



# Elements of Control Differentiate Associations Between Childhood Emotional Abuse and Anxiety Symptoms

Kristen Rimular<sup>1</sup> · Sara R. Berzenski<sup>1</sup>

Accepted: 19 August 2022

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## Abstract

Among adolescents experiencing childhood maltreatment, there exists wide variability regarding the development and maintenance of anxious symptoms. Existing research has identified the protective role of effortful control against childhood anxiety (Raines et al. in *Child Psychiatry and Human Development*, 2021). The current study aimed to uncover how distinct elements of effortful control differentially diminish or intensify anxiety symptoms arising from a perceived lack of control following childhood emotional abuse (CEA). 467 college student participants provided reports of their experience with childhood emotional abuse, locus of control, anxiety symptoms, and effortful control via in-person surveys. We explored three categories of effortful control: inhibitory control (the capacity to suppress inappropriate behavior), attentional control (the capacity to focus or shift attention), and activational control (the capacity to perform an action despite a strong tendency to avoid). Consistent with our hypotheses, results revealed that CEA predicted increased anxiety symptoms. External LOC significantly mediated the relationship between CEA and anxiety. When effortful control was broken down into its component elements, higher inhibitory control acted as a protective factor for locus of control driven anxiety, whereas higher levels of activational control acted as a risk factor. Attentional control was not a significant moderator. These findings stress the importance of identifying risk and protective factors that contribute to resilience, and may aid in the development of interventions targeted to specific aspects of effortful control.

**Keywords** Childhood emotional abuse · Adolescence · Locus of control · Perceived control · Effortful control · Inhibitory control · Activational control · Anxiety

## Introduction

The experience of child maltreatment has long-term, adverse consequences on an individual's physical health, interpersonal functioning, and psychological well-being including depressive symptoms, anxiety symptoms, feelings of hopelessness, lower self-esteem, lower life satisfaction, and insecure attachment styles (see Stoltenborgh et al., 2012 for review). Childhood emotional abuse (CEA), defined as rejecting, controlling, degrading, threatening, isolating, or exploitative caregiving (Hart et al., 1997), is a central component to examine in order to understand the deleterious, sustained effects of childhood maltreatment. It commonly

occurs alongside other types of abuse, making it the most common type of maltreatment (Berzenski & Yates, 2010). One reason why CEA may be particularly pernicious is that the denigration and dysfunctional relationship dynamic constituting CEA are not limited to isolated incidences. Because victims may find the experience to have no defined end or beginning, negative psychological consequences may persist, decreasing an individual's overall quality of life (Stoltenborgh et al., 2012). Indeed, CEA has been shown to predict a host of maladaptive thinking patterns including low self-esteem, feelings of helplessness, defectiveness, and inferiority (Hoglund & Nicholas, 1995). CEA is also associated with increased anxiety that lingers and persists into adulthood (Keyes et al., 2012). The current study aims to explain one potential pathway by which childhood emotional abuse influences anxiety symptoms, integrating both perceived control (i.e. possessing a more internal versus external locus of control), and actual control (one's observable behavior). We expected the experience of childhood emotional abuse to be associated with greater external locus of control, or the

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✉ Kristen Rimular  
kristen.rimular.230@my.csun.edu

<sup>1</sup> Department of Psychology, California State University, Northridge, 18111 Nordhoff St., Northridge, CA 91330, USA

belief that life events are not the predictable consequences of one's own actions, and that this perceived lack of autonomy (greater external locus of control) would be associated with greater anxiety. However, we also expected this relationship to be mitigated by an individual's level of actual behavioral control.

### Childhood Emotional Abuse and Anxiety

Existing literature has examined the detrimental impact of CEA on individual well-being and psychological outcomes (Banducci et al., 2017; Gallo et al., 2018). Childhood emotional abuse is a robust predictor of anxious psychopathology in adulthood, including severe anxiety, physiological anxious arousal symptoms, and social anxiety symptoms (Fonzo et al., 2016; Gallo et al., 2018; Hamilton et al., 2013). Exposure to verbal abuse increases emotional reactivity, dysregulates stress and fear responses and contributes to the emergence of anxiety symptoms (Fonzo et al., 2016).

