

Symptoms of Moral Injury from a Psychological Perspective: A Systematic Review

Psikoloji Perspektifinden Ahlaki Yaralanmanın Görünür Yüzü: Sistematik Bir Derleme

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ABSTRACT

Moral injury is a condition associated with severe negative outcomes such as self-harm, suicide attempts, post-traumatic stress disorder (PTSD), substance abuse, and depression. Although research on moral injury has increased in recent years, studies in the Turkish literature remain limited, and no systematic review on this topic has been identified. This gap leads to insufficient recognition of moral injury in clinical settings, often resulting in its confusion with PTSD, which can complicate treatment processes for affected individuals. This systematic review aims to clarify the manifestations and symptoms of moral injury. A comprehensive search was conducted in Web of Science, Science Direct, and Taylor & Francis databases using relevant keywords, focusing on English-language studies. Peer-reviewed articles addressing moral injury symptoms, available as open or early access, were included, while books, theses, reviews, case reports, conference papers, and non-English publications were excluded. The 59 included studies revealed that moral injury impacts not only psychological but also emotional, cognitive, behavioral, social, spiritual, and physical domains. These effects were categorized and analyzed. The studies primarily focused on various occupational groups, particularly veterans, and offer significant recommendations for mental health professionals to develop holistic treatment plans. It is emphasized that researchers should conduct culturally sensitive studies, develop culturally appropriate scales to measure moral injury, and explore how it is understood and manifested. The predominance of studies on specific groups highlights the need for public health research on diverse populations.

Keywords: Moral injury, symptoms, systematic review

ÖZ

Ahlaki yaralanma, kendine zarar verme, intihar girişimleri, travma sonrası stres bozukluğu (TSSB), alkol-madde bağımlılığı ve depresyon gibi ciddi olumsuz sonuçlara yol açan bir durumdur. Son yıllarda bu konuda uluslararası araştırmalar artsa da, Türkçe literatürde ahlaki yaralanmaya ilişkin çalışmaların sınırlı olduğu ve sistematik bir derlemenin bulunmadığı gözlenmiştir. Bu eksiklik, klinik ortamda ahlaki yaralanmanın yeterince tanınmamasına ve sıklıkla TSSB ile karıştırılmasına neden olmakta, bu da etkilenen bireylerin tedavisinde zorluklara yol açmaktadır. Bu sistematik derleme, ahlaki yaralanmanın belirtilerini ve görünümünü netleştirerek bireylerin yaşadığı etkileri ortaya koymayı amaçlamaktadır. Web of Science, Science Direct ve Taylor & Francis veri tabanlarında İngilizce yayınlar, ilgili anahtar kelimelerle taranmış; hakemli dergilerde yayımlanan, ahlaki yaralanma belirtilerini ele alan açık ve erken erişim makaleler dahil edilmiş, kitap, tez, derleme, olgu sunumu, bildiri ve İngilizce dışındaki yayınlar ise hariç tutulmuştur. Derlemeye dahil edilen 59 makale, ahlaki yaralanmanın yalnızca psikolojik değil, duygusal, bilişsel, davranışsal, sosyal, manevi ve fiziksel alanlarda da etkilere yol açtığını göstermiştir. Bu etkiler, kategorize edilerek incelenmiştir. Çalışmalar, özellikle gaziler gibi farklı meslek gruplarında yapılmış olup, ruh sağlığı uzmanlarına bütüncül tedavi planları geliştirme konusunda önemli öneriler sunmaktadır. Araştırmacıların kültüre duyarlı çalışmalar yapması, ahlaki yaralanmayı ölçen ölçekler geliştirmesi ve farklı gruplarda halk sağlığına yönelik araştırmalar yürütmesi gerektiği vurgulanmıştır.

