Do intimate partner violence and childhood maltreatment moderate mothers' ability to benefit

from a parenting programme?

Carys C. Bailey & Shantey Moabelo

University of Cape Town

Supervisor: Professor Catherine Ward

Word Count: 7519

   Abstract: 239

Main Body: 7280

PLAGIARISM DECLARATION

PLAGIARISM

This means that you present substantial portions or elements of another's work, ideas or data as your own, even if the original author is cited occasionally. A signed photocopy or other copy of the Declaration below must accompany every piece of work that you hand in.

DECLARATION

1.   I know that Plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

2.   I have used the American Psychological Association formatting for citation and referencing. Each significant contribution to, and quotation in, this essay/report/project from the work or works, of other people has been attributed, cited and referenced.

3.   This essay/report/project is my own work.

4.   I have not allowed, and will not allow anyone to copy my work with the intention of passing it off as his or her own work.

NAME: Carys Bailey, Shantey Moabelo

SIGNATURE:

STUDENT NUMBER:

BLYCAR010, MBLSHA006

SUPERVISORS: Professor Catherine Ward

PSY4000W: Thesis

Abstract

Child maltreatment is a global problem and caregivers are frequently the perpetrators. Two risk factors that explain this are caregivers' own histories of childhood maltreatment (HCM) and their experience of intimate partner violence (IPV). Parenting programmes, such as Parenting for Lifelong Health (PLH) for Young Children, show promise for preventing violence by reducing and improving harsh and positive parenting, respectively. Using secondary data, this study investigated whether women who had experienced IPV/HCM benefitted equally from the programme as others in a randomized controlled trial, in South Africa. The sample ($N = 296$) was predominantly biological mothers, aged 18-75, who took part in the trial. Due to missing data, several caregivers were not included in this study ($n = 34$). Data were collected using surveys at baseline, post-intervention and at one-year follow-up and analyzed using moderation multiple linear regression analyses. For the intervention, IPV and HCM, did not moderate a change in harsh/positive parenting. Findings suggested that these women benefitted equally from the programme as others. This may have been because the programme had no effect on harsh parenting in this sample. The intervention did improve positive parenting, but this effect was not sustained for any parent in the study. Due to the chief limitation of being underpowered for moderation analyses, no decisive conclusions can be made. Since the question of whether IPV and/or HCM moderate a change in harsh/positive parenting remains unanswered, more research into this topic is required.

Keywords: History of abuse; intimate partner violence; low and middle-income countries; Parenting for Lifelong Health; parenting programmes; violence against children.

Introduction

It is estimated that one billion children experience some form of violence every year – this violence can be either physical, emotional, sexual, or a combination of these (Hillis, Mercy, Amobi, & Kress, 2016). Adverse childhood experiences, including violence against children, are associated with long-lasting and far-reaching negative consequences (Currie & Widom, 2010). For example, exposure to violence increases the likelihood of attachment issues, psychological harm and underachievement, as well as the adoption of risk behaviours, such as substance misuse, the spread of communicable diseases, such as HIV, and unsafe sex which increases the risk of teenage pregnancy (Anda, Butchart, Felitti, & Brown, 2010; Bartlett, Kotake, Fauth, & Easterbrooks, 2016; Norman, Byambaa, Butchart, Scott, & Vos, 2012). Reducing violence against children is a target of the Sustainable Development Goals as outlined by the United Nations (United Nations [UN], n.d.).

Violence against children includes a range of harsh parenting practices, such as the use of severe corporal punishment, which can escalate to more severe abuse (Rajan, 2016; Woollet & Thomson, 2016). Specifically, harsh parenting contributes to the development of child behaviour problems through problematic patterns of caregiver-child interactions and this mutually aversive caregiver-child interaction leads to further child behaviour problems over time (Lunkenheimer, Ram, Skowron, & Yin, 2017). For young children, mothers are frequently the perpetrators of abuse. Two main risk factors for this are: 1) mothers' own history of abuse and neglect and 2) their experience of intimate partner violence (IPV; Rajan, 2016; White, Hindley, & Jones, 2014).

Intimate partner violence

IPV is a form of gender-based violence that includes emotional, physical, and sexual abuse as well as controlling behaviour by a former or current intimate partner (Pronyk et al., 2006). IPV affects many women, with South Africa having one of the highest rates of IPV worldwide - one in three South African women experiences physical or sexual abuse in her lifespan (Shai & Sikweyiya, 2015). IPV is associated with adverse consequences for women's health, which are linked to substance misuse, professional, parental and social dysfunction as well as poor overall quality of life (Pels, van Rooij, & Distelbrink, 2015; Shai & Sikweyiya, 2015).

Intimate partner violence and parenting. IPV may have harmful effects on parenting. As a result of the physical and mental impact that IPV has on wellbeing, IPV victimization has been linked to authoritarian parenting styles, harsh forms of maltreatment, reduced rates of contact and engagement, lack of positive parenting, as well as neglect

(Chiesa et al., 2018). These harsh parenting styles have specifically been linked to mothers who have experienced IPV (Hooker, Samaraweera, Agius, & Taft, 2016). Despite these challenges, some women strove to become good mothers through finding creative and strategic ways to cater for their child's needs, both during and after experiencing IPV (Lapierre, 2010). In addition, those who had experienced higher levels of IPV exhibited more positive parenting practices, including being more accepting, firm, and warm in their parenting (Greeson et al., 2014).

        Intimate partner violence and child behaviour. IPV has serious consequences for children, which may vary from child to child. A number of studies have demonstrated that children who witness IPV are at risk for developing conduct problems, as a result of the negative influence that this experience has on the child, directly, and indirectly through parenting (Pels et al., 2015). This is the case, even after controlling for other anticipated causes of child behavioural problems such as HIV status, partner cohabitation, alcohol use and posttraumatic stress disorder and age of the child (Chander et al, 2017). In addition, according to Pingley (2017), early exposure to IPV may have a direct impact on child delinquency at nine years of age. This delinquency then becomes a risk for harsh parenting, because children with conduct problems tend to elicit physical and verbal punishment from their caregivers (Pardini, Fite, & Burke, 2008).

Child maltreatment

        Child maltreatment includes any form of physical, sexual, emotional or negligent treatment or exploitation which may cause harm to the child's health (Cicchetti & Toth, 2005; Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). A number of studies have shown that, when compared to other caregivers, mothers who experienced abuse or neglect as a child are at an increased risk for using abusive behaviours with their own children (Barlett et al., 2016; Valentino, Nuttall, Comas, Borkowski, & Akai, 2012). Furthermore, caregivers who thought that their child had poor coping skills or poor impulsive control and who believed that their child was loud, were more likely to find difficulty in monitoring them and as a result, would revert to corporal punishment (Al Dosari, Ferwana, Abdulmajeed, Aldossari, & Zahrani, 2017). Those who experienced severe physical abuse were more likely than those who experienced mild physical abuse, to approve the use of punitive punishment practices (Bert, Guner, & Lanzi, 2009).

Parenting programmes

        As outlined by the World Health Organization, one method of counteracting the above mentioned risk factors for child maltreatment is parenting programmes (WHO, 2016).

Parenting programmes that focus on the caregiver-child dyad can foster attachments between the caregiver and child, allowing caregivers to learn better parenting practices and conflict resolution skills (Woollet & Thomson, 2016). There is evidence, both in low and middle-income countries (LMICS) and high-income countries that parenting programmes are effective at improving positive parenting as well as reducing harsh parenting – thus showing promise for reducing child maltreatment (Barlow & Coren, 2017; Knerr, Gardner, & Cluver, 2013; Mikton & Butchart, 2009;).

There is, however, very little research on how the experience of widespread and potentially important moderators, such as experience of maltreatment as a child or IPV may affect parenting programmes' outcomes. The Incredible Years programme and the Parent Management Training Oregon Model are two examples of parenting programmes that have shown promise for having a positive impact for reducing both child maltreatment and risk of IPV (Menting, Orobio de Castro, & Matthys, 2013; Niolon et al., 2017). They have not, however, conducted moderator analyses. Moderator analyses are vital for advising future trials and practice within parenting programmes, since they aid in identifying groups of people, such as those who have a history of maltreatment or have experienced IPV, who may need extra intervention (Gardner, Hutchings, Bywater, & Whitaker, 2010).

In South Africa, Parenting for Lifelong Health (PLH) for Young Children is a caregiver-child programme aimed at preventing and reducing child maltreatment, both within the home and within the community (Lachman et al., 2018). This is achieved by nurturing the caregiver-child relationship and teaching caregivers parenting skills that will allow them to effectively support their child, at the same time lessening the child's disruptive behaviours (Mejia, Leijten, Lachman, & Parra-Cardona, 2017). The randomized controlled trial (RCT) of the PLH parenting programme, in South Africa, shows promising evidence on the effectiveness of reducing child maltreatment and increasing positive parenting in LMICs (Ward et al., 2019). We therefore took advantage of this RCT to investigate how current IPV and caregivers' history of childhood maltreatment may influence harsh and positive parenting outcomes within the PLH parenting programme.

Research Aims and Hypotheses

This study adds to the body of knowledge on parenting programmes as effective interventions against violence against children, specifically by examining how certain factors may influence programme outcomes, in the context of LMICs. By making use of RCT data of caregivers' parenting practices over three time points, the study aimed to investigate whether women in the RCT who were in current IPV relationships and/or with a history of

childhood maltreatment benefited at least equally from the PLH parenting programme as other women in the trial, and thus whether they would need extra support

Hypotheses

We hypothesized the following relationships would occur in such a way that participants' experience of IPV and history of childhood maltreatment would moderate intervention outcomes in such a way as that participants with these histories benefit less from the intervention:

1: IPV will moderate change in harsh parenting in the intervention group, but not the control group.

2: IPV will moderate change in positive parenting in the intervention group, but not the control group.

3: History of childhood maltreatment will moderate change in harsh parenting in the intervention group, but not the control group.

4: History of childhood maltreatment will moderate change in positive parenting in the intervention group, but not the control group.

Method

Design and setting

This study made use of secondary data from the PLH RCT to explore whether harsh parenting and positive parenting were moderated by IPV and history of childhood maltreatment.

The RCT. The PLH RCT was conducted between February 2014 and March 2016, in two deprived, Xhosa-speaking communities within Cape Town (South Africa), where elevated rates of HIV and community- as well as family - violence were exhibited. The intervention group took part in the PLH for Young Children parenting programme whilst the control group received services as usual. Data were collected from caregivers at screening, baseline (T_0), post-test (T_1; immediately after the programme) and follow-up (T_2; one year after the programme finished).

The programme. PLH is a suite of evidence-based parenting programmes designed to prevent violence in low-resourced settings. These programmes have been developed and rigorously tested through a collaboration between various universities, international agencies and community-based partners. This study focused on PLH for Young Children. PLH for Young Children is a parenting programme, for caregivers of children (aged two to nine), that aims to increase positive parenting, decrease harsh parenting and reduce child conduct problems. The programme is delivered by trained community members and consists of 12

group sessions where caregivers are introduced to non-violent parenting skills such as the use of rewards and consequences, time out and ignore strategies, giving instructions, daily routines as well as household rules to improve limit setting.

Participants

This study included data from caregivers who participated in the RCT. A total of 296 caregivers took part in the trial. Participants were recruited through referrals from local schools (*n* = 2) and child welfare organisations (*n* = 18) or through door-to-door visits (*n* = 360). In order to take part, caregivers needed to be older than 18 and living with their child for a minimum of four nights per week. Children needed to be between the ages of two and nine and exhibit a minimum of 15 problem behaviours, on caregiver account, according to the Eyberg Child Behavior Inventory problem scale (Eyberg & Ross, 1978; Ward et al., 2019). Due to incomplete surveys (at various time point in the trial), which had too much missing data to be imputed, several caregivers were not included in this study (*n* = 34).

Measures

Data were collected through surveys that were developed by the PLH research team and then translated and completed in isiXhosa. This translation was reached through the consensus forward translation and confirmed using back translation.

Demographics. Demographic characteristics (Appendix A) of the sample were measured in the screening survey. These characteristics included caregiver age, gender, marital status, education, employment and relationship to the child.

Caregiver IPV. The Revised Conflict Tactics Scale (Appendix B) was used at the baseline survey to measure the frequency of caregivers' experience of IPV within the past month (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). This was measured using ten self-report items on a 5-point Likert scale (0 = Hasn't happened in the past month; 4 = Happened more than three times in the past month); thus higher scores indicated a higher frequency of IPV occurring. Two items (item 13.6 and item 13.9) were reverse scored. The scale was found to have acceptable internal consistency in studies of women in the United States and South Africa ($0.68 \leq \alpha \leq 0.84$; Ward et al., 2019; Yun, 2010).

Caregiver's history of childhood maltreatment. The International Society for Prevention of Child Abuse and Neglect Child Abuse Screening Tool – Retrospective version (Appendix C) was used at the baseline survey to assess caregivers' own experiences of verbal, physical and sexual abuse as children (Dunne et al., 2009). This was assessed using a self-report checklist of five items for verbal and sexual abuse and four items for physical abuse, where checking the item indicated that the participant had experienced it. This

instrument has been used effectively in a variety of contexts, as reflected by the moderate to high reliability (internal consistency), found in a seven-country (including LMICs) study of a young adult sample ($0.61 \leq \alpha \leq 0.82$; Dunne et al., 2009).

Harsh parenting. The International Society for Prevention of Child Abuse and Neglect Child Abuse Screening Tool – Parent version (Appendix D) was used to assess the frequency of emotional and physical discipline as well as nonviolent discipline practiced by caregivers over the past month at the baseline, post-intervention and follow-up survey (Runyan et al., 2009). Twenty-five self-report items from the physical discipline, severe physical discipline and psychological discipline subscales were included using a 5-point scale (0 = Hasn't happened in the past month; 4 = Happened more than 10 times). Two items (item 9.4 and item 9.5) were reverse scored. This instrument has been used effectively in LMICs, as reflected by the internal consistency, where it was used on caregiver account (α = 0.81; Runyan et al., 2009).

Positive parenting. Frequency of positive parenting in the past month was measured at the baseline, post-intervention and follow-up surveys using fifteen self-report items from the Parenting Young Children Scale (Appendix E; McEachern et al., 2012) – specifically from the setting limits as well as supporting positive behaviour subscales. These items were measured on a 7-point Likert scale (0 = never; 6 = always) where high scores indicated higher use of positive parenting techniques. Convergent validity tests of this instrument reveal that it is appropriate for measuring caregiver behaviour (McEachern et al., 2012).

Change in harsh/positive parenting.

Change in harsh parenting was measured by the difference in harsh parenting scores at various points in the study, whilst change in positive parenting was measured by the difference in positive parenting scores, at the same points. Change in parenting was assessed three times. Firstly, change was measured by the difference between parenting scores at post-test and follow-up. Secondly, change was measured by the difference between parenting scores at follow-up and post-test. Finally, change was measured by the difference in parenting scores at follow-up and baseline surveys. A bigger change score indicated a greater change in harsh/positive parenting, with negative scores indicating a decrease in harsh/positive parenting and positive scores indicating an increase in harsh/positive parenting practices.