The current study aims to expand this investigation to an emerging adult sample. Emerging adulthood is a transitional point in development, with high vulnerability for developing anxiety disorders (Hamilton et al., 2013). Adolescent health and high risk-taking behavior may negatively impact psychological outcomes and overall well-being (Fry et al., 2012). Understanding the pathways toward anxiety symptoms for this age group can aid in the early identification of risk factors for anxiety, improving adult outcomes for abuse victims.

### Locus of Control and Anxiety

Generalized anxiety disorder is characterized by excessive anxiety and worry that is difficult to control and may include recurring intrusive thoughts and a tendency to avoid stress-inducing situations (American Psychiatric Association, 2013). A widely accepted explanation for the development of anxiety is the biopsychosocial model, stating that anxiety disorders result as an integrated culmination of one's biological predisposition, cognitive patterns, and environmental experiences (Mineka & Oehlberg, 2008). While there is no single etiological explanation for the development and maintenance of anxiety symptoms and disorders, anxiety can be characterized as a lack of perceived control over external events (Rapee et al., 1996). In a meta-analytic review of perceived control and vulnerability to anxiety disorders, results indicated a large, negative association between perceived control and anxiety, particularly among adults (Gallagher et al., 2014). For the current study, we chose to investigate locus of control as an indicator of participants' perceived control over life events. Locus of control is defined as the extent to which an individual attributes outcomes to either internal or external circumstances (Rotter, 1966), measured on a bipolar spectrum. The association between locus of

control and anxiety has been established extensively in previous literature, such that higher external locus of control has a moderately strong relationship with anxiety symptoms (Archer, 1979; Cheng et al., 2013). Existing literature supports the positive relationship between having an external locus of control and both state and trait anxiety (Archer, 1979; Hoehn-Saric & McLeod, 1985). Externally-oriented locus of control has also been shown to predict the severity of anxiety (Hovenkamp-Hermelink et al., 2019).

### Childhood Emotional Abuse and Locus of Control

Research indicates that both child abuse in general (Ellis & Milner, 1981) and emotional abuse specifically are associated with developing a more external locus of control among adults and adolescents (Roazzi et al., 2016; Ajake et al., 2013). Further, CEA has been implicated in lower self-esteem (Berzenski & Yates, 2010; Mullen et al., 1996; Stoltenborgh et al., 2012; Fry et al., 2012), which is also associated with more external locus of control (Shubina, 2017).

### Effortful Control as a Moderator

Locus of control (i.e., *perceived* control) is defined as a bipolar dimension in which an individual may more likely attribute life outcomes to either internal or external circumstances. Therefore, a person with a strong internal locus of control perceives themselves to have more control over life events. In the case of external locus of control, there is a lack of perceived control over one's experiences. Whereas external locus of control (i.e., lack of *perceived* control) is presumed to negatively influence the severity of anxiety symptoms, it is important to consider how an individual's *actual* control operates within this model. The belief that circumstances are beyond one's control may be a risk factor for anxiety, however one's behavior is not isolated from their cognition. Therefore, another main aim of the current study was to examine the interaction between perceived control (locus of control) and actual control (effortful control), and how this may differentially influence the association between childhood maltreatment and anxiety. Effortful control is defined as the efficiency of one's executive attention, including the ability to act appropriately under conditions of conflict, plan for the future, and manage attention (Rothbart, 2007; Eisenberg, 2005). Three subcomponents of effortful control have been described in previous literature. Attentional control is the ability to focus and shift attention when desired. Activational control is the capacity to perform an action when there is a strong tendency to avoid it. Inhibitory control is the capacity to plan future action and to suppress inappropriate behavioral responses (Rothbart, 2007). There is limited research examining the interaction