Anahtar sözcükler: Ahlaki yaralanma, ahlaki yaralanma belirtileri, sistematik derleme

Introduction

Although moral injury is a relatively new concept in psychology, it arises from the violation of moral and ethical values that have been consistently upheld throughout human history. The roots of this concept can be traced back to Ancient Greece (Koenig and Zaben 2021). In the psychology literature, Shay's (1991) study is often cited as a key reference for the origins of moral injury. Later, with the contributions of Litz et al. (2009), moral injury began to receive significantly more attention in the clinical and academic psychology communities. Over the past decade, it has been recognized as a distinct issue, separate from trauma and other psychiatric

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conditions, leading to an increase in research on this topic (Bryan et al. 2018, McEwen et al. 2021). While moral injury has been studied across various disciplines, ranging from psychology to philosophy (Sherman 2014, Frankfurt and Frazier 2016), there is no consensus on its definition (Griffin et al. 2019). Generally, moral injury is conceptualized as long-term emotional, psychological, behavioral, spiritual, and social distress accompanied by a decrease in functionality when an individual is exposed to, witnesses, or is unable to prevent traumatic events that violate their moral values and beliefs, or when they are betrayed by someone they trust (Litz et al. 2009, Purcell et al. 2018, Griffin et al. 2019). These events are referred to as potential moral injury events (Dursun and Watkins 2018).

In recent years, studies on moral injury have increased (Kvitsiani et al. 2023). These studies have been conducted across various occupational groups, particularly military personnel and veterans (Sullivan and Starnino 2019, Pernicano et al. 2022, Biscoe et al. 2023, Denham et al. 2023). However, Currier et al. (2021) and Williamson et al. (2021a) emphasized that moral injury should be examined in non-military populations and that it is necessary to approach moral injury from a broader public health perspective.

Experiencing an event that contradicts one's moral values often leads to significant psychological and emotional challenges for the individual. Individuals who experience moral injury frequently report a loss of joy, hope, and overall joy of living. Furthermore, individuals who experience moral injury suffer from various psychological problems. This raises the question of whether the absence of moral injury indicates a morally healthy individual. The answer is no. Experiencing moral injury suggests that a person has strong values and deeply held beliefs that are challenged. Individuals who are strongly attached to their values may carry the burden of this wound. Therefore, in some cases, moral injury can be a driving force for personal growth and moral development (Fenton and Kelly 2020). In contrast, research indicates that individuals who experience moral injury often suffer from a significantly higher incidence of Post-Traumatic Stress Disorder (PTSD), depression, self-harming behaviors, and suicidal ideation (Bryan et al. 2014, Purcell et al. 2018, Koenig and Zaben 2021).

Studies have shown that different brain regions are more active in individuals who have experienced moral injury than in those who have experienced trauma (Barnes et al. 2019). Unlike PTSD, moral injury is primarily associated with feelings of shame and guilt rather than fear and anxiety. However, moral injury is often confused with PTSD. The limited number of studies on moral injury in the Turkish literature and the lack of systematic reviews on the subject may contribute to this confusion being overlooked in clinical practice. Accurately identifying the nature of an individual's distress is crucial for effective treatment. Therefore, this systematic review aimed to explore how moral injury is experienced, what its symptoms are, and to address the gap in the Turkish literature regarding its recognition and treatment by mental health professionals.

Method

The main purpose of this study was to address how moral injury appears and its symptoms. In this context, this systematic review was prepared following the PRISMA criteria (Page et al. 2021). Studies using qualitative and mixed methods were included in the review.

Search Strategy

The Web of Science, Science Direct, and Taylor & Francis databases were used in the current review. The keywords for searching in the aforementioned databases were determined as "moral injury symptoms" OR "morally injurious."

Selection of Studies

The inclusion criteria for the systematic review were as follows: (a) being in English, (b) being published in peer-reviewed journals, (c) containing symptoms of moral injury, (d) open access, and (e) publications with early access. At the beginning of the screening process, books/book chapters, theses, compilations/systematic reviews, case reports, reports, and publications in languages other than English were excluded. The current lack of studies in Turkey exploring moral injury symptoms made it possible to exclude Turkish publications from the reviewed articles. Since the main objective of this study was to examine studies that explore moral injury symptoms, it was deemed necessary to include studies that used qualitative methods.

Based on the keywords and criteria, 441 sources were identified. After excluding duplicate publications, the remaining 382 studies were screened separately by a single researcher. The identified studies were reviewed

and discussed with a second researcher, and a consensus was reached regarding the remaining sources. The process of selecting studies is shown in the PRISMA flowchart (Figure 1).

