The Influence of Age and Traumatic Experience on Emotional Awareness in a Lebanese Context:
A Correlational Study.

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Contents

Abstract:

This study examines the influence of age and traumatic experience on emotional awareness in a Lebanese population, using the Emotion Regulation Questionnaire (ERQ), the Negative Life Events Checklist for DSM-5 (LEC-5), and The PTSD checklist for DSM-5 (PCL-5). A total of 100 Lebanese participants aged between 17 and 70 answered these scales via an online survey. Pearson's correlation and multiple linear regression analyses were employed to measure the predictive power of age and traumatic experience on emotional awareness. Results imply that both age and traumatic experience notably predict emotional awareness, with traumatic experience having a somewhat stronger influence suggesting that the psychological influence of trauma may form emotional regulation strategies more greatly than age in the given population. The findings highlight the importance of taking into account personal history and demographic factors in therapeutic approaches, specifically in areas with a high prevalence of traumatic incidents. These insights convey a deeper understanding of emotion regulation considering cultural and historical contexts related to the Lebanese population and offer implications for psychological interventions and strategies.

Keywords: Emotional awareness, Emotion regulation strategies, PTSD, age, traumatic experience.

Introduction:

People differ in their capacity to understand their own and others' emotions (Salovey and Mayer 1989; Davis and Kraus 1997, as cited in Eckland & English, 2018). A weakened awareness of one's emotional states could affect emotional regulation strategies and self-reports of negative affect (Subic-Wrana et al., 2014).

Cross-sectional studies have reported that emotional awareness, defined by the person's clarity of and attention to their emotions is associated with psychopathology along with emotion regulation and coping mechanisms (Eckland & Berenbaum, 2021). Two Emotion Regulation (ER) strategies have been commonly studied: Expressive suppression and Cognitive reappraisal (Gross, 2002, as cited in Eckland & Berenbaum, 2021).

The configuration of emotional blends of the awareness of negative affect alertness might be critical to employing emotion regulation strategies. Reappraisal, an adaptive emotion regulation strategy calls for reflection on how someone is experiencing a situation to adopt a new approach. Reappraisal demands a conscious awareness of one's emotions. Alternatively, suppression does not require conscious awareness of one's emotions as it is a purposeful avoidance of an in-depth investigation of one's response to a specific situation. (Subic-Wrana et al., 2014).

Previous studies have examined the effect of emotional awareness while considering various determinants that could influence, explain, or enhance an individual's awareness of their emotions, that of others, and their attention to them such as gender, socioeconomic status, differences in cultures, age, PTSD, religiosity… Age has been considered a substantial factor given the assumption that emotional awareness increases with maturity. Concurrently, the influence of personal experiences such as traumatic incidents on emotional processing abilities has been gaining research attention. However, research on how these factors affect emotional awareness remains insufficient, especially in an understudied population like Lebanon, a country that has been ruled by political instability, economic unpredictability, and many traumatic events such as the recent Beirut port explosion and other traumatic instances that have happened throughout history like the 15-year civil war (1975-1990).

This study hypothesizes that traumatic experience, in the Lebanese context, would be a better predictor of emotional awareness than age. The Lebanese community has undergone significant and widespread trauma in the past and present, it would be reasonable to assume that trauma could have a greater influence on emotional awareness than age alone. Understanding these patterns can improve therapy modalities and guide educational initiatives, helping individuals become more emotionally aware, and a critical component of mental health resilience.

The following section adds to the body of knowledge by reviewing relevant research on emotional awareness, highlighting studies done worldwide and within Lebanon, and laying the groundwork for the current study.

Age:

Adaptive emotional processing has been linked to older age (Blanchard-Fields, 2007; Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; as cited in Mankus & Boden, 2016)

Older people recall and evaluate events with less negativity and more positivity in investigating appraisals in response to experimental triggers and life events. As noted by Lockenhoff and Carstensen, (2004; as cited in Mankus & Boden, 2016) older adults are inclined to concentrate on information that supports their short-term goals and less on negative content. Additionally, younger adults are more apt to ruminate about negative information than older counterparts (Charles & Carstensen, 2008). When assessing rather trivial negative everyday challenges faced throughout the week, older age pertained to lower levels of estimated severity (Charles & Almeida, 2007). Considering extreme situations such as dealing with the loss of a loved one, older adults reported lower levels of regret over the two years of grief in contrast with younger adults (Trogers et al., 2008). These findings suggest that older age is associated with a lesser negative outlook on life. Another study proved that older adults tend to ruminate much less about negative events than younger adults (MC Convtha & Huba, 1999).

Commonly recorded daily stressors relate to interpersonal tensions (Almedia, 2005) and social stressors can cause high levels of emotional distress (Almedia & Kessler, 1998, Rook, 1984). Carstensen (1992) reported that with age, older adults are more content with their social group. The latter also reports higher experiences of happiness and positivity with their family members

compared to younger adults (Charles & Piazza, 2007) and more positive than negative encounters (Newsom et al., 2005). Older adults account for greater levels of emotional well-being, frequently higher than those documented by younger adults.

In cross-sectional studies, older age is linked to lower levels of negative affect (Carstensen et al., 2000, Diener & Such, 1997, Mroczek & Kolarz, 1998) and decreased rates of anxiety and major depressive disorder. Accounts of anger also downgrade for successively older adults (Phillips et al., 2006). Taking into account results from studies related to positive and negative emotional experiences, older adults are documenting greater levels of well-being and uniformly report elevated levels of positive mood than negative mood (Charles et al., 2001, Diener & Suh, 1997). Whenever drops in well-being are detected, they normally occur after age 60 and are minor. Centenarians experience elevated levels of emotional well-being (Jopp & Rott, 2006).

Original speculations suggested that substantial qualitative transitions emerge in cognitive functioning as individuals' age. Withdrawal theory proposes social disengagement as people grow older, they become distant from loved ones as a way to prepare for death (Cumming & Henry, 1961). However, as empirical research broadened, it became apparent that these identified behaviors opposed the theory's core beliefs. Social circles do shrink in size; nevertheless, the cognitive and emotional characteristics observed in older populations are positive and socially active (Charles & Carstensen, 2007).

The socioemotional selectivity theory implies that older adults prioritize supportive relationships that are emotionally satisfying, they focus on sustaining and enriching these bonds and discarding those that do not serve them in meeting their emotional needs (Carstensen, 1993; Carstensen et al., 1999). Experience also alters people's handling of social situations (Blanchard-Fields 2007; Hess & Auman 2001; Hess et al. 1999, 2005; Leclerc & Hess 2007). Life occurrences particularly affect the way people react and respond to emotional information (Blanchard-Fields, 2007; Charles & Piazza 2009; Magai et al. 2006). Older adults are more perceptive to affective cues when making social judgments compared to younger adults (Hess, 2005). Strength and Vulnerability Integration Theory proposes that the interaction between an individual's strengths and vulnerabilities impacts their resilience and well-being: it induces the latter's knowledge related to emotion regulation and personal life accumulated from their experience and their time lived (Charles & Piazza, 2009). The theory also upholds that biological systems become less malleable with time. Older people adjust to low levels of distress quite well, it becomes challenging for them when experiencing difficulty for prolonged periods. Once older people employ strategies that allow them to avoid negative affect, they experience greater levels of emotional well-being compared to younger adults. However, when negative experiences are unavoidable, advantages related to age and well-being fade and may even reverse (Charles & Piazza, 2009). It is important to note that unavoidable negative incidents increase with age as one deals with the loss of loved ones, physical limitations that cause pain and bother, and meeting the strains of caregiving.

Emotional distress is associated with an individual's perspective of a situation, whether they see it as a challenge or as a threat (Lazarus, 1999). Research investigating appraisals in response to laboratory stimuli or real-life events suggests that older adults appraise and recall events less

negatively and more positively with age. Older age is related to discerning attention toward positive stimuli and away from negative stimuli (Isaacowitz et al. 2006, Mather & Carstensen 2003).

