PONTÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL
FACULDADE DE PSICOLOGIA
PROGRAMA DE PÓS-GRADUAÇÃO EM PSICOLOGIA
MESTRADO EM PSICOLOGIA

COGNITIVE EMOTION REGULATION, AFFECT AND POSTTRAUMATIC STRESS SYMPTOMS: PSYCHOMETRIC PROPERTIES OF THE *CERQ* AND A DOUBLE MEDIATION STUDY

JULIA LUIZA SCHÄFER

Dissertação apresentada ao Programa de Pós-Graduação em Psicologia da Pontifícia Universidade Católica do Rio Grande do Sul como requisito parcial para a obtenção do grau de Mestre em Psicologia.

Porto Alegre

Janeiro, 2017

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ORIENTADOR: Prof. Dr. Christian Haag Kristensen

Dissertação de Mestrado realizada no Programa de Pós-Graduação em Psicologia da Pontifícia Universidade Católica do Rio Grande do Sul, como parte dos requisitos para a obtenção do título de Mestre em Psicologia. Área de Concentração em Cognição Humana.

Porto Alegre
Janeiro, 2017

Ficha Catalográfica

S415c Schäfer, Julia Luiza

Cognitive Emotion Regulation, Affect and Posttraumatic Stress Symptoms : Psychometric Properties of the CERQ and a Double Mediation Study / Julia Luiza Schäfer . – 2017.

92 f.

Dissertação (Mestrado) – Programa de Pós-Graduação em Psicologia, PUCRS.

Orientador: Prof. Dr. Christian Haag Kristensen.

1. Sintomas Pós-traumáticos. 2. Regulação Emocional. 3. Regulação Emocional Cognitiva. 4. Ruminação. 5. Afeto Negativo. I. Kristensen, Christian Haag. II. Título.

Elaborada pelo Sistema de Geração Automática de Ficha Catalográfica da PUCRS com os dados fornecidos pelo(a) autor(a).

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Porto Alegre
Janeiro, 2017

DEDICATORY

I dedicate this work to all people who, unfortunately, have gone through traumatic life experiences. I know it hurts, but I hope that, eventually, every pain will ease and heal. I'll always try my best to contribute with it.

ACKNOWLEDGMENTS

Accomplishing a work like this is never a one woman's job. From all virtues I've been taught since I was a kid, gratitude has always been one of the most meaningful to me.

First of all, I would like to express my gratitude to the *Conselho Nacional de Pesquisa* (CNPq) for granting me the scholarship that allowed me to dedicate two years of my professional life to the research in Psychology, and to the Pontifical Catholic University of Rio Grande do Sul (PUCRS). I would like to especially thank the secretaries of the Postgraduate Program in Psychology for all the availability and patience they've had.

Thank you to Dr. Christian Kristensen for welcoming me as his advisee, supporting me and this research, and giving me the autonomy necessary to move it forward. Before even knowing him, I was an admirer of his work. Now I can say that, besides it, he's become an example of a human being within the academy. I hope I can be more like him one day.

Thanks to all the Professors I've met and learned so much from since I've become a Master student. Special thanks goes to Dr. Adriane Arteche for kindly helping me when I needed, and for teaching me more than I thought I could learn. I'm lucky to say I could count on someone I admire that much.

To all members of the *Núcleo de Estudos e Pesquisa em Trauma e Estresse* (NEPTE) and the *Cognição, Emoção e Comportamento* (CEC), my most sincere thanks. As soon as I became a part of these groups I realized what a beautiful family they've always been. Special thanks goes to Alice Einloft Brunnet, Ramon Silvestri, Gustavo Ramos da Silva, Tayse Conter, Valquíria Tavares, Eduardo Guimarães, Márcio Barbosa, Marcelo Rigoli, and Janaína Nunez for sharing countless learning and laughing moments, as well as for all the times they've answered my questions and calmed my anxieties. Thank you, also, to Bolivar Cibils Filho for taking all the interest in this research, and for being so valuable to its accomplishment as my research assistant.

Thank you to all my friends and my colleagues, not for directly helping me accomplish this work, but for taking my mind out of it from time to time. Also, thanks to all the research participants for taking their time to contribute, even when it meant thinking about painful life experiences. Without them, none of this would've been possible.

To my parents: my father, my mother, and my stepfather. I've always followed their footsteps. I've always looked up to them. With love, tenderness, patience, acceptance, and discernment, they've taught me how to be good. If I can be half the men and woman they are, I will be grand. Thank you.

Finally, thank you to the one, and only, whom I chose to be by my side for this and next lifetimes to come, Lucas. If it hadn’t been for his listening, warmth, and kind words on the most difficult moments, none of this would’ve been as smooth as it was. Because I had him with me, it all was a sweet journey of discoveries. Thanks to him for being so great and for loving me so deeply.

"... that's how life should be, when one person loses heart, the other must have heart and courage enough for both."

- José Saramago

RESUMO

Introdução: A literatura sugere que respostas emocionais estão associadas ao desenvolvimento e manutenção de sintomas do Transtorno de Estresse Pós-Traumático (TEPT). A capacidade de influenciar a experiência e expressão emocional, conhecida como regulação emocional (RE), pode ser crítica ao lidar com níveis significativos de estresse. Especificamente, a RE através de cognições, ou pensamentos (ou seja, Regulação Emocional Cognitiva, REC), ajuda os indivíduos a manter o controle sobre sua experiência emocional durante, ou depois de serem expostos a eventos estressores, ou traumáticos. O Questionário de Regulação Emocional Cognitiva (CERQ), foi desenvolvido para medir nove diferentes estratégias de REC que se referem à maneira consciente e atencional de lidar com eventos de vida ameaçadores, ou negativos. **Objetivos**: Os objetivos gerais desta dissertação foram desenvolver e investigar as evidências de validade da versão brasileira do CERQ (Estudo 1) e investigar a relação entre a exposição a traumas, estratégias cognitivas de RE, afeto e Sintomas de Estresse Pós-Traumático (SEPT) através de um modelo de mediação dupla (Estudo 2). **Método:** Uma amostra de 445 estudantes universitários completou um Questionário Sócio-Demográfico, a *Life of Events Checklist* (LEC-5), a versão brasileira do CERQ, a *Positive and Negative Affect Schedule* (PANAS) e a *Posttraumatic Symptoms Checklist* (PCL-5) em uma plataforma de pesquisa on-line. Para o Estudo 1, o processo de adaptação da versão brasileira do CERQ incluiu tradução, retro-tradução, avaliação de juízes e teste em 30 participantes da população-alvo. As evidências de validade de construto foram avaliadas através de análise fatorial confirmatória, da consistência interna através dos alfas de Cronbach e de correlações com as variáveis afetivas mensuradas pelo PANAS. Para o Estudo 2 foram realizadas análises preliminares de correlação e de regressão linear múltipla para investigar associações entre tipo de trauma, estratégias cognitivas de regulação emocional, afeto e severidade de SEPT. Em seguida, um modelo com ruminação e afeto negativo como mediadores do efeito da exposição ao trauma lesão moral causada por outros sobre os SEPT foi testado usando o macro PROCESS para o SPSS. **Resultados:** As análises de validade mostraram que a estrutura original do CERQ possui boa validade fatorial na amostra e alta confiabilidade, com α de Cronbach variando entre .71 e .88. Análises preliminares de associação entre tipo de trauma, estratégias de regulação emocional cognitiva, afeto e SEPT mostraram que o tipo de trauma de lesão moral causada por outros, ruminação e afeto negativo são preditores significativos da gravidade de SEPT. Ao testar o modelo de mediação dupla, os resultados sugerem que a ruminação é um mediador forte e independente entre o tipo de trauma de lesão moral causada por outros e SEPT, enquanto afeto negativo é um mediador apenas quando a ruminação está presente no modelo. **Discussão:** Nossos resultados indicam que a versão brasileira do CERQ é uma ferramenta válida e confiável para avaliar as estratégias cognitivas de regulação emocional e que os indivíduos expostos ao tipo de trauma de lesão moral causada pelos outros utilizam ruminação como uma estratégia de regulação emocional cognitiva com mais frequência. O uso aumentado dessa estratégia amplifica os níveis de afeto negativo que acaba levando a níveis mais elevados de SEPT. Em geral, esses resultados podem influenciar pesquisas e auxiliar no desenvolvimento e melhoria de intervenções cognitivas para indivíduos expostos a eventos traumáticos.

Palavras-Chaves: Sintomas Pós-traumáticos, Regulação Emocional, Regulação Emocional Cognitiva, Ruminação e Afeto Negativo.

Área conforme classificação CNPq: 7.07.00.00-1 - Psicologia

Sub-área conforme classificação CNPq: 7.07.01.03-2 – Construção e Validade de Testes, Esc. e o. Medidas Psicológicas; 7.07.06.00-0 – Psicologia Cognitiva; 7.07.02.04-7 – Estados Subjetivos e Emoção.

