

Effect of Childhood Trauma on Emotion Regulation Among Adults in Malaysia

Asma Perveen¹ and Gabriel Thai Shang Hua²

Article History:	ABSTRACT
Received: 20 Sep, 2021	The primary objective of the current study is to identify the predicting effect of childhood trauma on emotional regulation among adults in Malaysia. Different types of childhood trauma were included in the study which comprises of emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. As for emotion regulation strategies, it includes cognitive reappraisal and expressive suppression. A cross-sectional survey method was adopted as the study design. An online survey which consists of instruments of measurement Childhood Trauma Questionnaire, and Emotion Regulation Questionnaire was distributed through social media. A total of sample size of 390 (Male = 207, Female = 183) (Age range= 21-40) participated in the study. The findings indicated that there is a significant predicting effect ($p < 0.005$) of childhood trauma on emotional regulation among adults in Malaysia. Each type of childhood trauma was found to have a significant relationship with emotion dysregulation which might lead to potential development of psychopathology. The current study identified that childhood trauma affects the emotion regulation ability to deal with any stressors. The findings are crucial for professionals and clinicians to better understand the phenomena of childhood trauma and emotional regulations.
Accepted: 20 Dec, 2021	
	Key Words: Emotions, Childhood trauma, Emotional dysregulation, Psychopathology, Adults

Introduction

Throughout multiple studies, childhood trauma has been explored and defined in many ways. Some studies suggested that traumatic experiences that took place during an individual's childhood could play a role in affecting the overall functionality during adulthood. Experience to traumatic events its exposure during childhood and phase is linked with number of psychosocial, development, and physical impairments in adolescent, early adulthood and adulthood. (Dvir, Ford, Hill, & Frazier, 2014). Childhood trauma is known to predispose to a variety emotional and psychological issues (Mathews, Kaur, & Stein, 2008).

Childhood trauma is a crucial psychological, psycho- social and public related concern that can turnout with serious consequences for both the victims and the society. Studies have suggested that childhood trauma is related with lack of emotional support, and more stress to work related to social relationships in adults' life. It can reduce the overall well-

-
1. Senior Lecturer, Department of Psychology and Counselling, Universiti Pendidikan Sultan Idris, Malaysia. Email: asmaperveen@fpm.upsi.edu.my
 2. Faculty, Department of Psychology and Counselling, Universiti Pendidikan Sultan Idris, Malaysia

being and can cause the onset of many psychological problems. (Infurna, Rivers, Reich, & Zautra, 2015).

Currently there is vast clinical data indicating the clinical impact of short term and long-term effects of early life events of trauma on emotional and psychological health. But there are less studies emphasizing and exploring the link between childhood trauma and dysfunctional emotional regulations specifically (Fernando, et al., 2014). Multiple researches over the past several decades have suggested a strong link between traumatic childhood experiences and emotional effects during adolescence and adulthood of an individual's life. Converging evidence proposes that trauma exposure, especially during the early phase in an individual's life, deeply change the way emotional information's are processed and interpreted (Marusak, Martin, Etkin, & Thomason, 2014).

Emotion regulation is a complex phenomenon. Strategies of emotional self-regulation is integrated into a network of behavioral strategies by which both children and adults seek to maintain their relations with people around, behave consistently with their self-image, manage their self-presentation to the world, and achieve other goals in life (Thompson & Calkins, 1996). The regulation of emotions is inevitable in relation to an individual's daily life. The arrears in conflict regulation for emotional material may determine delicate risk for the development of psychological issues in individuals that suffer early life trauma. Problems with emotional regulation play a vital role in the development, maintenance, and treatment of many mental health conditions (Copeland et al., 2018).

On the other hand, difficulties faced in emotion regulations have been involved in multiple forms of psychopathology and may play an important role for current studies to comprehend the biological mechanisms underlying transdiagnostic symptoms (Bilc et al., 2018).

Furthermore, maladaptive coping with challenging emotions is familiar in individuals who are gone through traumatic experience to suffer with depression, and multiple psychological disorders, including personality issues, substance abuse disorders, eating disorders and mood among others (Dvir, Ford, Hill, & Frazier, 2014). Automatic regulation of emotional conflict is a concern among a high-risk urban sample of trauma-exposed children and adolescents.

