Student No: 4342353

Module Code: C84FRP

University of Nottingham

Assessed Coursework Cover Sheet for Applied Psychology Postgraduate Courses

Module Title: Forensic Psychology Research Dissertation

Coursework Title: Childhood Neglect and Intimate Partner Violence: The Mediating Role of the Dark Triad

Journal Format: Child Abuse and Neglect

Word Count: 5983

This is to confirm that I submit this piece of assessed work in the full knowledge of the published guidelines on plagiarism and its consequences

Name: Katarzyna Dudka

Table of Contents

Research Proposal 3

Application form 27

Ethics Approval Letter 33

Research Paper 34

Executive Summary 69

PowerPoint Presentation 73

Reflective Report 74

Research Proposal

Childhood neglect refers to a continuing negligence of basic needs of a child such as medical and physical care, supervision and guidance and emotional development (Radford et al., 2011). Although neglect is the most common form of childhood maltreatment (Radford et al., 2011), it is often insufficiently researched as compared to childhood abuse (Chapple, Tyler & Bersani, 2005). Stoltenborgh, Bakermans-Kranenburg and van IJzdendoorn (2013) conducted a meta-analysis on the prevalence of childhood neglect. Only 13 studies on physical neglect and 16 on emotional neglect were suitable to be included (Stoltenborgh et al., 2013) in comparison with 217 publications on childhood sexual abuse (Stoltenborgh, van IJzendoorn, Euser & Bakermans-Kranenburg, 2011). In the United Kingdom, around 16% of young adults reported childhood neglect (Radford et al., 2011). As prevalence rates are high, it is important to investigate consequences neglect has on later life.

Impact of childhood neglect on perpetration of intimate partner violence

It has been found that victims of childhood neglect and not childhood abuse reported more incidents of perpetration of intimate partner violence (Widom, Czaja & Dutton, 2014). Widom et al. (2014) used a prospective design as participants were followed up after 30 years from the initial report of child abuse and/or neglect. It was demonstrated that participants who were neglected as children were more likely to injure their intimate partner. The same results were not found for physical or sexual abuse. However, Widom et al. (2014) used official court reports to identify victims of child abuse and/or neglect. Therefore, participants are more likely to represent the most severe cases of childhood trauma and to have been victims of both abuse and neglect. Straus and Savage

(2005) investigated childhood neglect and dating violence in students from 17 countries. They confirmed that more experiences of neglectful behaviour in childhood correlated with higher perpetration of violence in a romantic relationship. It is important that more research focuses on child neglect as consequences can be more detrimental than those of childhood abuse alone.

Impact of childhood neglect on personality

Another consequence of childhood neglect might be the development of a malevolent personality. Dark Triad is a construct created to describe a cluster of antisocial traits (Paulhus & Williams, 2002). It encompasses psychopathy, narcissism and Machiavellianism. Psychopathy refers to callousness, lack of empathy and impulsivity (Hare, 2003). Previous research suggested a relationship between childhood neglect and psychopathic traits. Craparo, Schimmenti and Caretti (2013) found that violent offenders with higher levels of psychopathy were more likely to be neglected and abused in childhood. It is possible that adverse childhood experiences might contribute to the development of psychopathic disposition and subsequently to violence in adulthood. Weiler and Widom (1996) conducted a longitudinal study on neglected and abused individuals and a non-victimised control group. 20 years after the adverse childhood experience, their psychopathy levels were assessed using PCL-R (Hare, 2003). Furthermore, criminal records and self-report data were used to measure violent behaviour. It was demonstrated that the neglected and/or abused adults scored higher on the psychopathy scale as compared to the matched controls. Psychopathy and childhood trauma predicted violent behaviour. However, once psychopathy was controlled for, childhood trauma was no longer a significant predictor of violence (Weiler & Widom, 1996). It appears that child neglect and/or abuse might be a

contributing factor in the development of psychopathic traits which subsequently increase the risk for violent behaviour in adulthood.

Narcissism is another personality construct contained within the Dark Triad. It characterises an individual who is self-centred and often has a fragile self-esteem (Raskin & Terry, 1988). Maxwell and Huprich (2014) evaluated whether adverse childhood experiences, as measured with the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994), predict narcissism and self-esteem scores. Individuals with more adverse experiences in childhood had lower levels of self-esteem. Furthermore, emotional abuse and neglect had the largest number of correlations with pathological narcissism as compared to other adverse experiences. A recent study found similar results in that neglectful parenting in childhood increased the likelihood of vulnerable and grandiose narcissism (Ensink et al., 2017). However, this association existed only for girls suggesting that they are more susceptible to the negative effects of neglect in childhood.

Machiavellianism is the third composite of the Dark Triad. It describes a person who use manipulation and deceit to achieve personal gain (Rauthmann & Will, 2011). Láng and Lénárd (2015) investigated the relationship between Machiavellianism and childhood adversities. The results demonstrated that neglect was the strongest predictor of Machiavellianism in adulthood. It is possible that Machiavellianism develops as a response to childhood adversities. This behaviour can be explained through Life History Theory (Kaplan & Gangestad, 2005). It is expected that individuals create their life strategies accordingly to their environmental conditions. Therefore, harsh conditions will facilitate the formation of fast life strategies associated with exploitative strategies such as Machiavellianism (Jonason, Webster, Schmitt, Li & Crystel, 2012).

Impact of personality on intimate partner violence

Although there are clear consequences of neglectful parenting, mechanisms by which victims of neglect become perpetrators of domestic violence are not clear. One of the factors suggested to be responsible for moderating the relationship between childhood neglect and antisocial behaviour in adulthood is psychopathy (Swogger, Walsh, Kosson, Cashman-Brown & Caine, 2012). As psychopathy can be characterised by lack of empathy and impulsivity, it would be reasonable to predict that individuals with higher levels of psychopathic traits will be more violent towards their partners. Swogger et al. (2012) found that psychopathic traits explain the relationship between childhood physical abuse and intimate partner violence in male offenders. However, it is not clear whether childhood neglect would have similar implications for violence in adulthood. Furthermore, it would be beneficial to explore these relationships in a community sample.

Another personality trait – narcissism – is often related to the outburst of violent behaviour to protect fragile self-esteem. It would make sense that people with higher levels of narcissism will be more likely to use aggressive methods to maintain their social dominance. Peterson and DeHart (2014) demonstrated that higher levels of narcissism predicted more negative behaviours (i.e. insulting and shouting) during a conflict with their romantic partner. Furthermore, Keller et al. (2014) reported that total narcissism score correlated with greater aggression towards their partner. Therefore, narcissistic individuals are more likely to perpetrate violence because of an ego-threat.

Machiavellianism is the third personality construct included in the Dark Triad (Paulhus & Williams, 2002). In a recent study, Brewer and Abell (2017) measured

relationship satisfaction levels in relation to Machiavellianism. Researchers found that higher levels of Machiavellianism not only predicted lower relationship satisfaction but also controlling and emotionally abusive behaviour towards their partners. These behaviours might exist to lower partner's self-esteem and make them easier to manipulate. Nonetheless, the study did not examine other forms of intimate partner violence such as physical and sexual violence. Based on these findings, it can be concluded that Dark Triad traits might have a positive relationship with the perpetration of violence in a romantic relationship.

Current study

The current study explores the moderating role of antisocial traits between childhood neglect and intimate partner violence. It will explain whether neglect predisposes individuals to become a perpetrator of domestic violence and whether the Dark Triad (DT) in neglected individuals moderates and increases the risk for perpetration of intimate partner violence in adult life. Therefore, victims of childhood neglect with higher levels of psychopathy, narcissism and Machiavellianism might be at higher risk to perpetrate violence in adulthood. Stith et al. (2000) demonstrated that women are more likely to become victims of intimate partner violence. On the other hand, men are more likely to become perpetrators following adverse childhood experiences. It would be advantageous to establish whether the same gender patterns persist for child neglect rather than childhood trauma which encompasses several types of victimisation.

Research questions:

- Are adults with a history of childhood neglect more likely to perpetrate intimate partner violence as an adult?
- Do higher levels of psychopathy, narcissism and Machiavellianism predict higher levels of perpetration of intimate partner violence for adults?
- Does Dark Triad act as a moderator for the perpetration of intimate partner violence for adults with history of childhood neglect?

Proposed methods:

a) Participants

Community sample (18-65 years of age) currently or recently in a romantic relationship. Participants are recruited online through convenience and snowball sampling. A priori power calculation (G*power; Faul, Erdfelder, Buchner & Lang, 2009) recommended a sample size of 103 participants to achieve 80% power for multiple linear regression model with 7 variables (Machiavellianism, psychopathy, narcissism, neglect and three interactions neglect x Machiavellianism, neglect x psychopathy, neglect x narcissism). To ensure the sample represents the population, people between ages of 18 to 65 can participate in the study. Therefore, the findings are not going to be limited to a student sample which can be a source of bias. To account for missing data points, a certain value (e.g. 9 or 99) will be assigned in IBM SPSS Statistics.

b) Procedure

Participants complete the questionnaire online. The study will be advertised through various social media websites. Some of the advantages of using online research methods include convenience, accessibility and perceived anonymity. As current research explores sensitive topics (childhood trauma and domestic

violence), it might be more beneficial to use online methods which allow respondents to remain anonymous. Nonetheless, participants might be more likely to disengage during the study (Lefever, Dal & Matthiasdottir, 2007). First, they see an information page explaining the procedure. They are told they can withdraw at any time and that their answers are confidential. Once they consent, they complete demographic information such as age, gender, sexual orientation, ethnicity and relationship status about themselves and their romantic partner and three psychometric measures. Firstly, they complete a 20-item questionnaire on their experiences of neglect in childhood. Subsequently, they are asked 20 questions about their experiences in the most recent or current romantic relationship. Lastly, they fill out a 27-item questionnaire measuring their antisocial traits. At the end of the study, participants will be given information and telephone numbers of organisations helping victims of domestic violence.

c) Measures

Childhood neglect: The Multidimensional Neglectful Behaviour Scale – Adult Recall (MNBS-A; Straus, Kinard & Williams, 1995) consists of 20items measuring four domains of childhood neglect: supervisory, physical, emotional and cognitive needs. The instrument focuses exclusively on child neglect rather than childhood trauma. It has been proved to be a reliable and sensitive measure of childhood neglect in a student sample (Starus et al., 1995). Furthermore, the scale was cross-validated in 17 countries (Starus, 2006).

Dark Triad: Short Dark Triad (SD3; Jones & Paulhus, 2014) consists of 27 items measuring three antisocial personality constructs: psychopathy, narcissism and Machiavellianism. Psychopathy refers to callousness, impulsivity and thrill-seeking (Hare, 2003). Machiavellianism characterises manipulative individuals which

deceive others for their own benefit (Rauthmann & Will, 2011). Lastly, narcissism describes fragile self-esteem and feelings of grandiose (Raskin & Terry, 1988). The Short Dark Triad (Jones & Paulhus, 2014) has been empirically supported and is a reliable measure of the Dark Triad traits.

Intimate Partner Violence: A Short Form of Revised Conflict Tactics Scale (CTS2S; Straus & Douglas, 2004) consists of 20 items and is a self-report measure of experiences of domestic violence. It measures four concepts of intimate partner violence: assault, injury, psychological aggression and sexual coercion – both by the respondent and the partner. A short form has good construct validity as compared to the full version but is not as sensitive in that it might produce more false negatives. Furthermore, concurrent validity between the two measures is high, indicating that the short version reflects the full version.

d) Proposed analytical methods

All analyses will be conducted in IBM SPSS Statistics. Perpetration of intimate partner violence is a criterion (outcome) variable in the study. There is one predictor: total score on neglectful behaviour scale (Straus et al., 1995). Furthermore, there are three moderator variables: psychopathy, narcissism and Machiavellianism. Pearson's correlation will be used to understand the relationship between childhood neglect, the Dark Triad and intimate partner violence. Subsequently to investigate the relationship between variables, three multiple regressions will be conducted using the PROCESS macro (Hayes, 2013) on mean intimate partner violence scores as outcome variable, the total score on childhood neglect scale as independent variable and the score on psychopathy, narcissism and Machiavellianism as three moderators, each used for single analysis. Lastly, to interpret the interaction effects, a graph of simple slopes will be plotted.

e) Estimated timescale

- March – April: Data collection
- May – June: Data analysis
- 22nd of July: Submission of the Forensic Research Dissertation

References

Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., … & Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American Journal of Psychiatry, 151*(8), 1132.