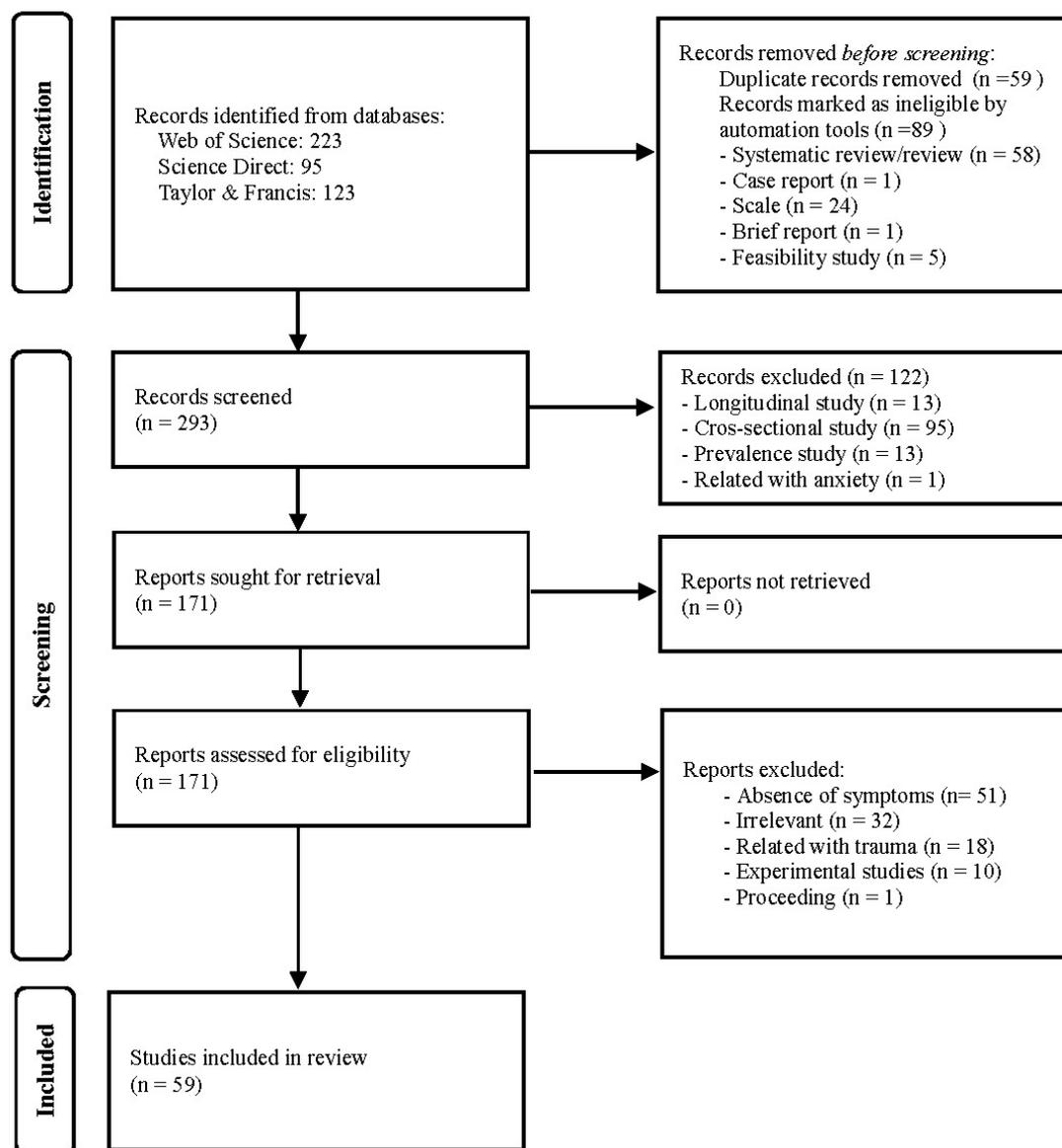


Figure 1. PRISMA flowchart for moral injury symptoms

Results

Following the screening process, 59 studies were included in this review (Figure 1). The names of the authors, publication dates, sample information, and signs of moral injury in the included studies are presented (Table 1). The results obtained were classified by the researchers and collected under seven headings (Table 2), as follows:

