

**PARTNER TRUST AND CHILDHOOD EMOTIONAL MALTREATMENT:
CONSIDERING THE ROLES OF MALADAPTIVE SCHEMAS AND
PSYCHOLOGICAL FLEXIBILITY**

by

Leah M. Baugh

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The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, a thesis/dissertation entitled:

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Examining Committee:

Dr. Daniel W. Cox, Counselling Psychology
Supervisor

Dr. David Kealy, Psychiatry
Supervisory Committee Member

Dr. Richard A. Young, Counselling Psychology
Supervisory Committee Member

Abstract

Victims of childhood emotional maltreatment (CEM) often experience lasting interpersonal impacts. CEM is commonly experienced as a betrayal of trust and can lead victims to generalize this mistrust to relationships in adulthood, including their romantic partners. The aim of the present study was to better understand the association between CEM and partner trust by examining the relative strength of three potential mediators – psychological flexibility, maladaptive self schemas, and maladaptive other schemas. The study also investigated whether psychological flexibility buffers the association between maladaptive schemas and partner trust. Adults ($N = 231$) in committed romantic relationships completed measures of CEM, romantic partner trust, maladaptive schemas, and psychological flexibility. Simple and multiple mediation analyses were performed. I found that maladaptive self schemas were a stronger mediator than maladaptive other schemas; however, psychological flexibility was a more potent mediator than either schema type. Contrary to my hypothesis, psychological flexibility did not significantly moderate the effect of maladaptive schemas on partner trust. The findings highlight the importance of attending to and increasing psychological flexibility with victims of CEM to facilitate romantic partner trust. Practical and clinical implications are discussed.

Lay Summary

Childhood abuse is related to trust in romantic partner relationships as they both involve relying on a significant other (i.e., caregiver, or partner). If children's first experience trusting caregivers to support and meet their needs results in betrayal, the expectation will be that others will also betray them. This blocks the development of trust in later relationships because the perceived risk for betrayal is too high. The purpose of the present study was to identify possible protective factors that may allow people to trust despite having experienced abuse in childhood. The findings indicate that being flexible and open to new experiences is linked with higher levels of romantic partner trust for victims of childhood abuse.

Preface

This thesis is original, independent work by the author, Leah M. Baugh. The research was covered by the UBC Research Ethics Board Certificate number H17-02227.

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*To my husband Nathan, my family, and to those who have experienced
childhood maltreatment*

- May you have new experiences filled with resilience and hope.

Chapter 1: Introduction

Victims of childhood emotional maltreatment (CEM) often experience immediate and lasting impacts in their interpersonal relationships (see Nanda, Reichert, Jones, & Flannery-Schroeder, 2016; Reichert & Flannery-Schroeder, 2014; Vettese, Dyer, Li, & Wekerle, 2011; Yoo, Park, & Jun, 2014). CEM is commonly experienced as a betrayal of trust from caregivers and can lead victims to extend mistrust to other people (Freyd & Birrell, 2013; Gobin & Freyd, 2013).

Cognitive approaches have emphasized the role of unhelpful beliefs (e.g., maladaptive schemas) in conceptualizing the association between CEM and romantic relationship functioning (Beck, 2011; Bruce, Heimberg, Goldin, & Goss). In contrast, acceptance-based approaches have emphasized the willingness to embrace thoughts and emotions while living in accordance with personal values (e.g., psychological flexibility; S. C. Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Presently, I examined the relative mediating and moderating roles of schemas and psychological flexibility for explaining the link between CEM and romantic partner trust. With a greater understanding of how CEM impacts partner trust, we can better target assessment and treatment strategies to support victims of CEM and their relationship functioning.

Chapter 2: Literature Review

Romantic Partner Trust and Childhood Emotional Maltreatment

Trust is a fundamental element of relationship wellbeing (Simpson, 2007). Romantic partner trust has been conceptualized as an interdependent and mutually supportive partnership (Kelley & Thibaut, 1978) and exists when each person believes that their partner is committed to their personal goals (Kramer & Carnevale, 2001).

The association between CEM and romantic partner trust has been well supported (e.g., Nanda, Reichert, Jones, & Flannery-Schroeder, 2016; Reichert & Flannery-Schroeder, 2014; Vettese, Dyer, Li, & Wekerle, 2011; Yoo, Park, & Jun, 2014). CEM includes verbal abuse (e.g., criticising) and emotional neglect (e.g., withholding comfort; Barnet, Miller-Perrin, & Perrin, 2005; Hart, Brassard, Binggeli, & Davidson, 2002). Children have been found to perceive CEM as a betrayal of trust from caregivers, which is confusing to children as they remain dependent on their caregivers for survival (Freyd, 1997). When children's early experiences trusting others results in betrayal, they often generalize this mistrust to other people and relationships. This mistrust has been found to persist into adulthood (Freyd & Birrell, 2013; Gobin & Freyd, 2013; Rotter, 1967; Rempel, Holmes, & Zanna, 1985).

Maladaptive Schemas and CEM

One explanation for the relation between CEM and romantic partner trust is the maladaptive schemas that often result from emotional maltreatment. The experience of CEM often leads children to believe that they are unloved, worthless, flawed, or unwanted (Glaser, 2002). These beliefs become maladaptive schemas when they are accepted as truths about the self (e.g., "I am worthless") or others (e.g., "The world is unsafe"; Rezaei, Ghazanfari, & Rezaee, 2016; Wright et al., 2009).

CEM has been associated with both maladaptive self schemas and maladaptive other schemas. In trying to make sense of their emotional maltreatment, children often take responsibility (Babcock & DePrince, 2012) and internalize self-critical thoughts (e.g., “I am unlovable”; Gibb, 2002). As a result, a maladaptive working model of the self as unworthy, unintelligent, or powerless can develop instead of an adaptive model of the self as worthy of love and belonging (Wright, Crawford, & Del Castillo, 2009). Alternately, the perceived betrayal from trusted caregivers after experiencing CEM may result in placing blame on caregivers. Maladaptive other schemas may subsequently develop as beliefs are generalized to others (e.g., “Everyone has bad intentions”). In these instances, a maladaptive working model of others as dangerous and controlling may develop (Rezaei et al., 2016).

Maladaptive Schemas and Trust

Maladaptive schemas that develop in childhood often persist into adulthood (Young, 1999). These schemas have been found to influence romantic relationships, particularly romantic partner trust (e.g., Bowlby, 1988; Michl, Handley, Rogosch, Cicchetti, & Toth, 2015; Pagura, Cox, Sareen, & Enns, 2006). Maladaptive self schemas may contribute to lower partner trust because people believe that they are inferior to partners, and undeserving of support, thereby decreasing engagement with partners (Wright et al., 2009; Lassri et al., 2016). Similarly, maladaptive other schemas may impede partner trust because people maintain emotional distance from partners to protect against perceived future emotional pain (Dorahy et al., 2009; Rezaei et al., 2016). Previous research has indicated that maladaptive other schemas lead people to avoid seeking support from others in favor of caring for their personal needs (Luyten, Fonagy, Lemma, & Target, 2012; Mikulincer & Shaver, 2007). While maladaptive self schemas have been found to have a stronger association with relationship functioning than maladaptive other schemas

(Yoo et al., 2014), the relative strength of self versus other schemas has yet to be investigated on romantic partner trust.

Childhood Emotional Maltreatment and Psychological Flexibility

Another possible explanation for the association between CEM and partner trust is psychological flexibility. People who are psychologically flexible intentionally behave consistent with their values despite fluctuating experiences of hardships and ease (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Further, highly psychologically flexible people are not entangled with their thoughts and feelings. Rather, they experience thoughts and feelings as external to themselves, increasing their likelihood of accepting rather than avoiding unpleasant internal experiences and the situations that trigger them (Hayes et al., 2006).

CEM has been negatively associated with psychological flexibility in several studies. For example, the experience of maltreatment in childhood encourages avoidance rather than acceptance of emotional experiences (Briere & Jordan, 2009; Kroska, Miller, Roche, Kroska, & O'Hara, 2018), thus contributing to reduced psychological flexibility. Additionally, researchers have linked CEM with people being entangled with their thoughts and feelings (O'Mahen, Karl, Moberly, & Fedock, 2015). When people do not experience their thoughts and feelings as external to themselves, they are more likely to avoid than accept their experiences.

Psychological Flexibility and Partner Trust

Beyond shaping internal perceptions, psychological flexibility has been associated with relationships generally and partner trust specifically. For example, people with higher psychological flexibility expressed a stronger sense of belonging in their interpersonal relationships than those with lower levels of psychological flexibility (Roush, Cukrowicz, Mitchell, Brown, & Seymour, 2018). Conversely, some parts of psychological inflexibility, such

as avoidance, contribute to interpersonal difficulties. Avoidant behaviors oppose the committed action required to engage in valued living (Gerhart, Baker, Hoerger, & Ronan, 2014). People with lower levels of psychological flexibility may avoid intimacy and have less trust in their romantic partners because vulnerability and trust in others may be perceived as risky and distressing.

Psychological flexibility may also impact trust via its buffering (i.e., moderating) effects. Several studies have found the buffering effects of psychological flexibility. For example, psychological flexibility has been found to buffer the relation between negative schemas and delusional thinking (Oliver, O'Connor, Jose, McLachlan, & Peters, 2012). For people with negative schemas, those with lower levels of psychological flexibility demonstrated increased delusional thinking compared to people with high levels of psychological flexibility. Psychological flexibility has also been shown to buffer the association between unmet psychosocial needs and psychological distress (Swash, Bramwell, & Hulbert-Williams, 2017). Given these findings, psychological flexibility may buffer the association between maladaptive schemas and romantic relationship trust. To date, no study has investigated this potential moderating effect.