Procedure

Data were collected in the homes of the participants. Eligible caregivers completed the baseline survey ($n = 310$). Baseline data were collected in the first community during March and April 2014 and in the second community between late June and mid-August 2014. After data collection, caregivers were randomly assigned to either the control ($n = 148$) or intervention ($n = 148$) groups, using a 1:1 ratio. Randomization was carried out by an off-site statistician without any other contact with the trial, stratified by age and gender of the children. The programme started in both communities four weeks after randomization. Following completion of the programme, the post-test survey was completed by both control ($n = 148$) and intervention ($n = 139$) groups. This occurred at 17.5 weeks, and 20 weeks, after randomization in the first, and second communities, respectively. One year after the programme was completed, the follow-up survey was also completed by the control ($n = 138$) and intervention ($n = 134$) groups. This occurred at 70 weeks after randomization for the first group and 71 weeks for the second group. Due to incomplete surveys, at various time points in the trial, several caregivers were not included in this study ($n = 34$). This is illustrated in Figure 1, along with reasons for non-participation at each stage.
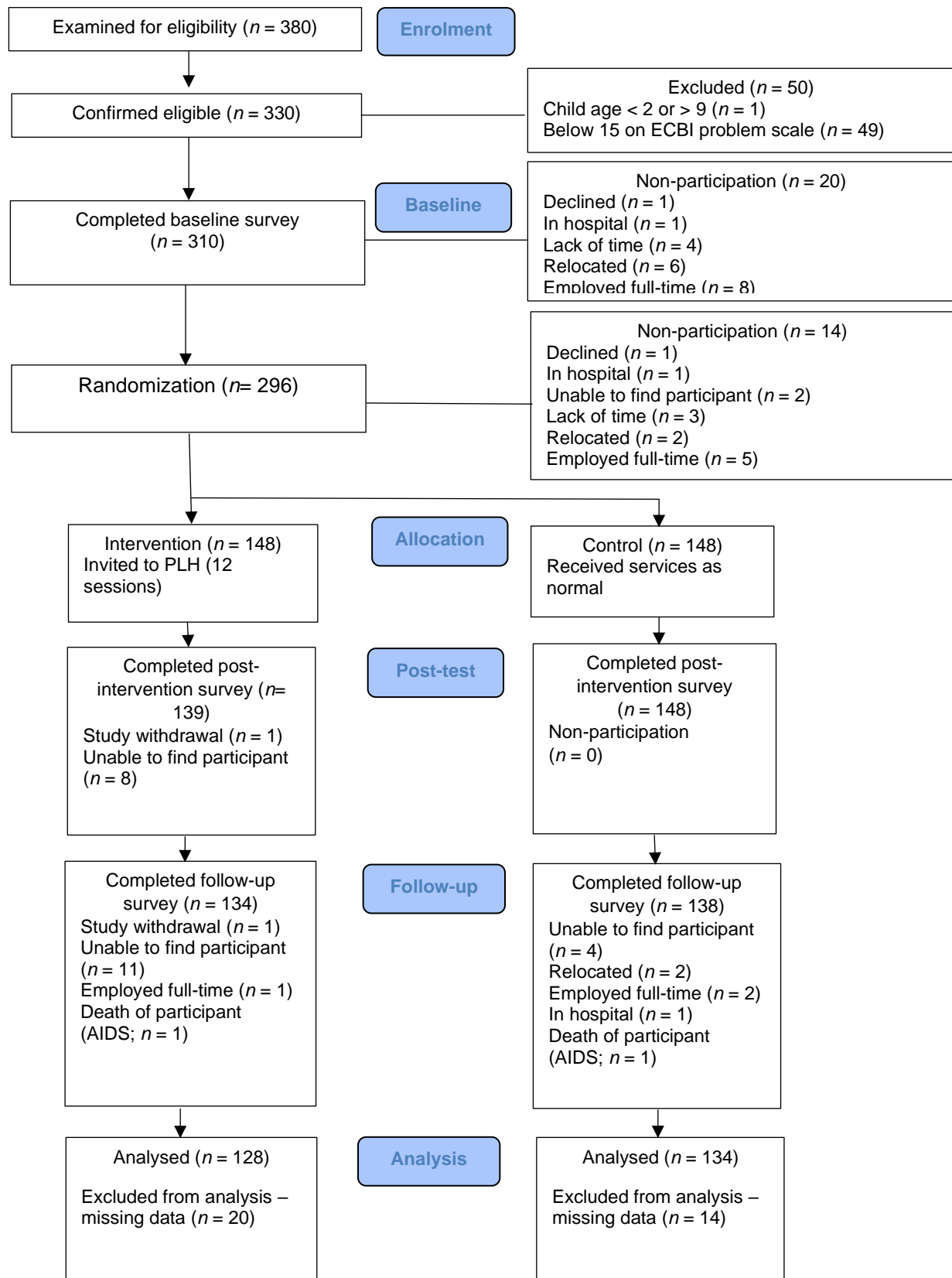
Figure 1. *CONSORT diagram - Number of individuals at each stage of study*

Ethical considerations

   Ethical approval. Ethical approval for the RCT was obtained from the Research Ethics Committee, within the Humanities Faculty, at the University of Cape Town (Ref: PSY2014-001) and from the Inter-Divisional Research Ethics Committee at the University of Oxford (Ref: SSD/CUREC2/11-40). Informed consent was obtained from caregivers prior to their participation in the RCT and confidentiality was maintained by storing data on password-protected computers. We received anonymised data and caregivers could not be identified from the dataset. Although there were no direct benefits or risks for participating in this study; this study could, however, add to the body of knowledge on the effectiveness of parenting programmes for reducing violence against children.

Data analysis

   The secondary data were received as a merged dataset of individual-item scores. From here, the data were cleaned and then analysed in SPSS version 25.0 (IBM Corporation, 2017). Analyses started with the item totals for each of the outcomes being calculated by summing either the binary indicators for incidence of an item or the Likert scale responses for frequency of behaviour. Descriptive statistics were used to examine these item totals. Inferential statistics were not used to assess comparisons between these totals, because of the risk of chance positive findings in the multiple comparisons that would be needed. Outliers and the assumptions (Appendix F) of the relevant statistical tests were also considered. Since the data were not normally distributed, bootstrapping occurred in the analyses. A moderation was defined as a significant change in R^2 between the model with and without the interaction.

   Missing data. Missing data is common is quantitative research – especially in the case of big-data RCTs (Zhang, 2016). Removing participants who did not complete the surveys may produce selection bias and exclude a considerable portion of the sample, lowering the power of the analysis (Sterne et al., 2009). As a result, trajectory median imputation, which is particularly relevant in the case of non-normally distributed data, was used to control for missing data at item-level (Zhang, 2016). This method substitutes missing values with the median of the available item scores on a specific scale for each participant with missing data. Those cases that could not be imputed, as a result of entire scale being missing, were removed listwise ($n = 34$; Enders, 2010). Since these methods rely on the assumption that data are missing at random, Little's MCAR (missing completely at random) test was used to analyse the pattern of missing data both before and after the imputation (Li, 2013).

Statistical models. Using multiple regression analysis, a total of 12 moderation models were built. Six of these models modelled a change in harsh parenting (and the other six in positive parenting) on allocation to either the control or intervention group. Three of these models used IPV as a moderator, whilst the other three used caregiver's history of childhood maltreatment as a moderator. Each of these three models made use of one of the three representations of change in parenting. These models are represented in Figure 2.
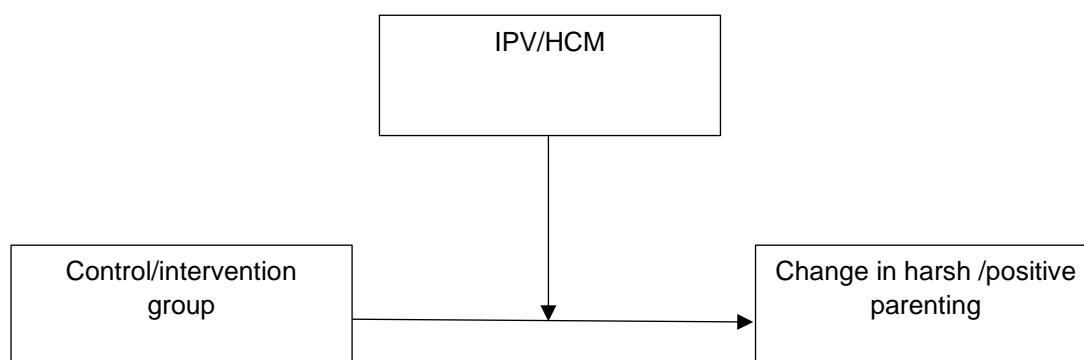

Figure 2. *IPV/HCM as moderator of change in harsh/positive parenting*

Power calculation. Since the sample size was outside the study's control, two post-hoc power analyses were performed using G*Power, version 3.1.9.4 (Faul, Erdfelder, Buchner, & Lang, 2009). These were done for multiple linear regression on the change in harsh parenting from baseline to follow-up, using the moderators – the Revised Conflict scale for IPV and the International Society for Prevention of Child Abuse and Neglect Child Abuse Screening Tool – Retrospective version – for history of childhood maltreatment.

Results

Descriptive Statistics

The sample was characterised of almost all women ($n = 261$; 99.62%) who were aged 18-75 and who were mostly the biological mother of the child ($n = 207$; 79.01%). The majority of these mothers were single ($n = 166$; 63.36%), had not completed high school ($n = 215$; 82.06%) and were unemployed ($n = 223$; 85.11%). Baseline measures, along with change in parenting, for IPV, history of childhood maltreatment and group allocation can be seen in Table 1. From this table, it appears that at baseline, those who had experienced IPV in the intervention group exhibited, on average, somewhat less harsh parenting and less positive parenting than those who had not. Whilst in the control group, those who had

experienced IPV exhibited, on average, somewhat more harsh parenting and less positive parenting than those who had not. Those who had a history of childhood maltreatment in both control and intervention groups exhibited, on average, somewhat more harsh parenting and less positive parenting than other caregivers.

      Furthermore, in terms of change in parenting, from baseline to follow-up, for the control group it appears that those who had experienced IPV or had a history of childhood maltreatment exhibited a greater change in positive parenting and harsh parenting than those who had not - resulting in a larger reduction in harsh parenting and a larger increase in positive parenting. On the other hand, in the intervention group it appears that those who had experienced IPV exhibited a smaller change in harsh parenting and a greater change in positive parenting – resulting in a smaller reduction of harsh parenting and a larger increase positive parenting – than those who had not. By contrast, those who had a history of childhood maltreatment also appeared to exhibit a greater change in both positive and harsh parenting than those who did not – resulting in a larger reduction and greater increase in harsh and positive parenting respectively.

Table 1

Baseline characteristics and change in parenting for IPV, history of childhood maltreatment and group allocation, (N = 262)

	Control (n = 134)				Intervention (n = 128)			
	IPV		HCM		IPV		HCM	
	IPV group (n = 128) 7.43(4.15)	Absent (n = 6) /	HCM group (n = 74) 1.27(1.72)	Absent (n = 60) /	IPV group (n = 122) 7.41(4.85)	Absent (n = 6) /	HCM group (n = 73) 1.83(1.87)	Absent (n = 55) /
Harsh parenting T_0	14.23(7.11)	11.50(5.61)	15.16(6.81)	12.82(7.18)	13.42(5.19)	14.17(5.91)	13.88(5.29)	12.89(5.08)
Median	13.00	9.50	14.00	10.50	13.00	12.00	14.00	12.00
T_1-T_0	-3.65(6.09)	-2.50(6.06)	-4.12(6.22)	-2.95(5.88)	-3.75(5.34)	-3.67(5.01)	-3.71(5.54)	-3.78(5.03)
T_2-T_1	-0.17(2.71)	-1.87(5.21)	-2.49(5.38)	-0.93(4.70)	-0.76(4.49)	-2.00(3.69)	-1.45(4.73)	0.02(3.94)
T_2-T_0	-5.52(6.70)	-2.67(5.99)	-6.61(6.45)	-3.88(6.70)	-4.51(5.11)	-5.67(4.68)	-5.16(5.09)	-3.76(4.98)
Positive parenting T_0	49.02(11.43)	58.17(4.97)	48.55(12.52)	50.50(9.75)	47.45(9.22)	53.00(6.87)	47.26(9.74)	48.31(8.44)
Median	51.50	56.00	51.50	52.00	48.00	55.00	47.00	48.00
T_1-T_0	1.18(12.98)	-4.00(6.78)	-1.15(12.37)	3.53(12.95)	7.36(10.91)	-0.83(8.70)	7.95(11.94)	5.69(9.37)
T_2-T_1	3.18(13.78)	2.17(6.55)	5.70(13.83)	-0.03(12.55)	-2.04(13.17)	3.67(10.09)	-2.33(13.67)	-1.04(12.30)
T_2-T_0	4.36(13.75)	-1.83(12.69)	4.55(14.17)	3.50(13.25)	5.32(12.50)	2.83(7.00)	5.61(12.21)	4.65(12.50)

Note.

Means are presented with standard deviation in parentheses

T_0 = Baseline; T_1 = Post-test; and T_2 = Follow-up.

Possible range: IPV = 0-40; HCM = 1-14; harsh parenting = 0-100; positive parenting = 0-90.

HCM = history of childhood maltreatment.

Missing data and outliers

Little's MCAR test on the harsh parenting, positive parenting, history of childhood maltreatment and IPV outcomes revealed that the data were missing completely at random (χ^2 = 957.02, df = 1341, p = 1.00). Inspection revealed a total of 4.08% missing data points, with 72.96% of the included items having at least one case of missing data. Only five items from the caregiver history of childhood maltreatment outcome (11.5%), specifically related to verbal abuse, were missing more than 10% of values. After the imputation was completed, Little's MCAR test on the same outcomes revealed that those data points that were still missing were missing completely at random (χ^2 = 293.21, df = 390, p = 1.00). Since less than 2% of the data points were outliers of more than three standard deviations from the mean, they would not dramatically skew the results. As a result, they were not removed, as they are representative of the sample.

Regression Analyses

IPV. Model statistics and coefficients for the six regression models that modelled control/intervention group on change in harsh or positive parenting, using IPV as a moderator can be seen in Table 2 and 3 respectively.

Harsh parenting. IPV was not found to moderate a change in harsh parenting from baseline to post-test, from post-test to follow-up or from baseline to follow-up. All three models of change in harsh parenting were statistically insignificant, $F(3, 258) = 0.29$, p = .839; $F(3, 258) = 1.76$, p = .154; and $F(3, 258) = 1.86$, p = .138, respectively.

Positive parenting. Although the models for change in positive parenting from baseline to post-test, $F(3, 258) = 6.13$, $p< 0.001$, and post-test to follow-up, $F(3, 258) = 3.97$, p = .009, were significant, accounting for 6% and 3% of the variance in the change scores respectively, IPV was not found to moderate these changes, p = .895; p = .664. Only group allocation was a significant contributor to these models, $p < .001$; $p = .003$. IPV was also not found to moderate a change in positive parenting from baseline to follow-up, since the model was not statistically significant, $F(3, 258) = 0.28$, p= .838.