ABSTRACT

Background: Literature suggests that emotional responses are associated to the development and maintenance of Posttraumatic Stress Disorder (PTSD) symptoms. The ability to influence emotional experience and expression, known as emotion regulation (ER), can be critical when dealing with significant levels of stress. Specifically, ER through cognitions, or thoughts (i.e. Cognitive Emotion Regulation; CER), helps individuals to maintain control over their emotional experience during, or after being exposed to stressful, or traumatic events. The Cognitive Emotion Regulation Questionnaire (CERQ) was developed to measure nine different CER strategies that refer to the conscious and attentional way people deal with threatening, or negative life events. **Objectives:** Therefore, the general purposes of this thesis were to develop and evaluate validity evidences of the Brazilian version of the CERQ (Study 1) and to investigate the relationship between trauma exposure, cognitive emotion regulation strategies, affect and Posttraumatic Stress Symptoms (PTSS) testing for a double mediation model (Study2). **Method:** A sample of 445 university students completed a Socio-Demographic Questionnaire, the Life of Events Checklist (LEC-5), the Brazilian version of the CERQ, the Positive and Negative Affect Schedule (PANAS) and the Posttraumatic Symptoms Checklist (PCL-5) on an on-line research platform. For Study 1, adaptation process of the Brazilian version of the CERQ included translation, back-translation, expert committee's evaluation, and testing on 30 participants from the target population. Validity evidence was assessed through confirmatory factor analysis, internal consistency through the Cronbach's alpha analysis, and correlations with the affective variables measured by the PANAS. For Study 2, preliminary correlation and multiple linear regression analyses were conducted to investigate associations among trauma type exposure, cognitive emotion regulation strategies, affect and PTSS severity. Next, a model positing rumination and negative affect as double mediators of the effect of trauma type of moral injury by others on PTSS was tested using the PROCESS macro for SPSS. **Results:** Validity analyses showed that the original structure of the CERQ has good factorial validity in the sample and high reliabilities, with Cronbach's α ranging between .71 and .88. Preliminary analyses of the association among trauma type, cognitive emotion regulation strategies, affect and PTSS showed that trauma type of moral injury, rumination and negative affect were significant predictors of PTSS severity. When testing for the double mediation model, results suggested that rumination is a strong and independent mediator between trauma type moral injury by others and PTSS, while negative affect is a mediator only when rumination is also included. **Discussion:** Our results indicate that the Brazilian version of the CERQ is a valid and reliable tool for assessing cognitive emotion regulation strategies, and that individuals who are exposed to trauma type of moral injury by others engage more frequently in rumination as a cognitive emotion regulation strategy, which in turn amplifies levels of negative effect that ends up leading to higher levels of PTSS. Overall, these results can influence further researches and aid the development and improvement of cognitive treatment interventions for individuals exposed to traumatic events.

Key-words: Posttraumatic Stress Symptoms, Emotion Regulation, Cognitive Emotion Regulation, Rumination, and Negative Affect.

Area according to CNPq: 7.07.00.00-1 - Psychology

Sub-area according to CNPq: 7.07.01.03-2 – Development and validity of tests, scales, and/or psychological measures; 7.07.06.00-0 – Cognitive Psychology; 7.07.02.04-7 – Subjective states and emotion.

INDEX

LIST OF TABLES

CHAPTER 1: PRESENTATION AND INTRODUCTION

CHAPTER 2: PSYCHOMETRIC PROPERTIES OF THE BRAZILIAN VERSION OF THE COGNITIVE EMOTION REGULATION QUESTIONNAIRE

CHAPTER 3: RUMINATION AND NEGATIVE AFFECT AS MEDIATORS OF TRAUMA TYPE AND POSTTRAUMATIC STRESS SYMPTOMS SEVERITY

LIST OF FIGURES

CHAPTER 1: PRESENTATION AND INTRODUCTION

CHAPTER 3: RUMINATION AND NEGATIVE AFFECT AS MEDIATORS OF TRAUMA TYPE AND POSTTRAUMATIC STRESS SYMPTOMS SEVERITY

1. CHAPTER 1

PRESENTATION AND INTRODUCTION

Presentation

This master's thesis is the result of a research project developed and conducted as part of the Center of Trauma and Stress Studies and Research (*Núcleo de Estudos e Pesquisa em Trauma e Estresse* – NEPTE) under the Cognition, Emotion and Behavior research line, at the Psychology Postgraduate Program of the Pontifical Catholic University of Rio Grande do Sul (PUCRS). The original project has been approved by the Research Committee of the Psychology Department (Attachment A) and by the Research Ethics Committee of the university (CEP - 1.530.135 – Attachment B).

The NEPTE, coordinated by Prof. Dr. Rodrigo Grassi de Oliveira, is part of the Psychology Postgraduate Program of the PUCRS, and is comprised of four lines of research with a general objective in common of investigating the effects of exposure to potentially traumatic events, and providing prevention and treatment interventions for trauma and stress related disorders. These lines of research are Affective Neuroscience and Transgenerationality, coordinated by Prof. Dr. Adriane Xavier Arteche; Developmental Cognitive Neuroscience, coordinated by Prof. Dr. Rodrigo Grassi de Oliveira; Cognition, Emotion and Behavior, coordinated by Prof. Dr. Christian Haag Kristensen; and Immunology of Stress, coordinated by Prof. Dr. Moisés Evandro Bauer at the Biomedical Research Institute.

Advised by Prof. Dr. Christian Haag Kristensen, the research resulting in this thesis is part of the psychological evaluation of adults exposed to potentially traumatic events axis of the Cognition, Emotion, and Behavior line of research. Its initial general objective was to investigate the associations of cognitive emotion regulation strategies, affect, and posttraumatic stress symptoms in university students who have already been exposed to traumatic events. To accomplish it, two empirical studies were planned, considering that valid measures were necessary to in order to conduct the investigation. Therefore, the first study performed and presented is the development and validation of the Brazilian version of the *Cognitive Emotion Regulation Questionnaire* (CERQ), while the second is an investigation of the relationship between trauma exposure, cognitive emotion regulation strategies, affect and Posttraumatic Stress Disorder (PTSD) through the evaluation of a double mediation model.

The main reason for the development of such studies was the interest in understanding affective and emotion regulation aspects related to the exposure of traumatic events and psychopathological outcomes, such as PTSD. Because emotions play an important role in individuals' adaptation to various aspects of everyday life (Ochsner & Gross, 2005), the ability to influence their experience and expression can be critical when dealing with significant levels of

stress (Garnefski et al., 2002), such as during and after the exposure to traumatic events. It is suggested that emotional responses are associated to the development and maintenance of posttraumatic stress symptoms (PTSS), bringing into discussion questions and findings about what is the part emotion regulation plays in the onset of the disorder (Seligowski, Lee, Bardeen, and Orcutt, 2014).

Introduction

Epidemiological studies have shown that 40% to 90% of the world population will be exposed to, at least, one traumatic event during their lifetime (Sher, 2004). Such data take into consideration the last edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 – Apa, 2013) definition of traumatic events. It states that traumatic events refer to situations where there is the occurrence of threatened or actual death, severe threatened or actual injury, or sexual violence. Exposure to these events can happen through direct experience, witnessing it, knowing about someone close experiencing it, or being repetitively exposed to details, or the aftermath of an event due to professional duties. Concerns about traumatic events exposure relate to the knowledge that it may result in a variety of negative health and quality of life consequences (Hoffman et al., 2014), placing individuals at risk for the development of psychopathologies. Supporting it, it is estimated that 10% of those who are exposed to this type of life events will develop a psychiatric condition (Breslau, 2009).

Among the negative outcomes of traumatic exposure, PTSD is highly studied for being a condition of significant psychological distress caused by the exposure to traumatic events. It is characterized by four clusters of symptoms related to re-experiencing, avoidance, negative alterations on cognitions and mood, and physiological arousal. Examples of symptoms comprising the clusters are intrusive memories, dreams, or flashbacks about the event; avoidance of thoughts, feelings, or activities associated to the event; increased frequency of negative emotional states; and hipervigilance, high emotional reactivity, sleeping disturbances and problems with concentration (APA, 2013). Prevalence data indicates that 6.8% of North Americans (Kessler et al., 2005), 10.2% and 8.7% of São Paulo and Rio de Janeiro inhabitants suffer from PTSD (Ribeiro et al., 2013).

Etiological and maintenance factors of PTSD have long been studied due to its important prevalence data, social and economical consequences and high comorbidity rates with major depressive disorder, anxiety disorders, and substance use related disorders (Rosen & Lilienfeld, 2008). As briefly mentioned, one of these factors recently being studied is the capacity to influence the occurrence, intensity, duration and expression of emotions, known as Emotional

Regulation (ER) (Gross, 1998). The process of regulating emotions occurs through the activation of regulatory biological, social, behavioral, and cognitive systems (Garnefski & Kraaij, 2007) allowing individuals to respond adequately and adaptively to environmental demands (Aldao, 2013; Aldao, Nolen-Hoeksema, & Schweizer, 2010; Gross, 2013; Gross & Muaoz, 1995).

When the way people regulate emotions are appropriate to the context and are used in a flexible manner orienting behaviors to personal goals without causing any harm, the emotion regulation process is considered adaptive. However, when the process of ER does not alter emotional responses, drives individual to harmful behaviors, or results in long term negative consequences, it is considered maladaptive (Bryan, Mcleish, Kraemer, & Fleming, 2015).