Current Study

The purpose of the present study was to improve the understanding of the potential mediators and moderators that impact the association between CEM and partner trust. I tested a mediated-moderation model of the associations between CEM, maladaptive schemas, psychological flexibility, and partner trust (see Figure 1).

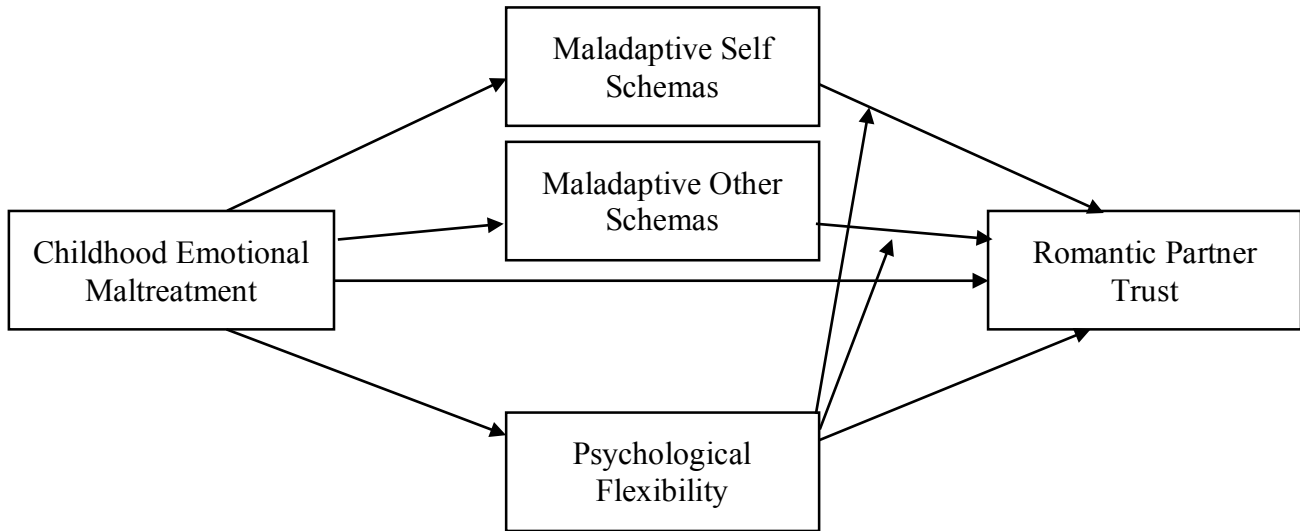


Figure 1. Specific mediators between CEM and partner trust with psychological flexibility as a moderator.

As seen in the figure below (Figure 2), I hypothesized that: (Hypothesis 1) maladaptive self schemas, (Hypothesis 2) maladaptive other schemas, and (Hypothesis 3) psychological flexibility would mediate the relation between CEM and partner trust. Given the previous research indicating that a negative-self view mediates the link between CEM and relationship wellbeing (Lassri & Shahar, 2012), I also hypothesized that: (Hypothesis 4) maladaptive self schemas would be a stronger mediator than maladaptive other schemas between childhood emotional maltreatment and partner trust. I then examined the relative strength of the three mediators (Research Question 1) – psychological flexibility, maladaptive self schemas, and maladaptive other schemas.

Given the existing research support for the buffering impact of psychological flexibility, I hypothesized that: (Hypothesis 5) psychological flexibility would moderate (i.e., buffer) the association between maladaptive self schemas and partner trust; and (Hypothesis 6) psychological flexibility would moderate the effect of maladaptive other schemas on partner trust.

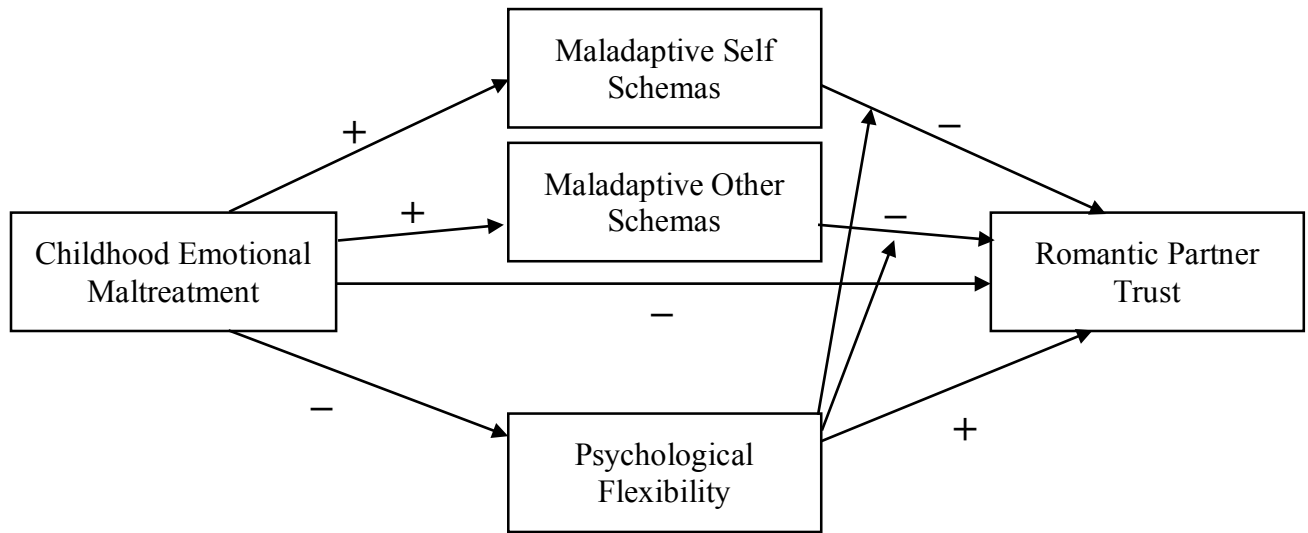


Figure 2. Hypotheses of the associations between variables.

Chapter 3: Method

Participants

A sample of 231 adults participated in the study. Inclusion criteria were that participants were 19 years or older, fluent in English, and in a monogamous romantic relationship for at least one year. The mean age was 38.24 years ($SD = 10.03$) and ranged from 22 to 68 years.

Participants were 52.8% women, 46.7% men, and 0.4% transgender; they were mostly Caucasian (82.3%), African American (5.6%), Hispanic (5.2%), and Asian (4.8%). The length of their romantic relationships ranged from 1 to 47 years, with a mean of 9.90 years ($SD = 9.46$). See table below for additional demographic information.

Table 1

Descriptive Statistics and Sample Demographics.

Characteristic	<i>n</i> (%)
Sex	
Female	121 (52.8%)
Male	107 (46.7%)
Transgender	1 (0.4%)
Age	
25 or less	8 (3.5%)
26 to 35	100 (44.2%)
36 to 45	69 (30.5%)
46 to 55	31 (13.7%)
56 to 65	17 (7.5%)
66 and up	1 (0.4%)
Highest level of education	
Less than 12 th grade	1 (0.4%)
High school or equivalent	25 (10.8%)
Some college/technical school	71 (30.7%)
College/university graduate	109 (47.2%)
Graduate degree (masters or doctoral)	23 (10.0%)
Other	2 (0.9%)

Table 1 Continued

Descriptive Statistics and Sample Demographics.

Characteristic	<i>n</i> (%)
Race	
Caucasian/White	190 (82.3%)
African American/Black	13 (5.6%)
Hispanic	12 (5.2%)
Asian	11 (4.8%)
Native Hawaiian/Other Pacific Islander	2 (0.9%)
American Indian/Alaska Native	0 (0%)
Other	3 (1.3%)
Sexual orientation	
Heterosexual	214 (93.4%)
Homosexual	5 (2.2%)
Bisexual	10 (4.4%)
Other	0 (0%)
Relationship status	
Partner not living together	42 (18.2%)
Partner living together	61 (26.4%)
Married	128 (55.4%)
Other	0 (0%)
Length of current relationship	
1 year	21(9.1%)
2 years	41 (17.7%)
3 to 4 years	22 (9.5%)
5 to 6 years	31 (13.4%)
7 to 8 years	21 (9.1%)
9 to 10 years	19 (8.2%)
11 to 15 years	26 (11.3%)
16 to 25 years	17 (7.4%)
26 to 35 years	27 (11.7%)
36 to 45 years	4 (1.7%)
46 years or more	1 (0.4%)
Children	
Yes	137 (59.8%)
No	92 (40.2%)
Employment	
Employed full time	172 (75.1%)
Employed part time	36 (15.7%)
Unemployed	11 (4.8%)
Student	1 (0.4%)
Other	9 (3.9%)

Table 1 Continued

Descriptive Statistics and Sample Demographics.

Characteristic	<i>n</i> (%)
Household income	
\$19,999 or less	12 (5.2%)
\$20,000 to \$39,999	55 (23.8%)
\$40,000 to \$59,999	51 (22.1%)
\$60,000 to \$79,999	61 (26.4%)
\$80,000 to \$99,999	20 (8.7%)
\$100,000 or more	32 (13.9%)

Procedure

Participants were recruited from the online crowdsourcing pool, Amazon’s Mechanical Turk (MTurk). Through MTurk, researchers can access diverse samples to complete Human Intelligence Tasks (HITs) online. MTurk participants (i.e., workers) are compensated by the researchers. MTurk is a commonly used participant pool in behavioral research as it allows rapid access to samples that are more representative of the population than typical participant pools (e.g., undergraduate students). Given that MTurk has over 500,000 workers, it is possible to access participants with specific characteristics who may be otherwise difficult to recruit (Paolacci & Chandler, 2014; Smith, Sabat, Martinez, Weaver, & Xu, 2015). MTurk workers have also been found to be more attentive to tasks than undergraduate students (Hauser & Schwarz, 2016). Another advantage of MTurk is that participants can be selectively recruited based on their history of providing quality data. In addition to selective recruitment, recommendations and procedures were followed to collect quality data and to minimize the misinterpretation of instructions, careless responding, and malingering (see Mason & Suri, 2012). Participants were compensated \$2.50 USD for completing the study.