between effortful control and perceived control, and the resulting effects on anxiety symptoms. However, effortful control itself is negatively associated with anxiety symptoms (Moriya & Tanno, 2008; Muris et al., 2004; Raines et al., 2021), and has demonstrated effectiveness as a protective factor for children's internalizing and externalizing problems stemming from contextual risk (Lengua et al., 2008). It has been theorized that an increased ability to shift attention and/or inhibit inappropriate responses may allow individuals to interpret situations as less threatening, in turn lowering the risk for anxiety (Raines et al., 2021). Additionally, previous studies have found that in response to CEA, individuals with anorexia nervosa utilize restrictive, inhibitory behaviors to cope with resulting feelings of low self-esteem, and to regain a sense of control over their lives (Slade, 1982). The current study aims to establish a similar pathway from CEA to anxiety while accounting for the interplay between perceived lack of control and actual behavioral efforts to mitigate this sense of insecurity. Greater effortful control is expected to counteract the influence that lack of perceived control has on anxiety. In order to cope with feelings of uncertainty and vulnerability that arise alongside the perception that one possesses little control over the environment, the utilization of behavioral techniques may serve as a coping mechanism against this insecurity, and foster a greater sense of security and autonomy within one's life. Exhibiting tangible, direct control over the environment and oneself may offset the perception of helplessness, that one is incapable of controlling an environment that is chaotic and unpredictable.

### The Current Study

The first main aim of the current study is to establish an indirect effect of childhood emotional abuse on adult anxiety symptoms, through external locus of control. The second main aim of the study is to examine the interaction between effortful control and locus of control. We hypothesized that activational control, attentional control, and inhibitory control would each separately moderate the relation between external locus of control and anxiety symptoms, acting as a protective factor against the indirect effect of childhood emotional abuse on anxiety symptoms through external locus of control.

It is important to assess these questions among emerging adults specifically as this is a crucial, transitional point in development, and identification of risk and resilience factors in this age group can encourage the implementation of more preventative measures to sustain psychological well-being in adulthood. Adolescents and emerging adults experience heightened risk-taking, as well as higher risk for the development of psychopathology (Fry et al., 2012; Hamilton et al., 2013). The assessment of this age group

contributes to existing literature by bridging the studies of childhood adversity with studies exploring the lasting adulthood outcomes.

## Method

### Participants

Participants were 467 introductory psychology students (66.6% female, 31.7% male, and 1.7% unanswered; 48.2% Hispanic, 23.3% White, 13.9% Asian, 6.0% Black, 6.0% multiracial, and 2.6% unanswered;  $M_{\text{age}} = 19.48$ ,  $SD = 2.20$ ) attending a West Coast regional public university. Over a period of one semester, students were recruited through the university research management system. Students had to be at least 18 years old to participate in the study. A total of 500 students participated in the study. Thirty-three participants were excluded from analysis because of missing data for Rotter's Locus of Control Scale, which was administered at the end of the survey.

### Procedures

Participants provided verbal informed consent before engaging in the study. Procedures were approved by the university institutional review board. The study took place in a campus computer lab, where each participant took a series of surveys on an individual computer. Participants were given a full hour to thoughtfully reflect on their answers to the computerized surveys, and were not permitted to leave early. All responses were kept confidential. There were approximately 25 students in the computer lab at the time of each student's responding. After completion of the study, participants were given course credit for their cooperation.

### Measures

**Childhood Emotional Abuse** The Child Trauma Questionnaire– Short Form (CTQ-SF) was administered to examine participant experience of childhood emotional abuse (Bernstein et al., 2003). The survey consists of 28-items, 3 of which were to confirm validity. Five different types of childhood maltreatment (emotional abuse, physical abuse, sexual abuse, physical neglect, and emotional neglect) were each assessed with 5 questions. Items are rated using a 5-point scale, in which responses range from “Never True” to “Very Often True.” Examples of items used to examine childhood emotional abuse included “People in my family called me things like ‘stupid’, ‘lazy’, or ‘ugly’,” “I thought my parents wished I had never been born,” and “People in my family

said hurtful or insulting things to me.” The 5 items used to assess emotional abuse were shown to have high reliability ( $\alpha=0.86$ ).

**Locus of Control** Rotter’s Locus of Control Scale was utilized to assess participant locus of control (Rotter, 1966). The scale includes 29 items with two statements each ( $\alpha=0.55$ ). One statement indicates a tendency toward a more internal locus of control, or the belief that one has control over life events. The opposing statement indicates a tendency toward a more external locus of control, the belief that one does not possess control over life events that happen unexpectedly or by chance. Participants must select which statement they agree with the most. An example item includes Statement A: “Many of the unhappy things in people’s lives are partly due to bad luck.” and Statement B: “People’s misfortunes result from the mistakes they make.” For every item chosen that indicates a greater external locus of control, one point is added to the total score. Higher scores indicate greater external locus of control.