In a study exposing young and old adults to negative comments about themselves and asked to respond to these negative remarks, younger adults were more likely to reply similarly to the people speaking to them. Whereas older adults made fewer comments, focused less on criticism, and seemed less engaged in the conflict altogether (Charles & Carstensen, 2008).
Favorable social interactions are associated with enhanced states of well-being; however, these outcomes are less durable than negative encounters. The beneficial outcomes of positive social encounters are limited to positive affective encounters (Newsom et al., 2008; see review by Rook 1998). In contrast, adverse social encounters are associated with elevated levels of depression, decreased emotional well-being, and degraded self-perceived wellness (Newsom et al., 2008; see review by Rook 1998). Hence, avoiding negative social experiences holds both affective and health-related advantages. Older adults manage their social relationships to experience less negativity compared to reports of younger adults (see review by Charles & Carstensen, 2007). Older age is associated with decreased interpersonal disputes and milder emotional reactions during conflicts (Birditt et al., 2005). One factor explaining older people's decrease in reporting distress following negative encounters would be that they avoid escalating the situation compared to younger adults: When faced with emotional tensions, older adults engage in passive actions like doing nothing about it (see review by Blanchard-Fields, 2007) and even suggest such strategy to others experiencing the same situation (Charles et al., 2001).

When evaluating different age groups, older adults report having social cohesion goals more so than younger adults who are more inclined to conflict resolution goals (Birditt & Fingerman, 2003). In summary, as people age they tend to adapt to their environment and become less reactive to social stressors. Older people tend to skilfully resolve stressful situations and perceive their environment as less threatening. The ability to regulate emotions improves as one gets older. Research suggests that older individuals prioritize emotional well-being in that they avoid negative situations by engaging in thoughts and behaviors which could also expose them to positive experiences (Carstensen, 2006). Such advantages reside in social dynamics whereby older adults interact with their social environment to report fewer social disagreements (Birditt & Fingerman, 2003) and address social conflicts more efficiently than younger adults (Blanchard-Fields et al., 2007).

The positivity effect is a psychological phenomenon that explains that older adults are more likely to focus on positive information and experiences than negative ones. This bias could lead them to overlook the negative recollections, affect, and facets of life while focusing more on the positive ones (Carstensen et al., 2006). It is an emotion regulation technique that helps older people cope with negative events and challenges. Nevertheless, findings suggest that older adults are as vigilant as younger adults to menacing stimuli (Mather & Knight, 2006). This conclusion proposes that older adults do not avoid negative situations to focus only on the positive ones.

Researchers propose that acquired life experience contributes to proficiency in social and emotional regulation, explaining how older adults efficiently manage their emotions (e.g.,

Blanchard-Fields 2007, Magai 2001). This expertise is gained by navigating everyday social interactions and addressing adverse sources of stress which is known as affective reactivity. However, exposure alone does not guarantee greater proficiency. Only a small percentage of people seem to benefit from this exposure. Different personality traits impact individuals' life aspects and problem resolution: people high on neuroticism tend to dwell on negative affect more (Suls & Martin, 2005). In individuals with high levels of neuroticism, older age correlates with increased emotional responsiveness (Mroczek & Almeida, 2004). People high on neuroticism experience increased levels of negative emotions and have a higher risk of depression, rather than learning from experience and improving their well-being (Kendler et al., 2006).

Three additional reasons could explain how older adults would not be able to effectively use strategies to regulate their emotions which also increases with age: First, to engage in emotion regulation strategies, older adults must possess the required cognitive capacity for them to exhibit a positivity bias. Research indicates older adults show a greater inclination towards positive information when they perform well on cognitive tasks that require control. Nevertheless, in divided-attention tasks biases are low because cognitive demands are higher. Additionally, poorer cognitive functioning in older adults is related to an increase in depressive symptoms (Mather & Knight, 2005; Knight et al., 2007; Kryla-Lighthall & Mather, 2009).

Second, adults use avoidance and distraction as emotion regulation strategies. However, in instances where these strategies are ineffective, the advantages they offer to older adults can decrease compared to younger adults. Chronic illness is associated with higher rates of negative affect (Charles & Almedia, 2006) particularly as prevalence rates increase with age (Rook et al., 2007). Nonetheless, despite higher rates of chronic illness, older adults tend to report higher rates of positive affect and lower levels of negative affect compared to younger adults (Piazza et al., 2007). This age-related advantage diminishes when individuals experience stressful events, where age is not related to affective reactivity (Piazza et al., 2007).

Lastly, when older adults experience losses in their social networks would explain their weakened ability to show age-related increases in well-being. The likelihood of experiencing bereavement increases with age leading to higher levels of loneliness among older adults (Barg et al., 2006; Cacioppo et al., 2006) suggesting that loneliness may have more profound effects on physiological functioning among older adults compared to younger adults, though further investigation is needed (Hawkley & Cacioppo, 2007).

In conclusion, older adults seem adept at managing social situations and employ social selection strategies to maintain relatively high levels of well-being. When the latter encounters unavoidable negative events, they often experience heightened physiological distress which could significantly impact their physical health and well-being. Social isolation exacerbates this disruption. Overall, older adults typically exhibit better social and emotional functioning compared to younger adults in everyday life. However, prolonged and unavoidable stress may compromise these age-related advantages.

A study done by Subic-Wrana et al. (2014) on a general German population found that higher age seems to promote a positive relationship between suppression as a dysfunctional emotion regulation strategy and self-reported negative emotions. Additionally, as individuals age,

emotional awareness tends to decrease as individuals become more likely to suppress their emotions.

"Emotional awareness facets should vary across the lifespan. We presume that older adults have had a greater number and more diverse learning experiences involving emotion. As people age, we posit that they experience more opportunities to "practice" identifying, labeling, and representing the type and source of their emotions." (Cited by Mankus at el., 2016).

Experience:

Lebanon has faced various traumatic events, an understudied population that has witnessed ongoing major clashes and unpredictability for more than four decades, comprising a 15-year civil war (1975-1990), the Israeli occupation of Southern Lebanon for 15 years (1985-2000), a succession of explosions and assassinations from 2005 till 2021, the 2006 July war, an economic crisis that has been aggravated by the Covid-19 Pandemic (2019-present), and the 2020 Beirut Port Blast (El Hajj, 2021). The recurrent trauma exposures have put countless Lebanese citizens at risk of PTSD generating an intricate collective trauma (Bosqui, 2020, as cited in El Hajj, 2021). In El Hajj's literature review, populations that were exposed directly to wars, violence, or traumatic injuries displayed higher rates of PTSD prevalence rates than those indirectly exposed (Fares et al., 2017; Khadra et al., 2015; Farhood and Noureddine, 2003; Karam et al., 2006, 2008, Farhood and Noureddine, 2003).

Trauma can obstruct the progression of emotional awareness by affecting the individual's ability to recognize and label their feelings correctly, leading to emotional dysregulation. Moreover, trauma can cause emotional numbing and avoidance, where individuals may detach from their emotions as a way to cope with devastating feelings related to the traumatic experience which in turn hinders emotional awareness, making it more challenging for individuals to express and consociate with their emotions. Additionally, trauma can induce hypervigilance and hyperarousal, creating a challenge for individuals to correctly discern and interpret their emotional experiences complicating emotional awareness and regulation given the challenges individuals may face in distinguishing differing emotions and misinterpreting their emotional responses (Powers et al., 2015).

In investigating the influence of varying emotion regulation (ER) strategies on psychological resilience, 360 participants of which 89 subjects experienced maltreatment and 112 who did not were invited to fill out a survey. A cognitive reappraisal task was carried out with 25 subjects from the maltreatment group and 25 subjects who matched in age, gender, and education from the non-maltreatment group. The maltreatment group reported increased difficulty in recognizing their emotions such as a lack of emotional clarity and awareness in addition to low psychological resilience and elevated depressive symptoms. Maltreatment subjects also represented a lack of adaptive cognitive emotional regulation. Maltreated children are commonly exposed to adverse emotional responses from their parents rendering it challenging for them to develop emotional understanding skills (Shipman & Zeman, 1999; Kavanagh, Youngblade, Reid, & Fagot, 1998, as cited in Wong Lee et al., 2019).

Individuals with high Emotional awareness (EA) hold a distinguished understanding concerning their emotional states and have a greater capability to attend to and notice the

intricacy of an emotional experience which allows for adaptive coping with vastly stimulating affect (Lane, 2008, as cited in Szczygiel et al., 2012).

Szczygiel et al. (2012) instructed 120 female students to regulate their emotions while watching an aversive film. Participants completed matching facial expression tasks pre- and post-emotion induction. Results indicate that participants with high EA had lower increases in incorrect matches compared to counterparts with lower EA. This finding was only significant for suppression, masking, and control conditions. Individuals with lower EA (lower capability of processing others' emotional experience and differentiating between their own emotions) could be engulfed with negative affect. This explains why there was no increase in error responses in reappraisal enactment who were instructed to hold a neutral stance to the emotional stimuli and thus were able to decrease their experience of negative affect despite being high or low on EA.