Measures

Demographic Questionnaire. Demographic information including gender, age, racial background, relationship status, number of years in romantic relationship, number of children, level of education, employment, and income was collected from all participants (see Appendix D).

Childhood Emotional Maltreatment (CEM). The Childhood Trauma Questionnaire Short Form (CTQ-SF; Bernstein et al., 2003) is a 28-item self-report measure with five subscales. Consistent with previous research (e.g., Lassri et al., 2016), the 5-item subscales emotional abuse (e.g., “Someone in my family yelled and screamed at me”) and emotional neglect (e.g., reverse scored “My family was a source of strength and support”) were selected to measure CEM. Items were rated on a 5-point scale ranging from 1 (*never true*) to 5 (*very often true*). Total scores were derived by computing the sum of emotional abuse and emotional neglect items, higher scores indicated more emotional maltreatment in childhood. In a recent review, the CTQ-SF demonstrated high indices of specificity and sensitivity relative to a similar measure (i.e., Complex Trauma Inventory; Spinhoven & Penninx, 2014). The CTQ is a widely used measure that has been validated for use as a brief assessment of childhood maltreatment (Bernstein et al., 2003). Cronbach’s alpha for the CTQ emotional maltreatment score for the present study was .95.

Maladaptive Schemas. The Evaluative Beliefs Scale (EBS; Chadwick, Trower, & Dagnan, 1999) measures maladaptive schemas about the self and others. The EBS is an 18-item measure with three subscales. For the purposes of this study, two subscales, the self-critical subscale (e.g., “I am unlovable”) and the other critical subscale (e.g., “Other people are bad”) were used to measure maladaptive schemas about the self and others. Participants rated how

much they agreed or disagreed with each item 0 (*disagree slightly or disagree strongly*) to 3 (*agree strongly*). The possible score on each subscale ranged from 0 to 18 with higher scores indicating stronger negative beliefs about the self or others. The EBS has been found to demonstrate good internal reliability with a Cronbach's alpha of .90 for the self-self scale and .86 for the self-other scale (Chadwick et al., 1999). The EBS demonstrated concurrent validity via correlations with scores on measures of related constructs (e.g., anxiety and depression; Chadwick et al., 1999). The present coefficient alpha for the self-critical subscale was .92, and other critical subscale was .88.

Romantic Partner Trust. The Trust in Close Relationships Scale (TCRS; Rempel, Holmes, & Zanna, 1985) was selected to measure trust in romantic partners. The TCRS is a 17-item measure with three subscales: Predictability (e.g., "My partner behaves in a very consistent manner"), dependability (e.g., "I can rely on my partner to keep the promises he/she makes to me"), and faith (e.g., "When I am with my partner I feel secure in facing unknown situations"). Each item is scored on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The TCRS scores have been found to demonstrate good internal consistency (Cronbach alpha's = .81; Rempel et al., 1985). Predictive and convergent validity have been supported via correlations with scores on measures of related relationship constructs (e.g., happiness and love; Rempel et al., 1985). Total scores were derived by computing the sum of item responses with higher scores indicating greater partner trust. Cronbach's alpha in the present study was .95.

Psychological Flexibility. The Comprehensive assessment of Acceptance and Commitment Therapy processes (CompACT) is a 23-item self-report measure of psychological flexibility (Francis, Dawson, & Golijani-Moghaddam, 2016). It consists of three subscales: Openness to experience (e.g., "I can take thoughts and feelings as they come, without attempting

to control or avoid them”), behavioral awareness (e.g., reverse scored “I find it difficult to stay focused on what’s happening in the present”), and valued action (e.g., “I can identify the things that really matter to me in life and pursue them”). The items are scored on a seven-point scale ranging from 0 (*strongly disagree*) to 6 (*strongly agree*). Total scores were derived by computing the sum of item responses with higher scores indicating greater psychological flexibility. CompACT scores have demonstrated good internal consistency (Cronbach’s alpha of .91) and convergent validity with another measure of psychological flexibility (Francis et al., 2016). Cronbach’s alpha in the present study was .93.

Intimate Partner Violence. The revised Conflict Tactics Scale-Short Form (CTS2S; Straus & Douglas, 2004) was used to screen for intimate partner violence. The CTS2S was included as a covariate to control for mistrust due to intimate partner violence. It is comprised of 20 items assessing prevalence of intimate partner violence (e.g., “My partner pushed, shoved, or slapped me”). Participants indicated the prevalence of each experience from 1 (*Once in the past year*) to 6 (*More than 20 times in the past year*) with 7 (*Not in the past year, but it did happen before*) and 8 (*This has never happened*). Consistent with scoring guidelines, responses were transformed so that if respondents had experienced the event it was re-scored a 1 and if not it was re-scored a 0. An intimate partner violence prevalence score was derived by computing the sum of the re-scored item responses for four of the five subscales (i.e., injury, sexual coercion, physical assault, and psychological aggression), with higher scores indicating more intimate partner violence. The CTS2S has demonstrated construct and concurrent validity with the full CTS2 (Straus & Douglas, 2004). Cronbach’s alpha in the present study was .97.

Data Analytic Plan

Ordinary least squares regression with bootstrapping was used in the PROCESS Macro in SPSS to examine simple and multiple mediation (Hayes, 2013). Bootstrapping generates an estimate of the mediating (i.e., indirect) effect by resampling with replacement the indirect effect's sampling distribution. If zero does not fall between the upper and lower 95% confidence intervals, the indirect effect is considered statistically significant.

I conducted three simple mediation models to examine the conditional indirect effects between CEM and partner trust through each mediating variable (i.e., psychological flexibility, maladaptive self schemas, and maladaptive other schemas) separately. This indirect effect indicates how partner trust is associated with CEM through psychological flexibility and maladaptive self and other schemas. Then I conducted a multiple mediation analysis to examine the relative mediating effects of each mediating variable (i.e., maladaptive self schemas, maladaptive other schemas, and psychological flexibility), while holding the other mediators constant. Finally, I examined if psychological flexibility moderated (i.e., buffered) the association between maladaptive schemas and trust. All coefficients were standardized to facilitate interpreting the associations between variables.

Chapter 4: Results

Preliminary Analyses

Preliminary data analyses were done to screen for missing responses, and univariate and multivariate outliers. Two univariate outliers were identified through boxplots. Nine multivariate outliers were found using Mahalanobis Distance. I reviewed each outlier, and there were no indications of invalid responding. Further, I ran analyses with and without outliers and found no notable differences, thus all data were retained. Next, the data were scanned for non-normality through visual inspection of univariate histograms, and kurtosis and skewness statistics. All scales, with the exception of the Evaluative Beliefs Scale, were normally distributed. The Evaluative Beliefs Scale was transformed using the appropriate data transformation technique (i.e., inverse transformation; Tabachnick & Fidell, 2013). The assumption of homoscedasticity was met as the scatterplot of standardized residuals and standardized predicted values did not vary systematically. The residuals were visually inspected and were normally distributed in the P-P plot. Age and gender were not significantly correlated with the primary study variables so were not included as covariates. As hypothesized, intimate partner violence was significantly correlated with partner trust ($r = -.317, p < .01$); thus, I controlled for intimate partner violence in all models predicting trust. Descriptive statistics and bivariate correlations of untransformed data are presented in Table 2. All reported parameter estimates in the regression models were standardized to facilitate interpretation.

Table 2

Bivariate correlations and descriptive statistics for primary variables.

Variable	1	2	3	4	5	6
1. Childhood Emotional Maltreatment	—					
2. Maladaptive Self Schemas	.297**	—				
3. Maladaptive Other Schemas	.090	.146*	—			
4. Psychological Flexibility	-.335**	-.360**	-.277**	—		
5. Romantic Partner Trust	-.178**	-.323**	-.116	.550**	—	
6. Intimate Partner Violence	.123	.107	.086	.232**	-.317**	—
M	20.31	1.04	1.01	95.94	29.27	3.18
SD	9.85	2.89	2.36	22.76	19.82	4.85

Note: Correlations and descriptive statistics are based on untransformed scores.

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

Simple Mediation Models

First, I ran three simple mediation models to examine the association between CEM and partner trust through maladaptive self schemas, maladaptive other schemas, and psychological flexibility (see Table 3).

Table 3

Standardized coefficients for simple mediation models examining association between childhood emotional maltreatment and romantic partner trust.

Mediator (M)	Effect of IV on M (a)	Effect of M on DV (b)	Direct Effect (c')	Indirect effect (a x b)	Indirect effect 95% CI	Total effect (c)
Maladaptive self schemas	-.315***	.289***	-.054	-.091	-.166 to -.041	-.141*
Maladaptive other schemas	-.164*	.185**	-.113	-.030	-.077 to -.007	-.141*
Psychological flexibility	-.335***	.509***	.018	-.171	-.262 to -.101	-.141*

Note: IV = childhood emotional maltreatment; DV = romantic partner trust; bolded confidence intervals do not include a zero, indicating a significant indirect effect. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Supporting Hypothesis 1, maladaptive self schemas significantly mediated the association between CEM and romantic partner trust (see Figure 3).