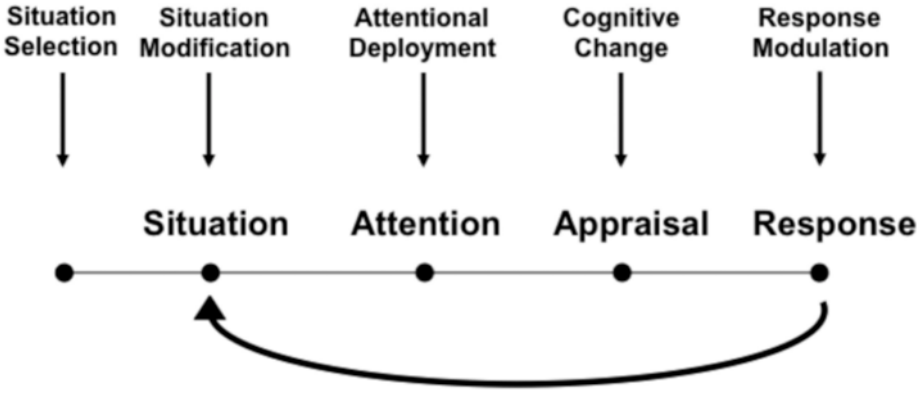
Differentiating adaptive and maladaptive emotion regulation depends on which are the affective, behavioral, and cognitive consequences of the mechanisms that are used for regulating emotions, as well as the relationship of these mechanisms with psychopathologies (Aldao et al., 2010). While adaptive ER has already been associated to good academic and professional performance, good interpersonal relationships, wellbeing, decreases in negative affect, and increases in tolerance to frustration (Gross & Muaoz, 1995), maladaptive ER is closely relate to psychopathologies such as personality, anxiety, mood, and trauma related disorders, as well as increases in sympathetic activation, and decreases in social support and autonomic behaviors (Aldao et al., 2010; Berking & Wupperman, 2012; Jazaieri, Urry, & Gross, 2013; Seligowski et al., 2014). Because of such findings, ER has increasingly been incorporated into psychopathologies models, postulating that individuals who are unable to cope effectively with emotional responses when faced with adverse life events experience higher levels of distress (Aldao et al., 2010).

Moreover, the process of emotional regulation can involve controlled and conscious, or automatic and unconscious processes, considered strategies, that aim at reducing negative emotions (such as anger, anxiety, and sadness) and positive emotions (such as euphoria during a business meeting), as well as increasing positive emotions (such as love and joy) and negative emotions (such as anger during an unfair negotiation) (Gross, 2013; Gross, 2002; Koole, 2009; Rottenberg & Gross, 2007). According to James Gross (2013), these strategies can target different aspects of the emotional response generation such as antecedents, cognitive meanings, physiological activation and behavioral engagement (Gross, 2002).

This comprehension is part of the Process Model of Emotion Regulation (Gross, 2013; **Figure 1**), which groups emotion regulation strategies into five categories of *situation selection, situation modification, attentional deployment, cognitive change, and response modulation.* Because the first four groups of strategies are believed to target antecedent aspects of the

emotional response, such as potential emotional eliciting situations, attentional focus and cognitive attributions given to potential emotional eliciting stimulus, they are considered *antecedent focused.* On the other hand, *response modulation* comprises strategies used to alter the emotional response once it is already in motion; therefore being considered *response focused* (Gross, 2002).

Figure 1
Process Model of Emotion Regulation by James Gross



Note. Retrieved from Gross, J. J. (2013). Emotion regulation: taking stock and moving forward. *Emotion*, *13*(3), 359–365

Of special interest for this research are the *attentional deployment* and *cognitive change* ER strategies because they compose what can be understood as cognitive emotion regulation (CER). Through the perspective of the cognitive theory, emotions can be comprehended as subjective responses affected by meaning attributions that are able to shape the emotional experience. In such perspective, cognitive assessments gauged by individuals to their internal and external environment play a central role (Gross & Barrett, 2011). Years of research have demonstrated that the regulation of emotions through cognition is part of human life and that cognitive processes can contribute to emotional control (Garnefski, Kraaij & Spinhoven, 2001). Therefore, CER refers to the conscious and attentional way of dealing with information that elicit emotions and can be conceptualized as part of the broader concept of ER (Garnefski & Kraaij, 2007).

The study of ER through cognition has focused on attentional control and cognitive responses (Oschner & Gross, 2005) to emotional eliciting stimulus, focusing on the study of specific strategies. In the case of CER, these strategies are attempts in modifying the stimuli's magnitude or meaning, as well as the intensity and quality of an emotional response (Schmidt, Tinti, Levine, & Testa, 2010).

Years of research has shown that ER through cognitions, or thoughts, helps individuals to maintain control over the emotion experience during, or after being exposed to stressful events.

Even though the capacity of thinking and regulating emotions through cognitive processes is universal, there are many individual differences regarding the amount of cognitive activity and content used to cope with emotional responses (Garnefski & Kraaij, 2007). Therefore, investigations have been conducted to identify what are the types of cognitive emotion regulation strategies, and which are their associations to positive and negative health outcomes (Aldao & Nolen-Hoeksema, 2010).

In order to do that, Garnefski and Spinhoven (2001) developed the *Cognitive Emotion Regulation Questionnaire* (CERQ), a 36-item instrument measuring nine cognitive emotion regulation strategies (see **Table 1**) that refer to the way people think and deal cognitively with what they feel after being exposed to stressful, or threatening life events. From investigations using the instrument, all nine strategies were classified as adaptive and maladaptive according to their positive and negative associations with psychopathological conditions, such as anxiety and depression (Garnefski & Kraaij, 2007; Martin & Dahlen, 2005).

The CERQ has been used within many different contexts and samples since it has been first developed. However, studies with trauma-exposed individuals published between 2013 and 2015 are limited to investigations of the cognitive emotion regulation strategies related to exposure therapy for patients with PTSD (Wisco, Sloan, & Marx, 2013), impulsivity and exposure to trauma in a community sample (Ceschi, Hearn, & Fu, 2014), and PTSD symptoms in individuals with bipolar disorder (Steel, 2015). Their results suggest that CER is a related factor to PTSD, because of findings regarding the predictive role of rumination, catastrophizing, and other-blame on PTSS (Steel, 2015) and the role of cognitive reappraisal and putting into perspective in symptom change after an exposure treatment (Wisco et al., 2013).

These results are in line with what Seligowski et al. (2014) have presented in a meta-analysis evaluating 57 international studies investigating PTSD and ER published up to 2012. Even though there are not a great amount of those studies using the CERQ, the same strategies have been measured through other instruments when investigating their relationship with PTSD symptoms. The authors found that strategies such as acceptance, cognitive reappraisal, and rumination, also evaluated by the CERQ, as well as experiential avoidance, emotional expression suppression, thought suppression and worry have positive and negative associations to PTSD. Samples form these studies varied among university students, psychiatric patients, victims of abuse, and war, traffic and natural disasters survivors, and about 15 instruments have been partially, or integrally used to measure ER constructs. From all the instruments, the CERQ was the main measure of CER that posits the possibility of measuring a significant number of specific

strategies, amplifying the strength of investigations by capturing a bigger variability of existing ways of cognitively regulating emotions.

Table 1.
Cognitive Emotion Regulation Strategies Evaluated By the CERQ

Strategy	Definition
Maladaptive strategies	
Self-blame	Thoughts of blaming oneself for what has happened.
Other-blame	Thoughts of putting the blame for what has happened on others.
Rumination	Thinking all the time about the feelings and thoughts associated with the negative event.
Catastrophizing	Explicitly emphasizing the terror of the experience.
Adaptive strategies	
Putting into perspective	Thoughts of playing down the seriousness of the event when compared to other events.
Positive refocusing	Thinking of other, pleasant matters instead of the actual event.
Positive Reappraisal	Thinking of attaching a positive meaning to the event in terms of personal growth.
Acceptance	Thoughts of resigning to what has happened.
Refocus on planning	Thinking about what steps to take in order to deal with the event.

Note. Source: Garnefski, N., & Kraaij, V. (2007). The cognitive emotion regulation questionnaire: Psychometric features and prospective relationships with depression and anxiety in adults. *European Journal of Psychological Assessment*, *23*(3), 141–149.

Attempts in understanding the nature and mechanisms of those relationships have suggested that the aftermath of being exposed to traumatic evens may influence individuals abilities to recover in a way that consequent impairment in cognitive, physiological, behavioral and emotional regulatory processes can lead to the development and maintenance of PTSD symptoms (Bardeen, Kumpula, & Orcutt, 2013). It is known that exposure to traumatic events and PTSD is also characterized by significant levels of negative affect (Badour & Feldner, 2013) that can be reduced through adaptive ER (Gross & Muaoz, 1995). However, individuals who suffer from PTSD seem to use maladaptive emotion regulation strategies in excess at the same time as they lack adaptive strategies employment (Boden et al., 2013).

Therefore, it is not surprising to understand the addition of the new cluster of symptoms, alterations in cognition and mood, in the last edition of the DSM-5 (Apa, 2013) under PTSD diagnosis criteria. The new cluster is an attempt to recognize the great variety of negative affect experience that is part of the disorder (Badour, Resnick, & Kilpatrick, 2015). Negative affect refers to a stable experience of stress marked by aversive emotional states such as anger, disgust,

guilt, and fear (Brown et al., 2014) that can become chronic among individuals with difficulties regulating their emotions (Shepherd & Wild, 2014).

Studies investigating the relationship of negative affect and PTSD in war veterans, women victims of abuse (Brown et al., 2014), and adults exposed to traumatic events (Badour et al., 2015; Vujanovic et al., 2013) have found high rates of negative affect among the samples, as well as associations with PTSD symptoms severity even when depressive symptoms are accounted for. Even though there are no studies directly investigating CER, negative affect and PTSD symptoms, Bryan et al. (2015) examined the role of emotion dysregulation when predicting PTSD symptoms among university students exposed to traumatic events controlling for negative affect. Their results point out to a positive association between negative affect and three PTSD clusters of re-experiencing, avoidance, and arousal symptoms.