The main findings of a study on strategies used by refugee resettlement workers to cope and emotional intelligence traits in predicting Secondary Traumatic Stress (STS) and burnout. Previous trauma history was found to be a significant predictor of STS, while age and sex played a role in predicting burnout among workers (Smith et al., 2018).

STS is an expected consequence when someone is exposed to the traumatic experiences/ stories of others. Mental health professionals (Psychologists, nurses, psychiatrists, etc…) working with trauma-exposed individuals could develop emotional distress, and show depressive symptoms, anxiety, and PTSD leading to burnout and STS (Ray, Wong, White & Heaslip, 2018).

Significant associations were found with coping factors involving self-distraction, humor, venting, substance use, disengagement, and self-blame. These strategies were the strongest predictors of STS and burnout, consistent with previous research (Volker et al., 2010; McGarry et al., 2013; Thompson, Amatea, & Thompson, 2014).

Trait Emotional intelligence (EI) was negatively linked to STS and burnout, especially when taking into account coping strategies. Trait EI indicates an individual's aptitude to identify, comprehend, regulate, and convey emotions. It also refers to the individual's ability to remark on and understand others' emotions.

Trait EI was strongly and negatively associated with coping techniques such as substance use and self-blame while weakly and positively correlated with active coping and positive reframing.

Post Traumatic Stress Disorder (PTSD) is an intricate mental health condition that emerges after experiencing real or perceived life-threatening events, severe injury, or sexual violence as noted by the American Psychiatric Association in 2013 (Cited in El Hajj, 2021). Exposure to various traumas has been proven to lead to different mental health consequences including PTSD (Powers et al., 2015). Additionally, PTSD has been related to emotion regulation techniques largely seen as maladaptive such as suppression (as cited in Khan et al., 2021).

A transdiagnostic study by Post et al. (2021) aims to explain how emotion-related factors influence co-occurring PTSD and Major Depressive Disorder (MDD) in relation to trauma. Findings suggest that increased negative emotions predicted the use of maladaptive emotion regulation strategies (expressive suppression and rumination) predicting both PTSD and MDD. Additionally, the belief of not being able to modulate negative mood also predicted PTSD and MDD explaining why some individuals may resort to maladaptive emotion regulation strategies which contribute to the development and sustaining of PTSD and MDD.

Some emotion regulation strategies have been speculated to be related to the development and upkeep of PTSD via their effect of avoiding trauma reminders and memories (Khan et al., 2021). Cognitive reappraisal and expressive suppression have been linked to avoidance and distorted appraisals that constitute the disorder. Cognitive Reappraisal (CR) denotes altering one's thoughts concerning the meaning of a stimulus while Expressive Suppression (ES) indicates the active restraint of external displays of personal emotional experience (Gross, 1998, as cited in Khan et al., 2021). CR is negatively associated with PTSD symptoms (Boden, Bonn-Miller, Kashdan, Alvarez, & Gross, 2013, as cited in Khan et al., 2021) and ES is positively associated with PTSD symptoms (Seligowski, Lee, Bardeen, & Orcutt, 2015; Larson & Berenbaum, 2015, as cited in Khan et al., 2021). Khan et al. (2021) aimed to duplicate previous studies related to Emotion Regulation (ER) and PTSD in a large veteran sample with three groups of participants (current, remitted, and never had PTSD). Findings show that veterans with current PTSD reported more use of ES with no diminished use of CR compared to veterans with remitted PTSD and those with no history of PTSD. Furthermore, when considering inter- and intrapersonal contexts, expressing emotions is expected to be adaptive since it stimulates care from others and simplifies processing emotions (Butler et al., 2003, as cited in Khan 2021). In contrast, suppression is related to decreased awareness of one's feelings, preventing others from noticing the individual's internal experience resulting in failed chances of getting care (Butler et al., 2003; Gross & John, 2003, as cited in Khan et al., 2021). People who frequently use ES have scarcer social support, experience greater relationship disruption, and have less peer support (Butler et al., 2003; Gross & John, 2003; John & Gross, 2004, as cited in Khan et al., 2021).

In summary, emotion regulation is important when considering mental health and illness, maladaptive ER techniques such as expressive suppression have a stronger link to psychopathology than do adaptive techniques like cognitive reappraisal extending to PTSD in a veteran population. It is important to note that reappraisal results in reduced negative emotions and expressive behavior yet suppression causes a decrease in behavioral response but fails to alleviate the actual feeling of the emotion, the subjective experience of the emotion does not change (Gross, 2002, as cited in Szczygiel et al., 2012).

In investigating the role of trauma type (early onset, late onset, interpersonal, no interpersonal, and non-chronic traumas) and the acuity of PTSD symptoms in emotion regulation difficulties known by trauma survivors. Ehrin and Quack (2010) found that the level of symptoms of PTSD was associated with a decreased level of awareness and clarity of emotions, reduced levels of acceptance of negative emotions, increased experiential avoidance, and increased levels of emotion suppression, including a damaged use of efficient emotion regulation strategies, especially reappraisal. Findings also propose a strong link between PTSD and emotion regulation difficulties. It is also important to note that survivors of early-onset personal trauma showed greater difficulty in emotion regulation than did survivors of late-onset no interpersonal trauma.

A study wanting to understand the characteristics of PTSD among veterans by comparing trauma-exposed veterans without PTSD to those with PTSD, while also considering coexisting disorders such as anxiety and depression and using two scales to measure emotion regulation and diagnose PTSD utilizing a credible clinical interview approach (Sipple et al., 2016). Results

suggest that PTSD is associated with difficulties in emotion regulation. PTSD has been proven to have an independent influence on emotion regulation exceeding trauma exposure expectations and common mental health issues.

Prior results were reproduced in collaboration with undergraduate students and population samples of Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation New Dawn (OND) veterans by indicating that veterans with PTSD show greater use of expressive suppression and more pronounced difficulties with emotion regulation when distraught. Those with PTSD commonly employ avoidance strategies such as expressive suppression (ES) that alleviate distress in the short run but preserve the disorders by preventing cognitive change and emotional processing (Ehlers & Clark, 2000; Foa & Rothbaum, 1998). A proficiency to endure and embrace intense emotions instead of inhibiting their manifestation would aid veterans in experiencing less negative outcomes.

Healthy individuals and trauma-exposed individuals with no PTSD displayed similar levels of ES and difficulties in emotion regulation when distressed, proposing that these individuals presented strong resilience (i.e. well-adjusted response following trauma) due to emotion regulation capacities and employment of suitable emotion regulation strategies. The ability to manage emotions has been connected to resilience (Southwick & Charney, 2012) such as cognitive reappraisal, acceptance, and mindfulness (Buhle et al., 2014).

According to Aldo et al. (2010), meta-analytic findings imply that maladaptive coping strategies may cause more extreme challenges than lacking adaptive ones. Reappraisal may be used by individuals with PTSD when dealing with general stressors; however, still rely on ES to manage trauma-related emotions. In conclusion, the efficacy of coping strategies may depend on the content and style in which individuals reappraise instead of how frequently reappraisal occurs.

The capacity to employ adaptive strategies such as reappraisal could be related to consciously processing emotional arousal. Being aware of certain affective states may be crucial for evaluating the situation by adopting various perspectives and accounting for the incident causing negative emotions that could improve mood (Subic-Wrana et al., 2014). Additionally, participants with greater emotional awareness reported less negative affect, and reappraisal as an emotion regulation strategy correlated with decreased reports of negative affect. Suppression, a maladaptive emotion regulation strategy predicts symptoms of PTSD in a trauma-exposed sample (Amstadter & Vernon, 2008, as cited in Subic-Wrana et al., 2014).

Emotion dysregulation represents the individual's insufficiency in skills to detect and acknowledge emotions in addition to a lack of the skills to adaptively choose efficient strategies to manage emotions as they occur (Powers et al., 2015). A study by Pancea et al. (2020) suggests findings that support the hypothesis that emotion dysregulation is associated with an increased tendency to develop chronic PTSD symptoms in a trauma-exposed population. When considering other known factors such as depression, interpersonal trauma, and the acuity of PTSD symptoms directly after the trauma. No significant link was found between race and the development of chronic PTSD symptoms, it is crucial to acknowledge that the prevalence of PTSD and exposure to trauma differs with various ethnic and cultural groups. Moreover, cultural influences may affect the manifestation of emotion dysregulation among cultural and ethnic groups (Chapman & Mullis, 2000; Dunbar et al., 2017).