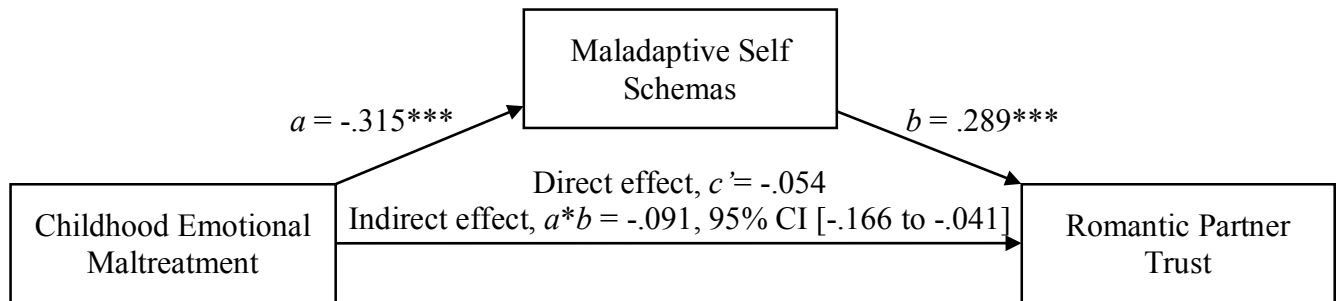


Figure 3. Simple mediation model (standardized path coefficients) of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by maladaptive self schemas. Intimate partner violence was controlled for in models predicting romantic partner trust. $*p < .05$, $**p < .01$, $***p < .001$.

Supporting Hypothesis 2, maladaptive other schemas significantly mediated the relation between CEM and partner trust (see Figure 4).

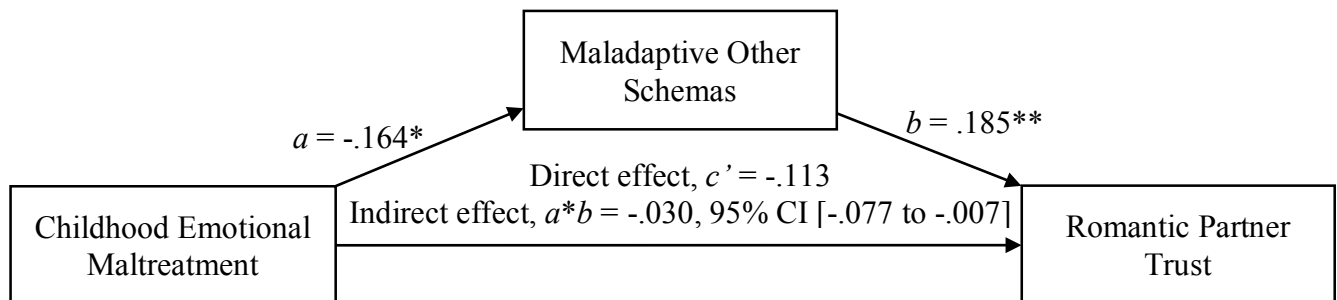


Figure 4. Simple mediation model (standardized path coefficients) of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by maladaptive other schemas. Intimate partner violence was controlled for in models predicting romantic partner trust. $*p < .05$, $**p < .01$, $***p < .001$.

Finally, in support of Hypothesis 3, psychological flexibility mediated the association between CEM and partner trust (see Figure 5).

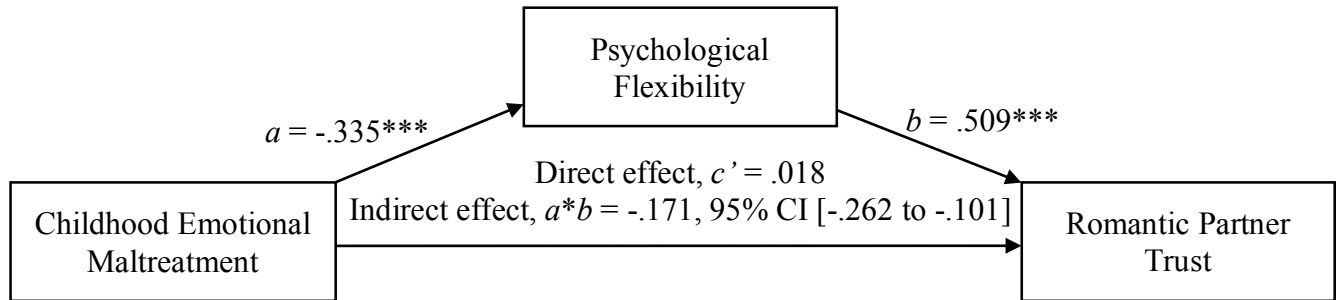


Figure 5. Simple mediation model (standardized path coefficients) of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by psychological flexibility. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Multiple Mediation Models

Maladaptive Self Schemas and Maladaptive Other Schemas as Mediators

I ran a multiple mediation model to examine the relative indirect effects of maladaptive self schemas and maladaptive other schemas on partner trust. In support of Hypothesis 4, maladaptive self schemas significantly mediated the association between CEM and partner trust, while other schemas did not (see Figure 6 and Table 4). The mediating effect of maladaptive other schemas was 28.2% as strong as the mediating effect of maladaptive self schemas.

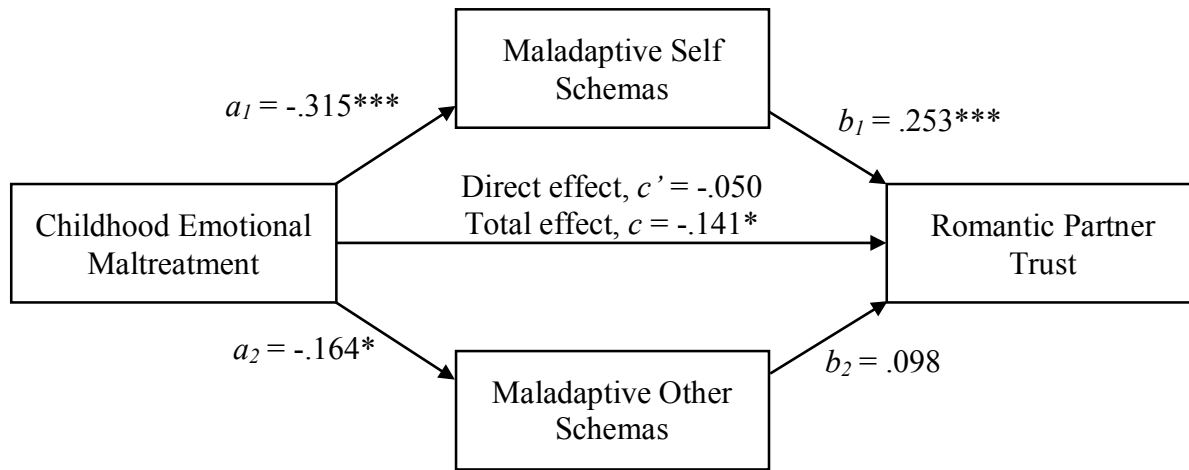


Figure 6. Multiple mediation model (standardized path coefficients) of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by maladaptive self and other schemas. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Table 4

Standardized coefficients for maladaptive self schemas and maladaptive other schemas mediating the association of childhood emotional maltreatment with romantic partner trust.

Dependent Variable (DV)	Mediator (M)	Effect of IV on M (a)	Effect of M on DV (b)	Direct Effect (c')	Indirect effect (a x b)	Indirect effect 95% CI	Total effect (c)
Romantic Partner Trust	Total Effect			-.050	-.096	-.179 to -.043	-.141*
	Maladaptive self schemas	-.315***	.253***		-.079	-.165 to -.027	
	Maladaptive other schemas	-.164*	.098		-.016	-.059 to .005	

Note: IV = childhood emotional maltreatment; DV = romantic partner trust; bolded confidence intervals do not include a zero, indicating a significant indirect effect. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Final Model: Including All Three Mediators

To investigate the relative strength of each mediator in the association between CEM and partner trust (i.e., Research Question 1), a multiple mediation model was tested to examine the relative indirect effects of maladaptive self schemas, maladaptive other schemas, and psychological flexibility on partner trust. Psychological flexibility was the only significant mediator in the association between CEM and trust (see Figure 7 and Table 5). In comparison to the mediating effect of psychological flexibility, the mediating effects of maladaptive self and other schemas were 28.9% and 1.1% as strong, respectively.

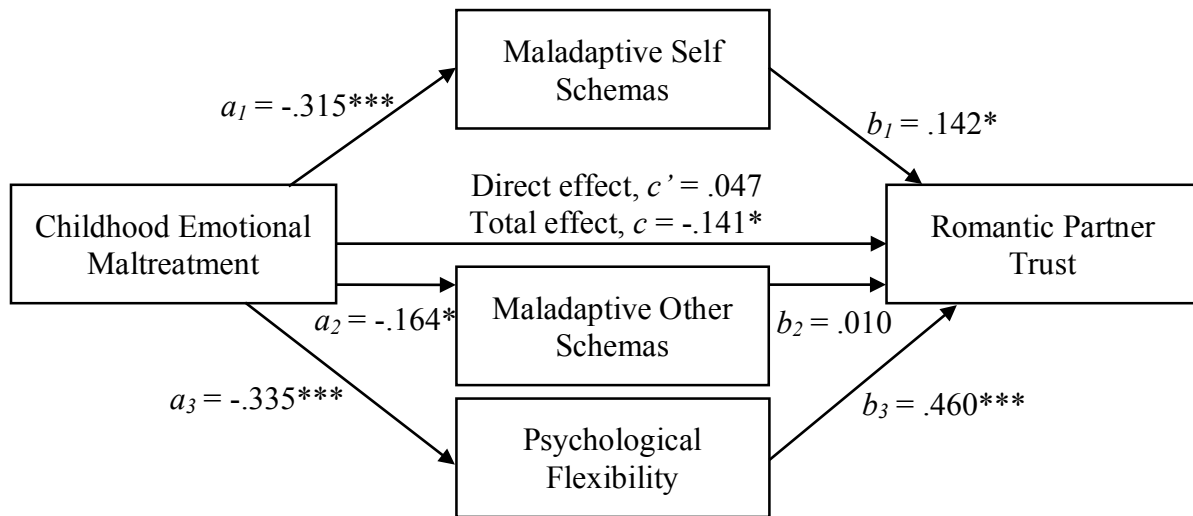


Figure 7. Multiple mediation model (standardized path coefficients) of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by maladaptive self and other schemas, and psychological flexibility. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Table 5

Standardized coefficients for maladaptive schemas and psychological flexibility mediating the association of childhood emotional maltreatment with romantic partner trust.