**Effortful Control** Items from the Adult Temperament Questionnaire short form (ATQ) were used to measure participant effortful control (Evans & Rothbart, 2007). Participants responded to 77 statements using a 7-point Likert-scale ranging from “extremely untrue” to “extremely true of you.” The whole scale includes questions that measure constructs of effortful control, negative affect, extraversion, and orienting sensitivity. For the current study, effortful control was the construct of interest and included into our analysis. The three elements of effortful control examined were activational control ( $\alpha=0.70$ ), and attentional control ( $\alpha=0.72$ ). The initial reliability of the inhibitory control scale was  $\alpha=0.35$ . Upon examination of individual item contributions, one item was significantly problematic. After removing this item, the scale score was recalculated, and its reliability improved to  $\alpha=0.47$ . This reduced version of the scale was used in all analyses.<sup>1</sup> Example statements of items measuring activational control included, “I can make myself work on a difficult task even when I don’t feel like trying,” and “I can keep performing a task even when I would rather not do it.” Items assessing inhibitory control include statements such as, “I am usually a patient person,” and “When I’m excited about something, it’s usually hard for me to resist jumping right into it before I’ve considered the possible consequences.” Items assessing attentional control include statements such as, “When I am trying to focus my attention, I am easily distracted,” and “When interrupted

or distracted, I usually can easily shift my attention back to whatever I was doing before.”

**Anxiety Symptoms** The GAD-7 Anxiety Scale (GAD-7) was used to assess participant anxiety symptoms over the past 2 weeks (Spitzer et al., 2006). Each question is rated using a 3-point Likert-scale, with responses ranging from “Not at all” to “Nearly every day” (See Fig. 1). This 7-item scale showed excellent reliability ( $\alpha=0.89$ ).