Table 2

Regression results for IPV as moderator on change in harsh parenting, (N = 262)

	Coefficients				Model Statistics		
	b	95% CI	*β*	*p*	*F (df)*	*p*	*Adjusted R²*
Harsh parenting T_1-T_0					0.29(3, 258)	.836	-0.01
Constant	0.07	-0.90, 1.05		.881			
Control/intervention group	-0.15	-1.54, 1.25	-0.01	.836			
IPV	-0.10	-0.33, 0.14	-0.08	.430			
IPV*Group	0.05	-0.26, 0.36	0.03	.758			
Harsh parenting T_2-T_1					1.76(3, 258)	.154	0.01
Constant	-0.48	-1.30, 0.34		.250			
Control/intervention group	0.97	-0.20, 2.14	0.10	.104			
IPV	-0.16	-0.36, 0.04	-0.15	.111			
IPV*Group	0.18	-0.08, 0.45	0.13	.172			
Harsh parenting T_2-T_0					1.86(3, 258)	.138	0.01
Constant	-0.41	-1.41, 0.60		.430			
Control/intervention group	0.82	-0.62, 2.26	0.07	.263			
IPV	-0.26	-0.50, -0.01	-0.19	.040*			
IPV*Group	0.23	-0.09, 0.56	0.13	.160			

Note.

T_0 = Baseline; T_1 = Post-test; and T_2 = Follow-up.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3

Regression results for IPV as moderator on change in positive parenting, (N = 262)

	Coefficients				Model Statistics		
	b	95% CI	β	p	F (df)	p	Adjusted R^2
Positive parenting T_1-T_0					6.13(3, 258)	< .001***	0.06
Constant	-2.95	-4.97, -0.92		.005**			
Control/intervention group	6.03	3.13, 8.94	0.25	< .001***			
IPV	0.19	-0.31, 0.67	0.07	.457			
IPV*Group	0.04	-0.61, 0.70	0.01	.895			
Positive parenting T_2-T_1					3.97(3, 258)	.009**	0.03
Constant	2.40	0.14, 4.66		.038*			
Control/intervention group	-4.92	-8.15, -1.68	-0.18	.003**			
IPV	-0.21	-0.76, 0.33	-0.07	.444			
IPV*Group	-0.16	-0.89, 0.57	-0.04	.664			
Positive parenting T_2-T_0					0.28(3, 258)	.838	-0.01
Constant	-0.55	-2.77, 1.68		.629			
Control/intervention group	1.12	-2.07, 4.30	0.04	.490			
IPV	-0.03	-0.57, 0.51	-0.01	.921			
IPV*Group	-0.12	-0.83, 0.60	-0.03	.749			

Note.

T_0 = Baseline; T_1 = Post-test; and T_2 = Follow-up.

* p < .05, ** p < .01, *** p < .001

History of childhood maltreatment. Model statistics and coefficients for the six regression models that modelled control/intervention group on change in harsh or positive parenting, using caregivers' history of abuse as a moderator can be seen in Table 4 and Table 5, respectively.

Harsh parenting. History of childhood maltreatment was not found to moderate a change in harsh parenting from baseline to post-test, since the model was not significant, $F(3, 258) = 0.52$, $p = .671$.

On the other hand, a history of childhood maltreatment was found to moderate the change in harsh parenting from follow-up to post-test. This model was statistically significant, $F(3, 258) = 4.82$, $p = .003$, albeit with it only accounting for 4% of the variance in change scores. The interaction between history of childhood maltreatment and group allocation was a significant contributor to the model, $p = .010$, as were history of childhood maltreatment, $p = .001$, and group allocation, $p = .003$. This moderation relationship is depicted in Figure 3. As can be seen from the figure, the intervention group remains relatively consistent, exhibiting almost no difference in change in harsh parenting as their history of childhood maltreatment increased in intensity. In contrast, the control group exhibits a greater change in harsh parenting – with their harsh parenting decreasing - as their history of childhood maltreatment increased in intensity
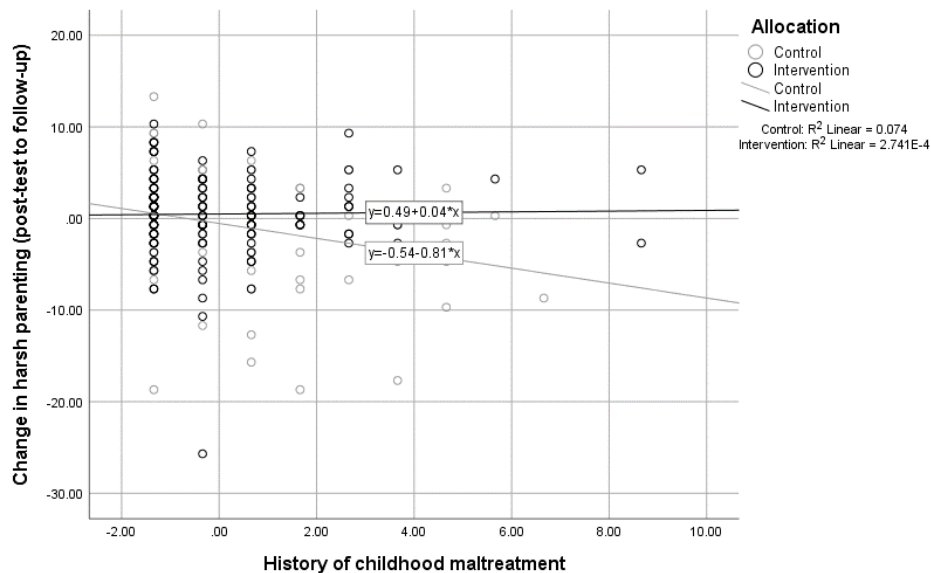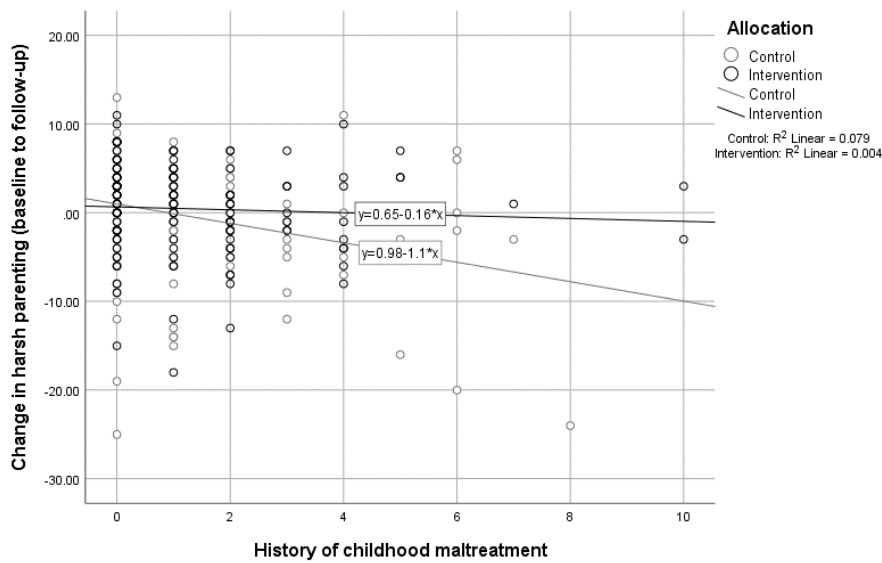

Figure 3. *Scatterplot showing the moderating relationship between group allocation and history of childhood maltreatment on change in harsh parenting from post-test to follow-up.*

Similarly to the last model, history of childhood maltreatment was found to moderate the change in harsh parenting from baseline to follow-up. This model was statistically significant, $F(3, 258) = 5.21$, $p = .003$, and accounted for 6% of the variance in change scores. The interaction between history of childhood maltreatment and group allocation was a significant contributor to the model, $p = .021$, as were history of childhood maltreatment, $p < .001$, and group allocation, $p = .017$. This moderation relationship is depicted in Figure 4. This relationship is the same as the one found in the previous model.
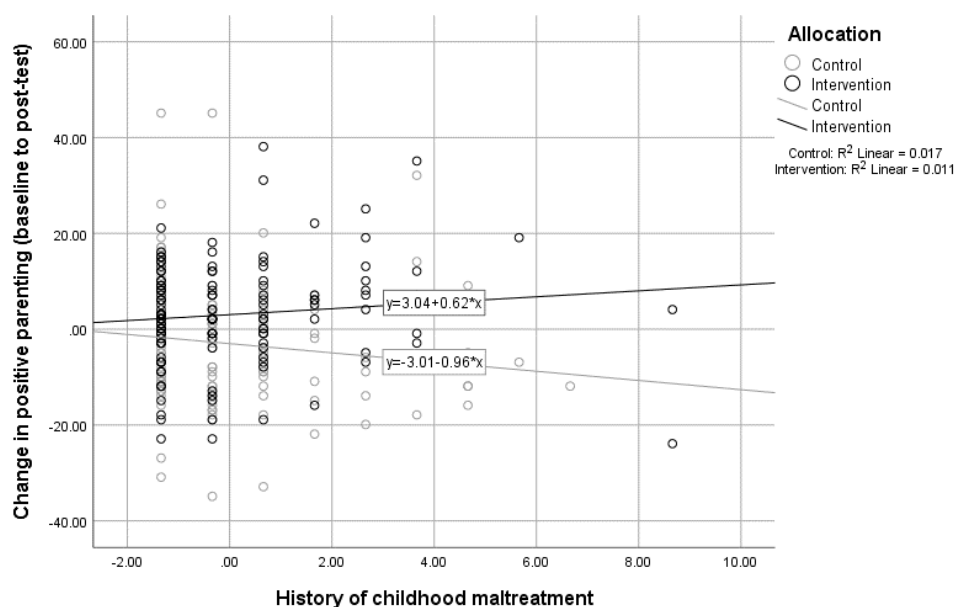

Figure 4. *Scatterplot showing the moderating relationship between group allocation and history of childhood maltreatment on change in harsh parenting from baseline to follow-up.*

Table 4

Regression results for history of childhood maltreatment as moderator on change in harsh parenting, (N = 262)

	Coefficients				Model Statistics		
	b	95% CI	*β*	*p*	*F (df)*	*p*	*Adjusted R²*
Harsh parenting T₁-T₀					0.52(3, 258)	.671	-0.00
Constant	0.05	-0.92, 1.03		.915			
Control/intervention group	-0.01	-1.74, 1.73	0.00	.995			
HCM	-0.28	-0.85, 0.29	-0.09	.330			
HCM*Group	0.08	-0.70, 0.86	0.02	.842			
Harsh parenting T₂-T₁					4.82(3, 258)	.003**	0.04
Constant	-0.54	-1.34, 0.27		.188			
Control/intervention group	2.15	0.72, 3.59	0.22	.003**			
HCM	-0.81	-1.28, -0.35	-0.30	.001***			
HCM*Group	0.85	0.21, 1.50	0.26	.010**			
Harsh parenting T₂-T₀					5.21(3, 258)	.002**	0.06
Constant	-0.49	-1.48, 0.50		.334			
Control/intervention group	2.15	0.39, 3.95	0.18	.017*			
HCM	-1.10	-1.67, -0.52	-0.33	< .001***			
HCM*Group	0.93	0.14, 1.73	0.23	.021*			

Note.

T_0 = Baseline; T_1 = Post-test; and T_2 = Follow-up.

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

HCM = history of childhood maltreatment.

Positive parenting. History of childhood maltreatment was also not found to moderate the change in positive parenting from baseline to follow-up. Although this model was statistically significant, $F(3, 258) = 6.88$, $p < .001$, only group allocation, $p < .001$, significantly contributed to the 6% of variance that was accounted for. History of childhood maltreatment as a moderator did not significantly contribute to the model. It was, however, approaching significance, $p = .056$. This relationship is depicted in Figure 5. Here, the intervention group exhibited about the same size change in positive parenting as the control group as history of childhood maltreatment increased in intensity. However, the intervention group showed an increase in positive parenting whilst the control group showed a decrease in positive parenting. Though, again, this interaction relationship was not statistically significant.

Figure 5. *Scatterplot showing the non-significant moderating relationship between group allocation and history of childhood maltreatment on change in positive parenting from baseline to follow-up.*

On the other hand, history of childhood maltreatment did moderate the change in positive parenting, between follow-up and post-test. This model was statistically significant, $F(3, 258) = 4.67$, $p = .003$, and explained 4% of the variance in change scores. History of childhood maltreatment as a moderator, $p = .027$, was a significant contributor to the model as was group allocation, $p < .001$. This moderation relationship is depicted in Figure 6. From this figure, it can be seen that this model exhibits the opposite relationship to the previous one. Change in positive parenting across the control and intervention groups in

about the same size as history of childhood maltreatment increased in intensity. However, the control group showed an increase in positive parenting whilst the intervention group showed a decrease in positive parenting.
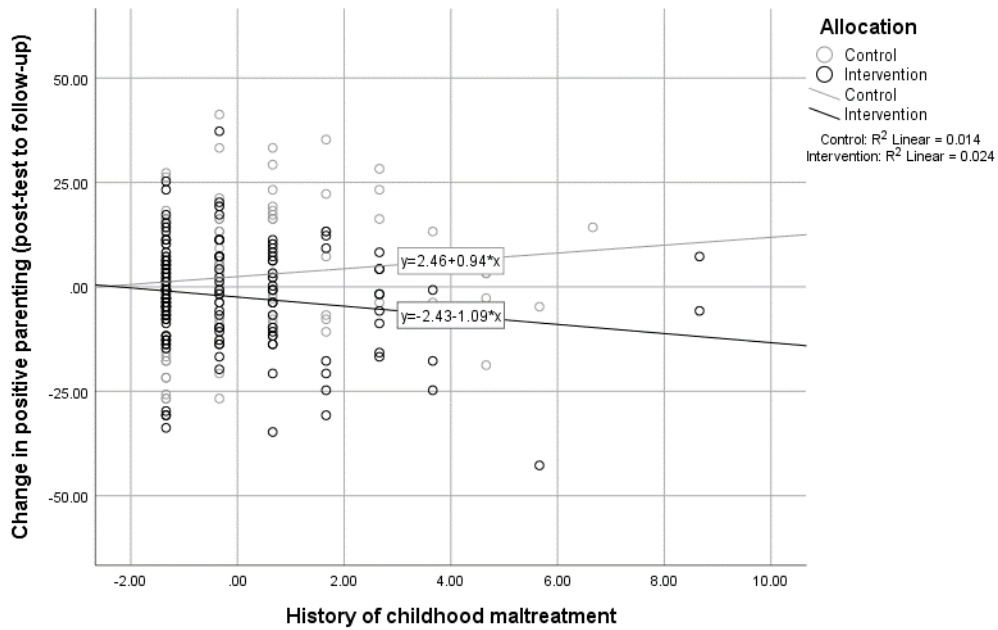

Figure 6. *Scatterplot showing the moderating relationship between group allocation and history of childhood maltreatment on change in positive parenting from post-test to follow-up.*

History of childhood maltreatment did not moderate the change in positive parenting from baseline to follow-up, since the model was not statistically significant, $F(3, 258) = 0.35$, $p = .788$.

