IPV perpetration. Moreover, conducting a longitudinal study would be ideal to clarify causal relationships, track changes in controlling and violent behaviour over time, and depict a more precise model of how IPV changes with the length of time a couple are together (Giordano *et al*., 2016).

Practical implications of the study.

The findings of this study aid understanding of the strength of the relationship between attitudes, attachment, and need for control on IPV by comparing a sample of Italian and British participants. Results suggest that risk assessment measures look out for an interaction of violence-supportive attitudes, anxious attachment, previous experiences of violence, as well as the presence of specific or general controlling behaviour. Therapeutic interventions for intimate violence should place a special emphasis on the significance of attitudes supportive of violence and resolving needs of individuals with an anxious attachment. Nonetheless, the limitations of the study are to be carefully considered and addressed in future studies to clarify the proximal and distal risk factors for IPV. Anger needs to be incorporated in the model to more accurately assess its association with attachment, early experiences and attitudes, and its impact on

control and relationship violence. It is paramount to create comprehensive models of IPV, highlighting causal relationships to improve risk assessment measures and develop effective intervention and treatment programmes for IPV perpetrators (Birkley & Eckardt, 2015).

Word Count = 5998

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Executive summary

The target audience is represented by other researchers in the field of domestic violence and intimate partner violence.

Title of research: The impact of attitudes, attachment and partner control on intimate partner violence(IPV): a cross-cultural comparison

Background. IPV refers to behaviours by a current or ex-partner that cause physical, sexual, or psychological harm (Birkley & Eckhardt, 2015) and represents a serious public health concern worldwide, spanning all relationship types (dating, marital, separated or divorced partners), with alarming prevalence rates for both genders (Romito, Beltramini, & Escribà-Aguir, 2013; Young et al., 2017; Swan et al., 2008). In the UK 27.1% of women and 13.2% of men are estimated to have experienced any domestic abuse since the age of 16 (CSEW, 2016); in Italy 31.5% of women between 16-70 years of age, that is nearly one in three women, reported experiencing some form of physical or sexual violence in their life, in 3 out of 4 cases perpetrated by their current or ex-partner (Istat, 2015). A better understanding of IPV causes and risk factors is important for effective prevention and intervention of violence in young and adult intimate relationships.

Risk factors that have been strongly implicated in IPV perpetration are depression, substance abuse, childhood victimisation, childhood exposure to parental violence, dispositional anger and anger control, insecure attachment (i.e. fearful, preoccupied, dismissing), traditional (patriarchal) attitudes (traditional gender roles, acceptance of male violence, chivalry)

and controlling behaviour (Dutton & White, 2012; Giordano, Copp, Longmore, & Manning, 2016). The latter was found to directly predict violence in both non-clinical and clinical populations, by mediating the relationship between insecure attachment and attitudes with IPV frequency and severity (Follingstad et al., 2002; Dutton & White, 2012; Giordano, Copp, Longmore, & Manning, 2016; Lafontaine & Lussier, 2005; McDermott & Lopez, 2013; Herrero et al., 2017; Nabors & Jasinski, 2009; Loveland, 2017).

Rationale for study. Researchers have tended to examine the relation of IPV with attitudes and personality variables separately, mainly within samples in North America, the UK, or New Zealand (Archer, 2006). This study aims to understand the unique relation and interactive effects of attachment, attitudes and need for control, on IPV in a comparative study of English and Italian young people, using a proposed pathway model based on findings from previous studies in this area (see Figure 1). Italy is a historically patriarchal country, with religious influences that advocate a subordinate status for women in the household and in society; the English society, in contrast, is more multi-ethnic and less affected by religious principles subordinating women to men, hence is expected to hold less patriarchal beliefs than Italian society.