Brewer, G., & Abell, L. (2017). Machiavellianism, relationship satisfaction, and romantic relationship quality. *Europe's Journal of Psychology, 13*(3), 491-502.

Chapple, C. L., Tyler, K., & Bersani, B. E. (2005). Child neglect and adolescent violence: Examining the effects of self-control and peer rejection. *Violence and Victims, 20*(1), 39-53.

Craparo, G., Schimmenti, A., & Caretti, V. (2013). Traumatic experiences in childhood and psychopathy: A study on a sample of violent offenders from Italy. *European Journal of Psychotraumatology, 4*.

Ensink, K., Chretien, S., Normandin, L., Begin, M., Daigle, D., & Fonagy, P. (2017). Pathological narcissism in adolescents: Relationships with childhood maltreatment and internalizing and externalizing difficulties. *Adolescent Psychiatry, 7*(4), 300-314.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160.

Hare, R. D. (2003). The psychopathy checklist-revised. Toronto: Multi-Health Systems.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York, NY, US: Guilford Press.

Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crystel, L. (2012). The antihero in popular culture: A life history theory of the Dark Triad. *Review of General Psychology, 16*(2), 192-199.

Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28-41.

Kaplan, H. S., & Gangestad, S. W. (2005). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology,* (pp. 68-95). New York, NY: Wiley.

Keller, P. S., Blincoe, S., Gilbert, L. R., Dewall, C. N., Haak, E. A., Widiger, T. (2014). Narcissism in romantic relationships: A dyadic perspective. *Journal of Social and Clinical Psychology, 33*(1), 25-50.

Láng, A., & Lénárd, K. (2015). The relation between memories of childhood psychological maltreatment and Machiavellianism. *Personality and Individual Differences, 77*, 81-85.

Lefever, S., Dal, M., & Matthiasdottir, A. (2007). Online data collection in academic research: Advantages and limitations. *British Journal of Education Technology, 38*(4), 574-582.

Maxwell, K., & Huprich, S. (2014). Retrospective reports of attachment disruptions, parental abuse and neglect mediate the relationship between pathological narcissism and self-esteem. *Personality and Mental Health, 8*(4), 290-305.

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36,* 556-563.

Peterson, J. L., & DeHart, T. (2014). In defense of self-love: An observational study on narcissists' negative behaviour during romantic relationship conflict. *Self and Identity, 13*(4), 477-490.

Radford, L., Corral, S., Bradley, C., Fisher, H., Bassett, C., Howat, N., & Collishaw, S. (2011). *Child abuse and neglect in the UK today*. London: NSPCC.

Raskin, R., & Terry, H. (1998). A principal-components analysis of the narcissistic personality-inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*(5), 890-902.

Rauthmann, J. F., & Will, T. (2011). Proposing a multidimensional Machiavellianism conceptualization. *Social Behavior and Personality, 39*(3), 391-403.

Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and Family, 62*(3), 640-654.

Stoltenborgh, M., Bakermans-Kranenburg, M. J., & van IJzdendoorn, M. H. (2013). The neglect of child neglect: A meta-analytic review of the prevalence of neglect. *Social Psychiatry and Psychiatric Epidemiology, 48,* 345-355.

Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment, 10*, 5-25.

Straus, M. A., & Savage, S. A. (2005). Neglectful behaviour by parents in the life history of university students in 17 countries and its relation to violence against dating partners. *Child Maltreatment, 10*(2), 124-135.

Straus, M. A. (2006). Cross-cultural reliability and validity of the Multidimensional Neglectful Behaviour Scale adult recall short form. *Child Abuse & Neglect, 30,* 1257-1279.

Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence and Victims, 19*(5), 507-520.

Straus, M. A., Kinard, E. M., & Williams, L. M. (1995). *The Multidimensional Neglectful Behaviour Scale, Form A: Adolescent and adult-recall version.* Durham: University of New Hampshire.

Swogger, M. T., Walsh, Z., Kosson, D. S., Cashman-Brown, S., & Caine, E. D. (2012). Self-reported childhood physical abuse and perpetration of intimate partner violence: The moderating role of psychopathic traits. *Criminal Justice Behaviour, 39*(7), 910-922.

Weiler, B. L., & Widom, C. S. (1996). Psychopathy and violent behaviour in abused and neglected young adults. *Criminal Behaviour and Mental Health, 6,* 253-271.

Widom, C. S., Czaja, S., & Dutton, M. A. (2014). Child abuse and neglect and intimate partner victimization and perpetration: A prospective investigation. *Child Abuse & Neglect, 38*(4), 650-663.

Appendix A – Participant Information and Consent Form

Influence of childhood experiences and personality on behaviour in romantic relationships

Participant Information and Consent

Thank you for your interest in taking part in this research. You have been invited to participate as you are 18-65 years old and have been in a romantic relationship**.** Please read through this information before agreeing to participate by ticking the "yes" box below.

What is the study about?

The study is looking at the influence of childhood experiences and personality traits on how we behave in intimate relationships.

If you consent to participate, you will be first asked to answer questions regarding your childhood experiences. Subsequently, you will answer questions about your personality. Lastly, you will have to answer questions regarding behaviours in a current or most recent romantic relationship. You can withdraw at any time without giving a reason. The study should take about 10 minutes.

How will your data be used?

Your answers will be completely anonymous, and we will use all reasonable endeavours to keep them confidential. Your participation in this study is entirely voluntary. You can withdraw at any point during the questionnaire for any reason, before submitting your answers by closing the browser. The data will only be uploaded on completion of the questionnaire by clicking the FINISH button. You are free to omit any question.

Your data will be stored in a password-protected file and may be used in academic publications. Your IP address **will not** be stored. All questions are **optional** if you prefer not to answer a particular question.

Who will have access to your data?

The University of Nottingham is the data controller for the purposes of the Data Protection.

We believe there are no known risks associated with this research study; however, if the study causes any distress, please contact organisations listed on the final page. 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 will remain anonymous.

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 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. e-mail: FMHS-ResearchEthics@nottingham.ac.uk

Lead Researcher: Katarzyna Dudka (katarzyna.dudka@nottingham.ac.uk)

Research Supervisor: Professor Kevin Browne (kevin.browne@nottingham.ac.uk)

Centre for Forensic and Family Psychology

Division of Psychiatry and Applied Psychology

School of Medicine

University of Nottingham

Floor B, Yang Fujia Buliding, Jubilee Campus

Wollaton Road, Nottingham, NG8 1BB

Ethics reference number: 239-1902

By agreeing to participate in this study, you indicate that:

- You are 18 years old and/or older
- You have been in a romantic relationship
- You understand that your answers will be anonymous.
- You confirm that you have read and understood the information above
- You understand that your participation is voluntary and that you can end the study at any time and withdraw your data by closing the browser.
- You give permission for the data from this study to be shared with other researchers provided that your anonymity is completely protected.

Do you consent to take part in the study?

YES – TO BE TAKEN TO THE SURVEY

NO – EXIT THE SURVEY

Appendix B – Questionnaires

- The Multidimensional Neglectful Behaviour Scale – Adult Recall (Straus et al., 1995)

For each of the following statements, decide how well it describes what it was like when you were living with your parents. "Parents" refer to the person or people who raised you. Please answer on a scale from 1 to 4 (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree).

1. My parents did not make sure I saw a doctor when I needed one
2. My parents did not care if I got into trouble in school
3. My parents were not interested in my activities or hobbies
4. My parents did not help me with homework
5. My parents were not interested in the kind of friends I had
6. My parents did not care if I did things like shoplifting
7. My parents did not keep me clean
8. My parents did not give me enough clothes to keep me warm
9. My parents did not help me when I had problems
10. My parents did not make sure I went to school
11. My parents did not help me to do my best
12. My parents helped me when I had trouble understanding something
13. My parents did not praise me
14. My parents did not read books to me
15. My parents wanted to know what I was doing when I was not at home
16. My parents did not tell me they loved me
17. My parents did not comfort me when I was upset

18. My parents did things with me just for fun
19. My parents kept the house clean
20. My parents did not give me enough to eat

- Short Dark Triad (Jones & Paulhus, 2014)

Please indicate how much each statement applies to you. Please answer on a scale from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree).

1. Most people can be manipulated.
2. Payback needs to be quick and nasty.
3. There are things you should hide from other people because they don't need to know.
4. You should wait for the right time to get back at people.
5. I like to get acquainted with important people.
6. I like to use clever manipulation to get my way.
7. I avoid dangerous situations.
8. People often say I'm out of control.
9. It's wise to keep track of information that you can use against people later.
10. I like to get the revenge on authorities.
11. Avoid direct conflict with others because they may be useful in the future.
12. I'll say anything to get what I want.
13. I enjoy having sex with people I hardly know.
14. Whatever it takes, you must get the important people on your side.
15. Many group activities tend to be dull without me.

16.I hate being the centre of attention.

17.People see me as a natural leader.

18.It's not wise to tell your secrets.

19.It's true that I can be mean to others.

20.I insist on getting the respect I deserve.

21.Make sure your plans benefit you, not others.

22.I know that I am special because everyone keeps telling me so.

23.I have never gotten into trouble with the law.

24.People who mess with me always regret it.

25.I feel embarrassed if someone compliments me.

26.I have been compared to famous people.

27.I am an average person.

- A Short Form of Revised Conflict Tactics Scale (Straus & Douglas, 2004)

Please answer the following questions with regard to your current or most recent romantic relationship. Please mark how many times you did each of these things and how many times your partner did them in the course of relationship. Please answer on a scale from 1 to 7 (1 = once, 2 = twice, 3 = 3-5 times, 4 = 6-10 times, 5 = 11-20 times 6 = more than 20 times, 7 = this has never happened).

1. I explained my side or suggested a compromise for a disagreement with my partner
2. My partner explained his or her side or suggested a compromise for a disagreement with me
3. I insulted or swore or shouted or yelled at me

4. My partner insulted or swore or shouted or yelled at me
5. I had a sprain, bruise, or small cut or felt pain the next day because of a fight with me
6. My partner had a sprain, bruise or small cut or felt pain the next day because of a fight with me
7. I showed respect for, or showed that I cared about my partner's feelings about an issue we disagreed on
8. My partner showed respect for, or showed that he or she cared about my feelings about an issue we disagreed on
9. I pushed, shoved, or slapped my partner
10. My partner shoved, or slapped me
11. I punched or kicked or beat-up my partner
12. My partner punched or kicked or beat-me-up
13. I destroyed something belonging to my partner or threatened to hit my partner
14. My partner destroyed something belonging to me or threatened to hit me
15. I went to see a doctor or needed to see a doctor because of a fight with my partner
16. My partner went to see a doctor or needed to see a doctor because of a fight with me
17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex
18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex
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)

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)

Appendix C – Debriefing Sheet

Influence of childhood experiences and personality on behaviour in romantic relationships

Debriefing Sheet

Thank you for taking part in the study! The general purpose of this research is to understand how personality affects the relationship between our childhood experiences and conflict behaviours in romantic relationships. Previous research confirmed that psychopathic traits might be the best predictor of future violence following adverse childhood experiences (Weiler & Widom, 1996). The current study turned to examine the influence of the Dark Triad traits consisting of psychopathy, narcissism and Machiavellianism (Paulhus & Williams, 2002) on the relationship between neglectful behaviour in childhood and partner violence in adulthood. These traits are often associated with antisocial and criminal behaviour, therefore it makes sense that people with higher levels of these traits will be more aggressive towards their romantic partner.

If you feel concerned or upset about any aspect of the study, please contact the lead researcher (katarzyna.dudka@nottingham.ac.uk). Alternatively, please refer to these helplines:

- **National Domestic Violence Helpline:** 0808 2000 247
- **Mind:** 0300 123 3393
- **Samaritans:** 116 123

Additional reading:

Weiler, B. L., & Widom, C. S. (1996). Psychopathy and violent behaviour in abused and neglected young adults. *Criminal Behaviour and Mental Health, 6,* 253-271.

Swogger, M. T., Walsh, Z., Kosson, D. S., Cashman-Brown, S., & Caine, E. D. (2012). Self-reported childhood physical abuse and perpetration of intimate partner violence: The moderating role of psychopathic traits. *Criminal Justice Behaviour, 39*(7), 910-922.

Appendix D – Study Advert

Childhood experiences, personality and behaviours in romantic relationships

Have you ever been in a romantic relationship?

If you have, you might be interested in taking part in my study. I am a forensic psychology master's student. My research is looking at the influence of childhood experiences and personality traits on how we behave in romantic relationships.