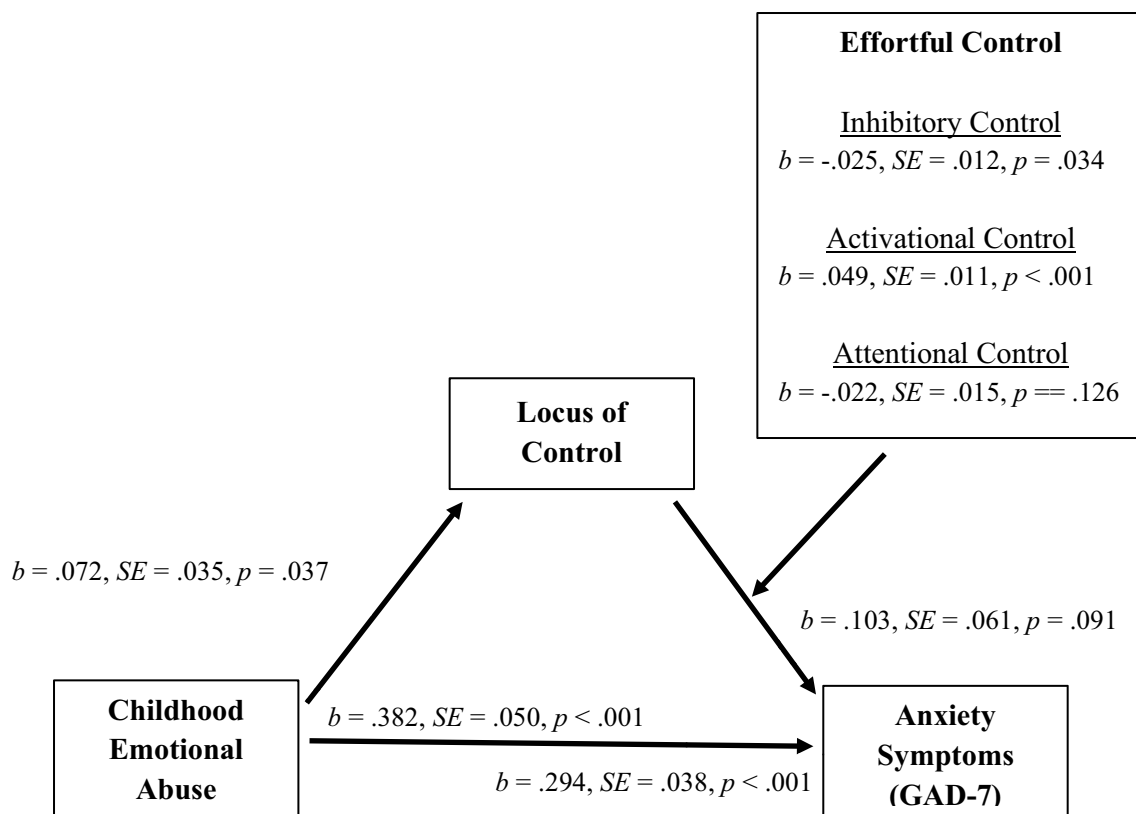
## Results

Bivariate correlations between variables were analyzed (see Table 1). Childhood emotional abuse was associated with more external locus of control, as well as lower activational and inhibitory control. Inhibitory control, attentional control, and activational control were all associated with more internal locus of control. All effortful control subscales were positively intercorrelated. Increased anxiety symptoms were associated with higher levels of childhood emotional abuse, more external locus of control, and lower levels of all effortful control subscales.

A linear regression was conducted to assess locus of control as a mediator of the relation between childhood emotional abuse and anxiety symptoms. Next, activational control, attentional control, and inhibitory control were analyzed concurrently as moderators of the model, specifically for effects on the relation between locus of control and anxiety symptoms. Consistent with our hypotheses, we found a significant, positive, direct effect of CEA on anxiety symptoms ( $b=0.382$ ,  $SE=0.050$ ,  $p<0.001$ ). External locus of control significantly mediated the relationship between CEA and anxiety symptoms ( $b=0.017$ ,  $SE=0.095$ , 95% *CI* [0.002, 0.0384]). There was a positive direct effect of CEA on locus of control, such that higher childhood emotional abuse was related to a greater tendency towards an external locus of control ( $b=0.076$ ,  $SE=0.035$ ,  $p=0.031$ ). Greater external locus of control was associated with greater anxiety symptoms ( $b=0.230$ ,  $SE=0.065$ ,  $p=0.0005$ ).

Next this model was analyzed for moderation by effortful control and its subcomponents. When analyzed within the model as a single construct, effortful control did not show a significant moderating effect on the relation between locus of control and anxiety symptoms. However, when separated into its component elements—activational control, attentional control, and inhibitory control—inhibitory control demonstrated a moderating effect ( $b=-0.017$ ,  $SE=0.008$ ,  $p=0.003$ ) such that as inhibitory control increased, the relation between locus of control and anxiety symptoms weakened. The indirect effect of childhood emotional abuse on anxiety symptoms through locus of control was only significant at low levels of inhibitory control (see Fig. 1).

<sup>1</sup> Analyses were also conducted using all items of the original inhibitory control scale and the results were consistent with those presented here.



Conditional Indirect Effects of CEA on Anxiety Through Locus of Control at Low, Medium, and High Levels of the Moderator

| Inhibitory Control                   |  |
|--------------------------------------|--|
| Low (16 <sup>th</sup> percentile)    | $b = .018, SE = .011, 95\% CI [.0001, .041]$ |
| Medium (50 <sup>th</sup> percentile) | $b = .009, SE = .007, 95\% CI [-.001, .024]$ |
| High (84 <sup>th</sup> percentile)   | $b = .002, SE = .007, 95\% CI [-.016, .017]$ |

| Activational Control                 |  |
|--------------------------------------|--|
| Low (16 <sup>th</sup> percentile)    | $b = -.016, SE = .010, 95\% CI [-.038, .0004]$ |
| Medium (50 <sup>th</sup> percentile) | $b = .009, SE = .007, 95\% CI [-.001, .024]$   |
| High (84 <sup>th</sup> percentile)   | $b = .034, SE = .017, 95\% CI [.001, .067]$    |

Fig. 1 Model of childhood emotional abuse through locus of control to anxiety symptoms, moderated by effortful control subscales