Table 5

Regression results for history of childhood maltreatment as moderator on change in positive parenting, (N = 262)

	Coefficients				Model Statistics		
	b	95% CI	*β*	*p*	*F (df)*	*p*	*Adjusted R²*
Positive parenting T₁-T₀					6.88(3, 258)	< .001***	0.06
Constant	-3.01	-5.03, -0.99		.004**			
Control/intervention group	8.14	4.54, 11.74	0.33	< .001***			
HCM	-0.96	-2.14, 0.22	-0.14	.110			
HCM*Group	1.58	-0.39, 3.20	0.19	.056			
Positive parenting change T₂-T₁					4.674(3, 258)	.003**	0.04
Constant	2.46	0.21, 4.71		.032*			
Control/intervention group	-7.58	-11.59, -3.57	-0.28	< .001***			
HCM	0.94	-0.37, 2.26	0.13	.160			
HCM*Group	-2.03	-3.84, -0.23	-0.22	.027*			
Positive parenting T₂-T₀					0.352(3, 258)	.788	-0.01
Constant	-0.55	-2.78, 1.68		.628			
Control/intervention group	0.56	-3.41, 4.53	0.02	.780			
HCM	-0.02	-1.32, 1.28	-0.00	.976			
HCM*Group	-0.45	-2.24, 1.34	-0.05	.619			

Note.

T_0 = Baseline; T_1 = Post-test; and T_2 = Follow-up.

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

HCM = History of childhood maltreatment

Power calculation. For IPV, power of 24.18% was established for PLH for Young Children with an effect size of $f^2 = 0.01$ and a sample size of 262. Similarly, for history of childhood maltreatment, a power of 85.44% was established with an effect size of $f^2 = 0.05$ and the sample size of 262.

Discussion

It was expected that IPV or history of childhood maltreatment would moderate a change in parenting – for both harsh and positive parenting. More specifically, that those who had experienced current IPV or had a history of childhood maltreatment would exhibit a smaller change in harsh parenting or positive parenting – exhibiting less benefit - than other caregivers. The results from the IPV models will be discussed, and followed by the results of the history of childhood maltreatment models, below.

IPV

Harsh parenting. IPV did not moderate a change in harsh parenting from baseline to post-test, from post-test to follow-up nor from baseline to follow-up for the intervention group nor the control group, neither confirming nor denying our hypothesis. This finding suggests that in terms of harsh parenting, participants who had experienced current IPV, benefitted equally from the programme as other caregivers. As a result, it would appear that they do not need extra intervention. However, it should be borne in mind that there was no change in harsh parenting as a result of group allocation – which is exhibited in the consistently low change in harsh parenting across the study. From this is appears that the intervention, as a whole, had very little effect on harsh parenting. So whilst these finding diverge from current literature on IPV and parenting, which has consistently found that IPV is linked to increased harsh parenting (Chiesa et al., 2018; Hooker et al., 2016), this may be because the programme itself had no effect. Therefore, although harsh parenting by caregivers who experienced IPV did not get worse over the course of the programme, it remains an open question as to whether they would need more help in this area. Future research should explore the relationship between IPV and harsh parenting, particularly in the case where there is a significant change in harsh parenting across the programme.

Positive parenting. Similarly to change in harsh parenting, IPV did not moderate a change in positive parenting from baseline to post-test, from post-test to follow-up or from baseline to follow-up. This finding suggests that participants who had experienced current IPV, benefitted equally from the programme, in terms of positive parenting, as other caregivers. As a result, it would appear that they do not need extra intervention. This might be explained by those mothers who have experienced IPV exhibiting positive parenting

practices through striving to be a good mother, despite their own experiences of violence (Lapierre, 2010; Greeson et al., 2014). However, this finding is contrary to our hypothesis, as well as the consensus in literature that those who have experienced IPV tend to exhibit harsher styles of parenting and as a result, may need extra help (Chiesa et al., 2018; Hooker et al., 2016). Following from this, future research should continue to explore the relationship between IPV and positive parenting practices within parenting programmes.

History of childhood maltreatment

       Harsh parenting. History of childhood maltreatment did not moderate the change in harsh parenting from baseline to post-test, but it did moderate the change from follow-up to post-test and from baseline to follow-up. Here, the intervention group remained consistent in their harsh parenting as their history of childhood increased in intensity, whilst the control group showed reduced harsh parenting as their history of childhood abuse increased in intensity. This finding suggests that whilst the intervention had no benefit for those who have a history of childhood maltreatment, it also did no damage in terms of harsh parenting. As a result, it would appear that those with a history of childhood maltreatment do not need extra intervention. On the other hand in the control group, those with a history of childhood maltreatment improved more in terms of harsh parenting than other caregivers. It may well be that women in the control group were more aware of the risks of abuse for their own children. Alternatively, those women in the intervention may have been overwhelmed with new material whilst those in the control were not (Patterson, Mockford, & Stewart-Brown, 2005). There are limitations to this finding which are linked to the extent to which harsh parenting, and specifically a change in harsh parenting, was present within the participants in this study. Scores on the harsh parenting measure were consistently low throughout the study, suggesting that harsh parenting was, already, not common in this sample. In addition, although history of childhood maltreatment predicted a statistically significant, greater change in harsh parenting within the control group, in terms real life experiences of participants, this difference is insignificant. By examining the instruments used, one can see that this was the difference between the participants hitting their children twice, compared to once a month. This finding was counterintuitive, contrary to our hypothesis and contrary to existing literature, which suggests that those caregivers who have a history of childhood maltreatment are at increased risk of making use of harsh parenting with their own children (Valentine et al., 2012; Bartlett et al., 2016). As a result, future studies should explore this relationship further.

Positive parenting. History of childhood maltreatment moderated a change in positive parenting from post-test to follow-up, but not at baseline to post-test or at baseline to follow-up. These finding suggests that those caregivers who have a history of childhood maltreatment do benefit equally, if not more from the programme, in terms of positive parenting than those who had not. However, in the case of these caregivers, this benefit is less lasting when compared to others in the sample. As a result, it would appear that women who have a history of childhood maltreatment do need extra intervention – perhaps of a stronger intensity or of a longer duration (Holzer, Higgins,Bromfield, Richardson, & Higgins, 2006). This finding converged with past literature as well as our hypothesis. Future research should investigate the relationship between IPV and positive parenting in parenting programmes over extended time periods.

The overall findings of this study suggest that caregivers who have experienced IPV or have a history of childhood maltreatment do benefit equally from the PLH parenting programme as other caregivers and as a result do not need extra intervention. These findings can inform future research and practice since resources can thus be focused on other groups of people that may not benefit equally from the programme, and following from this may need extra help. These findings are contrary to what most literature has found on the link between IPV, history of maltreatment and parenting, but does provide some new insights into and how having these experiences might affect parenting programme outcomes – a topic that little is known about. Through bettering our understanding of how parenting programmes work, this study can also indirectly contribute towards the achievement of the Sustainable Development Goals.

Limitations

These findings are however tentative, since there are several limitations to the overall findings of the study. Although it appeared that the programme benefitted these groups of caregivers equally, this may have been because the programme had no effect on harsh parenting in this sample. The intervention did improve positive parenting, but this effect was not sustained for any parent in the study. Additionally, missing data was prevalent for all of variables within the dataset but this was particularly the case for history of childhood maltreatment. As a result, for the analyses to be completed, median imputation was used to impute the missing data. However, median imputation has been linked to the introduction of bias and reductions of variance within a dataset, and thus to the underestimation of variance estimates, which lowers the power of the analysis (Enders, 2010). Furthermore, those data points that could not be imputed were deleted listwise, thus further lowering the power of the

analysis (Sterne et al., 2009). This was revealed through a post-hoc power analysis where, in the case of IPV, power was incredibly low. Consequently, there is a high chance of false negatives being found, as well as bias within the sample, and as a result, the findings for these models are statistically inconclusive (Faul et al., 2009; Cohen, 1988). As a result, the question of whether IPV and/or history of childhood maltreatment moderate a change in harsh/positive parenting remains, at large, unanswered.

Future studies should continue to investigate the relationship between IPV and history of childhood abuse and parenting programme outcomes. In the future, studies investigating these same variables should include a much greater sample size in order to control for underpowering.

Conclusion

By making use of RCT data of caregivers' harsh and positive parenting practices over three time points, this study aimed to investigate whether women in the PLH RCT who were in current IPV relationships and/or with a history of childhood maltreatment benefited at least equally from the PLH parenting programme as other women in the trial, and thus whether they would need extra support. For both IPV and history of childhood maltreatment, findings suggested that these women did benefit equally from the programme as other caregivers. However, for harsh parenting this may have been because the programme itself had no effect. Whilst for positive parenting, this affect is not lasting. Due to underpowering, no decisive conclusions can be made. As a result, since the question of whether IPV and/or history of childhood maltreatment moderate a change in harsh/positive parenting remains, at large, unanswered, more research into this topic is required.

Acknowledgements

We are incredibly thankful for our supervisor, Catherine Ward, who has guided us and taught us throughout the year. Having her as a supervisor has been an invaluable experience. We would also like to thank Michelle Henry, Milton Gering, Marilyn Lake, Alexa Leach, Jenny Pan, Daniel Raubenheimer and Colin Tredoux for their knowledge, support and guidance - which was provided out of their own time.

Several people also contributed to the original RCT. These included WHO, UNICEF, Andy Dawes (University of Cape Town) who assisted in programme development, Wim Delva (Stellenbosch University) who assisted in the randomization process, Trial Steering Committee and Data Safety Management Board (Tracey Bywater, University of York; Carl Lombard, South African MRC; Heidi Loening, UNICEF, Josephine McLallen, Ikamva Labantu; Daniel Michelson, University of Sussex), and the programme implementation partners – Ikamva Labantu, the Cape Town Child Welfare Society and Clowns Without Borders South Africa. Furthermore, we'd also like to acknowledge the research assistants, group facilitators and caregiver-child dyards who made the study possible.

Funding

References

Al Dosari, M. N., Ferwana, M., Abdulmajeed, I., Aldossari, K. K., & Al-Zahrani, J. M. (2017). Parents' perceptions about child abuse and their impact on physical and emotional child abuse: A study from primary health care centers in Riyadh, Saudi Arabia. *Journal of Family & Community Medicine*, *24*(2), 79–85. doi:10.4103/2230-8229.205110

Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, *39*(1), 93–98. doi: 10.1016/j.amepre.2010.03.015

Barlow, J., & Coren, E. (2018). The effectiveness of parenting programs: A review of Campbell reviews. *Research on Social Work Practice*, *28*(1), 99–102. doi: org/10.1177/1049731517725184

Bartlett, J. D., Kotake, C., Fauth, R. C., & Easterbrooks, M. A. (2017). Intergenerational transmission of child abuse and neglect: Do maltreatment type, perpetrator, and substantiation status matter? *Child Abuse & Neglect, 63*, 84-94. doi: 10.1016/j.chiabu.2016.11.021

Bert, S. C., Guner, B. M., & Lanzi, R. G. (2009). The influence of maternal history of abuse on parenting knowledge and behavior. *Family Relations*, *58*(2), 176–187. doi: 10.1111/j.1741-3729.2008.00545.x

Chiesa A. E., Kallechy, L., Harlaar, N., Ford, C. R., Garrido, E. F., Betts, W. R., & Maguire, S. (2018). Intimate partner violence victimization and parenting: A systematic review. *Child Abuse & Neglect, 80*, 285-300. doi: 10.1016/j.chiabu.2018.03.028

Chander, P., Kvalsvig, J., Mellins, C. A., Kauchali, S., Arpadi, S. M., Taylor, M., … & Davidson, L. L. (2017). Intimate partner violence and child behavioral problems in South Africa. *Pediatrics*, *139*(3). doi: 10.1542/peds.2016-1059

Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual Review of Clinical Psychology, 1*, 409-438. doi: 10.1146/annurev.clinpsy.1.102803.144029

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Currie, J., & Widom, C. S. (2010). Long-term consequences of child abuse and neglect on adult economic well-being. *Child Maltreatment, 15*(2), 111-120. doi: 10.1177/1077559509355316

Dunne, M., Zolotor, A. J., Runyan, D., Andreva-Miller, I., Choo, W., Dunne, S. K., . . . Youssef, R. (2009). ISPCAN Child Abuse Screening Tools Retrospective version (ICAST-R): Delphi study and field testing in seven countries. *Child Abuse and Neglect, 33*(11), 815-825. doi:10.1016/j.chiabu.2009.09.005

Enders, C. K. (2010). *Applied missing data analysis.* New York, NY: The Guilford Press.

Eyberg, S., & Ross, A. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology, 7*(2), 113-116. doi: 10.1080/15374417809532835

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. doi: 10.3758/BRM.41.4.1149

Gardner, F., Hutchings, J., Bywater, T., & Whitaker, C. (2010). Who benefits and how does It work? Moderators and mediators of outcome in an effectiveness trial of a parenting intervention. *Journal of Clinical Child & Adolescent Psychology, 39*(4), 568-580. doi: 10.1080/15374416.2010.486315

Greeson, M. R., Kennedy, A. C., Bybee, D. I., Beeble, M., Adams, A. E., & Sullivan, C. (2014). Beyond deficits: Intimate partner violence, maternal parenting, and child behavior over time. *American Journal of Community Psychology*, *54*(1-2), 46-58. doi: 10.1007/s10464-014-9658-y

Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics, 137*(3). doi: 10.1542/peds.2015-4079

Holzer, P. J., Higgins, J. R., Bromfield, L. M., Richardson, N., & Higgins, D. J. (2006). *The effectiveness of parent education and home visiting child maltreatment prevention programs.* Melbourne, Australia: National Child Protection Clearinghouse, Australian Institute of Family Studies.

Hooker, L., Samaraweera, N., Agius, P., & Taft, A. (2016). Intimate partner violence and the experience of early motherhood: A cross-sectional analysis of factors associated with a poor experience of motherhood. *Midwifery*, *34,* 88-94. doi: 10.1016/j.midw.2015.12.011

IBM Corporation. (2017). IBM SPSS Statistics for Windows (Version 25.0). Armonk, NY: IBM Corp. Retrieved from https://spss-64bits.en.softonic.com/

Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low- and middle-income countries: A systematic review. *Prevention Science*, *14*(4), 352-363. doi: 10.1007/s11121-012-0314-1

Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A., & Lozano, R. (2002). *World report on violence and health*. Geneva: World Health Organization.