The study will take approximately 10 minutes and your answers will remain completely anonymous. You need to be 18 or over and need to either currently be, or previously have been, in a romantic relationship.

If you would like to participate in the study, please follow the link:

https://nottingham.onlinesurveys.ac.uk/childhood-experiences-and-personality

If you have any questions regarding the study, please contact the lead researcher: Katarzyna Dudka (**katarzyna.dudka@nottingham.ac.uk**)

Thank you for your time!

Application form

1 Title of Project:

The moderating role of antisocial traits on relationship between childhood neglect and intimate partner violence

Short title

Childhood neglect, DT and IPV

2 Names, Qualifications, Job Title, School/Divisional/Unit/Address, email of all Researchers:

Chief Academic/Supervisor:

Professor Kevin Browne**,** Ph.D., C.Psych (foren), C.Biol
Professor of Forensic Psychology & Child Health
Director of Centre for Forensic and Family Psychology
Division of Psychiatry and Applied Psychology

School of Medicine
University of Nottingham
Floor B, Yang Fujia Building, Jubilee Campus
Wollaton Road, Nottingham, NG8 1BB, UK
Email: kevin.browne@nottingham.ac.uk

Other key researchers/collaborators:

Katarzyna Dudka

MSc Forensic and Criminological Psychology

Division of Psychiatry and Applied Psychology

School of Medicine
University of Nottingham
Floor B, Yang Fujia Building, Jubilee Campus
Wollaton Road, Nottingham, NG8 1BB, UK

Email: katarzyna.dudka@nottingham.ac.uk

3 Type of Project:

Forensic Research Dissertation for MSc Forensic and Criminological Psychology

Online questionnaire-based study

4 Location of study: United Kingdom

Start date: March 2019

End date: May 2019

Length of study: 2 months

5 Description and number of participants to be studied:

Community sample (18-64 years of age) currently or recently in a romantic relationship. G*Power analysis recommended a sample of 103 participants to achieve 80% power for multiple linear regression model.

6 Summary of Experimental Protocol

1. Background

Although neglect is the most common form of childhood maltreatment (Radford et al., 2011), it is often insufficiently researched. It has been previously demonstrated that any form of maltreatment in childhood increases the risk for perpetration of violence in adulthood (Widom, Czaja & Dutton, 2014). Nonetheless, the mechanisms by which some victims of childhood neglect become perpetrators of violence in not clear. Dark Triad (DT) is a personality construct comprising of three traits (psychopathy, Machiavellianism and narcissism) often associated with antisocial and criminal behaviour.

The current study will explore the role of Dark Triad traits on the relationship between childhood neglect and intimate partner violence. Specifically, it is expected that participants with experiences of childhood neglect and higher levels of DT will be most likely to become perpetrators of domestic violence. Perhaps, these antisocial traits are developed as a result of harsh conditions in childhood.

2. Aims

- Are adults with a history of childhood neglect more likely to perpetrate intimate partner violence as an adult?
- Do higher levels of psychopathy, narcissism and Machiavellianism predict higher levels of perpetration of intimate partner violence for adults?
- Does Dark Triad act as a moderator for the perpetration of intimate partner violence for adults with history of childhood neglect?

3. Research Protocol and methods

The study intends to test these research questions in a community sample. Current research explores sensitive topics (adverse childhood experiences and

violence), therefore it is more beneficial to conduct study online. As a result, respondents will be able to remain completely anonymous. Participants will see an information page and will be asked to consent to participate in the study. They can continue only if they voluntary agreed to take part and understood what is expected of them. They complete demographic information such as age, gender, ethnicity, sexual orientation and relationship status for themselves and their current or most recent romantic partner. Subsequently, they complete three psychometric measures on childhood neglect, personality and intimate partner violence.

4. Measurable end points/statistical power of the study

This study is going to use an experimental research design to explore relationships between variables. Perpetration of violence (intimate partner violence) is a criterion variable. Furthermore, there is one predictor variable: total score on neglectful behaviour scale. There are three moderators: psychopathy, narcissism and Machiavellianism (Dark Triad). All analyses will be conducted in IBM SPSS Statistics. Pearson's correlation will be used to understand the relationship between childhood neglect, personality and intimate partner violence. Subsequently, to investigate the moderating role of Dark Triad traits, three multiple regression will be conducted using PROCESS (Hayes, 2013). Lastly, to interpret the interaction effects, a graph of simple slopes will be plotted.

5. Key references

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York, NY, US: Guilford Press.

Radford, L. et al. (2011). Child Abuse and Neglect in the United Kingdom Today. London: National Society for the Prevention of Cruelty to Children

Widom, C. S., Czaja S., Dutton M. A. (2014) Child abuse and neglect and intimate partner violence victimization and perpetration: a prospective investigation. *Child abuse & neglect, 38*(4), 650-663.

7 Lay Summary of project:

The project aims to explore the role of antisocial personality traits on the relationship between childhood neglect and domestic violence. Childhood neglect fails to be addressed as a separate problem even though it is significantly more common than other types of childhood maltreatment (Radford et al., 2011).

It has been confirmed that adults with adverse childhood experiences are more likely to be violent against their romantic partners (Widom, Czaja & Dutton, 2014). Although domestic violence is more common among victims of neglect, most of them do not abuse their romantic partners in adult life. This study proposes a

specific mechanism – personality – to explain these differences. Specifically, antisocial personality might be a risk factor in perpetration of violence.

If the study found that antisocial personality traits increase the risk for domestic violence it would significantly help in prevention and treatment of this problem.

8 Will written consent be obtained from all volunteers? No

Online consent will be obtained from all participants before they can take part in the study.

9 Will an inconvenience allowance be offered No

10 Funding No

11 Studies involving NHS Staff, organisations, Services

Does the study involve any premises, services staff who hold a contract with a hospital, Primary Healthcare or Social Care Trust? **No**

12 How will the subjects be chosen?

Participants will be chosen using convenience and snowball sampling due to their availability at the time of the study. They will be over 18years old, female or male, have currently or recently been in a romantic relationship and have access to the internet to complete the study. A copy of proposed advert is included as a separate attachment.

13 Describe how possible participants will be approached.

The study will be advertised through various social media websites. Furthermore, participants will be asked to pass the study further (snowball sampling) to increase total sample size. To ensure participants are not coerced, they can refuse to take part and withdraw at any time without giving a reason.

14 What sources of information will be included? i.e, pre-existing research database, student records, visits to other organisation, online resource

"Jisc Online surveys" has been used to create an online questionnaire. A web link for the study is:https://nottingham.onlinesurveys.ac.uk/childhood-experiences-and-personality

15 Whose permission will be sought to access this information (eg GP, consultant Head of Organisation)?

N/A

16 For interview/focus groups:

N/A

17 Data Storage and Data management

Personal and research data will be collected online. The data will be transferred and analysed in IBM SPSS Statistics. Information that might identify participants will not be collected to ensure anonymity.

18 What ethical problems do you foresee in this project?

One of the ethical problems of current research is sensitivity of the topic under investigation – adverse childhood experiences and domestic violence. As a result, some participants might feel upset as the study might remind them of some unpleasant and traumatic experiences. To reduce distress, telephone numbers of organisations helping victims of domestic violence will be included at the end of the study. Furthermore, as the study is conducted online, participants will be more likely to give honest responses due to anonymity. However, participants are more likely to disengage which might result in incomplete data set. Lastly, students and academic staff will be reassured that withdrawing participation will not affect their professional relationships and course of study.

19 What are the possible limitations of the proposed design of this study?

Study uses convenience and snowball sampling to collect participants, therefore it is likely that findings will be less generalisable to population. Furthermore, the study is more likely to include WEIRD participants (Western, Educated, Industrialised, Rich and Democratic; Henrich, Heine & Norenzayan, 2010).

DECLARATION: I will inform the Medical School Ethics Committee as soon as I hear the outcome of any application for funding for the proposed project and/or if there are any significant changes to this proposal. I have read the notes to the investigators and clearly understand my obligations as to the rights, welfare and dignity of the subjects to be studied, particularly with regard to the giving of information and the obtaining of consent.

Signature of Lead Investigator:  **Date: 14 Jan 2019**

Name and address for correspondence with applicant:

Katarzyna Dudka

e-mail: katarzyna.dudka@nottingham.ac.uk

Please submit your completed application to:

Administrative Support

Faculty of Medicine & Health Sciences Research Ethics Committee

c/o Faculty PVC Office

B Floor, Medical School (nr Bridge)

QMC Campus, Nottingham University Hospitals

Nottingham

NG7 2UH

e-mail: louise.sabir@nottingham.ac.uk

Ethics Approval Letter

University of Nottingham
UK | CHINA | MALAYSIA

Email: FMHS-ResearchEthics@nottingham.ac.uk

Faculty of Medicine & Health Sciences
Research Ethics Committee
c/o Faculty PVC Office
School of Medicine Education Centre
B Floor, Medical School
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham, NG7 2UH

22 March 2019

Katarzyna Dudka
MSc Student in Forensic & Criminology Psychology
Division of Psychiatry and Applied Psychology
School of Medicine
University of Nottingham
Floor B, Yang Fujia Building, Jubilee Campus
Wollaton Road
Nottingham
NG8 1BB

Dear Ms Dudka

Ethics Reference No: 239-1902 **– please always quote**	
Study Title: The The moderating role of antisocial traits on relationship between childhood neglect and intimate partner violence.	
Chief Investigator/Supervisor: Kevin Browne, Professor of Forensic Psychology & Child Health, Psychiatry and Applied Psychology.	
Lead Investigators/student: Katarzyna Dudka, MSc in Forensic & Criminology Psychology	
Proposed Start Date: 01/03/2019	**Proposed End Date:** 30/05/2019

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

- FMHS REC Application form and supporting documents version 1.0: 15/01/2019

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

Childhood Neglect and Intimate Partner Violence: The Mediating Role of the Dark Triad

Main Authors:

1) Katarzyna Dudka

Centre for Forensic and Family Psychology

Division of Psychiatry and Applied Psychology

School of Medicine

University of Nottingham

Yang Fujia Building, Jubilee Campus

Wollaton Road

Nottingham, NG8 1BB

United Kingdom

katarzyna.dudka@nottingham.ac.uk

2) Professor Kevin Browne *

Centre for Forensic and Family Psychology

Division of Psychiatry and Applied Psychology

School of Medicine

University of Nottingham

Room B25, Yang Fujia Building, Jubilee Campus

Wollaton Road

Nottingham, NG8 1BB

United Kingdom

kevin.browne@nottingham.ac.uk

* Corresponding Author: Professor Kevin Browne

ABSTRACT

Background: Childhood neglect is the most prevalent form of child maltreatment. The outcomes of being neglected as a child are often more serious than that of abuse. Nonetheless, research on this topic is currently limited.

Objective: The present study examined the mediational properties of the dark triad personality traits on the relationship between history of neglect and the perpetration of intimate partner violence.

Participants and Procedure: The data was collected from 465 participants, who were recruited online. Once participants agreed to take part in the study, they could complete the questionnaires. At the end of the study, they were presented with a debrief with phone numbers to domestic violence helplines.

Methods: Participants completed three questionnaires regarding (1) their experiences in childhood, (2) their personality characteristics and (3) behaviours in a romantic relationship.

Results: It has been found that neglect did not significantly predict if a person perpetrates intimate partner violence. On the other hand, antisocial traits were a significant predictor of violent behaviour in romantic relationships for females but not for males. The mediation analyses demonstrated that there is no direct effect between neglect and perpetration of intimate partner violence, but there is an indirect effect for women only.

Conclusions: The findings indicate that antisocial traits are an important factor for establishing if individuals neglected in childhood perpetrate violence in their intimate relationship. Therefore, it is important that future research takes this into consideration to find effective intervention programmes to reduce the rate of re-offending.

Keywords: Childhood neglect, maltreatment, intimate partner violence and the dark triad.

1. Introduction

Childhood neglect can be defined as a failure to provide appropriate care to a child. This can include negligence of their medical, emotional and physical needs (Radford et al., 2011). It has been found that childhood neglect is more common than childhood abuse - which can comprise of physical, sexual or psychological abuse - with around 16 percent of young adults reporting some sort of neglect in their childhood (Radford et al., 2011). Furthermore, neglect is the most common form of child maltreatment (Radford et al., 2011). Nonetheless, researchers often ignore this topic and focus on more extreme cases of childhood trauma (Chapple, Tyler & Bersani, 2005). In fact, Stoltenborgh, Bakermans-Kranenburg and van IJzdendoorn (2013) demonstrated that a thorough search brought up only 29 studies on childhood neglect that could be included in their meta-analysis. On the other hand, there were over 200 publications on childhood sexual abuse alone (Stoltenborgh, van IJzendoorn, Euser & Bakermans-Kranenburg, 2011). Childhood neglect is a common phenomenon, therefore more studies should focus on its implications on adult life.