The result indicated that the participants who are exposed to trauma failed to dampen dorsolateral prefrontal cortex activity and engage amygdala-pregenual cingulate inhibitory circuitry during the regulation of emotional conflict, and were less able to regulate emotional conflict (Barlow et al., 2017). Hopfinger, Berking, Bockting and Ebert (2016) conducted a study to examine the emotion regulation as a mediator of the relationship between childhood trauma and mental health issues. Fernando et al. (2014) explored the link related to traumatic childhood experiences and emotional dysregulation

among individuals. They found the relationship of early trauma and personality issues along with mood dysregulation among healthy individuals.

The main finding of the study reinforces the assumptions of a specific connection between childhood maltreatment, especially emotional abuse and neglect, and emotion regulation complications. Further explained that a history of emotional neglect was associated with less frequent use of cognitive reappraisal, and a history of emotional abuse was related to more frequent use of expressive suppression (Berking & Wupperman, 2012). Hence the results demonstrated that emotional neglect was associated with a lack of adaptive emotion regulation strategies. As for emotional abuse, it was associated with dysfunctional emotion regulation strategies. The paper evolves its theory upon the hypothesis that the childhood trauma predicts emotion regulation among adults in Malaysia.

Methodology

This is a quantitative study. The study design adopted for this current study is a cross-sectional survey method. The research design is predictive correlation with an analysis using regression. Correlation is a statistical association or relationship between variables (Warner, 2013) and a valid use of regression correlation is prediction (Cohen et al., 2017). The current study desires to determine the predicting effect of childhood trauma on emotion regulation among adults in Malaysia.

Population

The targeted population for the current research was adults in the age range of 21 to 40 years settled within the area in the Federal Territory of Kuala Lumpur of Malaysia. More specifically, adults who are currently working in Kuala Lumpur. Participation Criteria include an adult within the age range of 21 to 40 years, employed or currently working, able to understand and read English as the questionnaires was administered in English.

Sample Size and Estimation

The target population of the current study is adult aged between 21 to 41 years old in Federal Territory of Kuala Lumpur of Malaysia. The population size is 665,800 individuals according to the Department of Statistics Malaysia (2019). As for the sample size estimation, the Raosoft sample size calculator was utilized to determine the appropriate number of samples. By setting the error margin as 5%, the level of confidence 80%, the size of the population as 665,800 individuals and the distribution of the response as 50%, the proposed sample size was estimated 384.

Procedure

The questionnaires were compiled into a google form and distributed via online survey invitation to adults who are within the age range of 21 to 40 years settled in the Federal Territory of Kuala Lumpur in Malaysia. Data was collected starting from September 2020 once the questionnaire was distributed to the targeted population. The survey was separated into three sections, which contains all three of the scales selected for the current study separately. In the first section, the participants answered the informed consent form with the outline of benefits and risks listed out regarding the current study. The confidentiality and anonymity of the participants was kept and protected. In the second section, the demographic information of the participants, such as age, gender, races and current city of residence were obtained. In the third section of the survey, the scales were presented a total of 28-items in Childhood Trauma Questionnaire CTQ, and 10-items in Emotion Regulation Questionnaire (ERQ). To complete the questionnaire, it took less than 20 minutes. After data collection, the data was compiled and analyzed by utilizing IBM Statistical Package for the Social Sciences (SPSS).

Instruments

❖ Childhood Trauma Questionnaire (CTQ)

The Childhood Trauma Questionnaire (CTQ) is an instrument designed by Bernstein and Finks (1998) in order to measure the severity of different types of childhood trauma (refer Appendix A). The standardized, retrospective 28-item self-report inventory consist of five different subscales: physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect. There is a total of 5 items representing each of the subscales. The response is measured in a five-point Likert scale. The scales were allocated as: 1=never, 2=rarely, 3=sometimes, 4=often, and 5=very often. Scoring results in classification of the level of maltreatment (None, Low, Moderate and Severe) for each of the five domains and/or can be converted to percentiles. An additional three items were included under Minimization/Denial scale for any potential underreporting of maltreatment. The CTQ has been well validated in both clinical and non-clinical populations, and has shown excellent reliability in the range of .70 to .93 for all of the subscales, with the lowest reliability for physical neglect and the highest for sexual abuse (Bernstein & Fink, 1998).