Results like this, and well grounded theory suggest that ER and negative affect are important aspects when studying individuals who have been exposed to traumatic events and are at risk of developing psychiatric disorders, such as PTSD. Considering that the best evidence-based treatments for PTSD follow a Cognitive Behavioral Therapy approach, understanding the role of negative affect and cognitive aspects of ER (i.e. the way people consciously think about events and emotional experiences in order to cope with them), can aid intervention designs and hierarchically organize treatments in a way that more significant cognitive contributors to symptoms are assessed at an early stage. Moreover, because the ability of regulating emotions through cognition can neutralize negative experiences without impairing memory, and diminish physiological activation caused by strong emotional reactions (Ochsner & Gross, 2005), identifying cognitive emotion regulation strategies associated to PTSD may be of great relevance.

Even though an increase in the number of studies investigating emotion regulation and outcomes related to traumatic events exposure has been easily noticed (Lee, Witte, Weathers, & Davis, 2015), this field has still a lot to be explored nationally. Therefore, the present research aimed at adapting and evaluating validity evidence the Brazilian version of the *Cognitive Emotion Regulation Questionnaire* (CERQ) in order to investigate how exposure to traumatic events, cognitive emotion regulation strategies and negative affect are related to posttraumatic stress symptom (PTSS) severity among university students. In order to do that, two studies were conducted with a university student sample of 445 students who have been exposed to stressful, or traumatic events.

After the approval by the Research Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul (PUCRS), folders were distributed around campus, and emails and invitations through social media (*Facebook*) were sent out briefly explaining about the research

and inviting students to participate. Students were asked to access an internet web link that directed them to an online research platform (*Qualtrics*) where a socio-demographic questionnaire and the instruments *Life Events Checklist* (LEC-5; Weathers et al., 2014), *Positive and Negative Affect Schedule* (PANAS; Watson, Clark, & Tellegen, 1988), *Cognitive Emotion Regulation Questionnaire* (CERQ; Garnefski et al., 2001) and *The Posttraumatic Symptoms Checklist-5* (PCL-5; Weathers et al., 2014) (Attachment C) were displayed after the participant's consent was given (Attachment D).

The first study derived from this research is the development and validity evaluation of the Brazilian version of the *Cognitive Emotion Regulation Questionnaire* (CERQ), and its main objective was to translate, adapt, and evaluate the psychometric properties of the instrument. Translation and adaptation processes were conducted according to Beaton, Bombardier, Guillemin, and Ferraz (2000) and Pasquali (2010), through translation, back-translation, expert committee's evaluation, and testing on a sample of the target population procedures, and those are described in more details next. For instrument validity, confirmatory factor analysis of two proposed factor structures of the instrument, internal consistency, and correlation analyses were conducted and are described in the next chapter of this thesis.

1.1 Translation and Adaptation Processes of the Brazilian Version of the CERQ

1.1.1. *Translation, back translation and Expert's Committee Evaluation of the CERQ*

Two native Portuguese-speaking translators, fluent in English, independently translated the original English version of the CERQ into Brazilian Portuguese (T1 and T2). Two other independent translators back-translated these versions into English (B1 and B2) so that an expert committee could compare them to the English version of the CERQ. This committee was composed of three psychologists who carefully evaluated every item from both versions (T1 and T2), and those items that were closest to the original version were chosen to comprise the preliminary version (P1) of the Brazilian version of the CERQ.

1.1.2. *Expert judges' evaluations*

Four judges who are experts in emotion regulation, human cognition and psychological assessment evaluated the preliminary version (P1). The content validity index (CVI) (Hernández-Nieto, 2002) was used to objectively measure the experts' evaluation. This index is based on a five-point Likert scale on which experts rate the items according to (1) clarity of language (which measures how understandable the items are to the target population); (2) practical relevance

(which measures how adequate each item is to evaluate the target population); and (3) theoretical relevance (which measures how much the items are in agreement with the construct theory) (Balbinotti, Benetti, & Terra, 2007). For each item, values > 0.7 were considered satisfactory (Clark, Lavielle, & Martinez, 2003). After the first evaluation by the judges, no item obtained a CVI lower than 0.7. However, five items (item 2, 4, 5, 14, and 27) obtained a CVI lower that 0.8, being rephrased according to judges' suggestions and observations, and resubmitted to them for a second evaluation. **Table 2** summarizes the final CVI obtained for every item after both evaluations, and the translated items that comprise the final version of the instrument. As it is possible to notice, every item had a CVI of >0.8 (except for item 19 in the clarity of language domain).

1.1.3. *Test in the Target Population*

After the expert judges committee, the final version of the Brazilian CERQ was made and it was included in the data collection online research platform for testing in the target population. For the first thirty participants in the study, the instrument was administered with a comprehension scale that evaluated the understanding of each item in the questionnaire using a five-point rating scale ranging from "1- Incomprehensible" to "5- I completely understood". Satisfactory understanding was defined with a mean score ≥ 3, a cut-off point based on previous studies (Lobo et al., 2014; Oliveira & Bandeira, 2011). None of the items needed to be modified at this stage because participants rated all the items as completely understandable. All items, except for items 23 and 32 (M= 3,83; M = 3,87) had a mean score ≥4.

1.1.4. *Original authors' evaluation*

Finally, adaptation procedures were completed submitting the Brazilian version of the CERQ to the authors of the instrument for evaluation, and approval was given.

Table 2.
Content Validity Indexes According to the Expert's Committee Evaluation

Item*	**CL**	**PR**	**TR**
1. Eu sinto que sou o culpado pelo que aconteceu	0,996	0,996	0,996
2. Eu penso que tenho que aceitar que isso aconteceu	0,946	0,996	0,896
3. Eu frequentemente penso em como me sinto em relação ao que aconteceu	0,846	0,946	0,896
4. Eu penso em coisas que são mais agradáveis do que aquilo que aconteceu	0,946	0,896	0,896
5. Eu penso nas melhores coisas que eu consigo	0,946	0,896	0,896
6. Eu penso que eu posso aprender algo com o que aconteceu	0,996	0,996	0,996
7. Eu penso que tudo poderia ter sido muito pior	0,946	0,996	0,996
8. Eu frequentemente penso que o que eu vivi é muito pior do que o que os outros viveram	0,946	0,896	0,896
9. Eu sinto que os outros são os culpados pelo que aconteceu	0,996	0,996	0,996
10. Eu sinto que eu sou o responsável pelo que aconteceu	0,996	0,996	0,996
11. Eu penso que eu tenho que aceitar o que aconteceu	0,996	0,996	0,896
12. Eu me preocupo com o que eu penso e sinto sobre o que aconteceu	0,846	0,946	0,946
13. Eu penso em coisas agradáveis que não tem nada a ver com o que aconteceu	0,946	0,946	0,946
14. Eu penso em qual a melhor forma para lidar com o que aconteceu	0,996	0,996	0,996
15. Eu penso que eu posso me tornar uma pessoa mais forte como resultado do que aconteceu	0,996	0,996	0,996
16. Eu penso que outras pessoas passam por experiências muito piores	0,996	0,946	0,946
17. Eu fico pensando o quão horrível é o que aconteceu	0,946	0,896	0,946
18. Eu penso que os outros são responsáveis pelo que aconteceu	0,996	0,996	0,996
19. Eu penso sobre os erros que cometi no que aconteceu	0,796	0,946	0,946
20. Eu penso que eu não posso mudar nada do que aconteceu	0,896	0,946	0,946
21. Eu quero entender porque me sinto da maneira que me sinto sobre o que aconteceu	0,896	0,896	0,946
22. Eu penso em algo agradável ao invés de pensar no que aconteceu	0,996	0,946	0,946
23. Eu penso em como mudar a situação atual	0,996	0,996	0,996
24. Eu penso que o que aconteceu também tem seu lado positivo	0,896	0,946	0,946
25. Eu penso que o que aconteceu não foi tão ruim quando comparado a outras coisas	0,946	0,946	0,946
26. Eu, frequentemente, penso que o que eu vivi é o pior que pode acontecer com uma pessoa	0,946	0,996	0,996
27. Eu penso sobre os erros que os outros cometeram no que aconteceu	0,846	0,896	0,896
28. Eu penso que há algo em mim que causou o que aconteceu	0,896	0,896	0,946
29. Eu penso que eu devo aprender a viver com isso	0,896	0,996	0,996
30. Eu fico remoendo os sentimentos que a situação causou em mim	0,946	0,996	0,996
31. Eu penso em experiências prazerosas	0,896	0,846	0,846
32. Eu penso em um plano para aquilo que eu posso fazer melhor	0,846	0,846	0,846
33. Eu procuro o lado positivo da situação	0,946	0,996	0,996
34. Eu digo a mim mesmo que existem coisas piores na vida	0,996	0,996	0,996
35. Eu, continuamente, penso o quão horrível foi a situação	0,996	0,946	0,946
36. Eu penso que há algo nos outros que causou a situação	0,846	0,896	0,896

Note. *Items listed are translated into Portuguese and are extracted from the final version of the Brazilian CERQ

The second study presented in this thesis aimed at exploring the effects of trauma type, cognitive emotion regulation strategies and affect on PTSS severity using the sample of university students exposed to traumatic events mentioned before. Trauma type variable was investigated

using the LEC-5, cognitive emotion regulation strategies using the Brazilian version of the CERQ, affect using the PANAS and PTSS using the PCL-5. The main hypothesis at this stage was that the relationships among maladaptive cognitive emotion regulation strategies, negative affect and PTSS severity would be significant and positive, and that specific trauma types would predict PTSS.