1.1. Impact of childhood neglect on the perpetration of intimate partner violence

Intimate partner violence comprises of abusive behaviours such as physical, sexual or emotional abuse towards a romantic partner (World Health Organisation, 2012). It is established that women are most likely to be victimised by their current or ex-partner. On the other hand, men are more likely to be assaulted by a stranger or an acquaintance (World Health Organisation, 2012). According to Garcia-Moreno, Jansen, Ellsberg, Heirse & Watts (2006), the lifetime prevalence of experiencing physical or sexual abuse from an intimate partner is alarmingly high and can range from 15 to 71 percent depending on the country in question. The consequences of intimate partner violence are an important public health problem, as

victims often experience deterioration in mental health and serious physical injuries. Therefore, it is important to explore the risk factors leading to the perpetration of intimate partner violence.

In a prospective longitudinal study, Widom, Czaja and Dutton (2014) reported outcomes in relation to intimate partner violence for individuals with histories of neglect and physical and sexual abuse. Participants were contacted after 30 years from the report of abuse or neglect. Although it has been demonstrated that there were no significant differences in the likelihood of perpetrating intimate partner violence by the experimental group as compared to control group, there were some significant differences in relation to the severity of injuries. In fact, only individuals with documented histories of neglect but not abuse reported causing significantly more injuries to their intimate partner. However, participants consisted of individuals whose abuse and neglect were severe enough to be included in the official court reports. Therefore, most likely representing an extreme sample of individuals. Nonetheless, these findings demonstrate that neglect needs to be further inspected.

Fang and Corso (2008) conducted a longitudinal study to explore relationships between different forms of child maltreatment and perpetration of intimate partner violence in adulthood. Furthermore, they included youth violence perpetration – defined as acts of violence in adolescence - as an intervening variable. It has been demonstrated that there are significant gender differences regarding the outcomes of child maltreatment and youth violence on the perpetration of intimate partner violence. For males, neglect in childhood does not have a significant relationship with partner abuse perpetration. However, this relationship becomes significant through the inclusion of youth violence. On the other hand, neglect for females predicts the perpetration of violence in intimate relationships directly and indirectly through youth violence. Therefore, these findings support antisocial behaviour trait theory (Simons, Wu, & Conger, 1995), in that being neglected in childhood increases the propensity for violent behaviour in adolescence, which in turn increases violent behaviours with intimate partners in

adulthood. Nonetheless, the study has some limitations that need to be considered. Most importantly, participants report incidents of child maltreatment retrospectively, therefore permitting for recall bias, which limits the generalisability of these findings. Furthermore, the study relies on self-report, which can increase measurement error as participants might not want to disclose the truth. Specifically, in relation to the perpetration of partner violence, as it is not a socially desirable behaviour.

Another study investigated the influence of neglect on the perpetration of dating violence in a sample of students. In their research, Straus and Savage (2005) included 33 sites to establish whether the effect is present across different cultures. As expected, a relationship between neglectful behaviour and violence against intimate partner has been demonstrated. Furthermore, the strength of the association varied depending on the prevalence of neglectful practices across different sites. In countries where domestic violence is a more socially acceptable construct, the relationship between neglect and intimate partner violence was proportionately greater. Nevertheless, the data is retrospective and might not accurately represent reality, which needs to be taken into account when drawing conclusions. This study indicates the importance of preventative measures in relation to neglectful parenting practices.

1.2. Childhood neglect and development of antisocial personality

The consequences of childhood neglect might present themselves before adulthood, therefore enabling clinicians to target these individuals and offer interventions early on. In fact, one of the plausible explanations of the development of antisocial personality is childhood trauma. According to Life History Theory (LTH; Kaplan & Gangestad, 2005), adults might develop maladaptive traits to counteract challenges they encountered in childhood and adolescence (Brumbach, Figueredo & Ellis, 2009). Fast strategies prioritise antisocial behaviour and immediate gain due to the harsh and unpredictable environment. If children learn

that their parents are unreliable and do not consistently care for them, they might adopt these approaches in adult life.

Dark triad traits are a popular topic in psychological research and comprise of three antisocial constructs: psychopathy, narcissism and Machiavellianism (Paulhus & Williams, 2002). Psychopathy can be described as a callous and unempathetic disposition. These individuals rarely care for anyone else and might often appear impulsive in their actions (Hare, 2003). For example, they might be unable to stay in a long-term relationship as a result of their self-centeredness. It has been found that there is a significant relationship between childhood neglect and psychopathic traits. In a longitudinal study, Weiler and Widom (1996) investigated outcomes for individuals who were neglected and/or abused in childhood. It has been demonstrated that victims of childhood trauma, had more psychopathic traits. In addition, psychopathy predicted violent behaviour which was obtained through official records and self-report measures. Therefore, psychopathy mediated the relationship between childhood maltreatment and violence. One of the limitations of this research paper is that participants were not randomly assigned to groups and were selected based on official reports. Therefore, making it more likely that extreme cases of neglect and abuse were studied.

The second personality trait included in the dark triad of personality is narcissism. It characterises individuals who are self-centred and disregard others due to their feelings of grandiose. They often have a fragile self-esteem, therefore if criticised or challenged they might become hostile towards others (Raskin & Terry, 1988). Maxwell and Huprich (2014) explored whether adverse childhood experiences – which can be defined as traumatic events in childhood - predict self-esteem and narcissism scores. Participants' childhood experiences had a negative relationship with self-esteem, with more adverse events corresponding to lower self-esteem. Furthermore, it has been found that emotional neglect and emotional abuse had the greatest number of correlations with narcissism as compared to other experiences. This study

has some important implications for future research. However, participants consisted of undergraduate students and the findings might not generalise to the community sample. Another study found a similar relationship in a sample of adolescents, in that grandiose narcissism correlates with childhood maltreatment, but only for girls (Ensink et al., 2017). Furthermore, narcissism appeared to mediate the association between childhood trauma and internalising (depression, anxiety, social isolation) and externalising difficulties (criminal behaviour, rule-breaking). According to Fonagy and Target's (2006) developmental model, neglectful and abusive practices might result in children developing narcissistic traits, as a consequence of inadequate exposure to other people's perspectives. Therefore, they might consider their own perspective as the only reality.

The third composite of the dark triad – Machiavellianism – is often related to the manipulation of others for personal benefit (Rauthmann & Will, 2011). In a recent study, Lang and Lenard (2015) explored the relationship between Machiavellianism and childhood maltreatment. It has been demonstrated that being neglected but not physically or sexually abused as a child was significantly associated with Machiavellian personality. According to the Life History Theory (Kaplan & Gangsted, 2005), it can be considered as an adaptive response to the harsh environment in which individuals learn exploitative behaviours to satisfy their needs. Although potentially beneficial, it might lead to retaliation from others, which further perpetuates the cycle of abuse.

1.3. The mediating role of antisocial personality traits

After experiencing neglect in childhood, it is often other factors that influence whether a person becomes a perpetrator of intimate partner violence. For example, it has been demonstrated that being a victim of neglectful parenting increases the chances of perpetrating dating violence through youth violence (Fang & Corso, 2007; Fang & Corso, 2008). Therefore,

it is important to explore other mechanisms by which victims of neglect become perpetrators. Antisocial personality traits have been proposed as one of the factors responsible for mediating this relationship. Swogger, Walsh, Kosson, Cashman-Brown and Caine (2012) demonstrated that psychopathy had an impact on the strength of the relationship between physical abuse in childhood and partner violence. Therefore, abused individuals with higher levels of psychopathic traits were most likely to perpetrate violence in romantic relationships. Nonetheless, the sample consisted exclusively of men, thus the results of this study do not confirm these relationships in females. Furthermore, the study is retrospective and relies on self-report measures, therefore might not reflect the real data accurately. It would be beneficial to explore whether similar findings can be replicated with childhood neglect rather than physical abuse.

White and Widom (2003) conducted a prospective study to establish whether childhood trauma predicts the perpetration of intimate partner violence. Furthermore, the mediators – hostility, early aggressive behaviour, problem drinking and antisocial personality disorder – were examined in relation to this association. It has been demonstrated that childhood victimisation significantly predicts the perpetration of intimate partner violence. Regarding the processes that might account for this relationship, antisocial personality has been proposed to be a significant mediator, for both men and women. Nonetheless, there was one serious methodological problem relating to the measure of intimate partner violence. White and Widom (2003) used only three questions to explore the concept, which can be inadequate in capturing more complex and extreme forms of dating violence. Furthermore, the study relies on self-report, therefore it is impossible to confirm whether participants are telling the truth. In spite of these limitations, these studies indicate that personality is an important factor in the perpetration of intimate partner violence.

1.4. The current study

Against the above background, the current study aims to investigate the relationship between childhood neglect, dark triad of personality traits and perpetration of intimate partner violence in a community sample. Thus, it will explore if neglect predisposes individuals to become a perpetrator in adulthood and whether the dark triad traits in neglected individuals mediate this association. Higher levels of the antisocial traits should predispose neglected individuals to perpetrate violent behaviours in their romantic relationships. The study will examine both direct and indirect effects of childhood neglect on intimate partner violence.

1.5. Research questions

There are three main research questions that the study aims to answer:

1) Are adults with a history of neglect more likely to perpetrate violence in romantic relationships?
2) Do higher scores on the dark triad predict perpetration of intimate partner violence?
3) Does the score on the dark triad mediate the relationship between a history of childhood neglect and perpetration of intimate partner violence?

2. Method

2.1. Design

The current study employed a quantitative research design. There were two predictor variables, one categorical (neglect vs no neglect) and one continuous variable (participants' mean score on the dark triad scale). Furthermore, there was one categorical outcome variable (perpetration of intimate partner violence vs no perpetration).

2.2. Ethical considerations

The study received a favourable opinion from the University of Nottingham Ethics Committee with the following ethics reference number: 239-1902. It was designed and

distributed online using Jisc Online Surveys software. Participants' anonymity was protected through measures implemented on the site such as not being able to see respondents' IP address or location. Furthermore, participants provided demographic information that is insufficient to identify them. Nonetheless, the use of online methods might have increased the disengagement rate (Lefever & Matthiasdottir, 2007). Before they could begin the study, they were informed about how their data was going to be used and who would have access to it. Subsequently, they could consent to take part in the study, if they confirmed they read the information page. If participants did not give their consent, they would be moved to the last page without being able to access the survey. As the study explored sensitive topics such as child neglect and intimate partner violence, participants were not forced to respond to all questions to ensure they can omit ones that made them feel uncomfortable. Once they finished completing the psychometrics, they could see the debrief which included telephone numbers to mental health helplines.

2.3. Participants

A priori power calculation (G*power; Faul, Erdfelder, Buchner & Lang, 2009) recommended a sample size of 138 participants to achieve 95% power for multiple linear regression model with 5 predictor variables (dark triad, childhood neglect (neglect vs no neglect), dark triad x neglect, dark triad x no neglect). In total, 465 participants completed the online questionnaire. They were obtained through opportunity sampling as they were accessible at the time of the study. Participants were recruited on social media platforms such as Facebook and Reddit. There were 407 females (87.5%) and 58 males (12.5%). Their ages ranged from 18 to 89 (M = 28.6, SD = 9.1). Subsequently, three cases were removed from the analysis to reduce the age range to only include participants that were 18 to 60 years old (M = 28.3, SD = 8.1). Furthermore, one participant omitted questions from one entire psychometric scale, therefore their answers were removed using listwise deletion method. These data

transformations resulted in a final sample size of 461 participants. Therefore, data from 403 females (87.4%) and 58 males (12.6%) were included in the analysis. Regarding sexuality, 375 participants (81.2%) were heterosexual, with the remainder 86 participants (18.6%) non-heterosexual (either bisexual or homosexual). There were 396 participants (85.7%) that identified as White and 65 participants (14.1%) that acknowledged a different ethnic group (Asian, Black or Mixed). Lastly, 385 participants (83.3%) reported being in a relationship or married, with the remaining 77 participants (16.7%) being either single or divorced.