A replication study was done in Egypt by Eldesouky et al. (2023), who linked the consequences of emotion regulation strategies to emotional well-being. The results suggest that daily, employing various adaptive interactive techniques (positive reframing, adaptation) leads to enhanced emotional well-being. Whereas, various deterrent cognitive conservation techniques (denial, suppression) lead to decreased emotional well-being.

Another study by Eckland and Berenbaum (2021) highlights the role of emotional clarity in allowing people to distinguish between various emotions and communicate their feelings conclusively (Salovey et al., 1995). Emotional clarity is a crucial aspect of emotional awareness (how individuals perceive, interpret, and respond to their emotions) and relates to various coping techniques and psychological well-being. It allows people to form a more profound understanding of their emotional experiences, contributing to enhanced emotion regulation skills and overall well-being.

Based on the literature review, it is clear that various studies have investigated the aspects of emotional awareness and regulation, discussed the influence of age and traumatic experience, and contributed to contradictory results across various cultural contexts. This study aims to bridge these gaps by concentrating on the Lebanese population, known to have had unstable historical and traumatic events. Building on the discussed theoretical framework, the following section outlines the methodology of this study.

Methods:

Participants:

A total of 100 participants aged between 17 and 70 were recruited using an online survey that was shared with them. Participants were asked about their age, gender, and nationality. Participants were asked about their nationality as this was considered an exclusion criterion. Participants who were not Lebanese were immediately redirected to the submission button of the survey.

32% of participants were male (n=31) 67% were females (n=64), 1% (n=1) of the participants preferred not to specify their gender, 3% of the participants were not Lebanese (n=3), 97% of participants were Lebanese (n=96), 99% of participants (n=99) voluntarily agreed to take part in the survey while 1% (n=1) of the participants did not agree to take part in the study.

Materials:

The ERQ is a 10-item scale questionnaire designed to measure individuals' tendency to regulate their emotions using two strategies: Cognitive Reappraisal which is an alternate way one thinks about the connotation of a stimulus to reduce its emotional impact. Some cognitive reappraisal items include "When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about." The second one is Expressive Suppression which is the ongoing repression of evident displays of individual emotional experience. Some expressive suppression items include "I keep my emotions to myself." The participants will answer in terms of how they manage and express their emotions using a Likert scale with 1 (strongly disagree) and 7

(strongly agree), participants respond to each statement by assigning a score ranging from 1 (strongly disagree) to 7 (strongly agree).

Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348-362.

The Life Events scale for DSM-5 (LEC-5) comprises 17 difficult/stressful events that would happen to people. Participants will be asked to indicate if it happened to them, witnessed it, learned about it, if it is part of their job, if they are not sure it fits, or if it did not occur to them while considering their whole life growing up as well as adulthood. The LEC-5 collects data concerning probable traumatic experiences an individual has experienced. Participants specify different levels of exposure for every type of probable traumatic event included on a 6-point nominal scale; therefore, there is no specific scoring method to follow other than knowing if the participant has experienced one or more of the 17 events listed. Participants may inscribe varying levels of exposure to the same trauma.

Some items include: "Serious accident at work, home, or during recreational activity." "Exposure to toxic substance (for example, car accident, boat accident, train wreck, plain crash)".

Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013). *The Life Events Checklist for DSM-5 (LEC-5) – Standard.* [Measurement instrument]. Available from https://www.ptsd.va.gov/

The PCL-5 is a PTSD checklist of 20 items self-report measure that evaluates the presence of PTSD and the acuteness of symptoms. Participants are asked to evaluate how much they have been bothered by every 20 items listed during the past month on a 5-point Likert scale ranging from Not at all, A little bit, Moderately, Quite a bit, to Extremely. The scale covers the 4 symptom clusters associated with PTSD re-experiencing, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity. Participants are asked to evaluate how much they have been bothered by every 20 items listed during the past month on a 5-point Likert scale ranging from 0 (Not at all), 1 (A little bit), 2 (Moderately), 3 (Quite a bit), to 4 (Extremely). Items are added to provide a total severity score range from 0-80.

Some items include: "Repeated, disturbing, and unwanted memories of the stressful experience?" "Repeated, disturbing dreams of the stressful experience."

Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM-5 (PCL-5) – Standard* [Measurement instrument]. https://www.ptsd.va.gov/

Google Forms were used to distribute the survey, and SPSS was used for data analysis.

Study Design:

This correlational study will examine the predictive strength of age and traumatic experience on emotional awareness in a Lebanese context.

Independent variables were age (measured in years) and traumatic experience qualified by two scales: LEC-5 and PCL-5.
The dependent variable is emotional awareness measures using ERQ.

Procedure:

Data collection lasted 21 days. After obtaining approval from the Institutional Review Board at LAU, participants were invited to partake in this study via email.
Participants first completed the informed consent form, followed by demographic questions, the emotion regulation questionnaire, the life events scale, and the negative life events scale.

Data Analysis:

Data were analyzed using SPSS version 29. Descriptive statistics were computed for participants' demographics, trauma scores, and emotional awareness scores. Pearson's correlation coefficient was calculated to examine the relationship between age, trauma scores, and emotional awareness. Multiple linear regression was calculated to analyze the influence of age and traumatic experiences on emotional awareness. This method allows for examining various predictors simultaneously, enabling the control for potential cofounders and separating the effect of each independent variable. It also provides coefficients for each variable which helps interpret how each independent variable (age and traumatic experiences) is related to emotional awareness. This method aligns with the predictive accuracy of our analysis and with the correlational design of our study. A bivariate correlation was also conducted including 2 reappraisal items and 2 suppression items from the ERQ scale, 4 items of each cluster intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and activity from the PCL-5 scale, and statement 1, 4, 5, and 6 from the LEC-5 scale.

Results:

Descriptive Statistics:

The sample comprised 64% female participants, 35% males, and 1% who preferred not to specify, demonstrating a greater representation of females. The vast majority of participants were Lebanese (96%) with only 4% who did not meet the criterion. Participants' ages ranged from 17 to 64, with a higher concentration in the early 20s reflecting a primarily young adult demographic.

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	64	64.0	64.0	64.0
	Male	35	35.0	35.0	99.0
	Prefer not to say	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Lebanese

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.0	1.0	1.0
	No	3	3.0	3.0	4.0
	Yes	96	96.0	96.0	100.0
	Total	100	100.0	100.0	
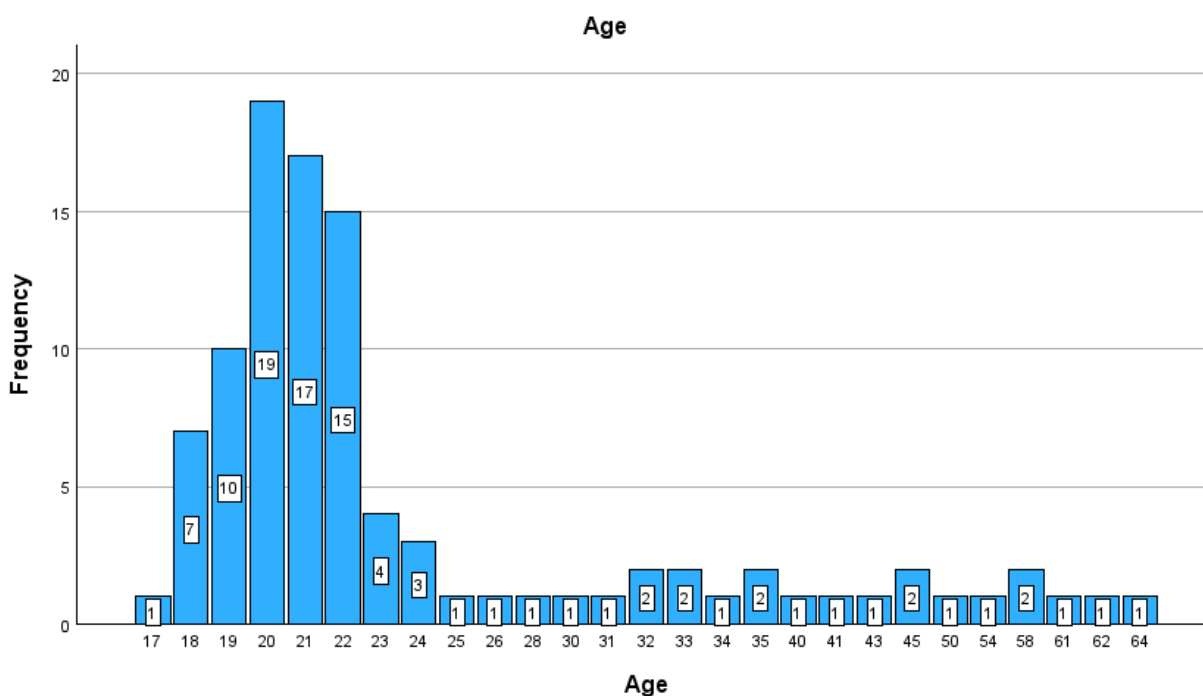
Total Reappraisal (range 7-42): Average score of 26.79 with a standard deviation of 7.95.