Dependent Variable (DV)	Mediator (M)	Effect of IV on M (a)	Effect of M on DV (b)	Direct Effect (c')	Indirect effect (a x b)	Indirect effect 95% CI	Total effect (c)
Romantic Partner Trust	Total Effect			.047	-.200	-.306 to -.117	-.141*
	Maladaptive self schemas	-.315***	.142*		-.045	-.106 to .000	
	Maladaptive other schemas	-.164*	.010		-.002	-.030 to .024	
	Psychological flexibility	-.335***	.460***		-.154	-.236 to -.090	

Note: IV = childhood emotional maltreatment; DV = romantic partner trust; bolded confidence intervals do not include a zero, indicating a significant indirect effect. Intimate partner violence was controlled for in models predicting romantic partner trust.

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

Mediated Moderation Model

Next, I examined whether psychological flexibility moderated (i.e., buffered) the association between maladaptive self schemas and maladaptive other schemas on partner trust (See Figure 8). Inconsistent with Hypothesis 5, psychological flexibility did not moderate the effect of maladaptive self schemas on partner trust ($b = -.021, p = .726$). Inconsistent with Hypothesis 6, psychological flexibility did not significantly moderate the effect of maladaptive other schemas on partner trust ($b = .096, p = .130$). Collectively, these results indicate that psychological flexibility did not moderate the effect of maladaptive schemas on romantic partner trust.

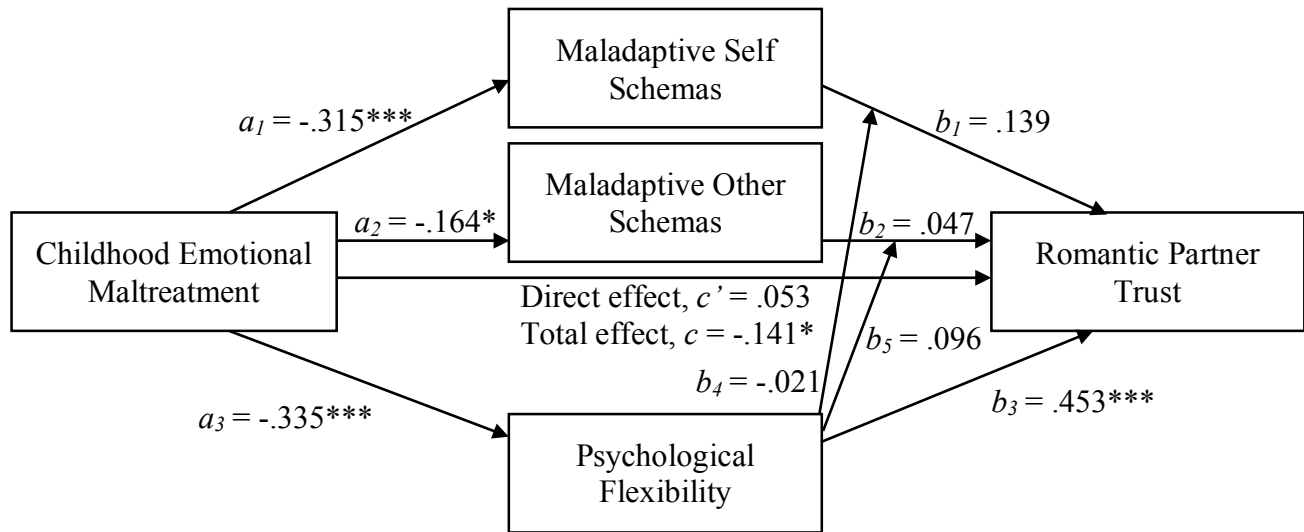


Figure 8. Model of childhood emotional maltreatment as a predictor of romantic partner trust, mediated by maladaptive self and other schemas, and psychological flexibility. Psychological flexibility is also included as a moderator in the model. All path coefficients are standardized. Intimate partner violence was controlled for in models predicting romantic partner trust. $*p < .05$, $**p < .01$, $***p < .001$.

Chapter 5: Discussion

General Discussion

The purpose of the present study was to better understand the association between CEM and romantic partner trust. I examined three potential mediators between CEM and partner trust: psychological flexibility, maladaptive self schemas, and maladaptive other schemas. The present study builds on the extant literature by demonstrating the importance of psychological flexibility as a mediator in the association between CEM and trust.

The results indicate that psychological flexibility is a more potent mediator than either maladaptive self schemas or maladaptive other schemas in the association between CEM and partner trust. Psychological flexibility may have emerged as a strong mediator because of psychological flexibility's particular relevance when developing trust. Psychological flexibility is comprised of intentional effort, valued living, and willingness to accept distressing experiences (Hayes et al., 2006). The components that make up psychological flexibility are similar to those that have been found to facilitate romantic partner trust: intentional effort, value-congruence, and vulnerability in relationships (Lewicki, Tomlinson, & Gillespie, 2006; McKinnon & Greenberg, 2017). Thus, people with high psychological flexibility may possess the intentionality and other qualities that facilitate building partner trust (Gerhart et al., 2014; McKinnon & Greenberg, 2017).

While psychological flexibility was a strong mediator of CEM and partner trust, an unexpected finding was that psychological flexibility did not moderate the association between maladaptive schemas and trust. In line with previous research on the buffering effects of psychological flexibility (Oliver et al., 2012; Silberstein, Tirsch, Leahy, & McGinn, 2012; Swash et al., 2017), I had anticipated that higher levels of psychological flexibility would buffer the

effect of maladaptive schemas on trust; with increased levels of psychological flexibility it was expected that maladaptive schemas would be less impactful. One possible reason psychological flexibility did not act as a significant moderator is because schemas are resistant to change, and are therefore challenging to detach from. Schemas develop at an early age and are foundational to how people view themselves, others, and the world (Fischer, Smout, & Delfabbro, 2016; Young, 1999). Thus, psychological flexibility may have less impact on the association between maladaptive schemas and trust, and a greater impact on emotions and thoughts that surface in the present moment (e.g., anxious thoughts about the future, moments of sadness). Although psychological flexibility did not buffer the effects of schemas on trust, the findings suggest psychological flexibility competes with schemas to explain the association between CEM and trust.

The results extend the literature on the mediating effects of maladaptive schemas. To my knowledge, this is the first study to contrast the mediating impacts of maladaptive self-schemas and maladaptive-other schemas between CEM and partner trust. While I hypothesized that maladaptive self-schemas would have a greater mediating effect than maladaptive other-schemas, I did not anticipate the extent to which this hypothesis would be supported. When maladaptive self schemas and maladaptive other schemas were entered in the same model, the mediating effect of maladaptive other schemas were no longer significant. The results extend the existing literature that negative internal working models of the self impact individual psychological wellbeing (Glaser, 2002; Lassri et al., 2016; Wright et al., 2009), and also impede interpersonal wellbeing, such as romantic partner trust.

Practical Implications

The finding that psychological flexibility had a strong mediating impact on the association between CEM and partner trust may have implications for practitioners, particularly those assisting people with a history of CEM. The results indicate that attending to and increasing psychological flexibility may be more beneficial for increasing partner trust than attempting to alter the foundational beliefs characteristic of maladaptive schemas. For example, specific Acceptance and Commitment Therapy (ACT) interventions have demonstrated clinical effectiveness in increasing psychological flexibility such as, exploration and identification of values, skills focused on detaching from thoughts, and acceptance of emotional experiences (Bohlmeijer, Fledderus, Rokx, & Pieterse, 2011).

This study may also contribute to clinical work with couples who present with low levels of trust, in addition to promoting the development of specific clinical interventions to support clients with a history of childhood emotional maltreatment. Preliminary research indicates that couples can benefit from interventions that facilitate psychological flexibility in their relationships (Peterson, Eifert, Feingold, & Davidson, 2009). In ACT-based couples' therapy, interventions are aimed at reducing entanglement with thoughts and feelings about their relationships. Couples are also encouraged to build awareness of the negative relational cycles partners often feel stuck in. Value-directed action interventions are modified to support couples in identifying and engaging in relationship values (e.g., open communication, honesty, and commitment). Considering psychological flexibility's significant mediating impact in the association between CEM and partner trust, the present study indicates that ACT interventions are well suited for couples who present with low partner trust. In addition to ACT interventions, it is important for clinicians to be aware of the negative impact that CEM has on psychological

flexibility and romantic partner trust to create informed treatment plans when working with couples.

Limitations and Future Directions

This research contributes to a deeper understanding of CEM and partner trust, however some limitations are important to note. First, a cross-sectional design was used, and although the study was informed by existing theory on the linear associations between CEM and partner trust, future research should consider using longitudinal designs to examine the temporal associations of the constructs. A second limitation was that data were collected online. Although MTurk workers have been found to be as attentive as traditional samples (i.e., undergraduate students; Hauser & Schwarz, 2016), concerns about the misinterpretation of questions and careless responding are still important to consider. Third, all data were self-reported. Future research would benefit from using alternate data collection strategies (i.e., partner reports), to obtain a more objective measure of trust, to examine if self reported and partner reported trust are consistent. A final limitation was that the sample was relatively homogenous; participants were recruited from MTurk and the majority of MTurk workers are Caucasian. Future research would benefit from collecting data from more diverse samples to determine whether these results generalize to other populations.