2.4. Procedure

Before participants could proceed with the study, they had to read the consent form and agree to be over 18 years old, confirm that they are or have been in a romantic relationship, understand that their answers are anonymous, confirm that they have read and understood the information page, understand that their participation is voluntary and they can withdraw at any time without consequences and give permission for their data to be shared with other researchers. Once they agreed to these conditions, they were asked whether they consent to take part. If they chose "yes" they could begin to complete the demographic questions. However, if they selected "no", they were moved to the last page and as a result, could not access the survey (Appendix 1).

On the demographic information page, participants answered questions regarding their age, gender, sexuality, ethnicity and relationship status. Then, they answered identical questions regarding their partner. Once they completed this section, they were presented with three psychometric measures, all located on different pages. First, they were asked 20 questions about their experiences of neglect in childhood. Subsequently, there were 27 questions regarding their personality traits. Lastly, they had to answer 20 questions about their current or most recent romantic relationship. Once, they completed the psychometric scales (Appendix

2), they could see the debrief explaining the purpose of the study (Appendix 3). If participants got distressed as a result of the experiment, they were encouraged to contact the researcher or helplines, for which the phone numbers were included on the last page. Lastly, participants were provided with references for additional reading.

2.5. Measures

Childhood neglect: The Multidimensional Neglectful Behaviour Scale – Adult Recall (MNBS-A; Straus, Kinard & Williams, 1995) consists of 20 items measuring four domains of childhood neglect: supervisory, physical, emotional and cognitive needs. The instrument focuses exclusively on child neglect rather than childhood trauma. The questions relate to behaviours expressed by their parents or primary caregivers during their childhood (e.g. "My parents did not care if I got in trouble in school"). It has been proved to be a reliable and sensitive measure of childhood neglect in a student sample (Straus et al., 1995). Furthermore, the scale was cross validated in 17 countries (Straus, 2006). The measure has a Cronbach alpha of $\alpha = .88$, therefore demonstrating good internal consistency.

Dark Triad: Short Dark Triad (SD3; Jones & Paulhus, 2014) consists of 27 items measuring three antisocial personality constructs: psychopathy, narcissism and Machiavellianism. Psychopathy refers to callousness, impulsivity and thrill-seeking (Hare, 2003). Machiavellianism characterises manipulative individuals who deceive others for their own benefit (Rauthmann & Will, 2011). Lastly, narcissism describes fragile self-esteem and feelings of grandiose (Raskin & Terry, 1988). The Short Dark Triad (Jones & Paulhus, 2014) has been empirically supported and is a reliable measure of the dark triad traits. Furthermore, the scale is reliable with Cronbach alpha at $\alpha = .84$. These are examples of questions used: "I like to get revenge on authorities" or "I have been compared to famous people".

Intimate Partner Violence: A Short Form of Revised Conflict Tactics Scale (CTS2S; Straus & Douglas, 2004) consists of 20 items and is a self-report measure of experiences of domestic violence. It measures four tactics employed during conflicts: assault, injury, sexual coercion and negotiation – both by the respondent and the partner. A short form has good construct validity as compared to the full version but is not as sensitive in that it might produce more false negatives. Furthermore, concurrent validity between the two measures is high, indicating that the short version reflects the full version. There are a number of techniques available to score the scales, but for purposes of this research, a "prevalence" measure has been used. If an incident happened at least once during the relationship, participants were assigned a score of 1. However, if the incident never happened, then they were assigned a score of 0 for this item. In the current study, we were interested in the perpetration of intimate partner violence rather than victimisation or negotiation techniques. Therefore, three tactics (assault, injury and sexual coercion) used by respondents were taken into consideration in the analysis. It resulted in 8 items being relevant for the measurement of perpetration. The subscale has Cronbach alpha of $\alpha = .84$ and has good internal consistency, therefore it can be assumed to be a reliable measure.

3. Results

The data from 461 participants were included in the statistical analysis. In relation to the main predictor variable (neglect), people were categorised into neglect or no neglect group based on the number of incidents they reported in the questionnaire. If they reported four or more incidents (scored in the 75^{th} percentile) they were subsequently classified as being neglected as a child.

3.1. Characteristics of adults neglected and not neglected in childhood

It has been found that out of the 461 participants, 329 (71.4%) were not neglected and 132 (28.6%) were neglected in their childhood. To test whether being neglected in childhood is

associated with the perpetration of violence in intimate relationships, a Chi-Square Test has been conducted as both variables were categorical. Pearson Chi-Square Test has confirmed that neglect is not associated with intimate partner violence (χ^2 = .243, p = .622), therefore demonstrating that being neglected in childhood does not increase the likelihood of becoming a perpetrator.

Secondly, it was explored whether neglect was associated with the development of antisocial personality traits. The data was tested for normality, and it has been found that it is not normally distributed. Therefore, a non-parametric Mann-Whitney U test has been conducted. It has been found that participants with a history of neglect scored significantly higher on the Dark Triad traits as compared to the no neglect group (U= 18676, p = .019).

3.2. Personality traits of adults perpetrating intimate partner violence

Participants were separated into two groups according to how frequently they exhibited violent behaviour towards their intimate partner. There were 346 participants (75.1%), who reported no antisocial behaviours, and 115 (24.9%) who reported perpetrating violence at least once during the relationship. On average the no perpetration group reported significantly less incidents (M = .55, SD = .498) as compared to participants that were abusive towards their intimate partners (M = 3.53, SD = 2.162).

Regarding the personality traits, a non-parametric Mann-Whitney U test has been performed as the normality assumption has not been met. As expected, the perpetrators of intimate partner violence had significantly more antisocial personality traits as compared to the non-perpetrators (U = 16263, p = .003). Therefore, demonstrating a strong association between personality and intimate partner violence.

3.3.Mediation analysis

To answer the final question, a binary logistic regression has been conducted. In the first block, neglect was entered as a predictor variable. It has been found that the model is not

significant, (χ^2 = .241, p = .623). Subsequently, personality and neglect were entered on the second step. The inclusion of the dark triad resulted in the model becoming significant (χ^2 = 6.955, p = .008). The effects of personality traits and neglect on the perpetration of intimate partner violence were explored and reported in Table 1. To ensure that multicollinearity is not a concern, a variance inflation factor and tolerance have been measured. Both scores indicate that collinearity assumption has been met (Tolerance = .989, VIF = 1.011). Furthermore, it is important to test whether there is a linear relationship between continuous independent variables and log of the outcome variable in our study. As the interaction between the dark triad and its natural logarithm was not significant, the linearity assumption has been met.

Variables	**B [S.E]**	**95% Confidence Interval for Odds Ratio**		
		Lower	**Odds**	**Upper**
Neglect	.053 [-.454, .518]	.661	1.054	1.682
Dark Triad	.616* [.180, 1.089]	1.169	1.851	2.931

Table 1. Coefficients (B) of the model and their standard errors exploring whether neglect and the dark triad predict perpetration of intimate partner violence for the entire sample. Bootstrap confidence intervals are based on 5000 samples. * p < .01

To establish whether the dark triad traits act as a mediator, the variables were entered into the PROCESS macro (Hayes, 2013). It was found that neglect significantly predicted the mediator - antisocial personality traits - with higher rates of neglect predicting more dark triad traits (b = .105, t = 2.22, p = .027). Further analyses established that dark triad significantly

predicted perpetration of intimate partner violence (*b* = .616, *p* = .009). However, neglect did not predict perpetration of violence (*b* = .053, *p* = .824). Lastly, it has been found that there was a significant indirect effect of neglect on the perpetration of intimate partner violence through the dark triad, *b* = .065, BCa CI [.004, .159]. Therefore, the relationship between neglect and perpetration of intimate partner violence can be explained through the inclusion of the dark triad. To illustrate the mediation pathway, the results are presented in Figure 1.

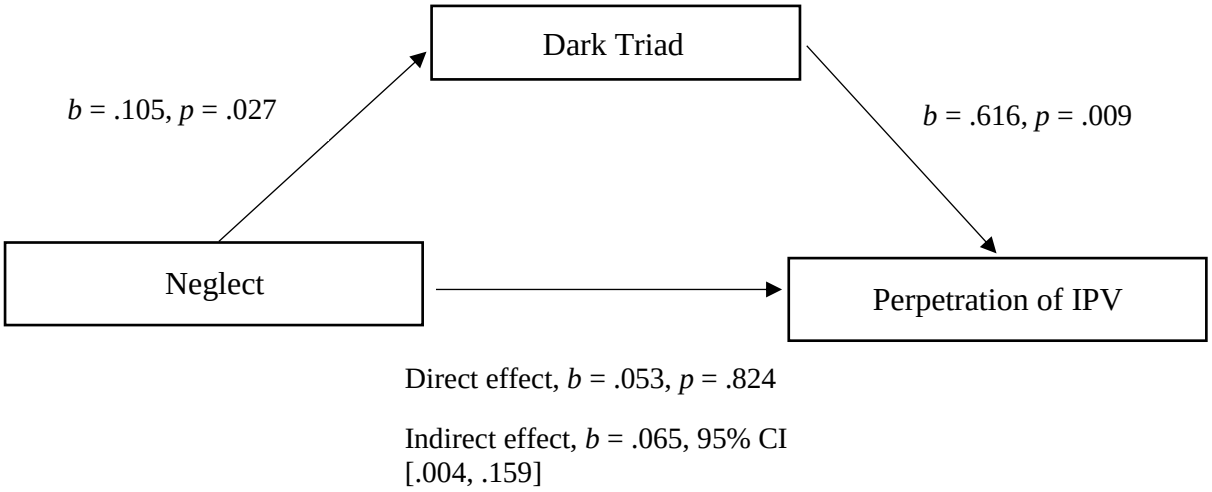


Figure 1. Mediation pathway with neglect as predictor, dark triad as a mediator and perpetration of intimate partner violence as an outcome variable for the entire sample.

As history of neglect did not directly predict perpetration of intimate partner violence for the entire sample, a supplementary analysis on the role of gender has been conducted to establish if there are any differences among males and females for the mediational properties of the dark triad personality traits. It was found that neglect did not significantly predict the development of the dark triad traits for males (*b* = -.028, *t* = -.223, *p* = .824) but did for females (*b* = .133, *t* = 2.692, *p* = .007). Furthermore, neglect did not predict perpetration of intimate partner violence for men (*b* = .103, *p* = .893) and for women (*b* = .029, *p* = .909). However, the mediator – antisocial personality traits – did not predict perpetration of intimate partner

violence for men (*b* = 1.223, *p* = .126) but did predict it for women (*b*= .647, *p* = .011). Lastly, the indirect effect of neglect on perpetration of intimate partner violence was only significant for women (*b* = .086, BCa CI [.011, .199] and not for men (*b* = -.035, BCa CI [-.471, .402]. Therefore, the dark triad did not act as a mediator nor was it a significant predictor of the perpetration of intimate partner violence for men, while the opposite is true for women. The mediation pathways are presented for men and women in Figure 2 and 3 respectively.

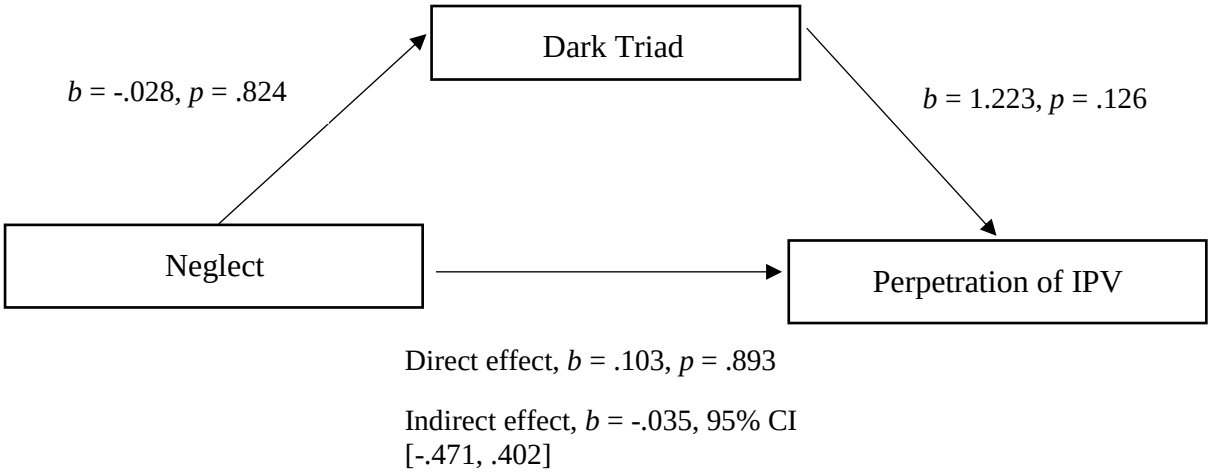


Figure 2. Mediation pathway with neglect as predictor, dark triad as a mediator and perpetration of intimate partner violence as an outcome variable for men only.