In order to start testing it, Spearman's correlation analysis was conducted with positive and negative affect, all nine cognitive emotion regulation strategies, and severity of posttraumatic stress disorder. Special attention was paid to the variables significantly correlated to the proposed outcome variable of PTSS. As it is shown on **Table 3**, *positive refocusing*, *positive reappraisal* and *positive affect* were uncorrelated with PTSS. Even though every other variable was significantly correlated to the outcome, the highest correlations found were between PTSS and *rumination* (r= 640, p<0,001), *catastrophizing* (r= 535, p<0,001) and *negative affect* (r=595, p<0,001). Based on the variables correlation coefficients with the outcome, *rumination, catastrophizing*, and negative affect were selected for further exploration.

Table 3.
Correlations Between the Cognitive Emotion Regulation Strategies, Affect, and PTSD Symptoms

CERQ	**PTSD Symptoms**
Self-blame	0,428**
Acceptance	0,355**
Rumination	0,640**
Positive refocusing	0,034
Refocus on planning	0,260**
Positive reappraisal	0,038
Putting into perspective	0,134**
Catastrophizing	0,535**
Other-blame	0,285**
Positive affect	-0,003
Negative affect	0,595**

Note: ** = p < 0,001

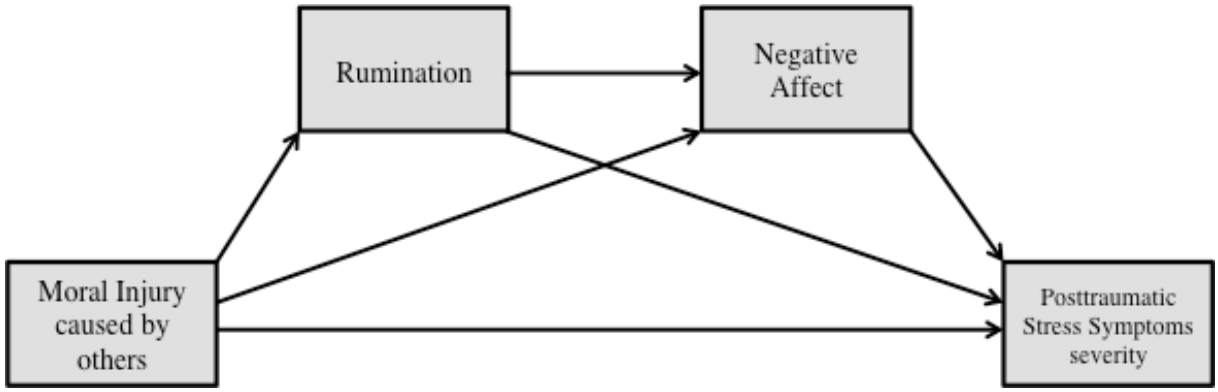
Further analyses involved regressions analyses testing for predictive effects of variables related to trauma exposure, *rumination, catastrophizing*, and negative affect on PTSS. To test for variables related to trauma, categorical variables of trauma type, and type of exposure to traumatic event were transformed in binary variables, resulting in the following variables: life threat to self (yes or no), life threat to others (yes or no), traumatic loss (yes or no), moral injury by self (yes or no), and moral injury caused by (yes or no).

When tested independently, regression analyses indicated that being exposed to moral injury by others was the strongest predictor of PTSS severity [b=0.64, t(444)=6.8, p<0.001, adj R^2= 0.092], life threat to others was a weak predictor [b=0.17, t(444)=-1.97, p<0.05, adj R^2=

0.006], as well as rumination (*b*=0.650, p<0.001, adj R^2= 0.421), catastrophizing (*b*=0.504, p<0.001, adj R^2= 0.252), and negative affect (*b*= 0.581, p<0.001, adj R^2= 0.336). Life threat to self [*b*= -0.16, *t*(444)= -1.93, p=0.053], traumatic loss [*b*= -0.15, *t*(444)= -1.79, p=0.74], and moral injury by self [*b*=0.17, *t*(444)=0.39, p=0.69] did not predict PTSS at all.

Based on results from preliminary exploration analysis, we hypothesized that trauma type of moral injury by others would predict PTSS severity through rumination and negative affect. Therefore, a double mediation model was proposed where trauma type of moral injury effects over PTSS severity would be double mediated by rumination and negative affect, meaning that being exposed to trauma increases the engagement in ruminative thinking, that by its turn increases negative affect experience leading to higher PTS symptom levels (**Figure 2**). Results from this analysis are presented in the Chapter 3 of this thesis.

Figure 2
Double Mediation Model proposed after Preliminary Data Analysis



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2. CHAPTER 2

PSYCHOMETRIC PROPERTIES OF THE BRAZILIAN VERSION OF THE COGNITIVE EMOTION REGULATION QUESTIONNAIRE

3. CHAPTER 3

RUMINATION AND NEGATIVE AFFECT AS MEDIATORS OF TRAUMA TYPE AND POSTTRAUMATIC STRESS SYMPTOMS SEVERITY

4. CHAPTER 4

GENERAL DISCUSSION AND FINAL REMARKS

The research that resulted in this master thesis had as its general objective to investigate the associations of cognitive emotion regulation strategies, affect and posttraumatic stress symptoms in university students who have already been exposed to traumatic events. In order to accomplish that, two studies were carried out sharing data collection procedures, but a sequential data analysis plan. Recognizing the need for valid measures to investigate the constructs, the first study performed and presented in this thesis is the development and validation of the Brazilian version of the *Cognitive Emotion Regulation Questionnaire* (CERQ). After validity data on the CERQ, an investigation of the relationship between trauma exposure, cognitive emotion regulation strategies, affect and Posttraumatic Stress Disorder was conducted (Study 2).

The Brazilian version of the CERQ (Study 1) was properly adapted and validated for the population being studied. Two factor structure models were tested for data fit through confirmatory factor analysis (CFA): the original first-order nine-factor model proposed by Garnefski et al., (2001), and the second-order two-factor model of adaptive and maladaptive cognitive emotion regulation dimensions proposed by Domínguez-Sánchez et al. (2011). The first model tested (model 1) maintained the original factor structure of the instrument, and CFA results provided an overall acceptable fit to the data after modification indices were assessed, and correlations among all latent variables and within-factor errors were allowed. The global fit indices obtained for the model were $x^2(541) = 1374.285$; $p < 0.001$; CFI=0,90; RMSEA = 0.06(CI= 0.055 – 0.063); SRMR = 0.07; and AIC=1624.285.

However, the CFA results of the second-order two-factor model (model 2) provided global fit indices out of the range of the proposed cut offs, suggesting not acceptable goodness of fit, even after correlation among within-factor errors were allowed. The indices for the model were $x^2(566) = 1676.073$; $p < 0.001$; CFI=0.86; RMSEA=0.07(CI= 0.063 – 0.070); SRMR = 0.1; and AIC=1876.073.

The nine-factor structure of the instrument (model 1) was tested for reliability analysis using the Cronbach's alpha. Results showed good internal consistency of the Brazilian version of the CERQ, with alphas exceeding 0.70, and ranging from 0.71 (*Refocus on planning*) to 0.88 (*other-blame*). Comparing these results with the original (Garnefski, & Kraaij, 2007); French (Jermann, et al., 2006), Spanish (Domínguez-Sánchez, et al., 2011), Romanian (Perte, & Miclea, 2011), Persian (Abdi, Taban, & Ghaemian, 2012), Turkish (Tuna, & Bozo, 2012), Argentinean (Medrano, et al., 2013); Chinese (Zhu et al., 2008), and Peruvian (Lara, & Medrado, 2016) versions, the Brazilian version of the CERQ has the highest reported alphas on the *self-blame, acceptance, rumination,* and *other-blame* subscales.

Moreover, correlation analysis with affective variables was conducted using partial correlations among the nine cognitive emotion regulation strategies measured by the CERQ and positive and negative affect measured by the PANAS. Results indicated that positive affect was significantly and positively correlated with *refocus on planning* (r= 0.19, p<0.001) and *positive reappraisal* (r= 0.14, p<0.05), as well as significantly and negatively correlated with *self blame* (r= -0.12, p<0.05). Negative affect, by its turn, was significantly and positively correlated with *refocus on planning* (r= 0.10, p<0.05), *putting into perspective* (r= 0.01, p<0.05), *self-blame* (r= 0.18, p<0.05), and *rumination* (r= 0.19, p<0.001), as well as significantly and negatively correlated with *positive reappraisal* (r= -0.22, p<0.001).

Overall, results of the Brazilian version of the CERQ validation study indicate that the instrument is a valid and reliable tool for assessing cognitive emotion regulation strategies in a Brazilian university sample. Even though the psychometric properties of the nine-factor structure of the instrument (model 1) are similar to the original and adapted versions, the two-factor structure of adaptive and maladaptive strategies was not acceptable, suggesting that the cognitive emotion regulation strategies would be better explained individually, rather than grouped according to its adaptability.

Because the CERQ was considered a valid and reliable measure, the second study of this thesis aiming at investigating relationships among trauma exposure, cognitive emotion regulation strategies, affect and posttraumatic stress symptoms, found among its results significant moderate to strong positive correlations between rumination and negative affect (r=0,450, p<0.001), negative affect and posttraumatic stress symptoms (PTSS) (r=0,595, p<0.001), and PTSS and rumination (r=0,640, p<0.001). Additionally, multiple Linear Regressions having the trauma type categories as predictors of PTSS severity indicated that being exposed to the type of trauma of moral injury by others was the strongest predictor of PTSS severity (b=0.64, t(444)=6.8, p<0.001).