References

- Babcock, R. L., & DePrince, A. P. (2012). Childhood betrayal trauma and self-blame appraisals among survivors of intimate partner abuse. *Journal of Trauma and Dissociation*, *13*(5), 526–538. <http://doi.org/10.1080/15299732.2012.694842>
- Barnet, O., Miller-Perrin, C. L., & Perrin, R. D. (2005). Child psychological maltreatment. In O. Barnet, C. L. Miller-Perrin, & R. D. Perrin (Eds.), *Family Violence Across the Lifespan: An Introduction* (2nd ed., pp. 151–178). Thousand Oaks, CA: Sage Publications.
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., ... Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse and Neglect*, *27*(2), 169–190. [http://doi.org/10.1016/S0145-2134\(02\)00541-0](http://doi.org/10.1016/S0145-2134(02)00541-0)
- Bohlmeijer, E. T., Fledderus, M., Rokx, T. A. J. J., & Pieterse, M. E. (2011). Efficacy of an early intervention based on acceptance and commitment therapy for adults with depressive symptomatology: Evaluation in a randomized controlled trial. *Behaviour Research and Therapy*, *49*(1), 62–67. <http://doi.org/10.1016/j.brat.2010.10.003>
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Briere, J., & Jordan, C. E. (2009). Childhood maltreatment, intervening variables, and adult psychological difficulties in women: An overview. *Trauma, Violence, and Abuse*, *10*(4), 375–388. <http://doi.org/10.1177/1524838009339757>
- Chadwick, P., Trower, P., & Dagnan, D. (1999). Measuring negative person evaluations: The evaluative beliefs scale. *Cognitive Therapy and Research*, *23*(5), 549–559. <http://doi.org/10.1023/a:1018776522497>

- Dorahy, M. J., Corry, M., Shannon, M., MacSherry, A., Hamilton, G., McRobert, G., ... Hanna, D. (2009). Complex PTSD, interpersonal trauma and relational consequences: Findings from a treatment-receiving Northern Irish sample. *Journal of Affective Disorders, 112*(1–3), 71–80. <http://doi.org/10.1016/j.jad.2008.04.003>
- Fischer, T. D., Smout, M. F., & Delfabbro, P. H. (2016). The relationship between psychological flexibility, early maladaptive schemas, perceived parenting and psychopathology. *Journal of Contextual Behavioral Science, 5*(3), 169–177. <http://doi.org/10.1016/j.jcbs.2016.06.002>
- Francis, A. W., Dawson, D. L., & Golijani-Moghaddam, N. (2016). The development and validation of the comprehensive assessment of acceptance and commitment therapy processes (CompACT). *Journal of Contextual Behavioral Science, 5*(3), 134–145. <http://doi.org/10.1016/j.jcbs.2016.05.003>
- Freyd, J. J. (1997). Violations of power, adaptive blindness and betrayal trauma theory. *Feminism and Psychology, 7*(1), 22–32.
- Freyd, J. J., & Birrell, P. (2013). *Blind to betrayal: Why we fool ourselves we aren't being fooled*. Hoboken, NJ: Wiley.
- Gerhart, J. I., Baker, C. N., Hoerger, M., & Ronan, G. F. (2014). Experiential avoidance and interpersonal problems: A moderated mediation model. *Journal of Contextual Behavioral Science, 3*(4), 291–298. <http://doi.org/10.1016/j.jcbs.2014.08.003>
- Gibb, B. E. (2002). Childhood maltreatment and negative cognitive styles. *Clinical Psychology Review, 22*(2), 223–246. [http://doi.org/10.1016/S0272-7358\(01\)00088-5](http://doi.org/10.1016/S0272-7358(01)00088-5)
- Glaser, D. (2002). Emotional abuse and neglect (psychological maltreatment): A conceptual framework. *Child Abuse and Neglect, 26*(6–7), 697–714. [http://doi.org/10.1016/S0145-2134\(02\)00342-3](http://doi.org/10.1016/S0145-2134(02)00342-3)

- Gobin, R. L., & Freyd, J. J. (2013). The impact of betrayal trauma on the tendency to trust. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(5), 505–511.
<http://doi.org/10.1037/a0032452>
- Hart, S., Brassard, M., Binggeli, N., & Davidson, H. (2002). Psychological maltreatment. In J. E. B. Myers, L. Berliner, J. Briere, C. T. Hendricks, C. Jenny, & T. A. Reid (Eds.), *The APSAC handbook on childhood maltreatment* (2nd ed., pp. 79–103). Thousand Oaks, CA: Sage Publications.
- Hauser, D. J., & Schwarz, N. (2016). Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400–407. <http://doi.org/10.3758/s13428-015-0578-z>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach* (1st ed). New York, NY: Guilford Press.
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <http://doi.org/10.1016/j.brat.2005.06.006>
- Kelley, H., & Thibaut, J. (1978). *Interpersonal relationships: A theory of interdependence*. New York: Wiley.
- Kramer, R. M., & Carnevale, P. J. (2001). Trust and intergroup negotiation. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 431–450). Malden, MA.
- Kroska, E. B., Miller, M. L., Roche, A. I., Kroska, S. K., & O'Hara, M. W. (2018). Effects of traumatic experiences on obsessive-compulsive and internalizing symptoms: The role of avoidance and mindfulness. *Journal of Affective Disorders*, 225, 326–336.

<http://doi.org/10.1016/j.jad.2017.08.039>

- Lassri, D., Luyten, P., Cohen, G., & Shahar, G. (2016). The effect of childhood emotional maltreatment on romantic relationships in young adulthood: A double mediation model involving self-criticism and attachment. *Psychological Trauma: Theory, Research, Practice and Policy*, *8*(4), 504–511. <http://doi.org/10.1037/tra0000134>
- Lassri, D., & Shahar, G. (2012). Self-criticism mediates the link between childhood emotional maltreatment and young adults' romantic relationships. *Journal of Social and Clinical Psychology*, *31*(3), 289–311. <http://doi.org/10.1521/jscp.2012.31.3.289>
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, *32*(6), 991–1022. <http://doi.org/10.1177/0149206306294405>
- Luyten, P., Fonagy, P., Lemma, A., & Target, M. (2012). Depression. In A. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice* (pp. 385–417). Washington, DC: American Psychiatric Association.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, *44*(1), 1–23. <http://doi.org/10.3758/s13428-011-0124-6>
- McKinnon, J. M., & Greenberg, L. S. (2017). Vulnerable emotional expression in emotion focused couples therapy: Relating interactional processes to outcome. *Journal of Marital and Family Therapy*, *43*(2), 198–212. <http://doi.org/10.1111/jmft.12229>
- Michl, L. C., Handley, E. D., Rogosch, F. A., Cicchetti, D., & Toth, S. L. (2015). Self-criticism as a mechanism linking childhood maltreatment and maternal efficacy beliefs in low-income mothers with and without depression. *Child Maltreatment*, *20*(4), 291–300. <http://doi.org/10.1177/1077559515602095>

- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford Press.
- Nanda, M. M., Reichert, E., Jones, U. J., & Flannery-Schroeder, E. (2016). Childhood maltreatment and symptoms of social anxiety: Exploring the role of emotional abuse, neglect, and cumulative trauma. *Journal of Child & Adolescent Trauma, 9*(3), 201–207. <http://doi.org/10.1007/s40653-015-0070-z>
- O'Mahen, H. A., Karl, A., Moberly, N., & Fedock, G. (2015). The association between childhood maltreatment and emotion regulation: Two different mechanisms contributing to depression? *Journal of Affective Disorders, 174*, 287–295. <http://doi.org/10.1016/j.jad.2014.11.028>
- Oliver, J. E., O'Connor, J. a., Jose, P. E., McLachlan, K., & Peters, E. (2012). The impact of negative schemas, mood and psychological flexibility on delusional ideation – mediating and moderating effects. *Psychosis: Psychological, Social and Integrative Approaches, 4*(1), 6–18. <http://doi.org/10.1080/17522439.2011.637117>
- Pagura, J., Cox, B. J., Sareen, J., & Enns, M. W. (2006). Childhood adversities associated with self-criticism in a nationally representative sample. *Personality and Individual Differences, 41*(7), 1287–1298. <http://doi.org/10.1016/j.paid.2006.05.003>
- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science, 23*(3), 184–188. <http://doi.org/10.1177/0963721414531598>
- Peterson, B. D., Eifert, G. H., Feingold, T., & Davidson, S. (2009). Using Acceptance and Commitment Therapy to treat distressed couples: A case study with two couples. *Cognitive and Behavioral Practice, 16*(4), 430–442. <http://doi.org/10.1016/j.cbpra.2008.12.009>