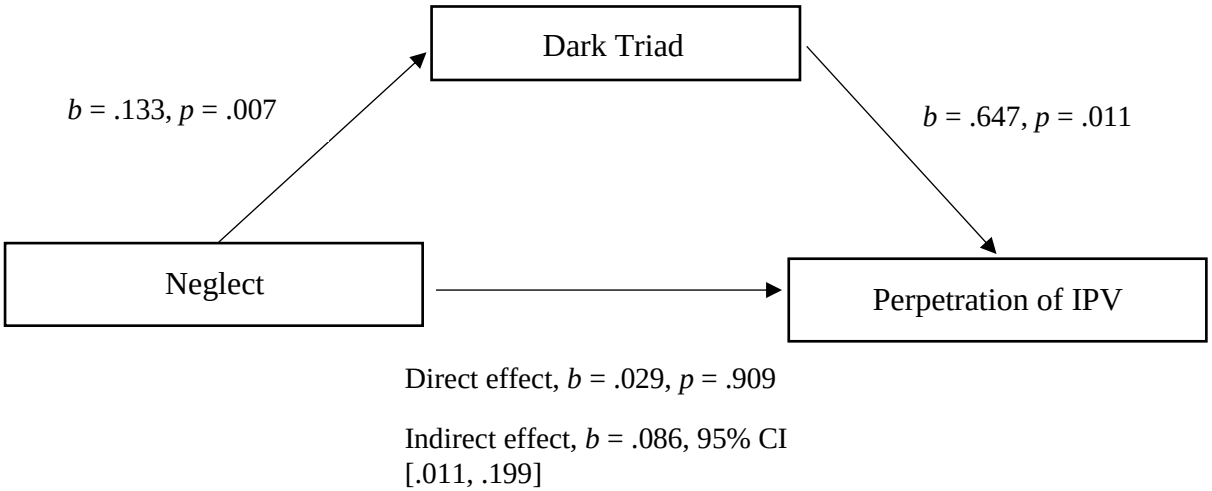


Figure 3. Mediation pathway with neglect as predictor, dark triad as a mediator and perpetration of intimate partner violence as an outcome variable for women only.

4. Discussion

The present study examined the mediating role of the dark triad traits on the relationship between experiences of childhood neglect and later perpetration of intimate partner violence in a community sample. In our study, a history of neglect is not a significant predictor of becoming a perpetrator of violence in a romantic relationship. Furthermore, the score on the dark triad is a significantly stronger predictor of perpetration of intimate partner violence and is significantly associated with experiences of neglect in childhood. Regarding the mediation analysis, it has been found that the indirect effect of being neglected in childhood on the perpetration of intimate partner violence is significant while the direct effect is not. However, these findings are true for females only, as no significant effects were found for males.

Our findings on how the dark triad mediates the relationship between neglect and perpetration of intimate partner violence add to the growing body of research on intergenerational transmission of violence. On the contrary to prior research, the study did not find a significant relationship between experiences of neglect and violent behaviour in romantic relationships. It might be a result of a different sample used in the current study. Straus and Savage (2005) indicated that they only recruited undergraduate students for their experiment. Therefore, this might account for the differences in findings between the two studies. Furthermore, Millett, Kohl, Jonson-Reid, Drake and Petra (2013) demonstrated that adverse childhood experiences did not directly or indirectly (through violent delinquency) predict perpetration of intimate partner violence for women. However, a significant effect has been found for men. The current study partially confirmed these results in relation to females, but the opposite has been found for males. This can be due to the mediator used in their research, as violent delinquency might be capturing more extreme concepts of antisocial behaviour as compared to the dark triad of personality traits. In line with Widom et al. (2014), our study found that there are no significant differences between the non-neglected and neglected

participants in terms of a number of incidents perpetrated towards an intimate partner. Therefore, it appears that the history of neglect is insufficient to differentiate perpetrators from non-perpetrators of intimate partner violence. It appears that the inclusion of other factors might be crucial in explaining this relationship.

The present study distinguished the dark triad traits as a potential mechanism responsible for the relationship between a history of neglect and perpetration of violence in intimate relationships. It has been found that antisocial personality predicts the perpetration of intimate partner violence in adulthood for females. These findings are similar to the ones reported by Iyican and Babcock (2018), who examined the relationship between psychopathy and aggressive behaviours in intimate relationships. They concluded that both men and women with higher levels of psychopathic traits are significantly more likely to perpetrate violence towards their partners. Similar results were reported for narcissism (Peterson & DeHart, 2014) as higher levels of narcissism predicted more violent behaviours in intimate relationships such as shouting or insulting their partner during a conflict. Furthermore, there was a significant positive relationship between controlling and psychologically abusive behaviours and Machiavellianism (Brewer & Abell, 2017). Therefore, it appears that the current study confirmed findings from prior research with respect to the dark triad traits and perpetration of intimate partner violence for females.

Notably, there was no direct effect of neglect on the perpetration of intimate partner violence for both males and females. However, the indirect effect of experiences of neglectful parenting on perpetration of violence in a romantic relationship through the dark triad traits was significant for females only. The insignificant results for men might be a consequence of insufficient sample as only twelve males were categorised as perpetrators of dating violence. Furthermore, it is plausible that men underreported perpetrating partner violence as a result of fear of social stigmatisation (Gover, Kaukinen & Fox, 2008). Thus, it can be concluded that

the dark triad does not mediate the relationship as it is not significant in the first place. However, there is an indirect effect for females that needs to be further inspected. In line with the current study, previous research demonstrated that there is an indirect effect of neglect on perpetration of violence in romantic relationships (Fang & Corso, 2008) which supports a developmental perspective (Simons et al., 1995). This theoretical perspective fits with our current findings for a female sample. According to this approach, children do not learn to behave in an abusive manner purely as a result of experiences of neglect, but rather as a consequence of the development of antisocial tendencies. On the other hand, our findings for males do not fit with this model, demonstrating that neither history of neglect nor antisocial personality predict perpetration of intimate partner violence. However, as the sample size for men is small, the results for males should be considered tentative.

Some practical implications can be concluded from the present study. The finding that personality affects the relationship between neglect in childhood and perpetration of intimate partner violence is crucial for the development of prevention programmes. Therefore, clinicians should focus specifically on neglected children with higher levels of the dark triad traits, as they have a significantly greater chance to perpetrate violent behaviours in adult life. Furthermore, these findings indicate that current intervention methods might not be effective. Juodis, Starzomski, Porter and Woodworth (2014) proposed that psychopathic offenders might be resistant to treatment. In fact, Scott, King, McGinn and Hosseini (2011) recommended allocating these individuals into pre-treatment programmes based on motivational interviewing techniques to reduce the dropout rates. It has been found that attendance on the brief intervention programme increased the probability of completing the standard treatment.

4.1. Study limitations

There are a few limitations to our study that need to be considered. First, there was a large gender imbalance in the study. The majority of participants were women and therefore, it is difficult to generalise our findings to men. It might be due to the fact that women are more likely to volunteer and participate in research, especially as it was advertised online (Sax, Gilmartin & Bryant, 2003). Second, the study relies on retrospective and self-report data. Therefore, participants are likely to not be accurate in their estimations regarding past incidents of neglectful behaviour. Furthermore, as the study investigated sensitive topics such as perpetration of intimate partner violence, participants are more likely to lie to present themselves in a more favourable manner. Third, there are some concerns regarding the measures used in the study. The Short Form of Revised Conflict Tactics Scale (Straus & Douglas, 2004) used to measure intimate partner violence requires participants to establish the number of times an incident happened. It might be difficult to accurately estimate the number of times, especially as the reference point has been set to "during the course of relationship". It would be beneficial to use a frequency scale with items such as never, rarely, sometimes, often and very frequently instead. Furthermore, it is important to establish the duration of the relationship prior to participants completing this questionnaire to acquire a reliable dataset.

4.2. Future directions

In the future, research should replicate this study with a more balanced sample, to determine if there are any gender differences between men and women. It would be beneficial to explore whether the inclusion of more males makes a history of neglect a significant predictor of perpetration of intimate partner violence. Furthermore, the study emphasises the importance of antisocial traits in practice. They should be considered when working with perpetrators of intimate partner violence. In addition, the intervention programmes should be

specifically adapted for these individuals to ensure a reduction in re-offending, as it has been demonstrated that they are often resistant to treatment (Juodis et al., 2014). Lastly, conducting a longitudinal study would be valuable to establish the direction of the effects found in the current study. At the moment, it is speculated that antisocial traits increase the chance of perpetrating violence in romantic relationships. However, the effect might occur in the opposite direction, thus it would be advantageous to explore these through a higher quality study.

4.3. Conclusions

To summarise, this study adds to the growing body of research on intergenerational transmission of violence and is the first to examine the mediating effect of the dark triad traits on the relationship between childhood neglect and perpetration of intimate partner violence. It has been confirmed that a history of childhood neglect does not predict whether a person will become a perpetrator of intimate partner violence. However, another variable - the dark triad - has been established to be a significant predictor of violent behaviours in a romantic relationship for females. Even though, the direct effect of neglect on intimate partner violence is non-significant, the indirect effect (through antisocial traits) has reached significance, but for women only. On the other hand, there were no significant effects for men. Therefore, it can be concluded that neglected children that have these antisocial tendencies are significantly more likely to perpetrate violence towards their intimate partners. In the future, the study should be replicated with a more gender-balanced sample.

References

Brewer, G., & Abell, L. (2017). Machiavellianism, relationship satisfaction, and romantic relationship quality. *Europe's Journal of Psychology, 13*(3), 491-502.

Brumbach, B. H., Figueredo, A. J., & Ellis, B. J. (2009). Effects of harsh and unpredictable environments in adolescence on development of life history strategies. *Human Nature, 20*(1), 25-51.

Capaldi, D. M., & Clark, S. (1998). Prospective family predictors of aggression toward female partners for at-risk young men. *Developmental Psychology, 34*(6), 1175-1188.

Chapple, C. L., Tyler, K., & Bersani, B. E. (2005). Child neglect and adolescent violence: Examining the effects of self-control and peer rejection. *Violence and Victims, 20*(1), 39-53.

Ensink, K., Chretien, S., Normandin, L., Begin, M., Daigle, D., & Fonagy, P. (2017). Pathological narcissism in adolescents: Relationships with childhood maltreatment and internalizing and externalizing difficulties. *Adolescent Psychiatry, 7*(4), 300-314.

Fang, X., & Corso, P. S. (2007). Child maltreatment, youth violence, and intimate partner violence: Developmental relationships. *American Journal of Preventative Medicine, 33*(4), 281-290.

Fang, X., & Corso, P. S. (2008). Gender differences in the connections between violence experiences as a child and perpetration of intimate partner violence in young adulthood. *Journal of Family Violence, 23*(5), 303-313.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160.

Fonagy, P., & Target, M. (2006). The mentalization-focused approach to self-pathology. *Journal of Personality Disorders, 20*(6), 544-576.

Garcia-Moreno, C., Jansen, H. A., Ellsberg, M., Heise, L., & Watts, C. H. (2006). Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. *The Lancet, 368*(9543), 1260-1269.

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

Hare, R. D. (2003). The psychopathy checklist-revised. Toronto: Multi-Health Systems.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York, NY, US: Guilford Press.

Iyican, S., & Babcock, J. C. (2018). The relation between the two factors of psychopathy and intimate partner aggression. *Journal of Aggression, Maltreatment & Trauma, 27*(2), 119-130.

Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28-41.

Juodis, M., Starzomski, A., Porter, S., & Woodworth, M. (2014). What can be done about high-risk perpetrators of domestic violence? *Journal of Family Violence, 29*(4), 381-390.

Kaplan, H. S., & Gangestad, S. W. (2005). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology,* (pp. 68-95). New York, NY: Wiley.

Láng, A., & Lénárd, K. (2015). The relation between memories of childhood psychological maltreatment and Machiavellianism. *Personality and Individual Differences, 77*, 81-85.

Lefever, S., Dal, M., & Matthiasdottir, A. (2007). Online data collection in academic research: Advantages and limitations. *British Journal of Education Technology, 38*(4), 574-582.