❖ Emotion Regulation Questionnaire (ERQ)

The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) is a 10-item self-report questionnaire based on Gross's process model of emotion regulation (refer Appendix B). The model categorizes emotion regulation strategies based on how early they are activated in the emotion generation process. Gross's model of emotion regulation hypothesizes that different regulation strategies might have different consequences. The ERQ is designed in order to measure individual's usage of two

regulation strategies. The first strategy is an antecedent-focused strategy called cognitive reappraisal, where an individual attempt to change how he or she thinks about a situation to change its emotional impact. The second strategy is a response-focused strategy called expressive suppression, where an individual attempt to inhibit the behavioral expression of his or her emotions (Gross & John, 2015). Participants are needed to answer all items on a 7-point Likert scale, in a range of 1 which represents strongly disagree, to 7 which represents strongly agree. The higher the scores, the higher the indication of usage of that particular strategy.

The Results

A total of 390 participants completed the online survey, fulfilling the proposed number of samples of 384. There were total of 207 male and 183 females with age range 21-40 years old. For normality test the Kolmogorov-Smirnov Test and Shapiro - Wilk Test shows a $p < 0.001$ for childhood trauma questionnaire and emotion regulation questionnaire for both Cognitive Reappraisal and Expressive Suppression. The values prove that the data is normally distributed.

Table 1: Descriptive profile of the participants

Age	Frequency	%	
21-25	151	38.7	
26-30	196	50.3	
31-35	38	9.7	
36-40	5	1.3	
Gender	Male	207	53.1
	Female	183	46.9
Ethnicity	Malay	137	35.1
	Chinese	182	46.7
	Indian	71	18.2

The tables show the distribution of participants, spanning across different age ranges total of $n = 151$ (38.7%) participants were in the age range of 21 to 25; $n = 196$ (50.3%) the range of 26 to 30, representing the largest population than the other age ranges; $n = 38$ (9.7%) participants in the age range of 31 to 35; and finally, the smallest population are the participants under the age range of 36 to 40 with a total of $n = 5$ (1.3%) participants. The above table shows the frequency statistic of the participants' gender. Out of 390 participants, a total of $n = 207$ (53.1%) were males who were the majority, and a total number of $n = 183$ (46.9%) who were females. The frequency statistic based on the categories of participants' ethnicity, $n = 137$ (35.1%) participants were Malays. The largest population was Chinese with a number of $n = 182$ (46.7%) participants however the smallest population were the Indians with a total number of $n = 71$ (18.2%) participants.

Table 2: Descriptive statistics of childhood trauma and types of emotional regulations categories

Childhood Trauma		Frequency	%
	Emotional Abuse	202	51.8
	Physical Abuse	102	26.2
	Sexual Abuse	25	6.4
	Emotional Neglect	215	55.1
	Physical Neglect	364	93.3
Childhood Trauma combined	None	1	.3
	One type	11	2.8
	Two types	255	65.5
	Three types	105	26.9
	Four types	18	4.6
Types of Emotional Regulation	Cognitive Reappraisal	235	63.3
	Expressive Suppression	206	52.8

The table reveals that n= 202 participants (51.8%) reported having a form of emotional abuse during their childhood, n= 288 participants (73.8%) reportedly experienced some form of physical abuse during their childhood, n= 25 participants (6.4%) reported having an exposure to sexual abuse during their childhood, n= 215 participants (55.1%) reported experiencing a form of emotional neglect during childhood, n= 364 participants (93.3%) reportedly experienced physical neglects during their childhood.

The frequency statistic based on the data of the combined childhood trauma where more than 99% (389/390) of the participants reportedly experienced at least one kind of childhood trauma. The majority of the participants n= 255 (65.4%) – reported experiencing two types of childhood trauma; followed by the second largest population n=105 (26.9%) reported having experiences of three types of childhood trauma; n=18 (4.6%) participants reported experiencing four types of childhood trauma; n=11 (2.8%) participants reported just having experienced one type of childhood trauma; and finally the smallest population that only consist of n=1 (0.3%) participant reported having no experiences with any type/form of childhood trauma.