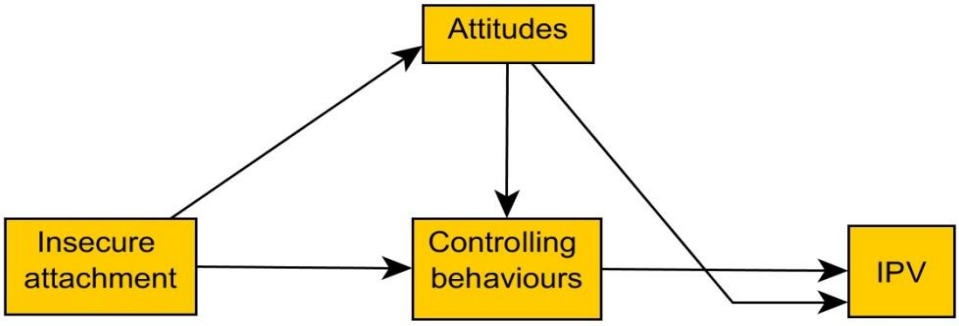


Figure 1. Proposed model of pathway leading to IPV

Research aims. The main aims of the study are: (1) to assess the extent to which psychological (attachment and controlling behaviours) and cultural (attitudes) dynamic risk factors are uniquely predictive of IPV perpetration; (2) to examine the potential interactions and pathways that implicate these variables as conducive to IPV.

Data collection and analysis. 241 participants provided responses to an online questionnaire. Analysis was conducted on 194 participants (33% males and 67% females, 51.5% Italians and 48.5% British). Univariate and bivariate analyses were first conducted to examine relationships between the variables; secondly logistic regression was performed with violence as DV, and control variables, attitudes, attachment and control as IVs to determine a model to predict IPV or not.

Key findings of the research

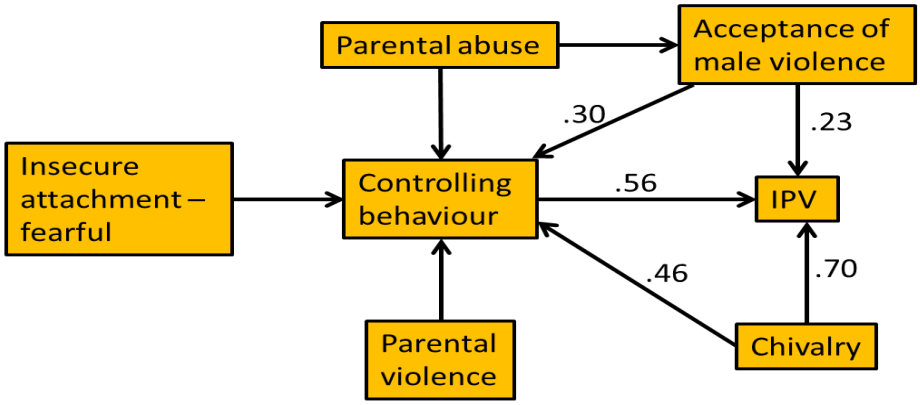


Figure 2. Model of pathways leading to IPV resulting from the analyses.

The findings of the study enabled the author to create a model of IPV perpetration and experience in intimate relationships (see figure 2). The strongest predictor of IPV was controlling behaviour; in particular, psychological aggression was found to be strongly associated to physical assault. These results parallel previous findings which suggested that a high degree of control and psychological abuse are concomitant features of intimate violence (Dutton & White, 2012; Capaldi et al., 2012; Giordano, Copp, Longmore, & Manning, 2016).

Furthermore, the model in Figure 2 highlighted concomitant influences of social learning, individual-based and power-and-control theories of relationship violence. Little endorsement of chivalrous attitudes, together with acceptance of male violence, were strongly related to control and IPV perpetration. Moreover, fearful, but not preoccupied, participants were significantly more likely than dismissing ones to perpetrate and experience control and severe violence. Fearful individuals, who hold a negative model of self and other, are likely to experience a greater

closeness-distance struggle with their partner, which increases the likelihood of resorting to violence to regulate the socio-emotional distance between the partners (Doumas et al., 2008). The model also incorporates arguments pertaining to social learning theory, related to what is brought into the relationship via early modelling or social exposure (Giordano et al., 2016). Parental abuse was significantly associated with attitudes accepting of male violence, and both parental abuse and exposure to parental violence were significantly associated with controlling behaviour.