Sample and Study Group Characteristics:

An analysis of 59 studies published between 2014 and 2024 that met the inclusion criteria revealed that research was conducted across diverse occupational groups and samples. Twenty-eight studies were on veterans, 12 on healthcare professionals, 6 on civilians, 4 on military personnel, 2 on refugees, 2 on public safety personnel, 1 on foster families, 1 on priest, 1 on individuals in terrorist organizations, 1 on personnel working in foster families, and 1 on veterinarians.

| Table 1. Summary of moral injury symptom findings across included studies (N = 59) | | | |
|---|-------------------------------|-------------------------|--|
| Number | Authors | Sample | Symptoms |
| 1 | Held et al. 2019 | Veteran | Guilt, shame, regret, disgust, social isolation, self-hatred, defining oneself as a monster, rumination, thinking that one will be judged by society, conflict in religious and spiritual beliefs, alcohol use |
| 2 | Ricciardelli et al. 2022 | Healthcare professional | Guilt, regret, distress, suicidal thoughts, anxiety, discomfort, insomnia |
| 3 | Nielsen et al. 2024 | Workers | Guilt, powerlessness, anger, rumination, depression, catastrophizing, insomnia, social isolation, deterioration in social relationships, physical difficulties (worsening of illnesses), decrease in work performance |
| 4 | Rodrigues et al. 2023 | Public safety personnel | Anger, disappointment, deterioration in social relationships, social isolation, change in self-perception (negative evaluations of one's humanity) |
| 5 | Haight et al. 2017b | Foster families | Persistent feelings of guilt, shame and anger, loss of trust in people |
| 6 | Skelton et al. 2023 | Healthcare professional | Burnout, psychological difficulty |
| 7 | Sullivan and Starnino 2019 | Veteran | Disruption of belief in the world, loss of meaning, search for meaning, a spiritual or existential crisis for those who are spiritually oriented, negative changes in spiritual beliefs and practices, guilt and shame, loss of trust in people, search for forgiveness of oneself and others, loneliness and withdrawal, anger |
| 8 | Borges 2019 | Military personnel | Detachment from spiritual values, feelings such as fear, disgust, terror, feeling weak, lack of self-care, turning away from things that will be good for oneself |
| 9 | Pernicano et al. 2022 | Veteran | Negative evaluation of oneself and/or others, detachment from oneself, people and a divine power, unresolved grief, guilt, loss of hope, meaning or purpose, shame, pain, anger |
| 10 | Zefferman and Mathew 2020 | Military personnel | Guilt |
| 11 | McGuire et al. 2019 | Veteran | Loss of trust in people, belief that people are evil, belief that there is no good in the world, decrease in positive emotions, emotional numbness, avoidance and isolation, decrease in social adaptation |
| 12 | Sherman and Klinenberg 2024 | Healthcare professional | Stress, helplessness, anger, guilt, shame, burnout, quitting or changing jobs |
| 13 | de la Rie et al. 2021 | Veteran | Guilt, shame, sleep problems, anxiety, sadness, alienation from family, nightmares, flashbacks, change in worldview, loss of trust in people, negative perspective on the world and humanity |
| 14 | Williamson et al. 2021b | Veteran | Emotional numbness, excessive rumination, low mood and pervasive negative evaluations of themselves (e.g., I am a terrible person) and others (e.g., other people are untrustworthy, the world is a terrible place), feelings of guilt, shame and worthlessness, poor self-care, risk-taking and self-harming behaviors |
| 15 | Kvitsiani et al. 2023 | Civilians | Emotion (anger, shame, guilt, loneliness, helplessness, injustice) Emotional reaction (crying, sleep problems, aggression) Stress, depression, anxiety Change (change in one's perspective on oneself, the world, others) |
| 16 | Denham et al. 2023 | Healthcare professional | Sadness, anger, difficulty in carrying out daily tasks (work-personal life-physical health), feelings of guilt and shame, self-condemnation, anger and regret, feeling unworthy of praise, feeling like they have lost part of their identity, feeling like they have lost their humanity, questioning who they are, worthlessness, not being able to keep their job |
| 17 | Biscoe et al. 2023 | Veteran | Anger issues, post-traumatic stress disorder, sleep problems, loneliness and problematic alcohol use, shame |
| 18 | Williamson et al. 2023b | Veteran | Deep shame, guilt, disgust, worthlessness, fear of being judged by people, distancing from loved ones (social isolation), substance abuse, risk-taking behavior, aggression, substance abuse at home and at work, gambling, increased risk-taking behaviors including dangerous driving and physical or verbal aggression, self-hatred, feeling like their life is no longer important, irritability |
| 19 | Mosca and Kruger 2023 | Healthcare professional | Pain, sadness, regret and anger, burnout |
| 20 | Suitt 2021 | Veteran | Angry, guilt, feeling like they are a bad person, feeling tainted, feeling like they are a terrible person, rumination, change in spirituality and beliefs, feeling like they have lost part of their humanity, exhibiting self-destructive behaviors, identity crisis, moral breakdown, a break in the understanding of divine relationship |
| 21 | Brémault-Phillips et al. 2022 | Veteran | Insomnia, depression and anxiety, strong anger and inability to forgive, unforgiveness of God, self-loathing, disgust, existential pain, suicidal ideation |