Lachman, J. M., Kelly, J., Cluver, L., Ward, C. L., Hutchings, J., & Gardner, F. (2018). Process evaluation of a parenting program for low-income families in South Africa. *Research on Social Work Practice*, 28(2), 188-202. doi: 10.1177/1049731516645665

Lapierre, S. (2010). Striving to be 'good' mothers: Abused women's experiences of mothering. *Child Abuse Review, 19*(5), 342-357. doi: 10.1002/car.1113

Li, C. (2013). Little's test of missing completely at random. *The Stata Journal: Promoting Communications of Statistics and Stata, 13*(4), 795-809. doi: 10.1177/1536867X1301300407

Lunkenheimer, E., Ram, N., Skowron, E. A., & Yin, P. (2017). Harsh parenting, child behavior problems, and the dynamic coupling of parents' and children's positive behaviors. *Journal of Family Psychology, 31*(6), 689-698. doi: 10.1037/fam0000310

McEachern, A., Dishion, T., Weaver, C., Shaw, D., Wilson, M., & Gardner, F. (2012). Parenting Young Children (PARYC): Validation of a self-report parenting measure. *Journal of Child & Family Studies, 21*(3), 498-511. doi: 10.1007/s10826-011-9503-y

Mejia, A., Leijten, P., Lachman, J. M., & Parra-Cardona, J. R. (2017). Different strokes for different folks? Contrasting approaches to cultural adaption of parenting interventions. *Prevention Science, 18*(6), 630-639. doi: 10.1007/s11121-016-0671-2

Menting, A., Orobio de Castro, B., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial child behavior: A meta-analytic review. *Clinical Psychology Review, 33*(8), 901-913. doi: 10.1016/j.cpr.2013.07.006

Mikton, C., & Butchart, A. (2009). Child maltreatment prevention: A systematic review of reviews. *Bulletin of the World Health Organization, 87*(5), 353–361. doi: 10.2471/BLT.08.057075

Niolon, P. H., Kearns, M., Dills, J., Rambo, K., Irving, S., Armstead, T., & Gilbert, L. (2017). *Preventing intimate partner violence across the lifespan: A technical package of programs, policies, and practices*. National Centre for Injury Prevention and Control,

Centers for Disease Control and Prevention Atlanta, Georgia. Retrieved from https://www.cdc.gov/violenceprevention/pdf/ipv-technicalpackages.pdf

Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *Public Library of Science Medicine, 9*(11), 1-31. doi: 10.1371/journal.pmed.1001349

Pardini, D. A., Fite, P. J., & Burke, J. D. (2008). Bidirectional associations between parenting practices and conduct problems in boys from childhood to adolescence: the moderating effect of age and African-American ethnicity. *Journal of Abnormal Child Psychology*, *36*(5), 647–662. doi:10.1007/s10802-007-9162-z

Patterson, J., Mockford, C., & Stewart-Brown, S. (2005). Parents' perceptions of the values of the Webster-Stratton parenting programme: A qualitative study of a general practice based initiative. *Child: Care, Health and Developoment, 31*(1), 53-64. doi: 10.1111/j.1365-2214.2005.00479.x

Pels, T., van Rooij, F. B., & Distelbrink, M. (2015). The impact of intimate partner violence (IPV) on parenting by mothers within an ethnically diverse population in the Netherlands. *Journal of Family Violence*, *30*(8), 1055–1067. doi:10.1007/s10896-015-9746-2

Pingley, T. (2017). *The impact of witnessing domestic violence on children: A systematic review* (unpublished master's thesis). St. Catherine University, United States of Aerica.

Pronyk, P. M., Hargreaves, J. R., Kim, J. C., Morison, L. A., Phetla, G., Watts., C., … & Porter, J. D. (2006). Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: A cluster randomised trial. *The Lancet, 368*(9551), 1973-1983. doi: 10.1016/S0140-6736(06)69744-4

Rajan, S. K. (2016). A review on the perpetrators of child abuse. *Review of Social Sciences*, *1*(3), 45-52. doi: 10.18533/rss.v1i3.25

Runyan, D. K., Dunne, M. P., Zolotor, A. J., Madrid, B., Jain, D., Gerbaka, B., & Isaeva, O. (2009). The development and piloting of the ISPCAN Child Abuse Screening Tool— Parent version (ICAST-P). *Child Abuse & Neglect*, *33*(11), 826-832. doi: 10.1016/j.chiabu.2009.09.006

Shai, N. J., & Sikweyiya, Y. (2015). Programmes for change: Addressing sexual and intimate partner violence in South Africa. *South African Crime Quarterly, 51*. 31-41. doi: 10.4314/sacq.v51i1.4

Sterne, J. A. C., White, I. R., Carlin, J. B., Spratt, M., Royston, P., Kenward, M. G., ... & Carpenter, J. R. (2009). Multiple imputation for missing data in epidemiological and clinical research: Potential and pitfalls. *BMJ, 338*, 157-160. doi:10.1136/bmj.b2393

Straus, M. A., Hamby, S., Boney-McCoy, S., & Sugarman, D. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283-316. doi:10.1177/019251396017003001

United Nations. (n.d.) About the Sustainable Development goals – United Nations Sustainable Development. Retrieved from https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Valentino, K., Nuttall, A. K., Comas, M., Borkowski, J. G., & Akai, C. E. (2012). Intergenerational continuity of child abuse among adolescent mothers: Authoritarian parenting, community violence, and race. *Child Maltreatment*, *17*(2), 172–181. doi: 10.1177/1077559511434945

Ward, C. L., Wessels, I. M., Lachman, J. M., Hutchings, J., Cluver, L.D., Kassanjee, R., … & Gardner, F. (2019). Parenting for Lifelong Health for Young Children: A randomized controlled trial of a controlled trial of a parenting program in South Africa to prevent harsh parenting and child conduct problems. *Journal of Child Psychology and Psychiatry*. doi: 10.1111/jcpp.13129

White, O., Hindley, N., & Jones, D. (2014). Risk factors for child maltreatment recurrence: An updated systematic review. *Medicine, Science and the Law, 55*(4), 259-77. doi: 10.1177/0025802414543855

Woollet, N., & Thomson, K. (2016). Understanding the intergenerational transmission of violence. *South African Medical Journal*, *106*(11), 1068-1070. doi: 10.7196/SAMJ.2016.v106i11.12065

World Health Organisation. (2016). *INSPIRE: seven strategies for ending violence against children*. Retrieved from www.who.int/violence_injury_prevention/violence/inspire

Yun, S. (2010). Factor structure and reliability of the Revised Conflict Tactics Scales' (CTS2) 10-factor model in a community-based female sample. *Journal of Interpersonal Violence, 26*(4), 719-744. doi: 10.1177/0886260510365857

Zhang, Z. (2016). Missing data imputation: Focusing on single imputation. *Annals of Translational Medicine, 4*(1), 1-8. doi: 10.3978/j.issn.2305-5839.2015.12.38

Appendix A: Relevant demographic measures

3.4   **Gender**

    ☐   3.4 What is your gender?

Expects a single option response (**required**)

☐ Female [0]

☐ Male [1]

3.5   **Age**

    ▦   3.5 How old are you? (please give your answers in years)

Expects a numeric response (**required**)

[   ]

Branches

If response **Less Than '18'** then skip to *Not Eligible Criteria (6.2)*

3.6   **Marital status**

    ☐   3.6 What is your marital status?

Expects a single option response (**required**)

☐ Single [1]

☐ Partnered [2]

☐ Married [3]

☐ Separated [4]

☐ Divorced [5]

☐ Widowed [6]

☐ Other [111]

☐ Refused [999]

3.15   **Highest level of education**

    ☐   3.15 What is your highest level of education completed?

Expects a single option response (**required**)

☐ No schooling [0]

☐ Some primary school [1]

☐ Completed primary school [2]

☐ Some high school [3]

☐ Completed high school [4]

☐ Post-matric degree/diploma [5]

☐ Post-graduate degree [6]

☐ Other [111]

☐ Don't Know [666]

☐ Refused [999]

3.16 **Highest level of education Other**

    📄   3.16 Please specify

Expects a single line text response (**required**)

```

```

3.17 **Currently working**

    ☐   4.1 Are you currently working (either formal employment or informal work)?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

Prerequisites
Skip when *Currently working (3.17)* **Not Equal 'Yes [1]'**

3.18 **Part-time or full-time**

    ☐   4.2 Do you work part-time or full-time?

Expects a single option response (**required**)

☐ Part-time (less than 40 hours a week) [0]

☐ Full-time (40 hours a week) [1]

☐ Refused [999]

3.5 **Child gender**

    ☐   What gender is **Childs first name (3.3)** ?

Expects a single option response (**required**)

☐ Female [0]

☐ Male [1]

3.6 **Child age**

    🔢   How old is **Childs first name (3.3)** ? [Please enter in years]

Expects a numeric response (**required**)

```

```

Constraints

Response must be **Less Than '10'**

Response must be **Greater Than '1'**

3.7 **Relationship to the child again**

    ☐   What is your relationship this to **Childs first name (3.3)** ?

Expects a single option response (**required**)

☐ Biological mother [0]

☐ Biological father [1]

☐ Stepfather/ stepmother [2]

☐ Brother/ sister/ stepbrother/ stepsister [3]

☐ Grandmother/ grandfather [4]

☐ Great-grandmother/ grandfather [5]

☐ Aunt/ uncle [6]

☐ Cousin [7]

☐ Foster parent [8]

☐ Other [111]

☐ Refused [999]

Prerequisites
Skip when *Relationship to the child again (3.7)* Not Equal 'Other [111]'

3.8 **Relationship to the child - Other**

📄   Please specify:

Expects a single line text response (**required**)

[   ]

4.9 **Child with Caregiver for 3 months**

☐   Has **Child First Name (4.3)** been staying with you at least 4 nights a week for the past 3 months?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

Branches
If response **Equals 'No [0]'** then skip to *Not Eligible Criteria (6.2)*

4.10 **Primary Caregiver of Child**

☐   5.9 Are you the person who looks after **Child First Name (4.3)** the most in your household?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

Branches
If response **Equals 'No [0]'** then skip to *NOT ELIGIBLE – Not Caregiver (10.1)*

Appendix B: Caregiver IPV measure

Section 13.   Challenges at Home

13.1   **Relationship at home 1**

☐   This next section is intimate partner relationships. Being in a relationship can be challenging. No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, tired, or for some other reason.

13.2   **Relationship in the last month**

☐   Are you in a relationship or have you been in a relationship in the last month?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

13.3   **Relationship at home 2**

☐   These next questions are about your relationship with your partner. If you are not currently in a relationship, please answer these questions about any relationship you have had in your adult life.

Prerequisites
Skip when *Relationship in the last month (13.2)* Not Equal 'Yes [1]'

13.4   **Disagreements1**

☐   Couples have many different ways of trying to settle their differences. Please answer how many times the following statements happened in the past month.

Prerequisites
Skip when *Relationship in the last month (13.2)* Equals 'Yes [1]'

13.5   **Disagreements2**

☐   Couples have many different ways of trying to settle their differences. Please answer if you have experienced the following in your life.

13.6   **Compromise**

☐   My partner explained his or her side or suggested a compromise for a disagreement with me.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.7 **My partner insulted or shouted or yelled**

☐   My partner insulted or shouted or yelled or swore at me.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

- -

13.8 **Sprain or bruise because of a fight**

☐   I had a sprain, bruise, or small cut because of a fight with my partner.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.9 **My partner showed respect**

☐   My partner showed respect for, or showed that he or she cared about my feelings about an issue we disagreed on?

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.10 **My partner pushed or slapped me**

☐   My partner pushed, shoved or slapped me.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.11   **Partner punched kicked beat**

☐   My partner punched me, kicked me or beat me up.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.12   **Threat to hit me**

☐   My partner destroyed something belonging to me or threatened to hit me.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.13   **I went to the doctor because of a fight**

☐   I went to the doctor or needed to see a doctor because of a fight with my partner.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.14   **Forced sex**

☐   My partner used force (like hitting, holding down or using a weapon) to make me have sex.

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

13.15   **Sex without a condom**

☐   My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force).

Expects a single option response (**required**)

☐ Never happened [0]

☐ Happened before but not in the past month [5]

☐ Once in the past month [1]

☐ Twice in the past month [2]

☐ Three times in the past month [3]

☐ More than 3 times in the past month [4]

☐ Refused [999]

Appendix C: Caregiver history of childhood maltreatment

Section 14. Experience Growing Up

14.1   **Questions about your early life**

☐   The next questions are about your early life, from when you were a small child to before you were 18 years old. These questions are about violent or upsetting things that can happen to children and young people.

14.2   **Questions about your early life1**

☐   We know that it is difficult to talk about these things. Remember, everything you tell me is private. No-one in your family, your neighbourhood or the authorities will know what you tell us.

14.3   **Questions about your early life 2**

☐   Please answer all of the questions even if you think some of them do not apply to you.

14.4   **Physical abuse**

☐   When you were growing up (before age 18), did any adult in your household ever do the following? (You can choose more than one)

Expects multiple selected options (**required**)

☐ Hit, punch or kick you very hard [1]

☐ Beat you very hard with an object like a stick cane, whip or belt [2]

☐ Shake your body very hard so that it hurt you [3]

☐ Stab or cut you with a knife or sharp object [4]

☐ None of these things happened to me [0]

☐ Cannot remember [111]

☐ Refused [999]

14.5   **Frequency of physical abuse**

☐   How often did any of the previous experiences happen to you?

Expects a single option response (**required**)

☐ 1 to 2 times [1]

☐ 3 to 10 times [2]

☐ More than 10 times [3]

☐ Refused [999]

14.6   **Verbal abuse**

☐   When you were growing up (before age 18), did any adult in your household ever do any of the following? (You can choose more than one)

Expects multiple selected options (**required**)

☐ Insult and criticise you to make you feel that you were bad, stupid, or worthless [1]

☐ Say that you were not loved or did not deserve to be loved [2]

☐ Say that they wished you had never been born or were dead [3]

☐ Threaten that you would be badly hurt or killed [4]

☐ Threaten to abandon you or refuse to let you live in the home anymore [5]

☐ None of these ever happened to me [0]

☐ Cannot remember [111]

☐ Refused [999]

14.7 **Frequency of verbal abuse**

☐ How often did any of the previous things happen?

Expects a single option response (**required**)

☐ 1 to 2 times [1]

☐ 3 to 10 times [2]

☐ More than 10 times [3]

☐ Refused [999]

14.8 **Events that may have happened**

☐ Sometimes things happen that make children feel very frightened or worried. They may also be made to feel embarrassed or ashamed or unloved.

14.9 **Events that may have happened1**

☐ Remember, all of these answers are completely confidential and will not be seen by anyone in the community. Thank you for being truthful and patient!

14.10 **Sexual abuse**

☐ When you were growing up (before age 18), did anyone ever do any of the following when you did not want them to? You can choose more than one.

Expects multiple selected options (**required**)

☐ Expose their private parts (genitals) to you [1]

☐ Make you pose naked in front of other people or for photographs, video, or internet [2]

☐ Touch your private parts (genitals) [3]

☐ Made you touch their private parts (genitals) [4]

☐ Have sexual intercourse with you [5]

☐ None of these things ever happened to me [0]

☐ Cannot remember [111]

☐ Refused [999]

14.11 **Sexual abuse frequency**

☐ How often did any of the previous things happen to you?

Expects a single option response (**required**)

☐ 1 or 2 times [0]

☐ Between 3 - 10 times [2]

☐ More than 10 times [3]

☐ Refused [999]

14.12 **Ever told anyone about sexual violence**

☐ Have you ever told any person about unwanted sexual experiences before now?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

14.13 **Thanks growing up**

☐ Thank you very much for answering these challenging questions. We really appreciate how patient you have been. We are almost done. The next section is the last section.

Appendix D: Harsh parenting measure

Section 9. Disciplining Our Children

9.1 **ICAST Introduction**

☐ Its really tough to be a parent in todays world. People who look after kids often struggle with the discipline of their children and in keeping them safe.

9.2 **ICAST Introduction 3**

☐ All adults use certain methods to teach children the right behaviour or to stop them from behaving badly. Sometimes they make us really angry or upset and we do things we wish we hadnt.