Total Suppression (range 5-28): Average score of 16.33 with a standard deviation of 5.20.

Total PCL (PTSD Checklist, range 0-70): Average score of 30.02, indicating variability in PTSD symptom severity among participants, with a standard deviation of 17.19: PTSD symptoms are present among the population studied.

Total Score LEC (range 21-89): Average score of 58.54 with a standard deviation of 15.9 suggesting diverse experiences among the population studied.

Total ERQ (Emotion Regulation Questionnaire, range 18-60): Average score of 43.12 with a standard deviation of 9.67, reflecting how participants generally regulate their emotions: Cognitive Reappraisal is the most dominant emotion regulation strategy in this sample.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TotalReappraisal	100	7.00	42.00	26.7900	7.94590
TotalSuppression	100	5.00	28.00	16.3300	5.20112
Valid N (listwise)	100				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TotalPCL	100	.00	70.00	30.0200	17.19348
Valid N (listwise)	100				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Totalscore	100	21.00	89.00	58.5400	15.91227
Valid N (listwise)	100				

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Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TotalERQ	100	18.00	60.00	43.1200	9.66748
Valid N (listwise)	100				

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[1] Totalscore refers to Total LEC score

Responses to ERQ:

62% of participants alter their way of thinking when they want to feel more positive emotions which suggests a shared use of cognitive techniques to increase positive affect (ERQ1).

57% of participants are more inclined to keep their emotions to themselves signifying a preference for emotional suppression (ERQ2).

54% of participants alter their way of thinking when they want to feel less negative emotions (such as sadness or anger) indicating a noteworthy dependence on cognitive reappraisal to deal with stress (ERQ3).

64% of participants do not stop themselves from sharing positive emotions with others when they are feeling positive highlighting a sense of comfort in sharing positive emotional states with others (ERQ4).

56% of participants think differently when they are dealing with a stressful situation to remain calm (ERQ5).

46% of participants (nearly half of the participants) control their emotions by not expressing them indicating a substantial use of suppression (ERQ6).

57% of participants change the way they think about a situation when they want to feel more positive emotions (ERQ7).

55% of participants control their emotions by changing the way they think about the situation they are in (ERQ8).

50% of participants do not express their emotions when they are feeling negative emotions (ERQ9).

57% of participants change the way they think about a situation when they want to feel less negative emotions (ERQ10).

Approximately, 57% of participants use reappraisal techniques compared to 36.5% who suppress their emotions. Results are on average positively inclined towards CR than ES.

Exposure to traumatic events (LEC-5):

LEC1: 61% of participants have been exposed to natural disasters indicating a high exposure to natural disasters.

LEC2: 42% of participants have been in a situation involving a fire or explosion compared to 38% who witnessed it.

LEC3: 45% have been involved in transportation accidents, 24% who witnessed it ad 16% who learned about it reflecting significant traumatic experiences.

LEC4: 30% of participants have experienced a serious accident at work, home, or during recreational activity compared to 20% who witnessed it and 30% of participants who said the experience did not apply to them

LEC5: 48% of participants were not exposed to toxic substances like dangerous chemicals, or radiation compared to 15% who witnessed it, 13% are not sure and 12% learned about it

LEC6: 35% reported being physically assaulted 17% witnessed it and 37% said that the experience did not apply to them.

LEC7: 62% of participants were not assaulted with a weapon compared to 14% who learned about it, 10% who witnessed it, and 11% who were assaulted with a weapon.

LEC8: 57% of participants have not experienced sexual assault, 11% experienced sexual assault 17% who learned about it, and 11% who have been sexually assaulted.

Therefore, there are serious incidents that have affected a minority of the participants.

LEC9: 46% of participants were not subjected to unwanted or uncomfortable sexual experiences compared to 32% who experienced it

LEC10: there is limited exposure to combat or war with 46% of participants not exposed to a war zone nor were exposed to it, 16% reporting experiencing combat or war zone conditions, 20% who witnessed it, and 12% who learned about it.

LEC11: 72% of participants were not held captive compared to 13% who learned about it. With 6% experiencing captivity.

LEC12: 40% of participants did not experience a life-threatening illness or injury compared to 22% who experienced it and 22% who witnessed it

LEC13: 35% of participants reported severe human suffering as not applicable, compared to 25% who witnessed it, 13% who learned about it, 13% who were unsure, and 13% who experienced it

LEC14: 53% of participants reported sudden violent death compared to 20% who learned about it, and 12% who witnessed it.

LEC15: 35% of participants did not experience sudden accidental death, compared to 28% who witnessed it, 17% who learned about it, and 10% who experienced it.

LEC16: 72% of participants reported serious injury, harm, or death they caused to someone as not applicable.

LEC17: 48% of participants experienced a stressful event or experience, compared to 24% who reported that such a statement did not apply to them and 16% who were unsure.

PTSD symptoms (PCL-5):

PCL1: 78% of participants were bothered by repeated, disturbing, and unwanted memories of the stressful experience in the past month.

PCL2: 61% of participants were bothered by repeated, disturbing dreams of a stressful experience in the past month.

PCL3: 63% of participants experienced feelings evoked by past traumatic experiences in the past month.

PCL4: 84% of participants felt very upset when something reminded them of a stressful experience.

PCL5: 64% of participants had strong physical reactions when something reminded them of a stressful experience in the past month.

PCL6: 78% of participants avoided memories, thoughts, or feelings related to a stressful experience in the past month.

PCL7: 76% of participants avoided external reminders of a stressful experience like people, places, conversations, activities, objects, or situations in the past month.

PCL8: 62% of participants had trouble remembering important parts of a stressful experience in the past month.

PCL9: 75% of participants had strong negative beliefs about themselves, others, or the world.

PCL10: 72% of participants blamed themselves or someone else for a stressful experience or what happened after it in the past month.

PCL11: 80% of participants had strong negative feelings such as fear, horror, anger, guilt, or shame in the past month.

PCL12: 79% of participants lost interest in activities they previously enjoyed in the past month.

PCL13: 81% of participants felt distant or cut off from others in the past month.

PCL14: 69% of participants had trouble experiencing positive feelings like being unable to feel happiness or have affectionate feelings for people close to them in the past month.

PCL15: 71% of participants experienced irritable behavior, angry outbursts, or acted aggressively in the past month.

PCL16: 45% of participants took too many risks or engaged in things that would cause them harm in the past month.

PCL17: 77% of participants were super alert or watchful or on guard in the past month.

PCL18: 70% of participants felt jumpy or were easily startled in the past month.

PCL19: 84% of participants had difficulty concentrating in the past month.

PCL20: 74% of participants had trouble falling asleep or staying asleep in the past month.

In conclusion, the data reflects a population that engages in both adaptive and maladaptive emotion regulation techniques (reappraisal and suppression). Is it also important to note the prevalence of the participants' exposure to traumatic events and the significant psychological impacts that indicate the presence of PTSD symptoms.

Significance levels:

Most ANOVA results related to the ERQ strategies and traumatic experiences show non-significant results (p-value>0.05) indicating that there may not be a statistically significant effect of age and traumatic experiences on these responses.

However, some results suggest significant results indicating that some specific aspects of ER are significantly influenced by the predictors (age and traumatic experience): "When I am feeling positive emotions I am careful not to express them" (p=.009).

"When I am faced with a stressful situation I make myself think about it in a way that helps me stay calm" (p=.023).