- Reichert, E. L., & Flannery-Schroeder, E. (2014). Posttraumatic cognitions as mediators between childhood maltreatment and poorer mental health among young adults. *Journal of Child and Adolescent Trauma*, 7(3), 153–162. <http://doi.org/10.1007/s40653-014-0021-0>
- Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49(1), 95–112. <http://doi.org/10.1037/0022-3514.49.1.95>
- Rezaei, M., Ghazanfari, F., & Rezaee, F. (2016). The role of childhood trauma, early maladaptive schemas, emotional schemas and experimental avoidance on depression: A structural equation modeling. *Psychiatry Research*, 246, 407–414. <http://doi.org/10.1016/j.psychres.2016.10.037>
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35(4), 651–665. <http://doi.org/10.1111/j.1467-6494.1967.tb01454.x>
- Roush, J. F., Cukrowicz, K. C., Mitchell, S. M., Brown, S. L., & Seymour, N. E. (2018). Valued living, life fulfillment, and suicide ideation among psychiatric inpatients: The mediating role of thwarted interpersonal needs. *Journal of Contextual Behavioral Science*, 8–14. <http://doi.org/10.1016/j.jcbs.2017.11.001>
- Silberstein, L. R., Tirch, D., Leahy, R. L., & McGinn, L. (2012). Mindfulness, psychological flexibility and emotional schemas. *International Journal of Cognitive Therapy*, 5(4), 406–419. <http://doi.org/10.1521/ijct.2012.5.4.406>
- Simpson, J. A. (2007). *Foundations of interpersonal trust. Social psychology: Handbook of basic principles (2nd ed.)*. New York: Guilford Press.
- Smith, N. A., Sabat, I. E., Martinez, L. R., Weaver, K., & Xu, S. (2015). A convenient solution: Using MTurk to sample from hard-to-reach populations. *Industrial and Organizational*

- Psychology*, 8(2), 220–228. <http://doi.org/http://dx.doi.org/10.1017/iop.2015.29>
- Spinhoven, P., & Penninx, B. (2014). Childhood trauma questionnaire: Factor structure, measurement invariance, and validity across emotional disorders. *Psychological Assessment*, 26(3), 717–729. <http://doi.org/10.1037/pas0000002>
- Straus, M. A., & Douglas, E. M. (2004). A short form of the revised conflict tactics scales, and typologies for severity and mutuality. *Violence and Victims*, 19(5), 507–520. <http://doi.org/10.1891/088667004780927800>
- Swash, B., Bramwell, R., & Hulbert-Williams, N. J. (2017). Unmet psychosocial supportive care needs and psychological distress in haematological cancer survivors: The moderating role of psychological flexibility. *Journal of Contextual Behavioral Science*, 6(2), 187–194. <http://doi.org/http://dx.doi.org/10.1016/j.jcbs.2017.02.005>
- Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson Education.
- Vettese, L. C., Dyer, C. E., Li, W. L., & Wekerle, C. (2011). Does self-compassion mitigate the association between childhood maltreatment and later emotion regulation difficulties? A preliminary investigation. *International Journal of Mental Health and Addiction*, 9(5), 480–491. <http://doi.org/10.1007/s11469-011-9340-7>
- Wright, M. O. D., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse and Neglect*, 33(1), 59–68. <http://doi.org/10.1016/j.chiabu.2008.12.007>
- Yoo, G., Park, J. H., & Jun, H. J. (2014). Early maladaptive schemas as predictors of interpersonal orientation and peer connectedness in university students. *Social Behavior and*

Personality, 42(8), 1377–1394. <http://doi.org/10.2224/sbp.2014.42.8.1377>

Young, J. E. (1999). *Cognitive therapy for personality disorders: A schema-focused approach*.

Sarasota, FL: Professional Resources Press.

Appendix A: Consent Form Consent for participation

Partner Trust and Childhood Emotional Maltreatment: Considering the Roles of Maladaptive Schemas and Psychological Flexibility

Principal Investigator

Dr. Daniel Cox, Department of Educational and Counselling Psychology, The University of British Columbia.

Co-Investigator

Leah Baugh, MA candidate, Department of Educational and Counselling Psychology and Special Education, The University of British Columbia. This research is being conducted as part of Leah's graduate thesis. Leah can be contacted at: leah.baugh@alumni.ubc.ca.

Purpose of this Study

The purpose of this research is to gain a greater understanding of the relationship between childhood and adulthood stressors, beliefs about self and others, romantic relationships, and psychological distress.

Procedure and Remuneration

This study consists of several survey questionnaires (e.g., measure of trust in a partner relationship) that will be administered in an online survey format. Completion of this study will take approximately 25 minutes. Each participant will receive an honorarium in the amount of \$2.50 USD.

Research Confidentiality

Participant surveys will be assigned an arbitrary number to ensure confidentiality. No personally identifying information (e.g., name) are collected. All digital files of online surveys and backups of the surveys will be password protected and encrypted. Only people directly involved in the study will have access to these.

Potential Risks and Benefits of this Evaluation

While completing questionnaires, participants may experience discomfort while recalling childhood events and reflecting on current beliefs and emotions. There is the possibility of experiencing physiological arousal (e.g., increased heart-rate) or heightened emotionality (e.g., feelings of anxiety). Resources will be provided for seeking support for participants who experience some amount of distress.

Benefits of participating in this study may include a greater understanding of your romantic relationship and insights into your beliefs. In addition, results generated from this study may benefit those who experience childhood or adulthood stressors in their relationships, and those who have experienced childhood stressors.

Participation in the study is voluntary and participants can withdraw at any time without penalty.

Contact for information about the study

If you have any questions or desire further information with respect to this study, you may contact Dr. Cox or Leah Baugh at (leah.baugh@alumni.ubc.ca)

Contact for concerns about the rights of research subjects

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at (604) 822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

I have read and fully understand the information contained in this document. Any and all questions I have regarding the contents of this document have been answered to my satisfaction and I would like to participate in this study.

By clicking the box below, you consent to participate in the study.

Appendix B: Recruitment Ad

Partner Trust and Childhood Emotional Maltreatment: Considering the Roles of Maladaptive Schemas and Psychological Flexibility

Recruitment - MTurk

1. Are you currently in a monogamous, committed romantic relationship that has lasted a year or longer?

We are conducting an academic survey about childhood experiences, relationship dynamics and general beliefs about the self and the world. This study is being conducted by researchers at the University of British Columbia, under the guidance of the primary investigator Dr. Daniel Cox. To participate in the study, you must be 19 years or older, a resident of the U.S. and currently be in a monogamous, committed relationship that has lasted a year or longer. If you meet these criteria please click the link below to complete the survey. At the end of the survey, you will receive a code to paste into the box below to receive credit for taking our survey. Please do not select this HIT if you have already participated in this study. Make sure to leave this window open as you complete the survey. When you are finished, you will return to this page to paste the code into the box. Compensation is \$2.50 USD and the study will take approximately 25 minutes.

If you have any questions or desire further information with respect to this study, you may contact Dr. Cox or Leah Baugh at (leah.baugh@alumni.ubc.ca)

Appendix C: Debriefing Form

Partner Trust and Childhood Emotional Maltreatment: Considering the Roles of Maladaptive Schemas and Psychological Flexibility

Childhood emotional maltreatment is when children are emotionally neglected or abused. Emotional maltreatment in childhood is interpersonal in nature and often involves the betrayal of trust from a caregiver. The experience of repeated damaging interactions characterized by emotional maltreatment, communicates to children that they are worthless, unloved, flawed, and unwanted.

Maladaptive schemas are internalized negative beliefs about the self and the world and are used as a self-protective coping strategy when children's needs are consistently unmet. As a result, a working model of the self as unworthy, unintelligent and powerless develops instead of a model of the self as worthy of love and belonging. Maladaptive schemas make it difficult for trust to develop because people fear criticism and disapproval from others and thus tend to distance themselves from closeness and intimacy.

While maladaptive schemas about the self and others are rigid and resistant to change, psychological flexibility involves an openness and acceptance of experience, mindfulness and committed action to live a valued life despite the presence of maladaptive schemas.

In this study, you completed a series of questionnaires. These questionnaires are intended to provide us with an understanding of any childhood emotional maltreatment you might have experienced, your current level of trust with your romantic partner, the beliefs you have about yourself and the world, and your level of psychological flexibility.

The current study seeks to understand the ways in which psychological flexibility is protective in the development of romantic partner trust for those who struggle with negative beliefs about themselves and others. We expect to find that people with higher levels of psychological flexibility will report having higher levels of partner trust, than those who have lower levels of psychological flexibility.

This study seeks to contribute to the existing research on treating maladaptive schemas and childhood emotional maltreatment. Ultimately, we hope that understanding the relationships between childhood emotional maltreatment, maladaptive schemas, psychological flexibility and romantic partner trust will contribute to clinical and research gains, and ultimately support those who have experienced childhood emotional maltreatment.

ARE YOU IN CRISIS?

***** If you are in a medical emergency, in immediate danger, or in a suicidal crisis, please call 911.**

If you are concerned about your relationship, your behavior, or want someone to talk to about intimate partner violence, call the National Domestic Violence Hotline: (800) 799-SAFE (7233)

Please call 1-800-273-TALK to connect with a trained counselor at a crisis centre in your area 24/7 or visit the National Suicide Prevention Lifeline website for more information:

<http://www.suicidepreventionlifeline.org/>

To learn more about childhood emotional maltreatment, please visit the following website:
<http://www.apa.org/news/press/releases/2014/10/psychological-abuse.aspx>

To learn more about maladaptive schemas, please visit the following website:
<http://www.schematherapy.com/id63.htm>

To learn more about psychological flexibility, please visit the following website:
https://contextualscience.org/the_six_core_processes_of_act

To learn more about romantic partner trust and relationships, please visit the following website:
<http://www.apa.org/helpcenter/healthy-relationships.aspx>

Appendix D: Demographics

Demographics questionnaire

Please answer the questions below by filling in the blanks or circling the number of the response that best applies.