9.3 **ICAST Introduction 4**

☐ Please tell me how many times you have tried these ways of disciplining **Childs first name (3.3)** in the last month (30 days)? If you have not done them in the last month but have done them before, please tell us.

9.4 **ICAST1**

☐ How often did you explain why something was wrong to **Childs first name (3.3)** in the past month?
Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.5 **ICAST2**

☐ How often did you tell **Childs first name (3.3)** to start or stop doing something in the past month?
Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.6 **ICAST3**

☐ How often did you shake **Childs first name (3.3)** in the past month?
Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.7   **ICAST4**

☐   How often did you hit **Childs first name (3.3)** with an object such as a stick, broom, switch, or belt in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.8   **ICAST5**

☐   How often did you give **Childs first name (3.3)** something else to do (distracted him/her) in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.9   **ICAST6**

☐   How often did you twist **Childs first name (3.3)** 's ear in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.10   **ICAST7**

☐   How often did you hit **Childs first name (3.3)** on the face or head with your hand in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.11   **ICAST8**

☐   How often did you pull **Childs first name (3.3)** 's hair in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.12   **ICAST9**

☐   How often did you threaten to abandon **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.13   **ICAST Introduction 5**

☐   Thank you very much for being honest with us. Many people struggle to manage their children's behaviour. We hope your answers will be able to help you and others.

9.14   **ICAST10**

☐   How often did you shout, yell or scream at **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.15   **ICAST11**

☐   How often did you tell **Childs first name (3.3)** that you wished **Childs first name (3.3)** were dead or had never been born in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.16   **ICAST12**

☐   How often did you threaten to kill **Childs first name (3.3)** or to invoke ghosts or evil spirits, or harmful people in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.17   **ICAST13**

☐   How often did you push, grab, or kick **Childs first name (3.3)** with a foot in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.18   **ICAST14**

☐   How often did you curse, or insult **Childs first name (3.3)** by calling him/her dumb, lazy or other names in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.19   **ICAST15**

☐   How often did you hit, beat, slap or spank **Childs first name (3.3)** with your bare hand in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.20   **ICAST16**

☐   How often did you choke **Childs first name (3.3)** or squeeze **Childs first name (3.3)** neck with hands or something else, smother him or her with a pillow or tried to drown him/her in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.21   **ICAST17**

☐   How often did you threaten to kick **Childs first name (3.3)** out of the house or send **Childs first name (3.3)** away from home in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.22   **ICAST18**

☐   How often did you lock **Childs first name (3.3)** out of the house in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.23   **ICAST19**

☐   How often did you take away **Childs first name (3.3)** 's privileges or money, forbade something he/she liked or told **Childs first name (3.3)** he/she cant leave the home in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.24   **ICAST Introduction 6**

☐   Thank you so much for telling us this. We know its not easy to be a parent and everyone struggles sometimes.

9.25   **ICAST20**

☐   How often did you refuse to speak to **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.26   **ICAST21**

☐   How often did you withhold a meal from **Childs first name (3.3)** as punishment in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.27   **ICAST22**

☐   How often did you use public humiliation to discipline **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.28   **ICAST Introduction 7**

☐   Sometimes children can make us so angry that we do things that are just not like ourselves. These are some things that caregivers have done could you tell us whether any of these have ever been true for you at really difficult time.

9.29   **ICAST23**

☐   How often did you burn or scald **Childs first name (3.3)**, or tie him/her up to something in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.30   **ICAST24**

☐   How often did you hit **Childs first name (3.3)** over and over again with object or fist in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

9.31   **ICAST25**

☐   How often did you threaten **Childs first name (3.3)** with a knife or gun in the past month?

Expects a single option response (**required**)

☐ Never [0]

☐ Has happened but not in the past month [1]

☐ Once or twice [2]

☐ 3-5 times [3]

☐ 6-10 times [4]

☐ More than 10 times [5]

☐ Refused [999]

Appendix E: Positive parenting measure

Section 7. Positive Parenting

7.1   **Relationship to child 1**

☐   As parents, sometimes we get on very well with our children, and other times it can feel difficult to have a good relationship. The next questions will ask about your relationship with **Childs first name (3.3)** . Please answer all the questions as best you can, even if you are not absolutely sure.

7.2   **Relationship to child 2**

☐   Please give your answers on the basis of your relationship with **Childs first name (3.3)** IN THE PAST MONTH (30 DAYS).

7.3   **Playing**

☐   How often do you play with your child?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.4   **Playing behaviour**

☐   Is playing with your child currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [(999)]

7.5   **Problem solving**

☐   How often do you stand back and let your child work through problems (s)he might be able to solve on his/her own?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ refused [999]

7.6 **Problem solving behaviour**

☐   Is letting your child work through problems (s)he might be able to solve on his/her own currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.7 **Share an enjoyable activity**

☐   How often do you invite your child to play a game with you or share an enjoyable activity?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refuse [999]

7.8 **Share an enjoyable activity behaviour**

☐   Is inviting your child to play a game with you or share an enjoyable activity currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refuse [999]

7.9 **Praise child**

☐   How often do you notice and praise your child's good behaviour?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refuse [999]

7.10   **Praise child behaviour**

☐   Is praising your child currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refuse [999]

7.11   **Teach your child new skills**

☐   How often do you teach your child new skills?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.12   **Teach your child new skills difficulty**

☐   Is teaching your child new skills currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.13   **Involve your child in household chores**

☐   How often do you involve your child in household chores?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.14   **Involve child in chores behaviour**

☐   Is involving your child in household chores currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.15   **Rewarding**

☐   How often did you reward your child when he/she did something well or showed a new skill?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.16   **Reward behaviour**

☐   Is rewarding your child when he/she did something well or showed a new skill currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.17   **Stick to rules**

☐   How often do you stick to your rules and not change your mind?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.18   **Stick to rules behaviour**

☐   Is sticking to your rules and not changing your mind currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.19   **Speak calmly with child**

☐   How often did you speak calmly with your child when you were upset with him or her?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.20   **Speak clamly behaviour**

☐   Is speaking calmly with your child when you are upset with him or her currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.21   **Explain clearly**

☐   How often did you explain what you wanted your child to do in clear and simple ways?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.22   **Explain clearly behaviour**

☐   Is explaining what you want your child to do in clear and simple ways currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.23   What you wanted him or her to do

☐   How often do you tell your child what you wanted him or her to do rather than tell him/her to stop doing something?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.24   What you wanted them to do behaviour

☐   Is telling your child what you want him or her to do rather than telling him/her to stop doing something currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.25   Expected behaviour

☐   How often did you tell your child how you expected him or her to behave?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.26   Expected behaviour from child

☐   Is telling your child how you expect him or her to behave currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.27   Enforce rules

☐   How often did you set rules on your child's behaviour that you were able to enforce?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.28   **Enforce rules behaviour**

☐   Is your ability to enforce rules on your child's behaviour currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.29   **Ensure rules are followed**

☐   How often did you make sure your child followed the rules you set all or most of the time?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

☐ Often [4]

☐ Very often [5]

☐ Always [6]

☐ Refused [999]

7.30   **Ensure rules are followed behaviour**

☐   Is making sure your child follows the rules you set all or most of the time currently a problem or difficult for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.31   **Family Meal Together**

☐   How often did you have a family meal together at home?

Expects a single option response (**required**)

☐ Never [0]

☐ Very rarely [1]

☐ Rarely [2]

☐ Sometimes [3]

7.32   **Family Meal Together Problem**

☐   Is having a family meal together at home currently a problem for you?

Expects a single option response (**required**)

☐ Yes [1]

☐ No [0]

☐ Refused [999]

7.33   **Thank you parenting**

☐   Thank you so much for answering these questions. You are doing a great job with this questionnaire.

Appendix F: Regression assumptions

IPV: Change in harsh parenting from baseline to post-test.
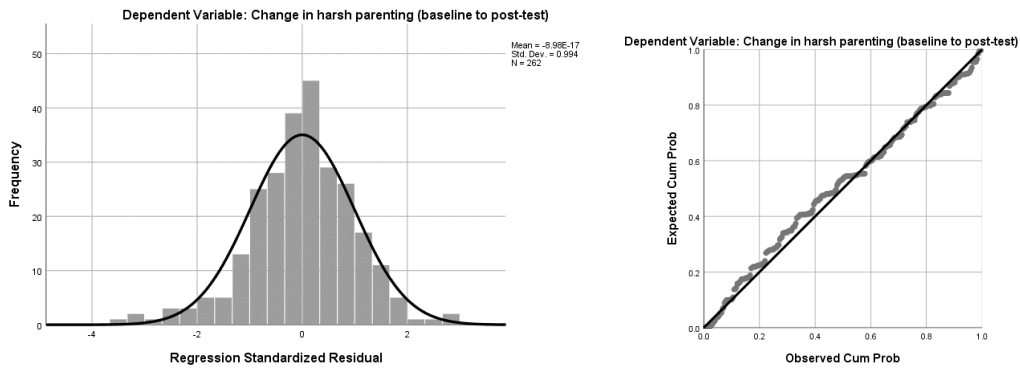
Figure 7. *Histogram and normal probability plot of residuals.*
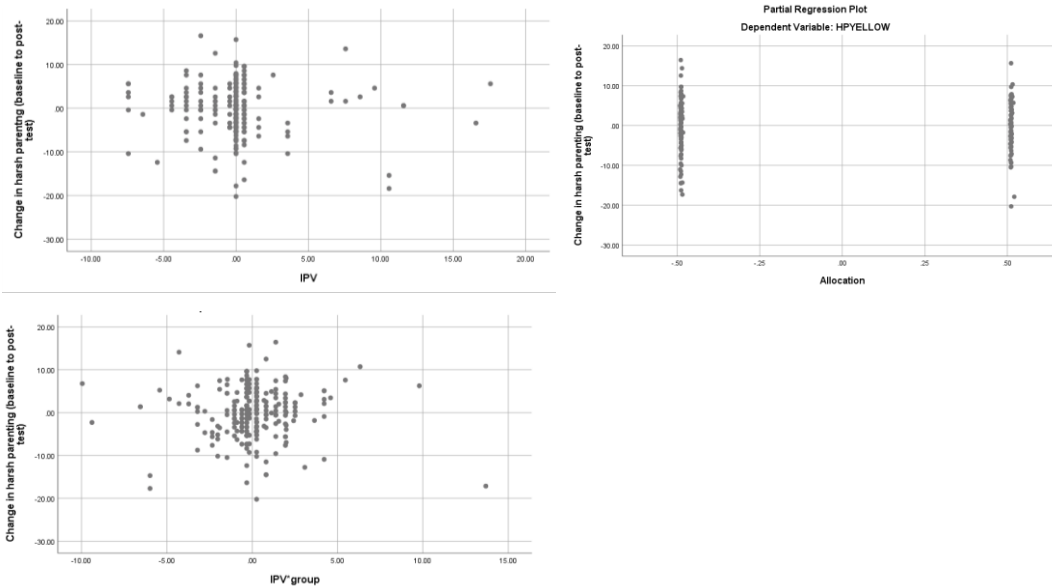
Figure 8. *Partial regression plots.*

IPV: Change in harsh parenting from post-test to follow-up.
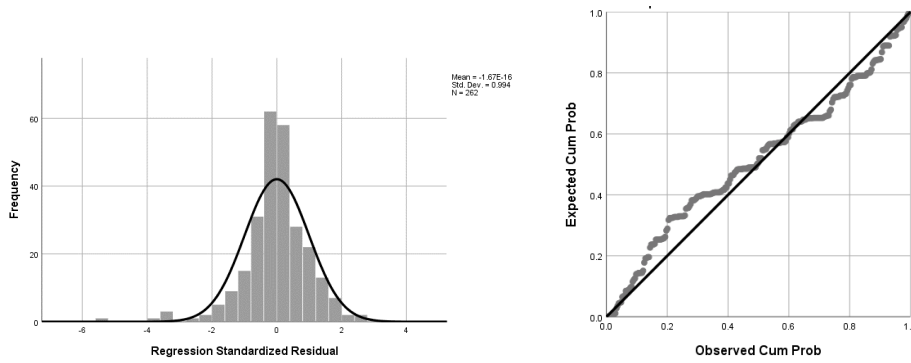
Figure 9. *Histogram and normal probability plot of residuals.*
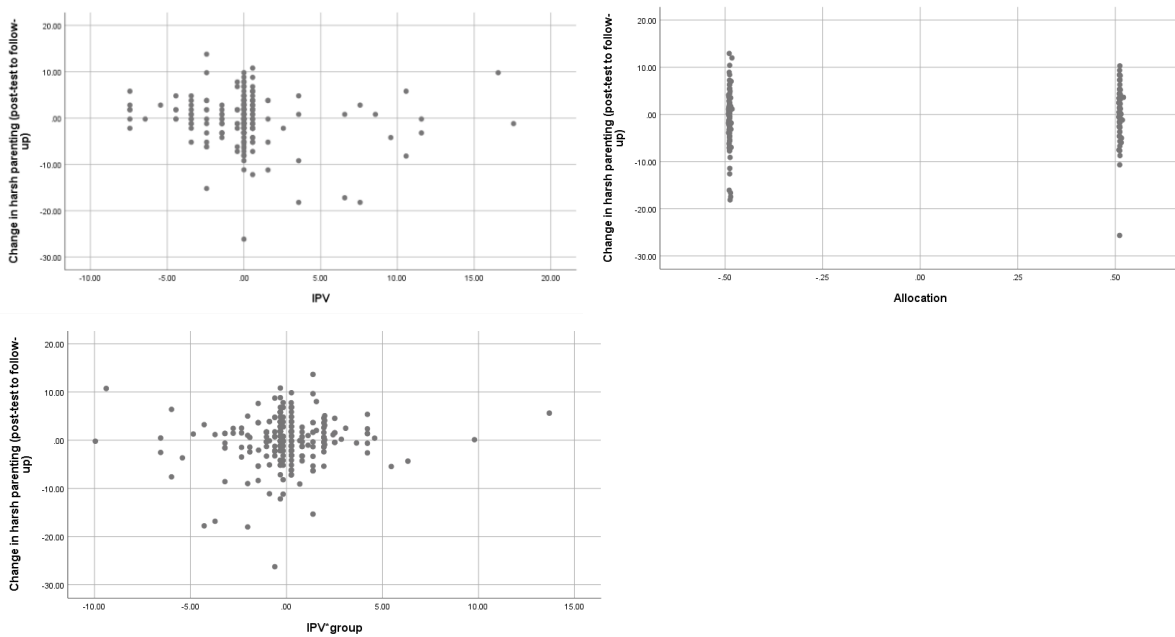
Figure 10. *Partial regression plots.*