ANOVA Effect Sizes[a,b]

| | | Point Estimate | 95% Confidence Interval | |
			Lower	Upper
1. ____ When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	Eta-squared	.002	.000	.000
	Epsilon-squared	-.040	-.042	-.042
	Omega-squared Fixed-effect	-.040	-.042	-.042
	Omega-squared Random-effect	-.010	-.010	-.010
2. ____ I keep my emotions to myself.	Eta-squared	.058	.000	.134
	Epsilon-squared	.019	-.042	.097
	Omega-squared Fixed-effect	.019	-.042	.096
	Omega-squared Random-effect	.005	-.010	.026
3. ____ When I want to feel less negative emotion (such as sadness or anger),	Eta-squared	.023	.000	.068
	Epsilon-squared	-.018	-.042	.029
	Omega-squared Fixed-effect	-.018	-.042	.029

I change what I'm thinking about.	Omega-squared Random-effect	-.004	-.010	.007
4. _____ When I am feeling positive emotions, I am careful not to express them.	Eta-squared	.026	.000	.074
	Epsilon-squared	-.015	-.042	.035
	Omega-squared Fixed-effect	-.015	-.042	.034
	Omega-squared Random-effect	-.004	-.010	<mark>.009</mark>
5. _____ When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	Eta-squared	.069	.000	.149
	Epsilon-squared	.030	-.042	.113
	Omega-squared Fixed-effect	.029	-.042	.112
	Omega-squared Random-effect	.007	-.010	.031
6. _____ I control my emotions by not expressing them.	Eta-squared	.022	.000	.066
	Epsilon-squared	-.019	-.042	.027
	Omega-squared Fixed-effect	-.019	-.042	.027
	Omega-squared Random-effect	-.005	-.010	.007
7. _____ When I want to feel more positive emotion, I change the way I'm thinking about the situation.	Eta-squared	.038	.000	.100
	Epsilon-squared	-.002	-.042	.062
	Omega-squared Fixed-effect	-.002	-.042	.061
	Omega-squared Random-effect	.000	-.010	.016
8. _____ I control my emotions by changing the way I think about the situation I'm in.	Eta-squared	.030	.000	.084
	Epsilon-squared	-.010	-.042	.045
	Omega-squared Fixed-effect	-.010	-.042	.045
	Omega-squared Random-effect	-.003	-.010	.012
9. _____ When I am feeling negative emotions, I make sure not to express them.	Eta-squared	.031	.000	.085
	Epsilon-squared	-.010	-.042	.047
	Omega-squared Fixed-effect	-.010	-.042	.046
	Omega-squared Random-effect	-.002	-.010	.012

10. _____ When I want to feel less negative emotion, I change the way I'm thinking about the situation.	Eta-squared	.039	.000	.101
	Epsilon-squared	-.001	-.042	.063
	Omega-squared Fixed-effect	-.001	-.042	.062
	Omega-squared Random-effect	.000	-.010	.016

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1. _____ When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	Between Groups	87.509	26	3.366	1.040	.432
	Within Groups	236.281	73	3.237		
	Total	323.790	99			
2. _____ I keep my emotions to myself.	Between Groups	84.614	26	3.254	1.138	.325
	Within Groups	208.776	73	2.860		
	Total	293.390	99			
3. _____ When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.	Between Groups	91.893	26	3.534	1.113	.351
	Within Groups	231.867	73	3.176		
	Total	323.760	99			
4. _____ When I am feeling positive emotions, I am careful not to express them.	Between Groups	127.170	26	4.891	2.054	.009
	Within Groups	173.830	73	2.381		
	Total	301.000	99			
5. _____ When I'm faced with a stressful	Between Groups	141.812	26	5.454	1.833	.023

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		Sum of Squares	df	Mean Square	F	Sig.
situation, I make myself think about it in a way that helps me stay calm.	Within Groups	217.178	73	2.975		
	Total	358.990	99			
6. ____ I control my emotions by not expressing them.	Between Groups	96.984	26	3.730	1.398	.134
	Within Groups	194.726	73	2.667		
	Total	291.710	99			
7. ____ When I want to feel more positive emotion, I change the way I'm thinking about the situation.	Between Groups	97.483	26	3.749	1.346	.162
	Within Groups	203.357	73	2.786		
	Total	300.840	99			
8. ____ I control my emotions by changing the way I think about the situation I'm in.	Between Groups	64.945	26	2.498	1.024	.450
	Within Groups	178.045	73	2.439		
	Total	242.990	99			
9. ____ When I am feeling negative emotions, I make sure not to express them.	Between Groups	82.104	26	3.158	.775	.764
	Within Groups	297.606	73	4.077		
	Total	379.710	99			
10. ____ When I want to feel less negative emotion, I change the way I'm thinking about the situation.	Between Groups	70.163	26	2.699	1.035	.437
	Within Groups	190.277	73	2.607		
	Total	260.440	99			

The majority of the ANOVA conducted yielded non-significant results suggesting that age and traumatic experiences do not have a strong predictive power on emotional awareness. The significant results in some areas such as shown in the tables might highlight a more crucial role between emotional awareness and the predictors.

Correlations findings:

i- Age and ERQ: Age demonstrates a significant positive correlation with the item "When I am feeling positive emotions, I am careful not to express them." (r = .328,

p < .001), a suppression item, suggesting that older adults may be more thoughtful about sharing their positive emotions. Other correlations with age are non-significant which indicates that age does not have a strong linear relationship with other emotion regulation strategies.

ii-   Emotion Regulation Strategies: Various emotion regulation techniques indicate significant correlations: "When I want to feel more positive emotion I change what I am thinking about" correlates strongly with "I control my emotions by changing the way I think about the situation I am in" (r = .482, p < .001) indicating that people who alter their way of thinking to feel more positive are more inclined to use similar strategies to control their emotions in general.

		Age	1. ___ When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	2. ___ I keep my emotions to myself.	3. ___ When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.	4. ___ When I am feeling positive emotions, I am careful not to express them.	5. ___ When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	6. ___ I control my emotions by not expressing them.	7. ___ When I want to feel more positive emotion, I change the way I'm thinking about the situation.	8. ___ I control my emotions by changing the way I think about the situation I'm in.	9. ___ When I am feeling negative emotions, I make sure not to express them.	10. ___ When I want to feel less negative emotion, I change the way I'm thinking about the situation.
Age	Pearson Correlation	1	.116	.093	.089	.328**	.156	.150	.134	.176	.142	.098
	Sig. (2-tailed)		.249	.356	.380	<.001	.122	.135	.183	.080	.158	.331
	N	100	100	100	100	100	100	100	100	100	100	100

1. ___ When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	Pearson Correlation	.116	1	.071	.412**	.009	.261**	.086	.433**	.482**	.335**	.442**
	Sig. (2-tailed)	.249		.482	<.001	.927	.009	.393	<.001	<.001	<.001	<.001
	N	100	100	100	100	100	100	100	100	100	100	100
2. ___ I keep my emotions to myself.	Pearson Correlation	.093	.071	1	.084	.125	-.043	.452**	-.004	.012	.528**	-.049
	Sig. (2-tailed)	.356	.482		.405	.216	.674	<.001	.967	.906	<.001	.630
	N	100	100	100	100	100	100	100	100	100	100	100
3. ___ When I want to feel less negative e	Pearson Correlation	.089	.412**	.084	1	-.129	.341**	-.090	.412**	.372**	.181	.486**
	Sig. (2-tailed)	.380	<.001	.405		.202	<.001	.374	<.001	<.001	.072	<.001

emotion (such as sadness or anger), I change what I'm thinking about.	N	100	100	100	100	100	100	100	100	100	100	100
4. ____ When I am feeling positive emotions, I am careful not to express them.	Pearson Correlation	.328**	.009	.125	-.129	1	-.085	.372**	-.041	.000	.223*	-.116
	Sig. (2-tailed)	<.001	.927	.216	.202		.401	<.001	.684	.997	.026	.252
	N	100	100	100	100	100	100	100	100	100	100	100
5. ____ When I'm faced with a stressful	Pearson Correlation	.156	.261**	-.043	.341**	-.085	1	.043	.674**	.552**	.127	.603**
	Sig. (2-tailed)	.122	.009	.674	<.001	.401		.674	<.001	<.001	.209	<.001

situation, I make myself think about it in a way that helps me stay calm.	N	100	100	100	100	100	100	100	100	100	100	100
6. ____ I control my emotions by not expressing them.	Pearson Correlation	.150	.086	.452**	-.090	.372**	.043	1	-.083	-.027	.525**	-.084
	Sig. (2-tailed)	.135	.393	<.001	.374	<.001	.674		.412	.789	<.001	.405
	N	100	100	100	100	100	100	100	100	100	100	100
7. ____ When I want to feel more positive emotion, I change the way I'm thinking about the situation.	Pearson Correlation	.134	.433**	-.004	.412**	-.041	.674**	-.083	1	.716**	.031	.652**
	Sig. (2-tailed)	.183	<.001	.967	<.001	.684	<.001	.412		<.001	.761	<.001
	N	100	100	100	100	100	100	100	100	100	100	100