Implications of the findings and recommendations

The findings of this study aid understanding of the strength of the relationship between attitudes, attachment, and need for control on IPV by comparing a sample of Italian and British participants. Results suggest that IPV risk assessment measures look out for an interaction of violence-supportive attitudes, anxious attachment, previous experiences of violence, as well as the presence of specific or general controlling behaviour. Therapeutic interventions for intimate violence should place a special emphasis on the significance of attitudes supportive of violence and resolving needs of individuals with an anxious attachment.

Nonetheless, the study presents numerous limitations to be carefully considered and addressed in future studies: (i) sample size is too small, which undermines the reliability of findings due to reduced power of detecting significant effects; (ii) anger (emotional reactivity) has been shown to be significantly implicated in IPV, increasing its odds when combined with partner control; therefore, examining anger would have

been very valuable to have a better understanding of the factorial interaction leading to IPV; (ii) cross-sectional nature of the study, which prevents examination of causality between the variables. More research is needed create more comprehensive models of IPV that clarify causal relationships in order to improve risk assessment measures, aid IPV prevention efforts, and develop effective intervention and treatment programmes for victims and perpetrators (Birkley & Eckardt, 2015).

PPT Presentation

The impact of attitudes, attachment and partner control on intimate partner violence(IPV): an Italian vs English comparison

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Intimate Partner Violence

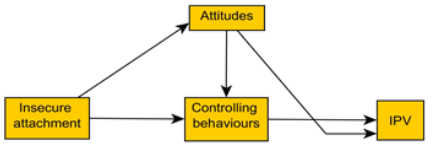
IPV = behaviours by a current or ex-partner causing physical, sexual, or psychological harm (Birkley & Eckhardt, 2015).

Risk factors: depression, substance abuse, childhood victimisation, exposure to parental violence, anger, insecure attachment, patriarchal attitudes, controlling behaviour (Dutton & White, 2012; Giordano et al., 2016; Archer, 2003; Fincham et al., 2008; Herrero et al., 2017; Nabors & Jasinski, 2009; Loveland, 2017)

Aims of the study

This study focuses on cultural comparison of Italians and English to better discern the role of attitudes, attachment and control in IPV.

Aims: - to assess unique relationship of attachment, attitudes, control with IPV;
- to examine factorial interactions and pathways leading to IPV



Proposed model of pathway leading to IPV

Method

- Cross-sectional study - Online questionnaire: (1) demographic questions; (2) Conflict Tactics Scale; (3) Controlling Behaviour Scale; (4) Relationship Scale Questionnaire; (5) Gender Attitude Inventory
- 241 participants recruited via social media: 48 excluded → tot= 194 (males = 33% and females = 67%; IT = 51.5% and EN = 48.5%)

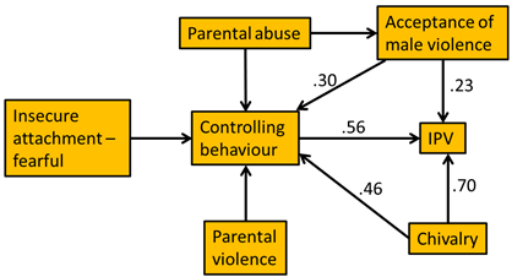
Variables:

- Control: age, gender, SES, ethnicity, relationship status, relationship length, childhood abuse, childhood exposure to parental violence, partner met online + coercion prior to meeting
- IVs: attachment, partner control, attitudes
- DV: IPV