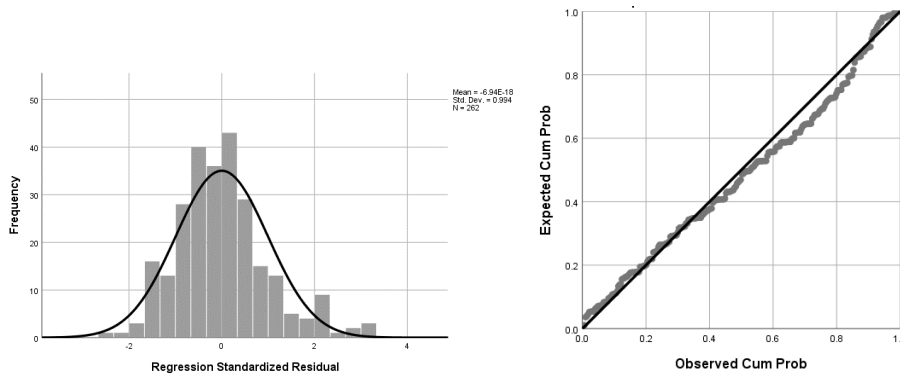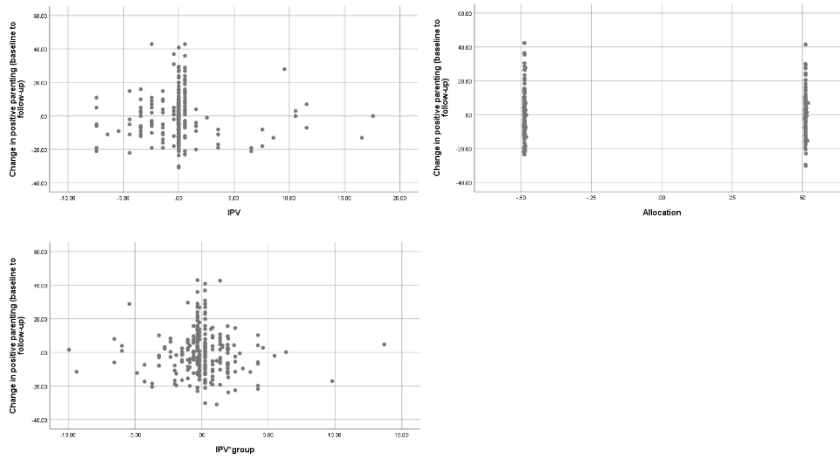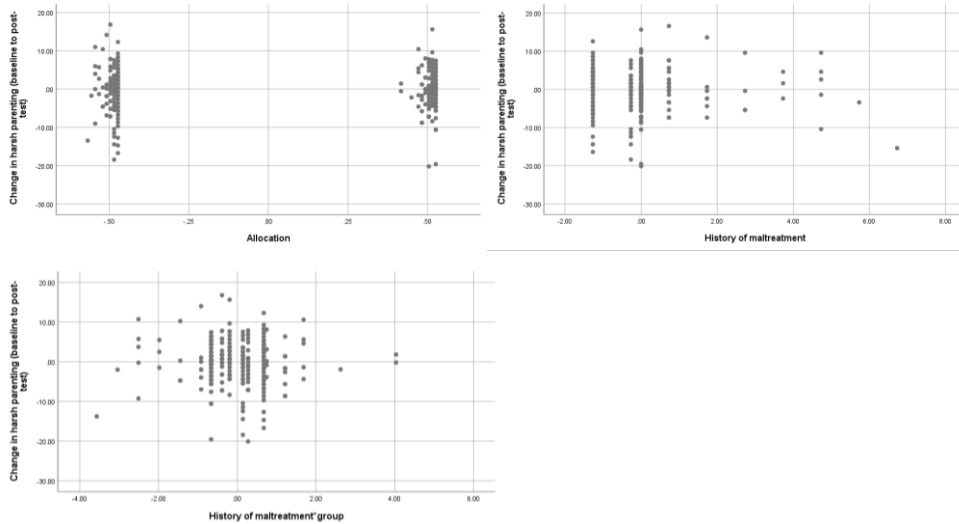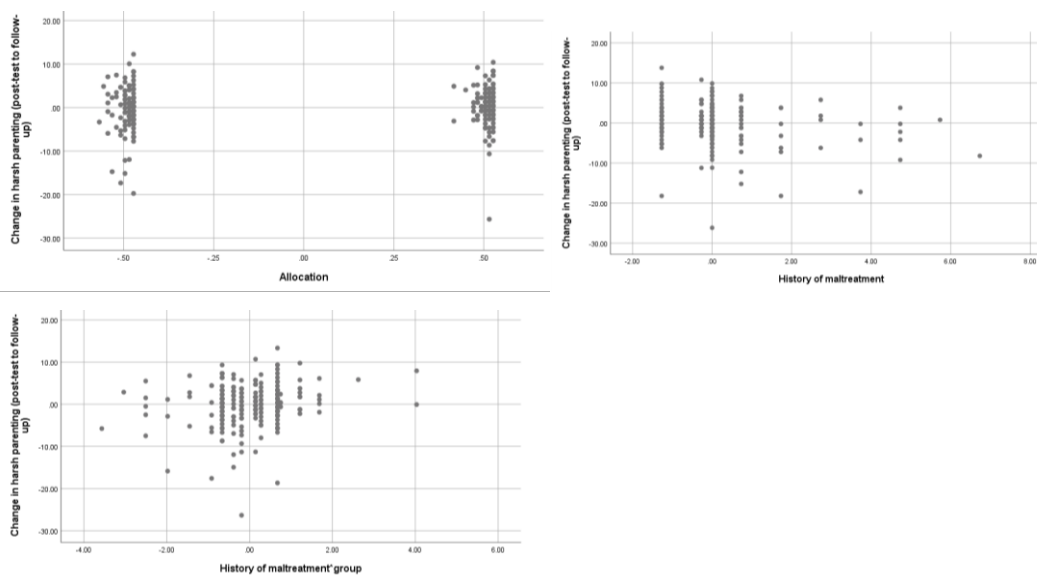**IPV: Change in harsh parenting from baseline to follow-up.**
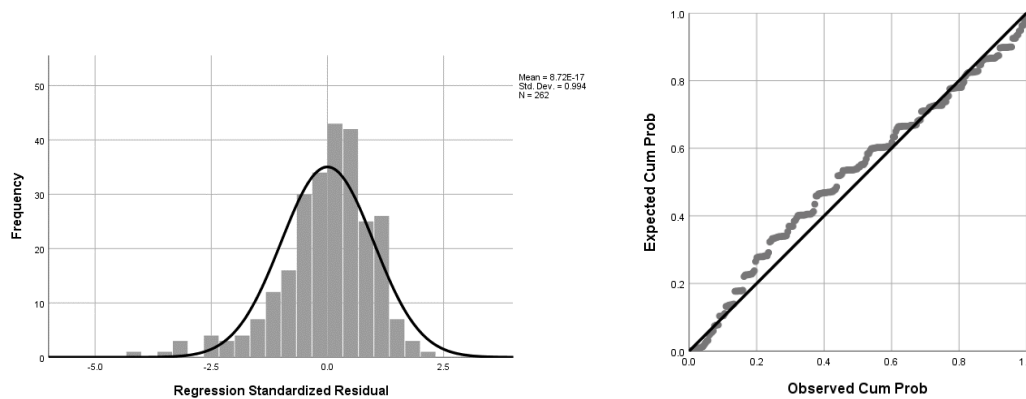
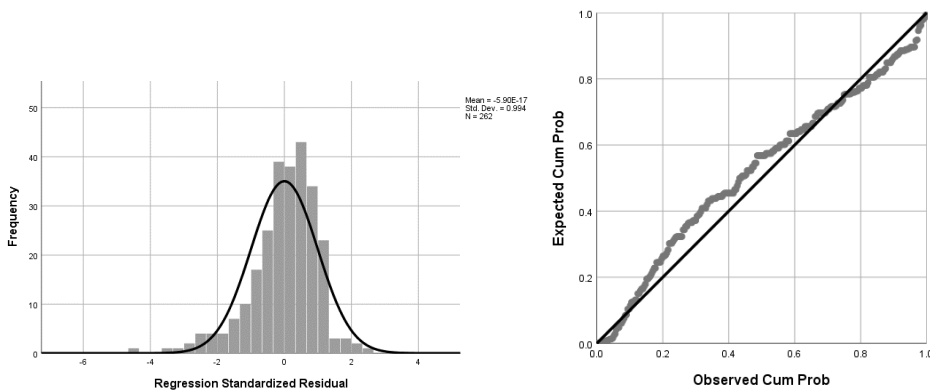Figure 11. *Histogram and normal probability plot of residuals.*
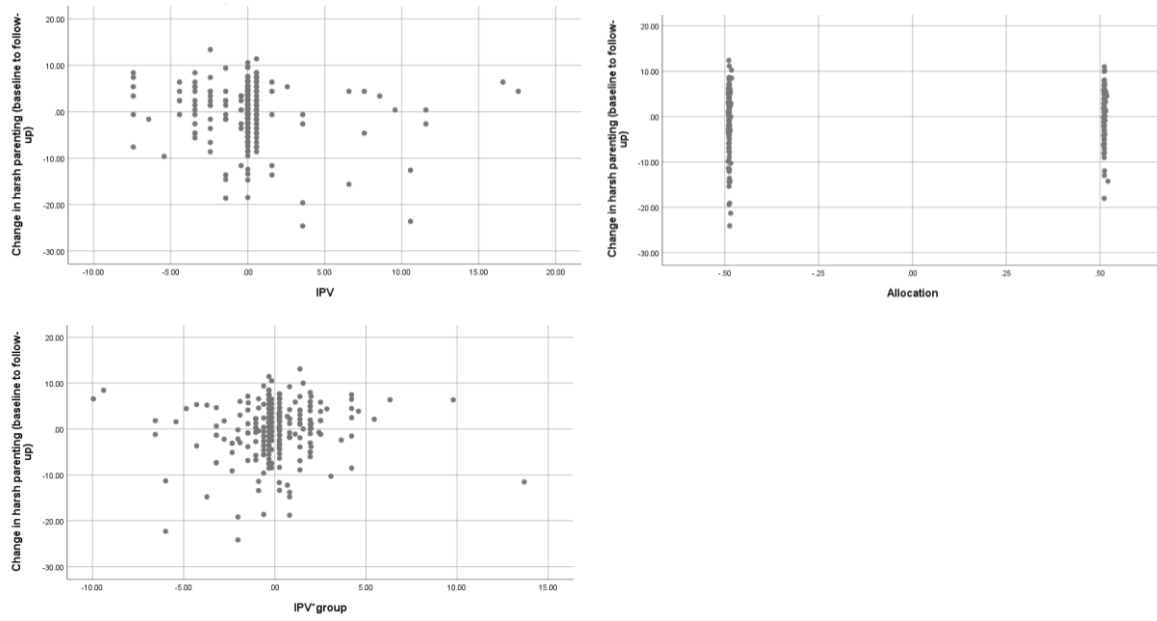
Figure 12. *Partial regression plots.*
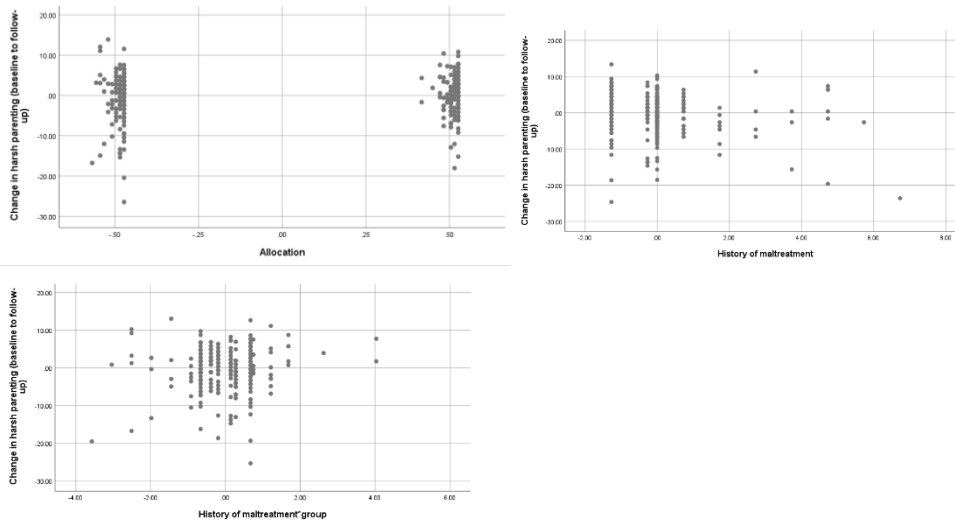
IPV: Change in positive parenting from baseline to post-test.
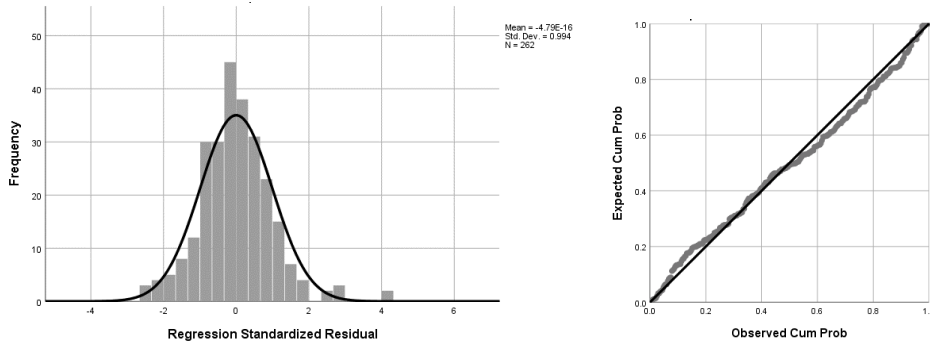
Figure 13. *Histogram and normal probability plot of residuals.*
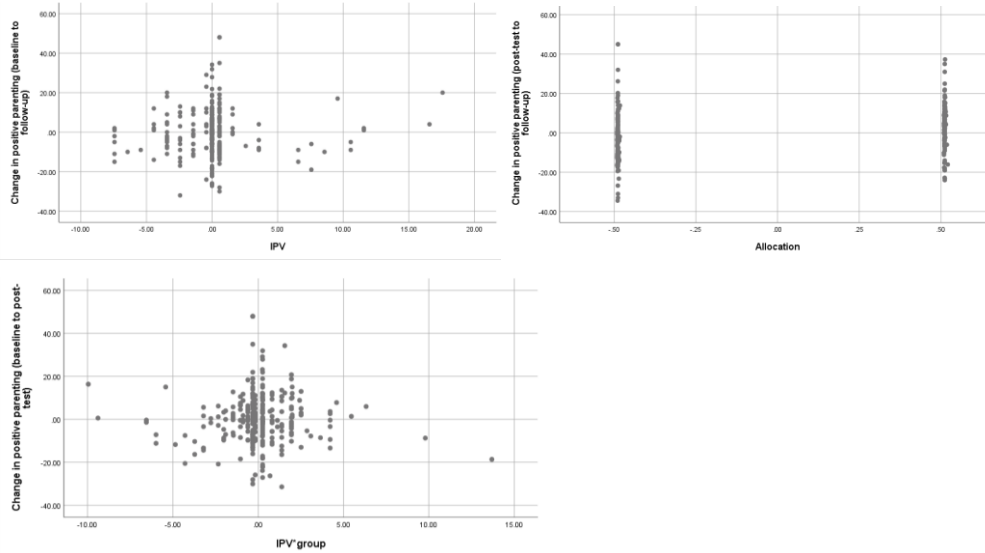
Figure 14. *Partial regression plots.*