Maxwell, K., & Huprich, S. (2014). Retrospective reports of attachment disruptions, parental abuse and neglect mediate the relationship between pathological narcissism and self-esteem. *Personality and Mental Health, 8*(4), 290-305.

Millet, L. S., Kohl, P. L., Johnson-Reid, M., Drake, B., & Petra, M. (2013). Child maltreatment and victimization and subsequent perpetration of young adult intimate partner violence: An exploration of mediating factors. *Child Maltreatment, 18*(2), 71-84.

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36,* 556-563.

Peterson, J. L., & DeHart, T. (2014). In defense of self-love: An observational study on narcissists' negative behaviour during romantic relationship conflict. *Self and Identity, 13*(4), 477-490.

Radford, L., Corral, S., Bradley, C., Fisher, H., Bassett, C., Howat, N., & Collishaw, S. (2011). *Child abuse and neglect in the UK today*. London: NSPCC.

Raskin, R., & Terry, H. (1998). A principal-components analysis of the narcissistic personality-inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*(5), 890-902.

Rauthmann, J. F., & Will, T. (2011). Proposing a multidimensional Machiavellianism conceptualization. *Social Behavior and Personality, 39*(3), 391-403.

Sax, L. J., Gilmartin, S. K., & Bryant, A. N. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education, 44*(4), 409-432.

Scott, K., King, C., McGinn, H., & Hosseini, N. (2011). Effects of motivational enhancement on immediate outcomes of batterer intervention. *Journal of Family Violence, 26*(2), 139-149.

Simons, R. L., Wu, C. I., Johnson, C., & Conger, R. D. (1995). A test of various perspectives on the intergenerational transmission of domestic violence. *Criminology, 33*(1), 141-172.

Stoltenborgh, M., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2013). The neglect of child neglect: A meta-analytic review of the prevalence of neglect. *Social Psychiatry and Psychiatric Epidemiology, 48,* 345-355.

Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment, 10*, 5-25.

Straus, M. A. (2006). Cross-cultural reliability and validity of the Multidimensional Neglectful Behaviour Scale adult recall short form. *Child Abuse & Neglect, 30,* 1257-1279.

Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence and Victims, 19*(5), 507-520.

Straus, M. A., & Savage, S. A. (2005). Neglectful behaviour by parents in the life history of university students in 17 countries and its relation to violence against dating partners. *Child Maltreatment, 10*(2), 124-135.

Straus, M. A., Kinard, E. M., & Williams, L. M. (1995). *The Multidimensional Neglectful Behaviour Scale, Form A: Adolescent and adult-recall version.* Durham: University of New Hampshire.

Swogger, M. T., Walsh, Z., Kosson, D. S., Cashman-Brown, S., & Caine, E. D. (2012). Self-reported childhood physical abuse and perpetration of intimate partner violence: The moderating role of psychopathic traits. *Criminal Justice Behaviour, 39*(7), 910-922.

Weiler, B. L., & Widom, C. S. (1996). Psychopathy and violent behaviour in abused and neglected young adults. *Criminal Behaviour and Mental Health, 6*, 253-271.

White, H. R., & Widom, C. S. (2003). Intimate partner violence among abused and neglected children in young adulthood: The mediating effects of early aggression, antisocial personality, hostility and alcohol problems. *Aggressive Behaviour, 29*, 332-345.

Widom, C. S., Czaja, S., & Dutton, M. A. (2014). Child abuse and neglect and intimate partner victimization and perpetration: A prospective investigation. *Child Abuse & Neglect, 38*(4), 650-663.

World Health Organization. (2012). *Understanding and addressing violence against women: Intimate partner violence.* World Health Organization

Appendix 1. Participant Information and Consent

Thank you for your interest in taking part in this research. You have been invited to participate as you are 18-65 years old and have been in a romantic relationship**.** Please read through this information before agreeing to participate by ticking the "yes" box below.

What is the study about?

The study is looking at the influence of childhood experiences and personality traits on how we behave in intimate relationships.

If you consent to participate, you will be first asked to answer questions regarding your childhood experiences. Subsequently, you will answer questions about your personality. Lastly, you will have to answer questions regarding behaviours in a current or most recent romantic relationship. You can withdraw at any time without giving a reason. The study should take about 10 minutes.

How will your data be used?

Your answers will be completely anonymous, and we will use all reasonable endeavours to keep them confidential. Your participation in this study is entirely voluntary. You can withdraw at any point during the questionnaire for any reason, before submitting your answers by closing the browser. The data will only be uploaded on completion of the questionnaire by clicking the FINISH button. You are free to omit any question.

Your data will be stored in a password-protected file and may be used in academic publications. Your IP address **will not** be stored. All questions are **optional** if you prefer not to answer a particular question.

Who will have access to your data?

The University of Nottingham is the data controller for the purposes of the Data Protection.

We believe there are no known risks associated with this research study; however, if the study causes any distress, please contact organisations listed on the final page. 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 will remain anonymous.

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 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. e-mail: FMHS-ResearchEthics@nottingham.ac.uk

Lead Researcher: Katarzyna Dudka (katarzyna.dudka@nottingham.ac.uk)

Research Supervisor: Professor Kevin Browne (kevin.browne@nottingham.ac.uk)

Centre for Forensic and Family Psychology

Division of Psychiatry and Applied Psychology

School of Medicine

University of Nottingham

Floor B, Yang Fujia Buliding, Jubilee Campus

Wollaton Road, Nottingham, NG8 1BB

Ethics reference number: 239-1902

By agreeing to participate in this study, you indicate that:

- ○ You are 18 years old and/or older
- ○ You have been in a romantic relationship
- ○ You understand that your answers will be anonymous.
- ○ You confirm that you have read and understood the information above
- ○ You understand that your participation is voluntary and that you can end the study at any time and withdraw your data by closing the browser.
- ○ You give permission for the data from this study to be shared with other researchers provided that your anonymity is completely protected.

Do you consent to take part in the study?

YES – TO BE TAKEN TO THE SURVEY

NO – EXIT THE SURVEY

Appendix 2. Measures

1) The Multidimensional Neglectful Behaviour Scale – Adult Recall (Straus et al., 1995)

For each of the following statements, decide how well it describes what it was like when you were living with your parents. "Parents" refer to the person or people who raised you. **A**nswer on a scale from 1 to 4 (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree).

1. My parents did not make sure I saw a doctor when I needed one
2. My parents did not care if I got into trouble in school
3. My parents were not interested in my activities or hobbies
4. My parents did not help me with homework
5. My parents were not interested in the kind of friends I had
6. My parents did not care if I did things like shoplifting
7. My parents did not keep me clean
8. My parents did not give me enough clothes to keep me warm
9. My parents did not help me when I had problems
10. My parents did not make sure I went to school
11. My parents did not help me to do my best
12. My parents helped me when I had trouble understanding something
13. My parents did not praise me
14. My parents did not read books to me
15. My parents wanted to know what I was doing when I was not at home
16. My parents did not tell me they loved me
17. My parents did not comfort me when I was upset
18. My parents did things with me just for fun
19. My parents kept the house clean
20. My parents did not give me enough to eat

2) Short Dark Triad (Jones & Paulhus, 2014)

Please indicate how much each statement applies to you. Please answer on a scale from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree).

1. Most people can be manipulated.
2. Payback needs to be quick and nasty.
3. There are things you should hide from other people because they don't need to know.
4. You should wait for the right time to get back at people.
5. I like to get acquainted with important people.
6. I like to use clever manipulation to get my way.
7. I avoid dangerous situations.
8. People often say I'm out of control.
9. It's wise to keep track of information that you can use against people later.
10. I like to get the revenge on authorities.
11. Avoid direct conflict with others because they may be useful in the future.
12. I'll say anything to get what I want.
13. I enjoy having sex with people I hardly know.
14. Whatever it takes, you must get the important people on your side.
15. Many group activities tend to be dull without me.
16. I hate being the centre of attention.
17. People see me as a natural leader.
18. It's not wise to tell your secrets.
19. It's true that I can be mean to others.
20. I insist on getting the respect I deserve.

21. Make sure your plans benefit you, not others.

22. I know that I am special because everyone keeps telling me so.

23. I have never gotten into trouble with the law.

24. People who mess with me always regret it.

25. I feel embarrassed if someone compliments me.

26. I have been compared to famous people.

27. I am an average person.

3) A Short Form of Revised Conflict Tactics Scale (Straus & Douglas, 2004)

Please answer the following questions with regard to your current or most recent romantic relationship. Please mark how many times you did each of these things and how many times your partner did them in the course of relationship. Please answer on a scale from 1 to 7 (1 = once, 2 = twice, 3 = 3-5 times, 4 = 6-10 times, 5 = 11-20 times 6 = more than 20 times, 7 = this has never happened).

1. I explained my side or suggested a compromise for a disagreement with my partner
2. My partner explained his or her side or suggested a compromise for a disagreement with me
3. I insulted or swore or shouted or yelled at me
4. My partner insulted or swore or shouted or yelled at me
5. I had a sprain, bruise, or small cut or felt pain the next day because of a fight with me
6. My partner had a sprain, bruise or small cut or felt pain the next day because of a fight with me
7. I showed respect for, or showed that I cared about my partner's feelings about an issue we disagreed on

8. My partner showed respect for, or showed that he or she cared about my feelings about an issue we disagreed on
9. I pushed, shoved, or slapped my partner
10. My partner shoved, or slapped me
11. I punched or kicked or beat-up my partner
12. My partner punched or kicked or beat-me-up
13. I destroyed something belonging to my partner or threatened to hit my partner
14. My partner destroyed something belonging to me or threatened to hit me
15. I went to see a doctor or needed to see a doctor because of a fight with my partner
16. My partner went to see a doctor or needed to see a doctor because of a fight with me
17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex
18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex
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)
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)

Appendix 3. Debriefing Sheet

Thank you for taking part in the study! The general purpose of this research is to understand how personality affects the relationship between our childhood experiences and conflict behaviours in romantic relationships. Previous research confirmed that psychopathic traits might be the best predictor of future violence following adverse childhood experiences (Weiler & Widom, 1996). The current study turned to examine the influence of the Dark Triad traits consisting of psychopathy, narcissism and Machiavellianism (Paulhus & Williams, 2002) on the relationship between neglectful behaviour in childhood and partner violence in adulthood. These traits are often associated with antisocial and criminal behaviour, therefore it makes sense that people with higher levels of these traits will be more aggressive towards their romantic partner.

If you feel concerned or upset about any aspect of the study, please contact the lead researcher (katarzyna.dudka@nottingham.ac.uk). Alternatively, please refer to these helplines:

- **National Domestic Violence Helpline:** 0808 2000 247
- **Mind:** 0300 123 3393
- **Samaritans:** 116 123

Additional reading:

Weiler, B. L., & Widom, C. S. (1996). Psychopathy and violent behaviour in abused and neglected young adults. *Criminal Behaviour and Mental Health, 6,* 253-271.

Swogger, M. T., Walsh, Z., Kosson, D. S., Cashman-Brown, S., & Caine, E. D. (2012). Self-reported childhood physical abuse and perpetration of intimate partner violence: The moderating role of psychopathic traits. *Criminal Justice Behaviour, 39*(7), 910-922.

Executive Summary

Target Audience: Police and Prison Services

Background:

Intimate partner violence is a major public health concern and can be defined as any violent behaviour towards a romantic partner. World Health Organization estimates that 1 in 3 women around the world have been victims of partner violence in their lifetime. In fact, partner violence can even lead to a homicide. Indeed, it has been demonstrated that women are more likely to be killed by their intimate partner than by an acquaintance or a stranger. The consequences of domestic violence can be substantial to both mental and physical health. It is important to evaluate current policies to ensure that perpetrators do not re-offend in the future and that appropriate prevention measures are in place for at risk families.

It is often the case that offenders were victims of maltreatment which increased their risk of becoming a perpetrator of intimate partner violence in their adult life. In particular, childhood neglect - which can be defined as a failure to provide emotional, physical and medical care to a child – is one of the most common forms of childhood trauma. Nonetheless, so far research on this topic is limited and focused on more extreme cases of child abuse. At present, the findings around the relationship between neglect and violent behaviour towards romantic partner are inconclusive. Therefore, it is proposed that a third factor – antisocial traits – might be responsible for perpetuating the intergenerational transmission of violence (IGT). IGT is a theoretical perspective proposing that parental conflict in childhood might result in exhibiting violence in adult intimate relationships.