Results

1. Attitudes supportive of male violence sign. related to greater control and violence among males.
   Non-chivalrous attitudes strongly related to economic control and respondent-perpetrated violence among British males.
2. Fearful individuals perpetrate and experience sign. more control and violence than dismissing individuals; fearful males *perpetrate* more violence whilst fearful females *experience* more control by partner
3. Control sign. predictive of IPV + Psychological violence predicted physical assault
4. Logistic regression: parental violence and total control the only sig. predictors of IPV.
   BUT, model left questions (only 34.1% of participants reporting severe violence were correctly classified)

Pathway model based on findings



Implications of research and suggestions for future research

- Risk assessment measures should look out for an interaction of violence-supportive attitudes, anxious attachment, previous experiences of violence, and the presence of specific or general controlling behaviour.
- Therapeutic interventions for intimate violence should place a special emphasis on the significance of attitudes supportive of violence and resolving needs of individuals with an anxious attachment.

- Anger has been shown to be significantly implicated in IPV, increasing its odds when combined with partner control (Giordano et al., 2016)
  → Measure of anger to be incorporated in the model to better understand the factorial interaction leading to IPV.
- Incorporate a measure of female-to-male violence attitudes to more accurately assess relationship dynamics

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Reflective Report of Research Activities

(word count = 1691)

Research Student: Laura Albini
Research Supervisor: Professor Kevin Browne

SUPERVISION MEETING DATES

DATE	Things done or changed - progress	Things to do next
Sept 2017	Choice of topic – IPV – first draft of research protocol to show Kevin	
18/10/17	decided on: online dating website sample of UK and Italy (English & Italian) + measures: IPV (CTS2), attachment (RSQ), and anger (STAXI)	add an online perspective and demography + construct questionnaire by 31/10/17
7/11/17	Revised measures to be included + confirmed psychometrics to be used in study NO anger questionnaire but "need for control"	write up research protocol and ethics form and create online questionnaire
24/11/17	Ethics form and research protocol was completed and the debrief form was translated into Italian. Today Kevin and I went through the research protocol, in particular the sections regarding title, aims and hypotheses, planned analysis and the measures used in the study (questionnaires). These needed modification: hypotheses were formatted rightly, with concise and more general predictions; a different analysis from what I had planned to conduct was deemed more appropriate; and in one questionnaire "romantic relationship" was to be defined clearly for participants' understanding of the question.	- Create Italian version of participant information sheet, consent form, and questionnaires - Some section of the ethics form to be completed by Kevin
14/12/17	Review of research protocol, participant consent form and ethics application Review of participant consent form and ethics application. Ethics Form now ready to go after minor corrections are made.	Update research protocol (including new measure of social desirability – questions to be randomly incorporated into the questionnaire) and ethics form + update online questionnaires + never mention "violence" to pps both in Italian and English questionnaires
	ETHICS APPROVAL	change a few things on participants

		info sheet
25/04/18	Caught up on research, in particular participants recruitment – so far I have 29 Italians and 43 British - got advice on websites to post study in	Post questionnaire on as many websites as I can
21/06/18	Went through analysis of data - re-done the scoring of some variables (attitudes and attachment), which I had done wrong, in a way that erased the value of raw data (by dichotomising raw scores)	- exclude some participants from analysis - re-run univariate and bivariate relationship analysis on the 13 + 10 variables
28/06/18	- Re-conducted analysis (Chi-square) between some variables - Conducted binary logistic regression to examine the variables most predictive of IPV	Write up the research paper, together with the executive summary, presentation and other elements of the portfolio, to email Kevin by the 7th of July