The frequency statistic based on the use of cognitive reappraisal as an emotion regulation strategy among the participants n= 235 participants (60.5%) reported the use of cognitive appraisal.; whereas n= 206 participants (52.8%) reported the use of expressive suppression as an emotion regulation strategy.

Table 3: Coefficient values between Childhood Trauma on Cognitive Reappraisal

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.584	.098		5.971	<.001
	Presence of Emotional Abuse	-.168	.054	-.172	-3.117	.002
	Presence of Physical Abuse	-.095	.048	-.085	-1.978	.049
	Presence of Sexual Abuse	-.271	.089	-.135	-3.030	.003
	Presence of Emotional Neglect	.427	.058	.434	7.407	<.001
	Presence of Physical Neglect	-.094	.088	-.048	-1.076	.283

^a Dependent Variable: Usage of Cognitive Reappraisal

Table 3 show the presence-of-trauma variable (independent variable), through a multiple linear regression between the independent variable and the dependent variable – usage of Cognitive Reappraisal, and its positive and negative relationship with childhood trauma.

The categories of childhood trauma seem to yield a significant standardized coefficient beta value except for physical neglect. With a insignificant p-value of $p < 0.283$, there is the presence of doubt of its negative relationship ($B = -0.94$), where the presence of Physical Neglect discourages the use cognitive reappraisal as an emotion regulation strategy. For the remaining childhood trauma, Emotional Abuse, Physical Abuse, and Sexual Abuse yielded a B value of -0.168 ($p < 0.001$), -0.095 ($p < 0.02$), -0.271 ($p < 0.03$) respectively, hence, suggesting a negative relationship with the use of Cognitive reappraisal where this childhood trauma discourages the use of said emotion regulation strategy. On the other hand, the presence of Emotional Neglect suggests a strong positive relationship with the use of cognitive reappraisal (B value = 0.427 , $p < 0.001$), hence suggesting that the presence of emotional neglect encourages, if not, leads to the use of cognitive reappraisal as an emotion regulation strategy.

Table 4: Coefficient values between Childhood Trauma on Expressive Suppression

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.427	.095		4.475	<.001
	Presence of Emotional Abuse	.348	.053	.348	6.622	<.001
	Presence of Physical Abuse	.140	.047	.123	2.984	.003
	Presence of Sexual Abuse	.243	.087	.119	2.795	.005
	Presence of Emotional Neglect	-.298	.056	-.297	-5.299	<.001
	Presence of Physical Neglect	.035	.085	.018	.413	.680

^a Dependent Variable: Usage of Expressive Suppression

The table 4 revealed that the categories of childhood trauma seem to yield a significant standardized coefficient beta value except for physical neglect. With an insignificant $p < 0.680$, with a positive relationship ($B=0.035$), the remaining childhood trauma, Emotional Abuse, Physical Abuse, and Sexual Abuse yield a B value of 0.348 ($p < 0.001$), 0.140 ($p < 0.003$), 0.243 ($p < 0.005$) respectively, hence, suggesting a positive relationship with the use of Expressive Suppression where this childhood trauma encourages the use of emotion regulation strategy of expressive suppression. The presence of emotional neglect suggests a strong negative relationship with the use of expressive suppression (B value = -0.94 , $p < 0.001$), hence suggesting that the presence of emotional neglect discourages the use of cognitive reappraisal as an emotion regulation strategy.

Discussion

Each childhood trauma was particularly highlighted to identify its predicting effect on the practice of the emotional regulation strategies (cognitive reappraisal and expressive suppression). The result from statistical analysis shows there is a significant relationship between every type of childhood trauma including emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect and cognitive reappraisal with equal $p < .001$. Hence, this proves that there is a chance that each childhood trauma experiences encourages the usage of cognitive reappraisal.