**Table 1** Bivariate correlations and descriptive statistics

| Variables               | 1      | 2       | 3       | 4       | 5       | 6 | Mean (SD)      |
|-------------------------|--------|---------|---------|---------|---------|---|----------------|
| 1. Emotional Abuse      | 1      |         |         |         |         |   | 8.487 (4.294)  |
| 2. Locus of Control     | .100*  | 1       |         |         |         |   | 11.793 (3.252) |
| 3. Activational Control | -.093* | -.193** | 1       |         |         |   | .038 (6.773)   |
| 4. Attentional Control  | -.060  | -.140** | .469**  | 1       |         |   | -.031 (5.319)  |
| 5. Inhibitory Control   | -.094* | -.116*  | .291**  | .455**  | 1       |   | -.0642 (5.426) |
| 6. Anxiety Symptoms     | .335** | .185**  | -.238** | -.376** | -.328** | 1 | 6.105 (4.892)  |

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

Contrastingly, activational control demonstrated a positive moderating effect ( $b = 0.025$ ,  $SE = 0.022$ ,  $p < 0.001$ ). The relation between locus of control and anxiety symptoms increased as activational control increased. The indirect effect of childhood emotional abuse on anxiety symptoms through locus of control was only significant at high levels of activational control (see Table 1). Attentional control did not have a significant moderating effect within the model.

## Discussion

Anxiety disorders are among the most prevalent psychological disorders, present in at least 13.3% of the U.S. population, and contribute to the increased risk of morbidity, mortality, and substance abuse (Bystritsky et al., 2013). Understanding the pathways through which anxiety is manifested and maintained can aid in early identification of these cognitive and behavioral risk factors, aiding in the development of prevention strategies.

Consistent with our initial hypotheses, our analysis revealed that childhood emotional abuse was associated with increased external locus of control. The experience of persistent, pervasive emotional abuse may lead a person to believe they have little control over events and circumstances in their environment. Childhood is a time of vulnerability, such that parents, teachers, and other guardian figures assume control over the child's decisions and lifestyle. In the context of emotional abuse, a child may feel particularly vulnerable, self-critical, and helpless (Beck, 2008). This belief may be reinforced and carry over throughout adolescence and adulthood (Toth & Cicchetti, 2013).

Further, external locus of control was associated with increased anxiety symptoms. Possessing an external locus of control may leave a person vulnerable to anxiety, as it can be characterized by perceived lack of control. Compared to individuals with greater internal locus of control, those with greater external locus of control are at a heightened risk for developing anxiety symptoms due to the tendency to believe that they do not possess autonomy over their environment (Archer, 1979; Hoehn-Saric & McLeod, 1985). Those with

a greater external locus of control are more likely to believe that events happen by chance or fate, rather than through their own actions. Following adverse events, possessing an internal locus of control can be beneficial for the individual because they perceive power and jurisdiction to change the outcome of life events. Contrastingly, those possessing an external locus of control may feel incapable, vulnerable, and helpless in their efforts to recover from adversity, to escape distressing circumstances, and to apply problem-solving strategies (Flannery & Harvey, 1991). This may lead to increased feelings of anxiety.

In addition, an interaction was found between perceived control (i.e., locus of control) and behavioral control (i.e., effortful control), revealing how each may serve as a risk or protective factor against the other. Often, perceived and behavioral control are examined separately, but they operate in conjunction to contribute to or detract from one's feelings of anxiety. Although the possession of an external locus of control might place someone at a greater risk for developing anxiety symptoms, it is pertinent to consider the accompanying effect of behavior. The findings of the present study revealed an unexpected moderating effect of inhibitory control and activational control in opposite directions. Inhibitory control may show a protective buffer against anxiety because individuals with greater inhibitory skills may use this as a coping mechanism in response to perceiving limited control of their environment. Individuals with an external locus of control who are nonetheless able to express more autonomy within more personally controllable contexts may in turn have fewer feelings of anxiety (Raines et al., 2021).

Contrastingly, activational control may serve as a risk factor for anxiety since activational control refers to the tendency to initiate actions toward goals. These individuals may be motivated to achieve a goal, yet if the outcomes of their efforts are ultimately perceived as outside of their control this tendency may serve to only exacerbate anxiety (Huys & Dayan, 2009). It may induce anxiety if an individual feels a responsibility or desire to successfully problem-solve and overcome adversity, yet feels the consequences of their actions are still largely determined by chance or destiny (Huys & Dayan, 2009).