Since preliminary analysis yielded evidence of associations among the independent variables (trauma type of moral injury, rumination, and negative affect) and the outcome (PTS symptom severity), a multiple mediation model was tested using the PROCESS macros for SPSS (Hayes, 2013), proposing that the use of rumination and the levels of negative affect mediate the effect of trauma type of moral injury by others on PTSS severity. Results indicate that (1) trauma type of moral injury predicts rumination (b= 0.69, p<0.001) and PTS symptom severity (b= 0.64, p<0.001), but not negative affect (b= 0.18, p= 0.78); (2) rumination is a significant predictor of negative affect (b= 0.34, p<0.001), and both, rumination and negative affect, are predictors of PTS symptom severity (b= 0.32, p<0.001; b= 0.321, p<0.001); and (3)

the total effect of trauma type moral injury by others on PTSS severity (b= 0.64, p < 0.001) accounts for the independent variable's effect when rumination and negative affect are added as predictors (b= 0.29, p < 0.001) and the sum of the independent variable's indirect effects on the outcome through rumination (b= 0.22, CI= 0.13 – 0.33) negative affect (b= 0.06, CI= -0.01 – 0.13), and rumination and negative affect (b= 0.07, CI= 0.04 – 0.12) as single and double mediators. These results show that rumination appears to be a strong and independent mediator between trauma type of moral injury by others and PTS symptom severity, while negative affect is a mediator only when rumination is also included. Data support the assumption that individuals who are exposed to trauma type of moral injury by others engage more frequently in rumination as a cognitive emotion regulation strategy amplifying, or increasing levels of negative effect that ends up leading to higher levels of PTSS in the sample.

Taken together, both studies have important limitations and implications. First, the sample consisted of university students who may not represent the general Brazilian population, limiting the results generalization. Additionally, no convergent measures were used to evaluate cognitive emotion regulation strategies, and every instrument was a self-report questionnaire, limiting collected data to single sources and nature.

Because cognitive emotion regulation and affect were investigated after the participants' exposure to traumatic events it is suggested that future studies attempt to adopt longitudinal and/or experimental designs with time intervals in order to understand the role of cognitive emotion regulation strategies and affect pre-trauma exposure. Besides, traumatic events can have a broad range of specificities leading to high event variability. Therefore, it is suggested that future studies evaluate the role of cognitive emotion regulation strategies and affect across many different types of trauma exposure, also considering period, frequency, duration and proximity of exposure.

Even though further investigations are needed, implications of these studies' results are some. One of the main implications is the development of a valid measure that allows clinicians and researchers to measure a broad variety of cognitive ways of dealing with a wide range of negative, stressful, and traumatic events. Measuring them can be useful for preventing psychopathological symptoms development, and strengthening adaptive psychological resources. Moreover, the results showing the mediators roles of rumination and negative affect in PTSS severity prediction can aid traditional Cognitive Behavioral Therapy treatment approaches through the improvement and tailoring of interventions. Treatment actions guided by such findings should qualify the assessment and efforts in diminishing

ruminative thinking that can amplify negative affect, therefor increasing symptm severity levels.

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5. ATTACHMENTS

ATTACHMENT A

Approval of the Research Committee of the Psychology Department

S I P E S Q

Sistema de Pesquisas da PUCRS

Código SIPESQ: 7047 Porto Alegre, 26 de janeiro de 2016.

Prezado(a) Pesquisador(a),

A Comissão Científica do ESCOLA DE HUMANIDADES da PUCRS apreciou e aprovou o Projeto de Pesquisa "Afeto, Estratégias Cognitivas de Regulação Emocional e Sintomas Pós-Traumáticos: Validação do CERQ e um Modelo de Mediação Moderada" coordenado por CHRISTIAN HAAG KRISTENSEN. Caso este projeto necessite apreciação do Comitê de Ética em Pesquisa (CEP) e/ou da Comissão de Ética no Uso de Animais (CEUA), toda a documentação anexa deve ser idêntica à documentação enviada ao CEP/CEUA, juntamente com o Documento Unificado gerado pelo SIPESQ.

Atenciosamente,

Comissão Científica do ESCOLA DE HUMANIDADES

ATTACHMENT B

Approval of the Research Ethics Committee of the PUCRS

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL - PUC/RS

Plataforma Brasil

PARECER CONSUBSTANCIADO DO CEP

DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: AFETO, ESTRATÉGIAS COGNITIVAS DE REGULAÇÃO EMOCIONAL E SINTOMAS PÓS-TRAUMÁTICOS: VALIDAÇÃO DO CERQ E UM MODELO DE MEDIAÇÃO MODERADA

Pesquisador: Christian Haag Kristensen

Área Temática:

Versão: 2

CAAE: 53519616.5.0000.5336

Instituição Proponente: UNIAO BRASILEIRA DE EDUCACAO E ASSISTENCIA

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 1.530.135

Apresentação do Projeto:

Vide primeiro parecer.

Objetivo da Pesquisa:

No TCLE este ficou ainda mais claro e com linguagem mais acessível, na medida em que o construtor da escala foi explicitado.

Avaliação dos Riscos e Benefícios:

Vide primeiro parecer.

Comentários e Considerações sobre a Pesquisa:

Muito relevante e com método claro.

Considerações sobre os Termos de apresentação obrigatória:

Os novos TCLEs incluíram ajustes que os tornam adequados perante os critérios requeridos pela Resolução no. 466.

Recomendações:

Conclusões ou Pendências e Lista de Inadequações:

Não há quaisquer outras pendências ou inadequações.

Endereço: Av.Ipiranga, 6681, prédio 40, sala 505
Bairro: Partenon **CEP:** 90.619-900
UF: RS **Município:** PORTO ALEGRE
Telefone: (51)3320-3345 **Fax:** (51)3320-3345 **E-mail:** cep@pucrs.br

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL - PUC/RS

Considerações Finais a critério do CEP:

Diante do exposto, o CEP-PUCRS, de acordo com suas atribuições definidas na Resolução CNS n° 466 de 2012 e da Norma Operacional n° 001 de 2013 do CNS, manifesta-se pela aprovação do projeto de pesquisa proposto.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_656248.pdf	28/03/2016 16:19:48		Aceito
Projeto Detalhado / Brochura Investigador	Projeto_Julia_com_alteracoes.pdf	28/03/2016 16:19:15	Christian Haag Kristensen	Aceito
Outros	Resposta_ao_Parecer.pdf	28/03/2016 16:18:03	Christian Haag Kristensen	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	Termo_de_Consentimento_Juizes_com_alteracoes.pdf	28/03/2016 16:16:10	Christian Haag Kristensen	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	Termo_de_Consentimento_com_alteracoes.pdf	28/03/2016 16:15:54	Christian Haag Kristensen	Aceito
Cronograma	Cronograma_com_alteracoes.pdf	28/03/2016 16:14:40	Christian Haag Kristensen	Aceito
Cronograma	Cronograma.pdf	28/01/2016 17:58:57	Christian Haag Kristensen	Aceito
Outros	Lattes_Christian.pdf	28/01/2016 17:57:02	Christian Haag Kristensen	Aceito
Outros	Lattes_Julia.pdf	28/01/2016 17:56:45	Christian Haag Kristensen	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	Termo_2.pdf	28/01/2016 17:53:16	Christian Haag Kristensen	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	Termo_1.pdf	28/01/2016 17:53:01	Christian Haag Kristensen	Aceito
Folha de Rosto	Folha_rosto.pdf	28/01/2016 17:52:44	Christian Haag Kristensen	Aceito
Orçamento	Orcamento_assinado.pdf	28/01/2016 17:06:14	Christian Haag Kristensen	Aceito

Endereço: Av.Ipiranga, 6681, prédio 40, sala 505
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Telefone: (51)3320-3345 **Fax:** (51)3320-3345 **E-mail:** cep@pucrs.br

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL - PUC/RS

Continuação do Parecer: 1.530.135

Outros	Ausencia_autorizacao_assinada.pdf	28/01/2016 17:03:28	Christian Haag Kristensen	Aceito
Outros	Documento_unificado_SIPESQ.pdf	28/01/2016 17:02:45	Christian Haag Kristensen	Aceito
Outros	Aprovacao_SIPESQ.pdf	28/01/2016 17:02:24	Christian Haag Kristensen	Aceito
Outros	Sobre_projeto.pdf	28/01/2016 17:01:52	Christian Haag Kristensen	Aceito
Outros	Carta_Apresentacao_assinada.pdf	28/01/2016 17:01:17	Christian Haag Kristensen	Aceito
Outros	Ata_defesa.pdf	28/01/2016 17:00:39	Christian Haag Kristensen	Aceito
Projeto Detalhado / Brochura Investigador	Projeto_Dissertacao.pdf	28/01/2016 16:58:21	Christian Haag Kristensen	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

PORTO ALEGRE, 04 de Maio de 2016

Assinado por:
Denise Cantarelli Machado
(Coordenador)

Endereço: Av.Ipiranga, 6681, prédio 40, sala 505
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ATTACHMENT C

Instruments

Nome:
(Para validação de horas complementares, caso seu curso tenha autorizado)

E-mail:

Idade:

Sexo:

- ◯ Masculino
- ◯ Feminino

Curso que está cursando na PUCRS:

Número de matrícula da PUCRS:
(Para validação de horas complementares, caso seu curso tenha autorizado)

Profissão:

Sobre seu histórico de saúde:

Você está em algum atendimento psicológico ou psiquiátrico atualmente?