8. ____ I control my emotions by changing the way I think about the situation I'm in.	Pearson Correlation	.176	.482**	.012	.372**	.000	.552**	-.027	.716**	1	.042	.649**
	Sig. (2-tailed)	.080	<.001	.906	<.001	.997	<.001	.789	<.001		.678	<.001
	N	100	100	100	100	100	100	100	100	100	100	100
9. ____ When I am feeling negative emotions, I make sure not to express them.	Pearson Correlation	.142	.335**	.528**	.181	.223*	.127	.525**	.031	.042	1	.130
	Sig. (2-tailed)	.158	<.001	<.001	.072	.026	.209	<.001	.761	.678		.198
	N	100	100	100	100	100	100	100	100	100	100	100
10. ____ When I want to feel less negativ	Pearson Correlation	.098	.442**	-.049	.486**	-.116	.603**	-.084	.652**	.649**	.130	1
	Sig. (2-tailed)	.331	<.001	.630	<.001	.252	<.001	.405	<.001	<.001	.198	

e emotio n, I change the way I'm thinkin g about the situatio n.	N	10 0	100	100	100	100	100	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Bivariate correlation findings:

I-   Correlations between PCL-5, ERQ, and LEC-5:

i-   Physical assault and PCL13 (numbing symptoms): a strong negative correlation of ($r = -.289$, $p = .004$), implying that instances of physical assault are significantly associated with greater levels of numbing symptoms, which are important aspects of PTSD and emotional awareness.

ii-   Exposure to toxic substances and ERQ3 (Suppression item): Significant positive correlation ($r = .269$, $p = .007$), signifying that exposure to toxic substances is related to an increased use of emotion suppression technique.

iii-   Natural disaster and PCL13: There is a significant negative correlation ($r = -.216$, $p = .031$), showing that experiences of natural disasters are related to increased numbing symptoms.

The results from this correlation analysis support the hypothesis that traumatic experience would be a better predictor of emotional awareness than age. Physical assault and exposure to toxic substances (traumatic experiences) indicate significant relationships with major PTSD symptoms and emotion regulation strategies, highlighting their impact on emotional awareness.

Correlations

		ERQ1	ERQ3	ERQ2	ERQ4	PCL1	PCL6	PCL13	PCL17	1. Natural disaster (for example, flood, hurricane, tornado, earthquake)	4. Serious accident at work, home, or during recreational activity	5. Exposure to toxic substance (for example, dangerous chemicals, radiation)	6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)
ERQ1	Pearson Correlation	1	.412**	.071	.009	.160	.156	-.004	.081	-.055	.032	.095	.005
	Sig. (2-tailed)		<.001	.482	.927	.112	.122	.967	.425	.588	.752	.347	.963
	N	100	100	100	100	100	100	100	100	100	100	100	100
ERQ3	Pearson Correlation	.412**	1	.084	-.129	-.031	-.016	.040	-.077	-.028	.072	.269**	.047
	Sig. (2-tailed)	<.001		.405	.202	.758	.874	.693	.445	.780	.479	.007	.642
	N	100	100	100	100	100	100	100	100	100	100	100	100
ERQ2	Pearson Correlation	.071	.084	1	.125	-.011	.063	.183	.064	.125	-.034	.082	.164

	Sig. (2-tailed)	.482	.405		.216	.917	.533	.068	.524	.215	.734	.419	.104
	N	100	100	100	100	100	100	100	100	100	100	100	100
ERQ4	Pearson Correlation	.009	-.129	.125	1	.143	.098	.050	.281**	.038	.000	-.132	-.125
	Sig. (2-tailed)	.927	.202	.216		.156	.331	.621	.005	.709	.998	.189	.215
	N	100	100	100	100	100	100	100	100	100	100	100	100
PCL1	Pearson Correlation	.160	-.031	-.011	.143	1	.712**	.479**	.288**	-.122	.081	-.102	-.111
	Sig. (2-tailed)	.112	.758	.917	.156		<.001	<.001	.004	.226	.423	.311	.271
	N	100	100	100	100	100	100	100	100	100	100	100	100
PCL6	Pearson Correlation	.156	-.016	.063	.098	.712**	1	.487**	.440**	-.079	.058	-.071	-.087
	Sig. (2-tailed)	.122	.874	.533	.331	<.001		<.001	<.001	.434	.565	.486	.390
	N	100	100	100	100	100	100	100	100	100	100	100	100
PCL13	Pearson Correlation	-.004	.040	.183	.050	.479**	.487**	1	.422**	-.216*	.015	-.057	-.289**
	Sig. (2-tailed)	.967	.693	.068	.621	<.001	<.001		<.001	.031	.882	.576	.004

	N	100	100	100	100	100	100	100	100	100	100	100	100
PCL17	Pearson Correlation	.081	-.077	.064	.281**	.288**	.440**	.422**	1	-.095	.016	-.075	-.234*
	Sig. (2-tailed)	.425	.445	.524	.005	.004	<.001	<.001		.345	.872	.459	.019
	N	100	100	100	100	100	100	100	100	100	100	100	100
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)	Pearson Correlation	-.055	-.028	.125	.038	-.122	-.079	-.216*	.095	1	.064	.184	.236*
	Sig. (2-tailed)	.588	.780	.215	.709	.226	.434	.031	.345		.529	.066	.018
	N	100	100	100	100	100	100	100	100	100	100	100	100
4. Serious accident at work, home, or during recreational activity	Pearson Correlation	.032	.072	-.034	.000	.081	.058	.015	.016	.064	1	.374**	.168
	Sig. (2-tailed)	.752	.479	.734	.998	.423	.565	.882	.872	.529		<.001	.096
	N	100	100	100	100	100	100	100	100	100	100	100	100
5. Exposure to toxic	Pearson Correlation	.095	.269**	.082	-.132	-.102	-.071	.057	.075	.184	.374**	1	.213*

substance (for example, dangerous chemicals, radiation)	Sig. (2-tailed)	.347	.007	.419	.189	.311	.486	.576	.459	.066	<.001		.033
	N	100	100	100	100	100	100	100	100	100	100	100	100
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)	Pearson Correlation	.005	.047	.164	-.125	-.111	-.087	-.289**	-.234*	.236*	.168	.213*	1
	Sig. (2-tailed)	.963	.642	.104	.215	.271	.390	.004	.019	.018	.096	.033	
	N	100	100	100	100	100	100	100	100	100	100	100	100

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

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

Regression Analysis:

The regression model with age, total LEC score, and total PCL score as predictors explains 19.1% of the variance in total ERQ score ($R^2 = .191$), stating a modest effect size.

ANOVA: the regression model is statistically significant ($F_{(3, 96)} = 7.564$, $p < .001$), implying that the model significantly predicts the emotion regulation scores.

Coefficients: age indicates a positive significant relationship with Total ERQ ($\beta = .312$, $p = .001$), signifying that older adults reported greater emotion regulation scores.

The total LEC score indicates a positive significant relationship ($\beta = .280$, $p = .003$) indicating that higher LEC scores are related to higher scores on the emotion regulation scale.

The total PCL score indicates a positive significant relationship (β = .243, p = .011), implying that greater PTSD symptoms are related to greater emotion regulation scores.

The regression analysis offers proof that age and total PCL score are significant predictors of emotion regulation as measured by the total ERQ score. The PTSD symptoms (PCL scale) reveal a significant predictive relationship supporting the assumption that traumatic experience would be a better predictor of emotional awareness. Nonetheless, age also seems to be a notable predictor having a higher standardized coefficient than the total PCL score indicating its impact is somewhat stronger in predicting emotion regulation.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Age , Totalscore, TotalPCL[b]	.	Enter

a. Dependent Variable: TotalERQ
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.437[a]	.191	.166	8.82914

a. Predictors: (Constant), Age , Totalscore, TotalPCL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1769.012	3	589.671	7.564	<.001[b]
	Residual	7483.548	96	77.954		
	Total	9252.560	99			

a. Dependent Variable: TotalERQ
b. Predictors: (Constant), Age , Totalscore, TotalPCL

Discussion:

The current study aimed to inspect the predictive relationship of traumatic experience and age on emotional awareness, measured by the emotion regulation scale ERQ, LEC-5, and PCL-5. The findings propose that traumatic experience significantly predicts emotional awareness, possibly more so than age.