Rationale:

The primary purpose of this report is to explain the factors responsible for perpetrating intimate partner violence and emphasise the importance of preventative and treatment interventions for offenders.

Research Aims:

1) To assess whether there is a relationship between being neglected as a child and perpetrating violence in romantic relationships.
2) To examine if antisocial personality traits predict perpetrating violence towards intimate partners.
3) To establish whether personality contributes to the intergenerational transmission of violence.

Data collection and analysis:

The data was collected online using Jisc Surveys software. 465 participants were recruited through social media platforms such as Facebook and Reddit. They had to complete three questionnaires regarding their experiences in childhood, personality traits and behaviours in a current or most recent romantic relationship. As the study explored sensitive topics, the telephone numbers to domestic violence helplines were provided on the debriefing page. The data was analysed using statistical software – IBM SPSS Statistics – to examine relationships between history of neglect, personality and conflicts in intimate relationships.

Findings:

It has been found that a history of neglect does not predict whether a person becomes a perpetrator of intimate partner violence. In fact, antisocial traits are responsible for this relationship instead. Personality predicts both the

perpetration of violence and the indirect effect of the history of neglect, but only for females. There were no effects of personality or history of neglect on perpetration of intimate partner violence for males.

Implications:

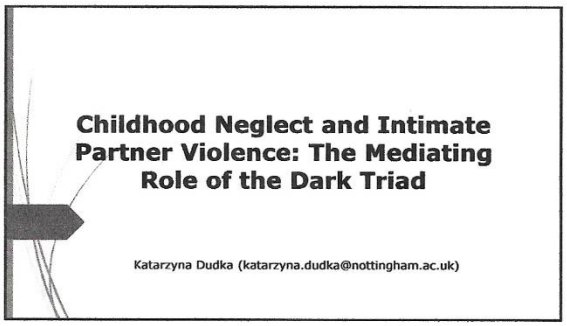
These findings demonstrate that being neglected as a child does not mean a person is going to become a perpetrator of intimate partner violence. It is the other factors that distinguish between whether an individual is going to offend. Therefore, the development of antisocial tendencies is a predictor of becoming a perpetrator in romantic relationships for women. On the other hand, personality traits have no impact on formation of abusive behaviours for men. As offenders with maladaptive personality traits are often resistant to treatment, it is important to adapt the treatment methods to ensure a reduction in re-offending behaviour.

Recommendations:

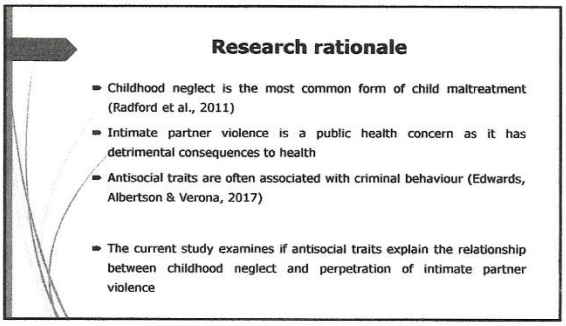
The second aim of this report is to make recommendations regarding treatment methods for perpetrators of intimate partner violence. As recognised, violence towards romantic partner is a public concern due to considerable risks to health. As these offenders are often difficult to treat and manage, current policies regarding the intervention methods need to be re-evaluated. It can be extremely difficult for victims to come forward and report an abuser, therefore it is our responsibility to ensure their safety from the perpetrator through the implementation of effective rehabilitation methods. It is our recommendation to screen potential perpetrators coming to the police and those already in prison services for antisocial traits. Subsequently, if the offender presents with higher than normal levels of antisocial traits it is recommended to administer a brief intervention based on motivational interviewing prior to participation in standard

treatment programmes. This technique has been proven to considerably reduce the dropout rates as a result of increasing motivation to change the destructive behaviours that promote violence in romantic relationships.

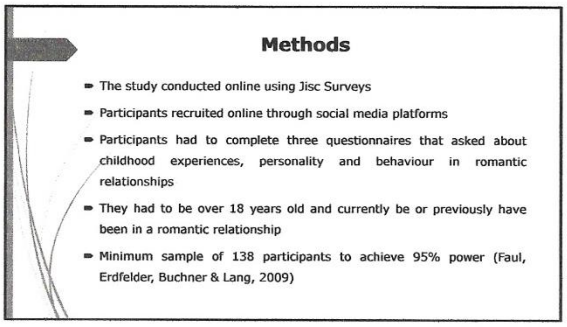
PowerPoint Presentation



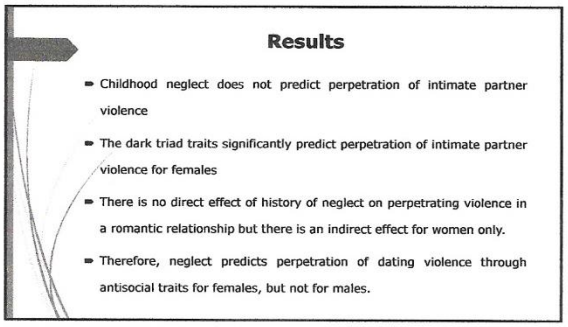
1



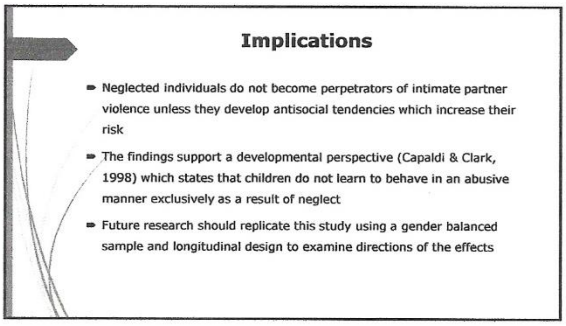
2



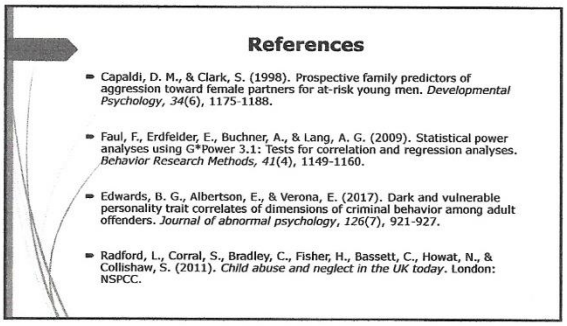
3



4



5



6

Reflective Report

In this report personal reflections regarding the process of conducting academic research will be presented and then critically discussed to establish strengths and challenges encountered in this module.

1. Conceptualisation

Before the course started, we were required to conceptualise an idea regarding our research project. We were given a list of supervisors and their academic interests and had to explore different topics to write up two brief research proposals. The process of choosing our research topic for this course has been considerably different from the one at an undergraduate level. The expectations from the start were a lot greater than what was expected before. However, as we received over a month to choose our topic, it gave us enough time to read different academic articles and come up with a plan of action for the start of the term. At the time, we did not have access to our academic email nor was it possible to email the supervisors for clarification. Specifically, I was concerned regarding whether my choice of topic would fit with the academic interests of the staff members. Nonetheless, I found the process quite straightforward and would recommend it to the future students.

2. Preparation

We were allocated to our research supervisors before induction and had a tutorial scheduled for us. During the tutorial, our ideas regarding the research project were discussed in a group setting. Subsequently, I scheduled the first meeting to further define the research questions and choose which variables I am interested to explore within my scope of interest. At this point, I realised the

reason for being allocated so much time to do our research. The main crucial difference I found between an undergraduate degree and a postgraduate research degree is that the topic is not chosen for you which takes a considerable amount of time to tailor. At the first meeting (11th of October) with my supervisor, some research ideas were recommended to me. In relation to one of them, I was concerned regarding the feasibility of obtaining a sample from outside of the United Kingdom. Therefore, I decided to pursue a research topic which tests differences in a community sample rather than compares cross-cultural differences.

After the first supervision, I made considerable changes to the original proposal. I opted out of examining preference for romantic partners and rather decided to explore how childhood experiences and personality influence intimate partner violence. I read more academic papers regarding childhood maltreatment and identified a research gap regarding childhood neglect. I found that it is the most common form of childhood trauma and that its consequences might be more severe than that of abuse. Therefore, I tailored my research topic to include neglect as its main independent variable. From the start, I was interested in researching personality differences as I believe they are crucial for predicting future behaviour. In particular, the dark triad traits have captured my attention as they are a cluster of three antisocial traits which predict criminal behaviour. I searched for available psychometric measures to explore these three concepts (childhood neglect, dark triad traits and intimate partner violence). To examine the amount of time needed to complete the study, I completed them myself and concluded it will take up to 15 minutes.

I discovered I do not handle uncertainty well which is something I need to work on in the future. I felt significantly more confident once I defined my research questions and found appropriate psychometrics for the study. Consequently, I scheduled another meeting to share my reflections with my supervisor and make the last changes to the research plan.

3. Study design

After my second meeting (23rd of October) with my supervisor, I had a clear plan of action for the research project. I requested an ethics application form from the University of Nottingham Ethics Committee and started to design my study online using Jisc Surveys software. During my undergraduate degree, I distributed my questionnaires in person and therefore was unclear on the process of conducting it online. However, I found the software straightforward to use and it did not take me long to design the study online. However, I had some concerns regarding the sample size required to have enough statistical power. At this point, I questioned my ability to collect enough participants with online methods. Looking back at this moment, I realise this belief was predominately a result of not conducting an online study before.

Nevertheless, I decided to schedule another meeting (6th of November) to go over the online questionnaire and make revisions if needed to the current form. All things considered, I felt satisfied with the online study as only minor changes were made to the demographics section. Subsequently, I proceeded with the draft research proposal and ethics application. I found the process of writing it clear as detailed guidance regarding both forms was provided in the assignment manual. It is at this time that I conducted a power analysis to find a minimum sample size. Once I realised that I need 103 participants to achieve 80% power, I felt reassured

that I can collect a sufficient amount of data to run necessary statistical analyses. In December (13th of December) I met again with my supervisor to discuss feedback from the draft research proposal and ethics application. Minor changes were made to the research questions and the study was submitted to the committee for the ethical approval in January. At this point, I felt relieved that the first part of my research portfolio has been completed.

4. Data collection

I received the ethical approval at the end of March and started the data collection immediately after that. I advertised my study twice on social platforms such as Facebook and Reddit. I was pleased that so many people completed my study in such a short amount of time. I collected data from 465 participants in total, which is a considerably larger sample than I expected. In fact, the data collection was significantly less daunting than anticipated and I found it to be one of the most enjoyable parts of conducting psychological research. I received some positive feedback regarding my study, as well as some constructive criticism regarding the scales which I included in my limitations. Once the data collection was completed, I scheduled a meeting (25th of April) to discuss the statistical methods that should be applied to answer my research questions. It has been recommended that I recode the variables to conduct a binary logistic regression.

5. Data analysis

I analysed my data using IBM SPSS Statistics. I used the programme before during my undergraduate degree, therefore I felt confident in conducting the basic statistical analyses. Nonetheless, I have not conducted these more complicated processes before. I spent a considerable amount of time transforming my data into categories to allow me to run a binary logistic regression later. I found myself

quite stressed as a result of not having done these tests in my undergraduate degree. However, after reading relevant chapters and spending time understanding the fundamental assumptions of the test, I felt more confident in conducting these analyses. In the end, I run all the necessary tests to answer my research questions. Some of my results were significant, but others were not so simple to interpret such as mediation analysis. In fact, to be able to draw my conclusions I had to read some academic articles regarding this statistical process. Although I managed to conduct these analyses myself, I did not feel completely confident in my ability to sufficiently explain my results to the reader. Therefore, it would be beneficial to improve my knowledge of statistics to be able to understand and conduct these tests more easily in the future.

6. Write up

The final part of conducting research is to write up the research paper. I had to choose a format to follow as recommended by the chosen academic journal. I decided to follow recommendations from Child Abuse and Neglect as many papers I read have been published in this journal. I found that the guidance for authors provided on the journal page was clear and sufficient to write up my dissertation. The process of seeing the final product on paper has been one of the most pleasurable experiences during this module. I felt confident writing the sections as a result of conducting quantitative research and writing up an undergraduate project before. I found it easy to summarise the study in the research paper as I knew the topic very well. I enjoyed reading more papers around the subject and being able to see how my research fits into it. Overall, I found the process to be helpful in the development of my skills which I can transfer to different roles in the future.