Conceptualisation

The first idea that I proposed was a study on IPV, specifically examining the relationship between anger (trait, state and expression), attachment styles and type of abuse in community adults. I decided to focus on IPV given the numerous cases of partner violence that happened in Italy in the summer before starting the course and the extensive research I carried out on the topic. The articles I came across indicated that the role of anger (with respect to its subcomponents: anger expression, anger control, state anger, and trait anger) is poorly understood in IPV relative to other variables (Jordan, Nietzel, & Walker, 2004; Kuijpers, van der Knaap, & Winkel, 2012; Genest & Mathieu, 2014), despite being a major driver of violence. Hence the research I was proposing aimed to discern the components of anger to examine their interaction with the type of attachment style (secure, anxious, avoidant), and their impact on the nature of abuse perpetrated or suffered (psychological, physical, or sexual). Included in the initial proposal was the idea to compare an English vs Italian sample (given my Italian origins) in which case I would also measure attitudes towards women using the short version of the Attitudes Towards Women Scale (ATWS; Spence, Helmrich & Stapp, 1978) in order to control for this variable and also measure its impact on IPV likelihood. The proposed design was cross-sectional; the material consisted of an online questionnaire,

advertised within online platforms such as Facebook pages, dating websites and other social media websites (e.g. Reddit, research pages) to recruit participants.

During the first meeting with Kevin, the measures for the constructs to be examined were chosen: Conflict Tactics Scale (CTS-2) for IPV, the Relationship Scale Questionnaire (RSQ) for attachment, and the Buss-Durkee Hostility Inventory (BDHI; 1957) for anger. Moreover, the set task for the following meeting was to construct the questionnaire, including demographic questions and the scales of the constructs of attachment and anger.

Changes to the initial proposal were made on the 7th Nov 2017 due to the realisation that the BDHI (anger measure) comprised of too many items and would have made the questionnaire too long for participants. Hence, Kevin and I decided to substitute that with the Need for Control measure, which was shorter and is still an important variable in IPV. The psychometric to be used to measure *need for control* was agreed to be The Revised Controlling Behaviours Scale (CBS-R) (Graham-Kevan & Archer, 2008), which comprised of 32 items instead of 66 contained in the BDHI. Targets for the next meeting were to write up a complete research protocol and ethics form, and create the online questionnaire with the revised measure.

On the 24th of November I came into the meeting with the research proposal, ethics form, participants information sheet, consent form, and debrief form completed, with the latter also translated into Italian. Kevin and I went through each section of the research protocol, some of which needed editing: (1) hypotheses, which were too long and descriptive, were formatted more concisely with specific and clear predictions; (2) the planned analysis was changed from *Structural Equation Modelling* to more appropriate analysis (univariate analysis, chi-square, and logistic regression); (3) some questions included in the demographic section of the questionnaire were modified, such as gender and ethnic origin. Moreover, it was deemed appropriate to add a clear definition of "romantic relationship" within the participants information sheet in order for participants to have a clear understanding of the questions. Targets for the next session were to

create the Italian version of participant information sheet, consent form, and the questionnaire as a whole.

On the 14th December 2017 Kevin and I reviewed the various pieces of work. Regarding the research protocol, we decided a measure of social desirability was needed to control whether participants were defensive in their disclosure of personal information – 8 items from the "Lie" subscale of the Culture Free Self-Esteem Inventory (2nd edition, CFSEI-2; Battle, Carson, Ord & Hawkins, 1985) to be incorporated randomly into the questionnaire. Furthermore, my supervisor stressed the importance of not mentioning the term "violence" to participants in any document, as this might scare them and prevent honest responding.

On the 28th January 2018 I officially submitted my research proposal and ethics form on Moodle and in mid-February these were sent off to the University Ethics Committee by the department. Feedback from the Committee came on the 4th of April – my research was approved, however minor changes were required to the information and consent forms (these can be found in appendix 1).

After gaining approval and making the requested changes I started posting my research – the link to the questionnaire – onto multiple online social platforms, such as various Facebook pages, University web pages, Meetic, Reddit, and asking friends and acquaintances.

On the 25th April 2018 I met Kevin: we caught up on research and participants recruitment – so far I had 29 Italians and 43 British, and I need to get to 220, so a lot of posting and advertising was still needed to achieve the target. By mid-May I had 111 British and 69 Italians. Data collection ended on the 29th May, reaching a total of 241 participants.