The regression analysis reveals significant coefficients for age-predicting emotional awareness (ERQ scores) and trauma ratings (PCL and LEC total scores). While age and trauma scores are both significant predictors, the standardized coefficients (beta values) indicate that age has a somewhat higher beta value than trauma ratings. This suggests that for this research study, age may have a better predictive power for emotional awareness suggesting controversial findings. While Charles and Carstensen (2010) suggested that better emotion regulation is acquired with age as older individuals tend to focus less on negative aspects of situations and tend to focus more on their goals, the sample in this study has a higher percentage of younger participants (18-24). As previously mentioned, younger people tend to be more negative in the way they handle social situations. Additionally, emotional awareness specifically expressive suppression strategy was substantially predicted by trauma scores as shown by PCL measurements. This infers that individuals who have experienced more intense trauma might be more inclined to employ emotional suppression strategies. These findings are in line with Khan et al. (2021). In the regression model, age did show up as a significant predictor; however, its influence was not as strong compared to traumatic experiences. Age and emotional regulation techniques often had lower correlation coefficients, indicating a weaker relationship.

Further information is provided via the correlation matrices. Significant positive associations have been noted between emotional suppression and trauma-related symptoms (PCL scores), highlighting that a higher trauma score has been linked to a propensity for emotional suppression which supports the hypothesis that traumatic experiences would influence emotional awareness. Age and emotional regulation techniques show weaker associations signifying that age might have a weaker impact than traumatic experience. Moreover, the correlation analyses revealed a high positive association between emotional suppression measures and trauma-related symptoms. This pattern emphasizes how traumatic experiences affect the techniques individuals use to control their emotions—highlighting that traumatic experiences may directly impact the emergence of maladaptive emotion regulation strategies. This goes in line with Post et al. (2012) findings suggesting that negative affect predicted both the intensity of PTSD symptoms and the use of maladaptive techniques.

The ANOVA results highlight significant differences in emotional awareness based on various emotion regulation techniques (items 1 and 3 from the cognitive reappraisal subscale, items 2 and 4 from the expressive suppression subscale). However, they do not directly evaluate the effects of age and traumatic experiences. These findings are not as indicative of age or trauma, but rather of individual differences in emotion regulation techniques.

The results show significant therapeutic ramifications. Targeted therapeutic interventions can be developed with the understanding that traumatic experiences might have a major impact on emotion regulation techniques. For example, therapy could be tailored to focus on specific

emotional regulation issues related to trauma, like suppression. This would improve the efficacy of psychological interventions for trauma survivors.

This research provides valuable insight; however, there are several drawbacks to take into consideration. The cross-sectional design restricts the capacity to determine causal relationships. More decisive evidence regarding the effects of age and traumatic experiences might be better understood if longitudinal studies were conducted. The life events checklist LEC-5, was used in this study which involves one limitation in the interpretation and data collection. The study only considered participants' first answer without taking into account varying levels of trauma. This approach might fail to take into account the complex traumatic experiences that individuals may have experienced like exposure to the same traumatic event more than once and in different ways, which can have different effects. Consequently, this can cause the prevalence and effects of the participants' trauma exposure to be underestimated. It also makes it more challenging to investigate in detail the potential effects on psychological outcomes of varying exposure levels to the same traumatic experience. A more comprehensive analysis of all recorded incidents of each kind of traumatic incident would be beneficial for future research, yielding a more detailed evaluation of trauma and its impacts on emotional awareness and other psychological factors.

Additionally, self-report measures are prone to recall bias and social approval bias. It is also possible that there might be some gender and cultural differences that might be related to different emotion regulation techniques. Eldesouky et al. (2023) reported that positive affect expression is less central when considering collectivistic cultures such as East Asians (English & John, 2013) which also applies to other collectivistic cultures such as Arabs (Buda & ElSayed-Eldesouky,1998; Dwairy et al.,2006) highlighting that positive affect may not be crucial. Therefore, this difference in handling emotions impacted by culture should be taken into account when conducting future studies. Additionally, the participants' age range mainly consisted of youth which might be considered a limitation given that there was not enough variety of age groups and that the sample was small.

Conclusion:

This study concludes that traumatic experiences are a strong predictor of emotional awareness, specifically when it comes to how people control their emotions and repress them. While some findings suggest that age has an impact, it is not as strong as it potentially could be. With suggested clinical implications and future studies, these findings highlight the need for a more detailed knowledge of how various life experiences contribute to emotional regulation strategies.

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NOTICE OF IRB APPROVAL – EXEMPT STATUS

To:	Ms. Dany Hasbany Dr. Pia Tohme Assistant Professor School of Arts and Sciences

> **APPROVAL ISSUED:** 22 March 2024
> **EXPIRATION DATE:** 22 March 2026
> **REVIEW TYPE:** EXEMPT CATEGORY B

Date: March 22, 2024

RE: **IRB #:** *LAU.SAS.PT16.22/Mar/2024*
Protocol Title: *Is Emotional Awareness Influenced by Age or Trauma. A Correlational Study*

The above referenced research project has been approved by the Lebanese American University, Institutional Review Board (LAU IRB). This approval is limited to the activities described in the Approved Research Protocol and all submitted documents listed on page 2 of this letter. **Final reviewed consent documents or recruitment materials and data collection tools released with this notice are part of this determination and must be used in this research project.**

APPROVAL CONDITIONS FOR ALL LAU APPROVED HUMAN RESEARCH PROTOCOLS

LAU RESEARCH POLICIES & PROCEDURES: All individuals engaged in the research project must adhere to the approved protocol and all applicable LAU IRB Research Policies & Procedures. PARTICIPANTS must NOT be involved in any research related activity prior to IRB approval date or after the expiration date.

PROTOCOL EXPIRATION: The LAU IRB approval expiry date is listed above. The IRB Office will send an email at least 45 days prior to protocol approval expiry - Request for Continuing Review - in order to avoid any temporary hold on the initial protocol approval. It is your responsibility to apply for continuing review and receive continuing approval for the duration of the research project. Failure to send Request for Continuation before the expiry date will result in suspension of the approval of this research project on the expiration date.

MODIFICATIONS AND AMENDMENTS: All protocol modifications must be approved by the IRB prior to implementation.

NOTIFICATION OF PROJECT COMPLETION: A notification of research project closure and a summary of findings must be sent to the IRB office upon completion. Study files must be retained for a period of 3 years from the date of notification of project completion.

IN THE EVENT OF NON-COMPLIANCE WITH ABOVE CONDITIONS, THE PRINCIPAL INVESTIGATOR SHOULD MEET WITH THE IRB ADMINISTRATORS IN ORDER TO RESOLVE SUCH CONDITIONS. IRB APPROVAL CANNOT BE GRANTED UNTIL NON-COMPLIANT ISSUES HAVE BEEN RESOLVED.

If you have any questions concerning this information, please contact the IRB office by email at irb@lau.edu.lb

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The IRB operates in compliance with the national regulations pertaining to research under the Lebanese Minister of Public Health's Decision No.141 dated 27/1/2016 under LAU IRB Authorization reference 2016/3708, the international guidelines for Good Clinical Practice, the US Office of Human Research Protection (45CFR46) and the Food and Drug Administration (21CFR56). LAU IRB U.S. Identifier as an international institution: FWA00014723 and IRB Registration # IRB00006954 LAUIRB#1

Dr. Joseph Stephan
Chair, Institutional Review Board

DOCUMENTS SUBMITTED:

LAU IRB Protocol Exempt Application	Received 15 March 2024
Research Protocol	Received 15 March 2024
Informed Consent	Received 15 March 2024
Questionnaire	Received 15 March 2024
Link to online survey	Received 15 March 2024
CITI Training – Pia Tohme	Cert.# 50286050 Dated (15 September 2022)
CITI Training – Dany Hasbany	Cert.# 60854627 Dated (28 January 2024)

Institutional Review Board
Lebanese American University

22 MAR 2024

APPROVED