- ◯ Psicológico
- ◯ Psiquiátrico
- ◯ Psicológico e psiquiátrico
- ◯ Nenhum

Você faz uso de alguma medicação psiquiátrica atualmente?

- ◯ Sim
- ◯ Não

Você já recebeu algum desses diagnósticos de Psicólogos, Psiquiatras e/ou Médicos? Marque as que se aplicam:

- ☐ Esquizofrenia
- ☐ Transtorno Esquizoafetivo
- ☐ Transtorno Delirante
- ☐ Doença de Alzheimer
- ☐ Doença (mal) de Parkinson
- ☐ Acidente Vascular Cerebral (AVC)
- ☐ Epilepsia
- ☐ Outros
- ☐ Não

Mais alguns dos seus dados:

Escolaridade:

- ◯ Ensino Fundamental Incompleto
- ◯ Ensino Fundamental Completo
- ◯ Ensino Médio Incompleto
- ◯ Ensino Médio Completo
- ◯ Ensino Superior Incompleto
- ◯ Ensino Superior Completo
- ◯ Pós-Graduação
- ◯ Analfabeto
- ◯ Outro

Anos de estudo (anos formais):

Estado Civil:

- ◯ Solteiro(a)
- ◯ Casado(a)
- ◯ Separado(a)
- ◯ Divorciado(a)
- ◯ Viúvo(a)
- ◯ União Estável
- ◯ Outro

Procedência:

- ◯ Porto Alegre
- ◯ Grande Porto Alegre
- ◯ Interior
- ◯ Outros Estados
- ◯ Outros Países

Com quem vive:

- ◯ Sozinho(a)
- ◯ Com os pais
- ◯ Com o conjugue
- ◯ Com os filhos
- ◯ Com familiares
- ◯ Em uma instituição
- ◯ Outro

Em média, qual a sua renda familiar?

Checklist de Eventos de Vida (LEC-5)

Parte 1

A lista a seguir apresenta uma série de eventos difíceis ou traumatizantes que podem acontecer com as pessoas. Para cada evento marque uma ou mais opções para indicar se: o evento *aconteceu diretamente com você*; você *presenciou o evento* acontecer com outra pessoa; você *ficou sabendo* que o evento aconteceu com um membro próximo da sua família ou um amigo próximo; você foi exposto ao evento como *parte do seu trabalho* (por exemplo, paramédico, policial, militar ou outro tipo de socorrista); você *não tem certeza* se o evento se encaixa nas opções anteriores; ou *não se aplica* a você.

Certifique-se de considerar a sua *vida inteira* (desde a infância até a idade adulta) ao responder a lista de eventos.

	Aconteceu comigo	Presenciei	Fiquei sabendo	Parte do meu trabalho	Não se aplica
1. Desastre natural (por exemplo, enchente, deslizamento de terra, desabamento).	☐	☐	☐	☐	☐
2. Incêndio ou explosão.	☐	☐	☐	☐	☐
3. Acidente com meio de transporte (por exemplo, acidente de carro, barco, trem, avião).	☐	☐	☐	☐	☐
4. Acidente grave no trabalho, em casa ou durante uma atividade de lazer.	☐	☐	☐	☐	☐
5. Exposição à substância tóxica (por exemplo, produtos químicos perigosos, radiação).	☐	☐	☐	☐	☐
6. Agressão física (por exemplo, ser atacado fisicamente, apanhar, levar tapas, ser chutado, ser espancado)	☐	☐	☐	☐	☐
7. Agressão com arma (por exemplo, levar um tiro, ser esfaqueado, ser ameaçado com faca, arma de fogo ou bomba).	☐	☐	☐	☐	☐

8. Agressão sexual (estupro, tentativa de estupro, ser obrigado a fazer qualquer tipo de ato sexual à força ou sob ameaça de agressão).	☐	☐	☐	☐	☐
9. Outras experiências sexuais indesejadas ou não consentidas.	☐	☐	☐	☐	☐
10. Combate ou exposição a uma área de guerra ou de conflitos urbanos violentos (como militar ou como civil).	☐	☐	☐	☐	☐
11. Ser mantido em cativeiro (por exemplo, ser raptado, sequestrado, ser mantido como refém ou prisioneiro de guerra).	☐	☐	☐	☐	☐
12. Doença, ferimento ou lesão com risco de morte	☐	☐	☐	☐	☐
13. Experiência de sofrimento físico grave ou intenso.	☐	☐	☐	☐	☐
14. Morte violenta inesperada (por exemplo, homicídio, suicídio).	☐	☐	☐	☐	☐
15. Morte acidental inesperada.	☐	☐	☐	☐	☐
16. Lesão grave, ferimento ou morte que você causou a alguém.	☐	☐	☐	☐	☐
17. Qualquer outro evento ou experiência muito traumatizante.	☐	☐	☐	☐	☐

Se você marcou a questão 17 da parte 1, cite brevemente o evento em que você estava pensando:

Parte 2

Se você vivenciou mais de um dentre os eventos listados na PARTE 1, pense sobre aquele que você considera o pior evento, ou seja, o evento que mais lhe incomoda atualmente. Se você vivenciou apenas um dos eventos descritos na PARTE 1, considere-o como sendo o pior evento. Por favor, responda às perguntas a seguir pensando no pior evento que você já vivenciou (marque todas as opções que se aplicam):

1. Descreva resumidamente o pior evento (por exmplo, o que aconteceu, quem estava envolvido, etc)

2. Há quanto tempo o evento aconteceu? (por favor, calcule o tempo aproximado se não tiver certeza)

3. Como você vivenciou o evento?

- ◯ Aconteceu diretamente comigo
- ◯ Eu presenciei o evento
- ◯ Eu fiquei sabendo que este evento aconteceu com um membro da minha família ou amigo próximo
- ◯ Eu fui repetidamente exposto a detalhes do evento como parte do meu trabalho (por exemplo, paramédico, policial, militar ou outro tipo de socorrista)
- ◯ Outro, por favor, descreva:

4. A vida de alguém estava em perigo?

- ◯ Sim, a minha vida
- ◯ Sim, a vida de outra pessoa
- ◯ Não

5. Alguém ficou gravemente ferido ou morreu?

- ◯ Sim, eu fiquei gravemente ferido
- ◯ Sim, outra pessoa ficou gravemente ferida ou morreu
- ◯ Não

6. O evento envolveu violência sexual?

- ◯ Sim
- ◯ Não

7. Se o evento envolveu a morte de um membro da sua família ou amigo próximo, foi devido a algum tipo de acidente ou violência, ou foi devido a causas naturais?

- ◯ Acidente ou violência
- ◯ Causas Naturais
- ◯ Nenhuma das duas

8. Quantas vezes você vivenciou um evento semelhante tão traumatizante ou quase tão traumatizante quanto o pior evento descrito?

- ◯ Apenas uma vez
- ◯ Mais de uma vez (por favor, calcule o total de vezes que você teve essa experiência)

Escala de Afeto Negativo e Positivo (PANAS)

Este questionário é composto de uma série de palavras que descrevem diferentes sentimentos e emoções. Leia cada item e, em seguida, assinale a opção que melhor caracteriza o seu modo de ser ***desde que você vivenciou o evento que você considerou o pior nas perguntas anteriores***. Não há respostas certas ou erradas.

	Muito pouco/nada	Um pouco	Médio	Muito	Bastante/sempre
1. Ativo	○	○	○	○	○
2. Alerta	○	○	○	○	○
3. Atento	○	○	○	○	○
4. Com orgulho de si	○	○	○	○	○
5. Determinado	○	○	○	○	○
6. Entusiasmado	○	○	○	○	○
7. Empolgado	○	○	○	○	○
8. Inspirado	○	○	○	○	○
9. Interessado	○	○	○	○	○
10. Forte	○	○	○	○	○
11. Com medo	○	○	○	○	○
12. Envergonhado	○	○	○	○	○
13. Aflito	○	○	○	○	○
14. Culpado	○	○	○	○	○
15. Hostil	○	○	○	○	○
16. Irritável	○	○	○	○	○
17. Inquieto	○	○	○	○	○
18. Nervoso	○	○	○	○	○
19. Apavorado	○	○	○	○	○
20. Chateado	○	○	○	○	○

Questionário de Regulação Emocional Cognitiva (CERQ)

Como você lida com os eventos?

Você vivenciou um evento específico. Mais pessoas passam por situações semelhantes, porém cada pessoa lida com elas da sua própria maneira. Nas questões seguintes, pedimos que você pense ***no pior evento que você viveu***. Por favor, leia as frases abaixo e indique com que frequência você tem os seguintes pensamentos relacionados ao evento, circulando a opção que mais se encaixa com você.