IPV: Change in positive parenting post-test to follow-up.
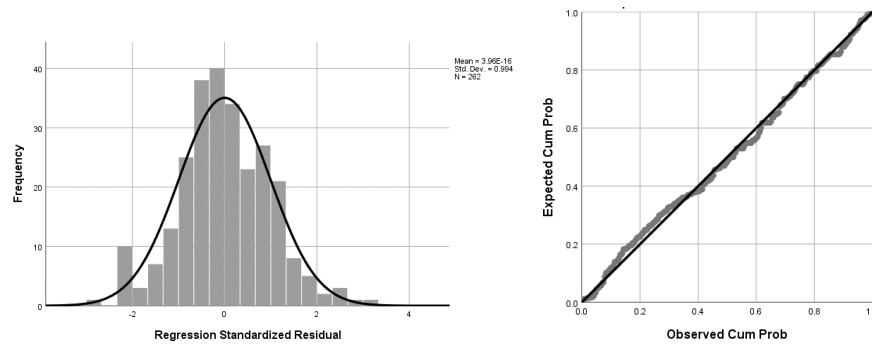
Figure 15. *Histogram and normal probability plot of residuals.*
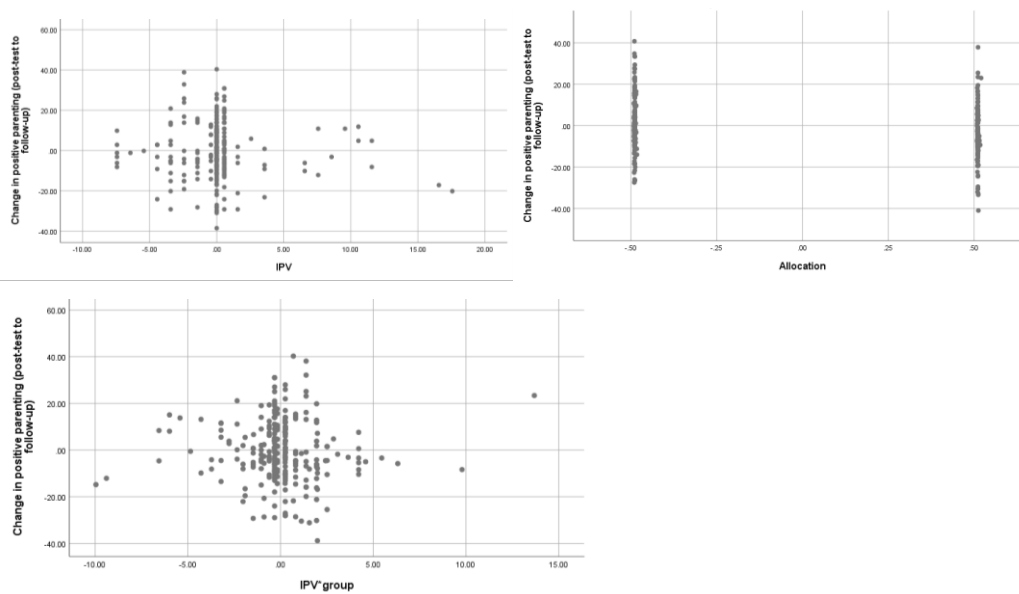
Figure 16. *Partial regression plots.*

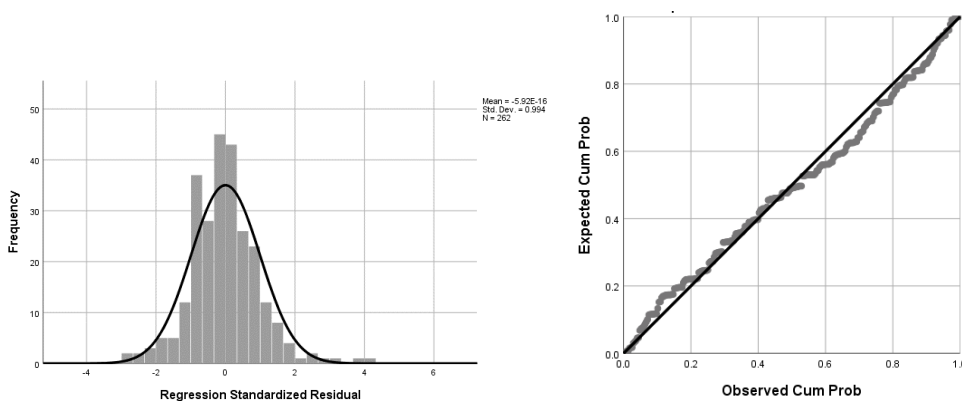**IPV: Change in positive parenting from baseline to follow-up.**

Figure 17. *Histogram and normal probability plot of residuals.*

Figure 18. *Partial regression plots.*

History of childhood maltreatment: Change in harsh parenting from baseline to post-test.
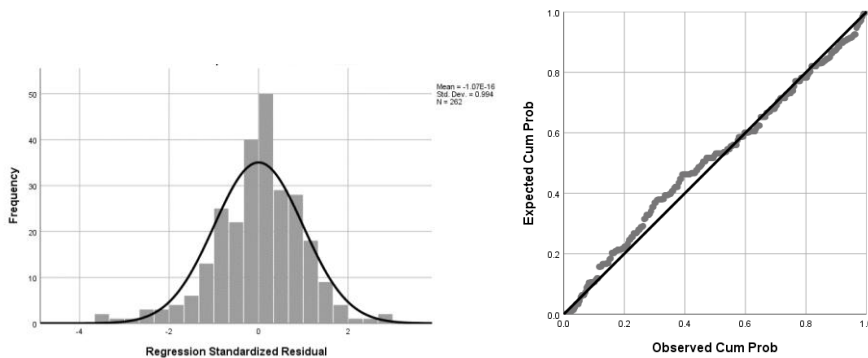
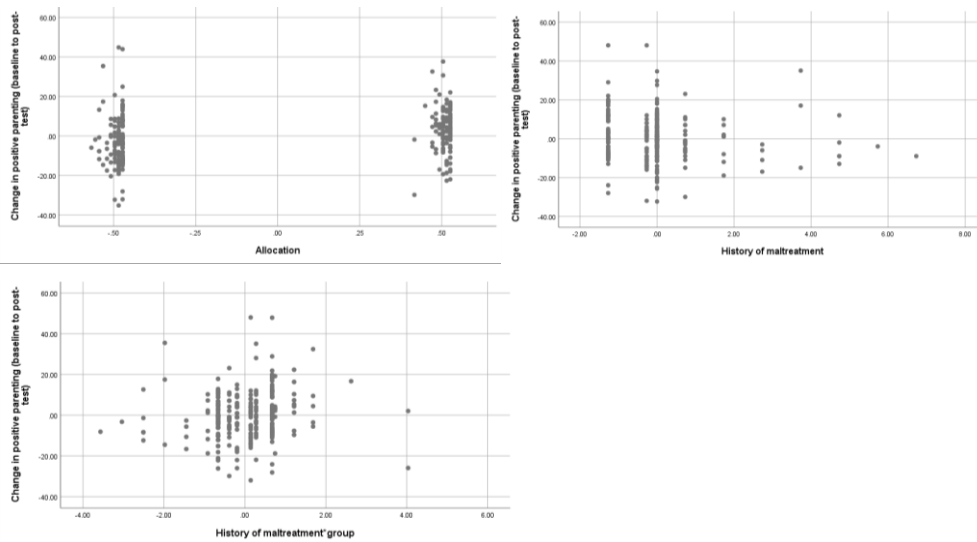Figure 19. *Histogram and normal probability plot of residuals.*

Figure 20. *Partial regression plots.*

History of childhood maltreatment: Change in harsh parenting from post-test to follow-up.
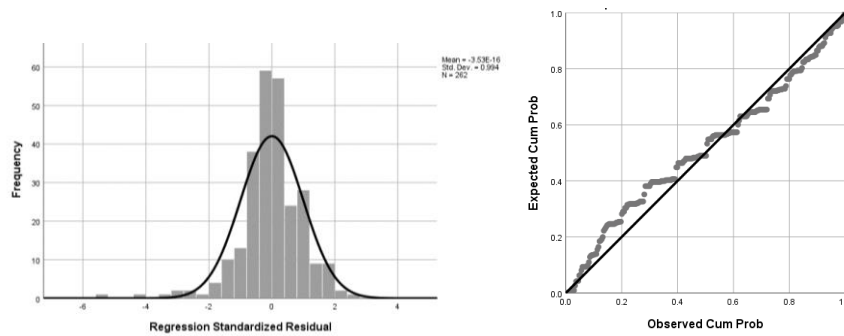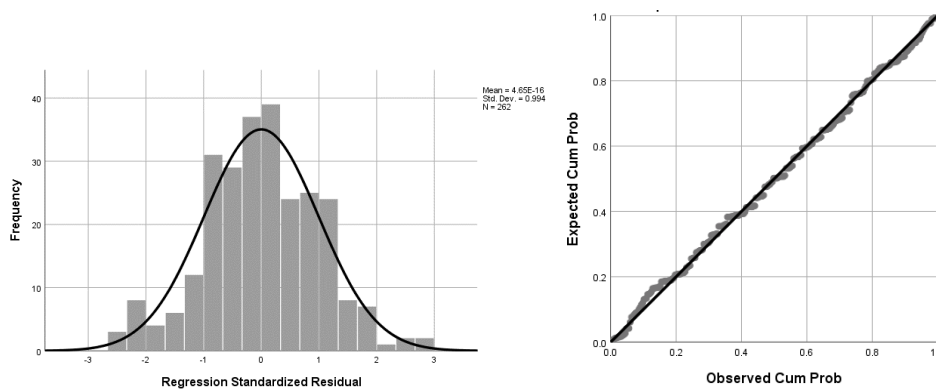

Figure 21. *Histogram and normal probability plot of residuals.*

Figure 22. *Partial regression plots.*

History of childhood maltreatment: Change in harsh parenting from baseline to follow-up.

Figure 23. *Histogram and normal probability plot of residuals.*

Figure 24. *Partial regression plots.*

History of childhood maltreatment: Change in positive parenting from baseline to post-test.

Figure 25. *Histogram and normal probability plot of residuals.*

Figure 26. *Partial regression plots.*

History of childhood maltreatment: Change in positive parenting from post-test to follow-up.

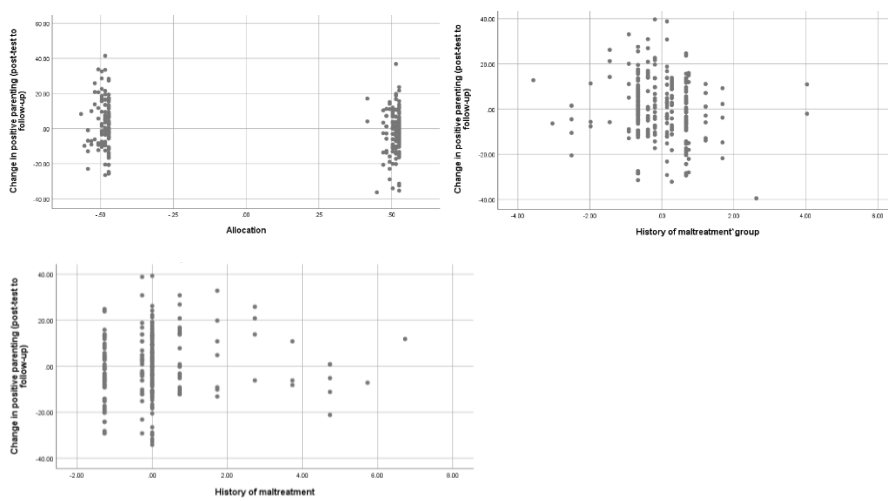Figure 27. *Histogram and normal probability plot of residuals.*

Figure 28. *Partial regression plots.*

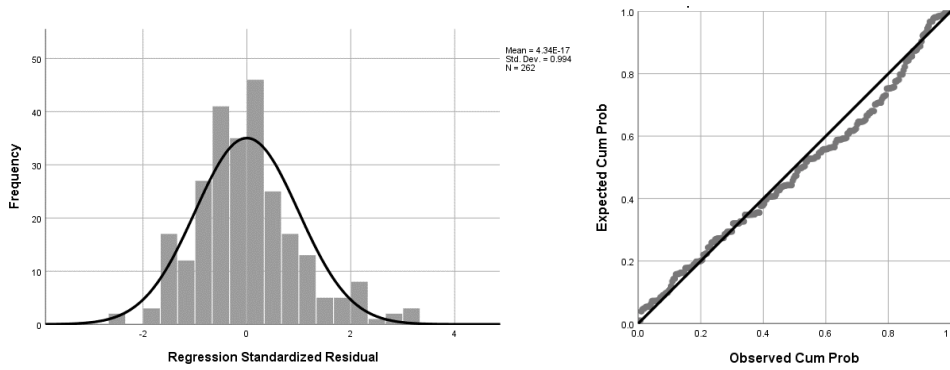**History of childhood maltreatment: Change in positive parenting from baseline to follow-up.**

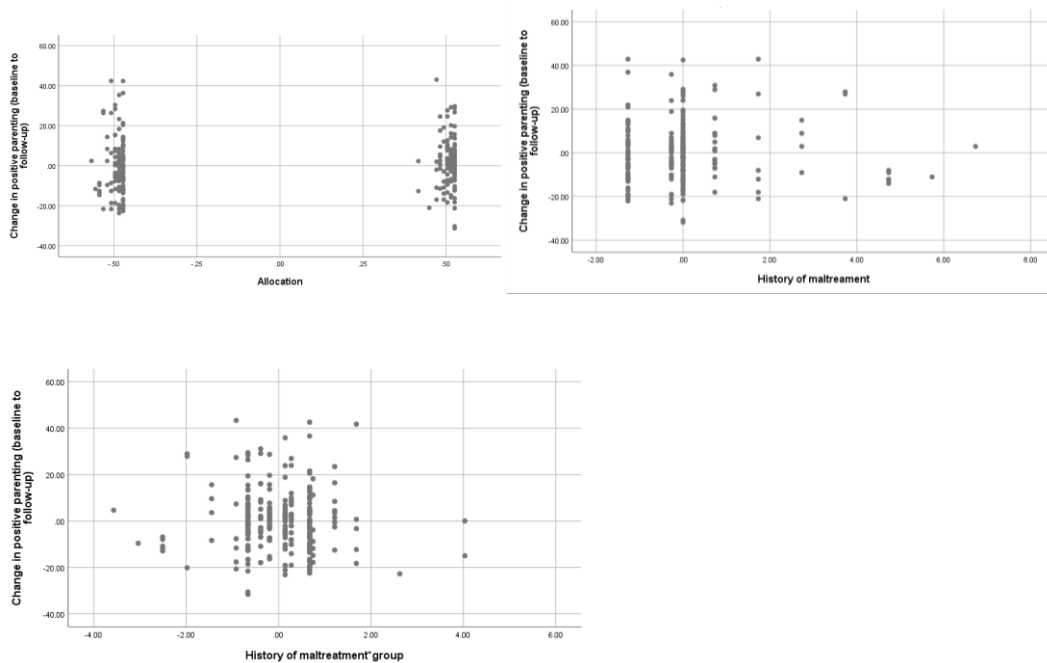Figure 29. *Histogram and normal probability plot of residuals.*

Figure 30. *Partial regression plots.*