The results revealed that there is a significant relationship between every type of childhood trauma including emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect and expressive suppression with equal $p < .001$. Hence, this proves that there is a chance that each childhood trauma experiences encourages the usage of expressive suppression. The main finding of the study reinforces the assumptions of a specific link between childhood trauma, especially emotional abuse and neglect, and emotion regulation difficulties. Further explained that a history of emotional neglect was associated with less frequent use of cognitive reappraisal, and a history of emotional abuse was related to more frequent use of expressive suppression (O'Mahen et al., 2015).

Hereafter the results demonstrated that emotional neglect was associated with a lack of adaptive emotion regulation strategies. As for emotional abuse, it was associated with dysfunctional emotion regulation strategies as emotional abuse have significant effect on childhood trauma according to the current findings. It was further analyzed to identify the positive or negative effect on each childhood trauma towards the use of cognitive reappraisal and expressive suppression as an emotional regulation strategy. The result shows that the experiences of childhood trauma such as emotional abuse, physical abuse, sexual abuse and physical neglect has a negative relationship with cognitive reappraisal. This means that the presence of each specified childhood trauma leads to a less practice of cognitive reappraisal (Burns et al., 2010).

However, the findings also indicated that the experiences of childhood trauma such as emotional abuse, physical abuse, sexual abuse and physical neglect has a positive relationship with expressive suppression. This explains that the presence of each stated childhood trauma leads to an increase usage of expressive suppression. Gross and John (2014) stated that emotion regulatory strategies such as higher expressive suppression and lower cognitive reappraisal may be associated with increased psychological disorders. Furthermore, Kim and Cicchetti (2009) conducted a study and discovered that individuals with experience form of neglect, physical and/or sexual abuse, multiple treatment subtypes, and earlier onset of maltreatment were related to emotion dysregulation.

In addition, it was shown that such experiences during childhood had detrimental effects on emotion regulation development which is shown in terms of poor emotional regulation skills and deficits in emotional understanding. Other studies that support the findings of this study was conducted by Shields and Cicchetti (1998) found that maltreated children had decreased in their emotional regulation and socially appropriate expression of emotions. Similar studies that were conducted reported that maltreated children including forms of abuse or neglect had increased in emotion dysregulation (Shields et al., 2001).

Trauma related to sexual abuse specifically can decrease emotion regulation and understanding, and can increase interpersonal conflict in response to expression of negative emotional states (Copeland et al., 2018). The current findings of the study are consistent with prior reports that identified the significant relationship between childhood trauma and emotion dysregulation.

Conclusion

The results of this study are consistent with prior studies' findings on the significant relationship between childhood trauma, emotion regulation and psychopathology. The main findings of the study contribute to the knowledge of understanding the predicting effect of childhood trauma on emotion regulation leading to anxiety, stress and depression. The objectives of the study have been fulfilled. In conclusion, the current study lays out a platform with the data given for further researches to take place to understand more regarding the etiology of psychopathology from different point of views. The findings of the study are crucial for practicing professionals and clinician to better understand the phenomena of the relationship between the studied variables.