	Quase nunca	As vezes	Regularmente	Com frequência	Quase sempre
1. Eu sinto que sou o culpado pelo que aconteceu.	○	○	○	○	○
2. Eu penso que tenho que aceitar que isso aconteceu.	○	○	○	○	○
3. Eu frequentemente penso em como me sinto em relação ao que aconteceu.	○	○	○	○	○
4. Eu penso em coisas que são mais agradáveis do que aquilo que aconteceu.	○	○	○	○	○
5. Eu penso nas melhores coisas que eu consigo.	○	○	○	○	○
6. Eu penso que eu posso aprender algo com o que aconteceu.	○	○	○	○	○
7. Eu penso que tudo poderia ter sido muito pior.	○	○	○	○	○
8. Eu frequentemente penso que o que eu vivi é muito pior do que os outros viveram.	○	○	○	○	○
9. Eu sinto que os outros são culpados pelo que aconteceu.	○	○	○	○	○
10. Eu sinto que sou o responsável pelo aconteceu.	○	○	○	○	○
11. Eu penso que eu tenho que aceitar o que aconteceu.	○	○	○	○	○
12. Eu me preocupo com o que eu penso e sinto sobre o que aconteceu.	○	○	○	○	○

13. Eu penso em coisas agradáveis que não tem nada a ver com o que aconteceu.	○	○	○	○	○
14. Eu penso em qual a melhor forma para eu lidar com a situação.	○	○	○	○	○
15. Eu penso que eu posso me tornar uma pessoa mais forte como resultado do que aconteceu.	○	○	○	○	○
16. Eu penso que outras pessoas passam por experiências muito piores.	○	○	○	○	○
17. Eu fico pensando o quão horrível é o que aconteceu.	○	○	○	○	○
18. Eu penso que os outros são responsáveis pelo que aconteceu.	○	○	○	○	○
19. Eu penso sobre os erros que eu cometi no que aconteceu,	○	○	○	○	○
20. Eu penso que eu não posso mudar nada sobre o que aconteceu.	○	○	○	○	○
21. Eu quero entender porque me sinto da maneira que me sinto sobre o que aconteceu.	○	○	○	○	○
22. Eu penso em algo agradável ao invés de pensar no que aconteceu.	○	○	○	○	○
23. Eu penso em como mudar a situação atual.	○	○	○	○	○
24. Eu penso que o que aconteceu também tem seu lado positivo.	○	○	○	○	○
25. Eu penso que o que aconteceu não foi tão ruim quando comparado a outras coisas.	○	○	○	○	○
26. Eu, frequentemente, penso que o que eu vivi é o pior que pode acontecer com uma pessoa.	○	○	○	○	○

27. Eu penso sobre os erros que os os outros cometeram no que aconteceu.	○	○	○	○	○
28. Eu penso que há algo em mim que causou o que aconteceu.	○	○	○	○	○
29. Eu penso que eu devo aprender a viver com isso.	○	○	○	○	○
30. Eu fico remoendo os sentimentos que a situação causou em mim.	○	○	○	○	○
31. Eu penso em experiências prazerosas.	○	○	○	○	○
32. Eu penso em um plano para aquilo que eu posso fazer melhor.	○	○	○	○	○
33. Eu procuro o lado positivo da situação.	○	○	○	○	○
34. Eu digo a mim mesmo que existem coisas piores na vida.	○	○	○	○	○
35. Eu, continuamente, penso o quão horrível foi a situação.	○	○	○	○	○
36. Eu penso que há algo nos outros que causou a situação.	○	○	○	○	○

Checklist de Transtorno de Estresse Pós-Traumático (PCL-5)

A seguir é apresentada uma lista de dificuldades que as pessoas podem enfrentar após vivenciar uma experiência muito traumatizante. Mantendo o evento que você vivenciou e que considerou o pior de todos nas perguntas anteriores em mente, por favor, leia cuidadosamente cada uma das dificuldades e, então, marque o quanto você tem se sentido incomodado por essa dificuldade no último mês.

No último mês você se sentiu incomodado por:

	Absolutamente nada	Um pouco	Moderadamente	Muito	Extremamente
1. Lembranças repetidas, perturbadoras e involuntárias da experiência traumatizante.	○	○	○	○	○
2. Sonhos repetidos e perturbadores referentes à experiência traumatizante.	○	○	○	○	○
3. De repente, se sentir ou agir como se a experiência traumatizante estivesse realmente acontecendo de novo (como se você estivesse lá de volta revivendo a situação).	○	○	○	○	○
4. Sentir-se muito perturbado quando algo lhe faz lembrar da experiência traumatizante.	○	○	○	○	○
5. Apresentar reações físicas intensas quando algo lhe faz lembrar da experiência traumatizante (por exemplo, coração bater forte, dificuldades para respirar, suor excessivo).	○	○	○	○	○
6. Evitar lembranças, pensamentos ou sentimentos relacionados à experiência traumatizante.	○	○	○	○	○
7. Evitar algo ou alguém que lembre você da experiência traumatizante (por exemplo. pessoas, lugares, conversas, atividades, objetos ou situações).	○	○	○	○	○
8. Dificuldades de se lembrar de partes importantes da experiência traumatizante.	○	○	○	○	○

9. Ter fortes crenças negativas sobre si mesmo, sobre outras pessoas ou sobre o mundo (por exemplo, ter pensamentos como: eu sou ruim, há algo muito errado comigo, não se pode confiar em ninguém, o mundo é um lugar muito perigoso).	○	○	○	○	○
10. Culpar a si mesmo ou a outra pessoa pela experiência traumatizante ou pelo que aconteceu depois de tal experiência.	○	○	○	○	○
11. Ter fortes sentimentos negativos, tais como medo, horror, raiva, culpa ou vergonha.	○	○	○	○	○
12. Perder o interesse em atividades que você costumava gostar.	○	○	○	○	○
13. Sentir-se distante ou isolado de outras pessoas.	○	○	○	○	○
14. Dificuldades para experimentar sentimentos positivos (por exemplo, ser incapaz de sentir felicidade ou de ter sentimentos afetuosos pelas pessoas próximas a você).	○	○	○	○	○
15. Comportamento irritável, explosões de raiva, ou agir de forma agressiva.	○	○	○	○	○
16. Arriscar-se muito ou fazer coisas que podem causar algum mal a você.	○	○	○	○	○
17. Estar "superalerta" ou hipervigilante.	○	○	○	○	○
18. Sentir-se sobressaltado ou assustar-se facilmente.	○	○	○	○	○
19. Ter dificuldades para se concentrar.	○	○	○	○	○
20. Dificuldades para "pegar no sono" ou para permanecer dormindo.	○	○	○	○	○

ATTACHMENT D
Informed Consent Form

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

Você está sendo convidado(a) a participar da pesquisa intitulada "Afeto, Estratégias Cognitivas de Regulação Emocional e Sintomas Pós-Traumáticos: Validação do CERQ e um Modelo de Mediação Moderada", coordenada pelo pesquisador Professor Dr. Christian Haag Kristensen do Programa de Pós-graduação em Psicologia da Pontifícia Universidade Católica do Rio Grande do Sul e conduzida pela mestranda Julia Luiza Schäfer. Esta pesquisa tem dois objetivos principais. O primeiro é desenvolver a validação da versão em português brasileiro do instrumento *Cognitive Emotion Regulation Questionnaire (CERQ)* e o segundo é avaliar a exposição a eventos traumáticos, a maneira como as pessoas sentem, pensam e lidam com esses eventos e a presença, ou ausência, de sintomas que indiquem sofrimento após experiências traumáticas. O instrumento que será validado avalia nove estratégias cognitivas de regulação emocional que se referem a forma como as pessoas pensam para lidar com o que sentem depois de vivenciar eventos estressores, ou ameaçadores. Caso você decida participar desta pesquisa, você receberá uma via deste documento por *e-mail*, e lhe será pedido que responda algumas perguntas e alguns instrumentos sobre eventos estressores, ou traumáticos que você pode ter vivido e a forma como você sente e lida com eles. O tempo para responder todos os instrumentos é de aproximadamente 1 hora e 10 minutos.

A participação nesse estudo é voluntária, e se você decidir não participar ou quiser desistir de continuar em qualquer momento, tem absoluta liberdade de fazê-lo. Na publicação dos resultados desta pesquisa, sua identidade será mantida no mais rigoroso sigilo. Serão omitidas todas as informações que permitam identificá-lo(a). Pode ser desconfortável responder a perguntas referentes a um evento de vida difícil, porém ao participar, você estará contribuindo para compreendermos melhor o que acontece com algumas pessoas que passam por eventos traumáticos e de forma podemos melhor ajuda-las.

Qualquer dúvida relativas a esta pesquisa poderão ser esclarecidas pelos pesquisadores responsáveis, Christian Haag Kristensen e Julia Luiza Schäfer, pelo fone do Núcleo de Estudos e Pesquisa em Trauma e Estresse, (51) 3353-4898, ou pela entidade responsável, o Comitê de Ética em Pesquisa da PUCRS, localizado na Av. Ipiranga 6681, Prédio 40, Sala 505, Porto Alegre /RS, Brasil, CEP: 90610-900, Fone/Fax: (51) 3320.3345. E-mail: cep@pucrs.br. Horário de atendimento: De segunda a sexta-feira das 8h às12h horas e das 13h30min às 17h.

Atenciosamente,

_____ _____

Julia Luiza Schäfer
Matrícula:15191059-3
CRP: 07/24431

Local e data

_____

Prof. Dr. Christian Haag Kristensen
Matrícula: 10082330
CRP: 07/06493

☐ **Consinto em participar deste estudo**

ATTACHMENT E

Proof of Paper Submission

Journal of Clinical Psychology

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Print

Thank you for your submission

Submitted to
Journal of Clinical Psychology

Manuscript ID
JCLP-17-0011

Title
Psychometric Properties of the Brazilian Version of the Cognitive Emotion Regulation Questionnaire

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Date Submitted
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