## Strengths and Limitations

A major strength of the current study is the examination of the distinct effects of several components of effortful control, in addition to analyzing it as a unified, single construct. Assessing specific elements of effortful control can aid in the development of future interventions targeted at behavior modification alongside the experience of maladaptive cognitions, promoting resilience and improving developmental outcomes for sufferers of childhood emotional abuse. In addition, future studies may be served by expanding upon the way childhood emotional abuse is assessed. Childhood emotional abuse is comprised of numerous potential component behaviors, including threats to physically hurt a child, threats of abandonment, words of hostility/rejection/debasement, humiliation, severely controlling/limiting child's interactions, scaring, discriminating, scapegoating, and belittling. The current study utilized a well-validated, frequently-used measure of childhood emotional abuse, however, breaking down specific forms of childhood emotional abuse by behavior may reveal differential effects of each.

Although retrospective reports have been shown to be reliable over time (Dube et al., 2004), use of retrospective self-report here remains a limitation of the present study. Participant recollection of past maltreatment has been shown to be largely accurate (Hardt & Rutter, 2004), but may be underestimated (Dube et al., 2004). Another limitation of the current study is the generalizability of results. Research was conducted on college students receiving class credit for their participation. Therefore, results may not reflect the same effect of that found in the broader population of people who have experienced childhood emotional abuse. In addition, the reliability of the inhibitory control scale was quite poor. Although removal of the most problematic item improved the reliability of the scale and partially mitigated this limitation, and the very low reliability must be taken into consideration when interpreting the results pertaining specifically to the inhibitory control subscale. Finally, it is worth noting that, though significant, the effects in the present study were small. This likely indicates that there are a multitude of factors not examined in the present study that can explain the remaining variance in individuals' anxiety scores. However, despite having limited effect sizes, our analysis conveys a small, yet relevant relationship between childhood emotional abuse, perceived control, and how actual behaviors may mitigate or induce anxious symptomatology in conjunction with these cognitions.

## Implications

The results of this study indicate that different subtypes of effortful control may contribute to an individual's resilience in response to childhood emotional abuse. They also

help identify a mechanism through which childhood emotional abuse influences anxiety, as well as the differential effects that each component of effortful control has on a person's anxiety symptom severity. It is important to further specify and investigate factors that influence an individual's risk of developing anxious symptomatology to improve early screening techniques of cognitive patterns as well as preventative behavioral intervention strategies. This study can serve as a foundation for the future examination of how other specific types of maltreatment coincide with each other and function within this moderated mediation model. Other forms of maltreatment such as physical neglect, emotional neglect, sexual abuse, and physical abuse should be assessed further for their effects on locus of control, and in turn, anxiety symptoms. Future studies should also incorporate analyses of both cognitive and behavioral constructs rather than isolating either from each other.

Anxiety is a prevalent experience, impacting the health and well-being of those who suffer from these symptoms. Understanding the risk and protective factors of anxiety may help to improve adolescent and adulthood outcomes for individuals who suffer from childhood maltreatment. Identifying the enduring, harmful consequences of childhood emotional abuse, as in the present study, enables clinicians to focus on preventative rather than reactive intervention strategies. The specific findings of the present study have applications for traditional cognitive-behavioral techniques, which can improve the prognosis and quality of life for individuals who have experienced childhood emotional abuse and emerging anxiety symptoms related to a perceived lack of control. Our results indicate that it may be clinically conducive to integrate cognitive interventions strengthening self-efficacy alongside behavioral coping techniques related to inhibitory control. Existing treatments involving the evaluation and replacement of irrational, inflexible cognitive beliefs may incorporate these findings regarding the impact of locus of control on anxiety symptoms. Additionally, practitioners of Acceptance and Commitment Therapy, which emphasizes the dynamic relationship between beliefs and behaviors, may integrate these findings in order to target maladaptive beliefs about perceived control alongside dysfunctional behaviors that emerge in response to childhood maltreatment. For example, practitioners may incorporate interventions incorporating the acceptance of a perceived lack of control.

## Declarations

**Conflict of Interest** The authors declare that they have no conflict of interest.

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