References

- Barlow, M. R., Turow, R. E., and Gerhart, J. (2017). Trauma appraisals, emotion regulation difficulties, and self-compassion predict posttraumatic stress symptoms following childhood abuse. *Child Abuse & Neglect*, 65, 37-47. <https://doi:10.1016/j.chiabu.2017.01.006>.
- Berking, M., and Wupperman, P. (2012). Emotion regulation and mental health. *Current Opinion in Psychiatry*, 25(2), 128-134. <https://doi:10.1097/yco.0b013e3283503669>.
- 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 & Neglect*, 27(2), 169-190. [https://doi:10.1016/s0145-2134\(02\)00541-0](https://doi:10.1016/s0145-2134(02)00541-0).
- Bilc, M. I., Vulturar, R., Chiş, A., Buciuman, M., Nuţu, D., Bunea, I., . . . Miu, A. C. (2018). Childhood trauma and emotion regulation: The moderator role of BDNF Val66Met. *Neuroscience Letters*, 685, 7-11. <https://doi:10.1016/j.neulet.2018.07.018>.
- Burns, E. E., Jackson, J. L., Harding, H. G. (2010). Child Maltreatment, Emotion Regulation, and Posttraumatic Stress: The Impact of Emotional Abuse. *Journal of Aggression, Maltreatment & Trauma*, 19(8), 801-819. <https://doi:10.1080/10926771.2010.522947>.
- Cohen, J. R., Menon, S. V., Shorey, R. C., Le, V. D., Temple, J. R. (2017). The distal consequences of physical and emotional neglect in emerging adults: A person centered, multi-wave, longitudinal study. *Child Abuse & Neglect*, 63, 151-161. <https://doi:10.1016/j.chiabu.2016.11.030>.
- Copeland, W. E., Shanahan, L., Hinesley, J., Chan, R. F., Aberg, K. A., Fairbank, J. A., Costello, E. J. (2018). Association of childhood trauma exposure with adult psychiatric disorders and functional outcomes. *JAMA Network Open*, 1(7). <https://doi:10.1001/jamanetworkopen.2018.4493>.
- Dvir, Y., Ford, J. D., Hill, M., Frazier, J. A. (2014). Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. *Harvard Review of Psychiatry*, 22(3), 149-161. <https://doi:10.1097/hrp.0000000000000014>.
- Fernando, S. C., Beblo, T., Schlosser, N., Terfehr, K., Otte, C., Lowe, B., Wingenfeld, K. (2014). The impact of self-reported childhood trauma on emotion regulation in borderline personality disorder and major depression. *Journal of Trauma & Dissociation*, 15(4), 384-401. <https://doi:10.1080/15299732.2013.863262>.

- Gross, J. J., and John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and wellbeing. *Journal of Personality and Social Psychology*, 85(2), 348. <https://doi.org/10.1037/0022-3514.85.2.348>.
- Gross, J., John. (2014). Emotion regulation: Conceptual and empirical foundations. *Handbook of emotion regulation* (pp. 3-15). New York, NY: The Guilford Press.
- Gross, J., John. (2015). The extended process model of emotion regulation: Elaborations, applications, and future directions. *Psychological Inquiry*, 26(1), 130-137. <https://doi:10.1080/1047840x.2015.989751>.
- Hopfinger, L., Berking, M., Bockting, C. L., & Ebert, D. D. (2016). Emotion regulation mediates the effect of childhood trauma on depression. *Journal of Affective Disorders*, 198, 189-197. <https://doi:10.1016/j.jad.2016.03.050>.
- Infurna, F. J., Rivers, C. T., Reich, J., & Zautra, A. J. (2015). Childhood trauma and personal mastery: Their influence on emotional reactivity to everyday events in a community sample of middle-aged adults. *Plos One*, 10(4). <https://doi:10.1371/journal.pone.0121840>.
- Kim, J., & Cicchetti, D. (2009). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology and Psychiatry*, 51(6), 706-716. <https://doi:10.1111/j.1469-7610.2009.02202>.
- Marusak, H. A., Martin, K. R., Etkin, A., & Thomason, M. E. (2014). Childhood trauma exposure disrupts the automatic regulation of emotional processing. *Neuropsychopharmacology*, 40(5), 1250-1258. <https://doi:10.1038/npp.2014.311>.
- Mathews, C. A., Kaur, N., & Stein, M. B. (2008). Childhood trauma and obsessive-compulsive symptoms. *Depression and Anxiety*, 25(9), 742-751. <https://doi:10.1002/da.20316>.
- 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. <https://doi:10.1016/j.jad.2014.11.028>.
- Shields, A., & Cicchetti, D. (1998). Reactive Aggression Among Maltreated Children: The Contributions of Attention and Emotion Dysregulation. *Journal of Clinical Child Psychology*, 27(4), 381-395. https://doi.org/10.1207/s15374424jccp2704_2.

- Shields, A., Ryan, R. M., & Cicchetti, D. (2001). Narrative representations of caregivers and emotion dysregulation as predictors of maltreated children's rejection by peers. *Developmental Psychology*, 37(3), 321–337. <https://doi.org/10.1037/0012-1649.37.3.321>.
- Thompson, R. A., & Calkins, S. D. (1996). The double-edged sword: Emotional regulation for children at risk. *Development and Psychopathology*, 8(1), 163-182. <https://doi:10.1017/s0954579400007021>.
- Warner, R.M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA. Sage Publications.