1. Your Age: ____ years
2. Your gender:
 1. Male
 2. Female
 3. Transgender
3. Highest level of education you have completed:
 1. Less than 12th grade
 2. High School or Equivalent
 3. Some College/University
 4. College/university graduate (received degree)
 5. Graduate Degree (Masters or doctoral)
 6. Other: _____
4. Racial/Ethnic Background:
 1. Aboriginal/First Nations [Native American/American Indian]
 2. South Asian
 3. East Asian
 4. Middle Eastern
 5. African American/Black
 6. Hispanic
 7. Caucasian/White
 8. Other: _____
5. What is your current relationship status?
 1. Single, never married
 2. Partner not living together, number of years: ____, number of months: _____
 3. Partner living together, number of years: ____, number of months: _____
 4. Married, number of years: ____, number of months: _____
 5. Divorced, number of years: ____, number of months: _____
 6. Separated, number of years: ____, number of months: _____
 7. Widowed, number of years: ____, number of months: _____
 8. Other: _____
6. Do you have children?
 1. Yes, how many: _____
 2. No

7. Including your current partner (if applicable), how many romantic partners have you had in the past 12 months? ____

8. Are you currently:

1. Employed full-time
2. Employed part-time or causally
3. Unemployed
4. Student
5. Other: _____

(make so can have up to 2)

9. Over the past 12 months, what was your household income?

1. \$19,999 or less
2. \$20,000 to \$39,999
3. \$40,000 to \$59,999
4. \$60,000 to \$79,999
5. \$80,000 or more

10. What is your religious affiliation? (circle one)

1. Christian
2. Jewish
3. Latter-Day Saint
4. Muslim
5. Hindu
6. Buddhist
7. Agnostic
8. Atheist
9. Other _____

11. What is the answer to the following question? $2+6=$ ____

12. From what state are you filling out this survey? ____

Appendix E: Childhood Trauma Questionnaire - SF

Childhood Trauma Questionnaire – Short Form
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Directions: These questions ask about some of your experiences growing up as a child and a teenager. For each question, please indicate which statement best describes how you feel by writing the appropriate number from the scale below on the line beside each item. Although some of these questions are of a personal nature, please try to answer as honestly as you can. Your answers will be kept confidential.

1	2	3	4	5
Never	Rarely	Sometimes	Often True	Very Often True

When I was growing up...,

_____	1. I didn't have enough to eat.
_____	2. I knew that there was somewhere there to take care of me and protect me.
_____	3. People in my family called me things like "stupid", "lazy", or "ugly".
_____	4. My parents were too drunk or high to take care of the family.
_____	5. There was someone in my family who helped me feel important or special.
_____	6. I had to wear dirty clothes.
_____	7. I felt loved.
_____	8. I thought that my parents wished I had never been born.
_____	9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.
_____	10. There was nothing I wanted to change about my family.
_____	11. People in my family hit me so hard that it left me with bruises or marks.
_____	12. I was punished with a belt, a board, a cord (or some other hard object).
_____	13. People in my family looked out for each other.
_____	14. People in my family said hurtful or insulting things to me.
_____	15. I believe that I was physically abused.
_____	16. I had the perfect childhood.
_____	17. I got hit or beaten so badly that it was noticed someone like a teacher, neighbor, or doctor.
_____	18. Someone in my family hated me.

_____	19. People in my family felt close to each other.
_____	20. Someone tried to touch me in a sexual way or tried to make me touch them.
_____	21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them.
_____	22. I had the best family in the world.
_____	23. Someone tried to make me do sexual things or watch sexual things.
_____	24. Someone molested me (took advantage of me sexually).
_____	25. I believe that I was emotionally abused.
_____	26. There was someone to take me to the doctor if I needed it.
_____	27. I believe that I was sexually abused.
_____	28. My family was a source of strength and support.

Emotional abuse Items: 3, 8, 14, 18, 25

Physical abuse Items: 9, 11, 12, 15, 17

Sexual abuse Items: 20, 21, 23, 24, 27

Emotional Neglect Items: 5(R), 7(R), 13(R), 19(R), 28(R)

Physical neglect Items: 1, 2(R), 4, 6, 26(R)

Denial Items: 10, 16, 22

Appendix F: Evaluative Beliefs Scale

Evaluative Beliefs Scale

1 2 3 4 5
Disagree Strongly Disagree Slightly Unsure Agree Slightly Agree Strongly

Scale One: Maladaptive Self Schemas

_____	1. I am a total failure
_____	2. I am worthless
_____	3. I am totally weak and helpless
_____	4. I am a bad person
_____	5. I am an inferior person
_____	6. I am unlovable

Scale Three: Maladaptive Other Schemas

_____	13. Other people are worthless
_____	14. Other people are inferior to me
_____	15. Other people are total failures
_____	16. Other people are totally weak and helpless
_____	17. Other people are bad
_____	18. Other people are unlovable

Appendix G: CompACT

Comprehensive Assessment of Acceptance and Commitment Therapy Scale

Please rate the following 23 statements using the scale below:

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

_____	1. I can identify the things that really matter to me in life and pursue them
_____	2. One of my big goals is to be free from painful emotions
_____	3. I rush through meaningful activities without being really attentive to them
_____	4. I try to stay busy to keep thoughts or feelings from coming
_____	5. I act in ways that are consistent with how I wish to live my life
_____	6. I get so caught up in my thoughts that I am unable to do the things that I most want to do
_____	7. I make choices based on what is important to me, even if it is stressful
_____	8. I tell myself that I shouldn't have certain thoughts
_____	9. I find it difficult to stay focused on what's happening in the present
_____	10. I behave in line with my personal values
_____	11. I go out of my way to avoid situations that might bring difficult thoughts, feelings, or sensations
_____	12. Even when doing the things that matter to me, I find myself doing them without paying attention
_____	13. I am willing to fully experience whatever thoughts, feelings and sensations come up for me, without trying to change or defend against them
_____	14. I undertake things that are meaningful to me, even when I find it hard to do so
_____	15. I work hard to keep out upsetting feelings
_____	16. I do jobs or tasks automatically, without being aware of what I'm doing
_____	17. I am able to follow my long terms plans including times when progress is slow
_____	18. Even when something is important to me, I'll rarely do it if there is a chance it will upset me

_____	19. It seems I am "running on automatic" without much awareness of what I'm doing
_____	20. Thoughts are just thoughts – they don't control what I do
_____	21. My values are really reflected in my behaviour
_____	22. I can take thoughts and feelings as they come, without attempting to control or avoid them
_____	23. I can keep going with something when it's important to me

Appendix H: Trust Scale

Trust Scale (Rempel, Holmes & Zanna, 1985) – Trust within close interpersonal relationships
 Instructions:

Using the 7 point scale shown below, indicate the extent to which you agree or disagree with the following statements as they relate to someone with whom you have a close interpersonal relationship. Place your rating in the box to the right of the statement.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

_____	1. My partner has proven to be trustworthy and I am willing to let him/her engage in activities which other partners find too threatening.
_____	2. Even when I don't know how my partner will react, I feel comfortable telling him/her anything about myself, even those things of which I am ashamed.
_____	3. Though times may change and the future is uncertain, I know my partner will always be ready and willing to offer me strength
_____	4. I am never certain that my partner won't do something that I dislike or will embarrass me.
_____	5. My partner is very unpredictable. I never know how he/she is going to act from one day to the next.
_____	6. I feel very uncomfortable when my partner has to make decisions which will affect me personally.
_____	7. I have found that my partner is unusually dependable, especially when it comes to things which are important to me.
_____	8. My partner behaves in a very consistent manner.
_____	9. Whenever we have to make an important decision in a situation we have never encountered before, I know my partner will be concerned about my welfare.
_____	10. Even if I have no reason to expect my partner to share things with me, I still feel certain that he/she will.
_____	11. I can rely on my partner to react in a positive way when I expose my weaknesses to him/her.
_____	12. When I share my problems with my partner, I know he/she will respond in a loving way even before I say anything.
_____	13. I am certain that my partner would not cheat on me, even if the opportunity arose and there was no chance that he/she would get caught.

_____	14. I sometimes avoid my partner because he/she is unpredictable and I fear saying or doing something which might create conflict.
_____	15. I can rely on my partner to keep the promises he/she makes to me.
_____	16. When I am with my partner, I feel secure in facing unknown new situations.
_____	17. Even when my partner makes excuses which sound rather unlikely, I am confident that he/she is telling the truth.

Appendix I: Revised Conflict Tactics Scale - SF

Revised Conflict Tactics Scale – Short Form (CTS2S)

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

How often did this happen?

1	2	3	4	5	6	7	8
Once in the Past Year	Twice in the past year	3 to 5 times in the past year	6 to 10 times in the past year	11 to 20 times in the past year	More than 20 times in the past year	Not in the past year, but it did happen before	This has never happened

_____	1. I explained my side or suggested a compromise for a disagreement with my partner.
_____	2. My partner explained his or her side or suggested a compromise for a disagreement with me
_____	3. I insulted or swore or shouted or yelled at my partner
_____	4. My partner insulted or swore or shouted or yelled at me
_____	5. I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with my partner
_____	6. My partner had a sprain, bruise, or small cut or felt pain the next day because of a fight with me
_____	7. I showed respect for, or showed that I cared about my partner’s feelings about an issue we disagreed on
_____	8. My partner showed respect for, or showed that he or she cared about my feeling about an issue we disagreed on
_____	9. I pushed, shoved, or slapped my partner
_____	10. My partner pushed, shoved, or slapped me
_____	11. I punched or kicked or beat-up my partner

_____	12. My partner punched or kicked or beat-me-up
_____	13. I destroyed something belonging to my partner or threatened to hit my partner
_____	14. My partner destroyed something belonging to me or threatened to hit me
_____	15. I went see a doctor (M.D.) or needed to see a doctor because of a fight with my partner
_____	16. My partner went to see a doctor (M.D.) or needed to see a doctor because of a fight with me
_____	17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex
_____	18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex
_____	19. I insisted on sex when my partner did not want to or insisted on sex without a condom (but did not use physical force)
_____	20. My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force)