Data analysis and write up

Data analysis was challenging but also very exciting for the curiosity of finding out the variables' relationships. First of all the variables had to be converted into SPSS and scores on some measurement scales were obtained for each participant. However, scores on some scales (attitudes and attachment) were re-scored after meeting up with

Kevin, due to having made the mistake of dichotomising raw scores, thus erasing the value of the data – later scales' raw data was kept as a continuous variable. Some participants were excluded from analysis and univariate and bivariate analyses were conducted to examine relationships between the independent and dependent variables. Ultimately, logistic regression was performed to determine a model predictive of IPV. Writing up was at first confusing, given the difficulty of conciliating the numerous findings and writing them out in a concise and clear manner.

Strengths

The strengths of this study include the specific comparison of British and Italian participants, which gave a cultural dimension to the study and helped to better understand the role of traditional attitudes in relation to IPV. Moreover, the inclusion of a wide range of variables was important to inspect which ones had a stronger association with IPV and how they interacted to facilitate relationship violence.

Challenges. Participants' recruitment was very challenging. I struggled to find Italian participants to take part, as they would not participate despite posting the research on lots of Italian pages and websites. At times I had to rely on my social network and that extending from it. Furthermore, analysis of data was quite challenging, given the numerous variables to be analysed in isolation and in relation to one another – this created confusion around main effects and their meaning at times.

What has been learned. The process of researching a topic, conceptualising the study, collecting and analysing data, and writing the paper has at times been daunting, but also exciting and purposeful. I learnt to work independently on an important piece of research, inputting my own ideas and initiative regarding what to do, how to do it and when to consult a mentoring/supervisory figure. I appreciated and took great benefit for the purpose of my learning from my supervisor's feedback, expertise and advice. This dissertation allowed me to explore a topic I had a genuine interest in and to learn a great deal about IPV and the underlying processes that may facilitate or prevent IPV perpetration and victimisation.

Limitations. This study has various limitations. First, the sample size was too small for the many variables analysed, which reduced the power of the study in detecting significant effects in the relationships between the variables. Secondly, despite controlling for defensive responding via the Social Desirability Scale, self-report and recall biases may still have played a role in the accuracy of reported information. Thirdly, the model created was not a good fit of the data, which questions the presence of other variables that may have a stronger influence on IPV (e.g. anger) (Giordano et al., 2016). In addition, this study was cross-sectional, with variables assessed simultaneously, which prevented an understanding of the causal order of processes that are very likely related (Giordano et al., 2016). For example, it was not possible to understand whether attitudes precede or follow IPV, or whether controlling behaviours stem from an episode of IPV or precede it. Conducting a longitudinal study would be ideal in order to identify strong causal relationships among variables implicated in IPV to ultimately create a more fine-grained model of IPV perpetration.

Moreover, the study only examined attitudes regarding male perpetration of violence against females, with the opposite (attitudes of female perpetration of violence against males) not taken into account. Research has been focussing mainly on male-to-female violence, despite an acknowledged increase in female-to-male violence (Johnson, Giordano, Manning & Longmore, 2015). Therefore, it would be important to create a scale reflecting this construct, in order to better analyse couples' dynamics.

What could be done differently. First of all, I would recruit a lot more participants in order to increase the reliability of the findings. I had recruited 21 more participants than I actually needed, however, many more had to be excluded from the analysis, which was very unfortunate. Moreover, I could have included anger as an additional measure of individual emotional reactivity. Anger has been shown to be significantly implicated in IPV, increasing its odds when combined with partner control. Therefore examining anger would have been very valuable to have a better understanding of the factorial interaction leading to IPV. Regarding the measures used, future studies could use alternative measures of traditional gender roles to the one used in the present study (GAI), such as

the Attitudes Towards Women Scale or the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995) in order to maximise the likelihood of detecting traditional gender role attitudes, both overtly and covertly held. Incorporating a female-to-male violence attitude scale would also be important to more accurately analyse relationship behavioural dynamics.