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|---|-----------------------------|--------------------------------------|---|
| Number | Authors | Sample | Symptoms |
| 22 | Van Minnen et al. 2022 | Civilians | Negative moral cognitions and emotions such as guilt, shame and self-blame, inability to forgive oneself, quitting one's job, anger and outbursts, negative cognitions about oneself, sleep problems and feeling dirty |
| 23 | Walser et al. 2024 | Veteran | Feeling worse, worthless, guilty, inferior, dirty and shameful, anger, disgust, inability to forgive |
| 24 | Straud et al. 2022 | Veteran | Feelings of guilt, shame and regret, as well as negative beliefs about oneself ("I am a bad person") and inability to forgive oneself ("I do not deserve to be happy"), avoiding meaningful activities |
| 25 | Hegarty et al. 2022 | Healthcare professional | Frustration, distrust of people, guilt, pain, anger towards people, alcohol use (maladaptive coping strategies), sleep disorders, burnout |
| 26 | Smigelsky et al. 2022 | Veteran | Guilt, belief that life is meaningless, substance use, shame, seeing oneself as subhuman (e.g. monster) |
| 27 | Wirpsa et al. 2023 | Priest | Insomnia, anxiety |
| 28 | Smith-MacDonald et al. 2021 | Public safety personnel | Frustration, helplessness, hopelessness, exhaustion, anger, resentment, hostility, anxiety, altered perceptions of the world and others ("the world is a shitty place", "people are terrible"), a sense of meaninglessness of one's work |
| 29 | Elbasheir et al. 2024 | Civilians | Anger, existential crisis, disgust, feelings of guilt and shame, social isolation, negative effects on mood or cognition, avoidance of stimuli associated with the morally damaging experience |
| 30 | Reynolds et al. 2022 | Healthcare professional | 1) Cognitive (loss of control, overwhelm, perception of self as a "failure", rumination, loss of respect or faith in colleagues and authorities) 2) Emotional (guilt, shame, anger, rage, sadness, hopelessness, anxiety, loneliness, grief, numbness); 3) Physiological (nausea, increased heart rate, agitation/tension, tingling sensation, sleep disturbance) |
| 31 | Evans et al. 2021 | Military personnel | Guilt, shame, disgust and anger, moral impurity, self-condemnation, avoidance, seeing oneself as a monster |
| 32 | Jin et al. 2022 | Civilians | Feelings of guilt, shame and anger |
| 33 | McGowan 2022 | Terrorist | Deep sadness, guilt, shame and anger, self-disgust, hatred and shame, negative self-evaluation, nightmares, depression, psychological distress, intrusive thoughts, pain, sleep problems, hopelessness, exhaustion, loss of confidence, suicidal ideation, disappointment |
| 34 | Hodgson et al. 2021 | Veteran | Moral collapse, self-hatred, anger, shame, anxiety, self-disgust, dehumanization, loss of faith (spirituality), inability to forgive oneself, suicidal ideation, self-sabotage (thinking one needs to be punished), being harsh on oneself, feeling undeserving of happiness |
| 35 | Hodgson et al. 2022 | Veteran | Regret, anger, rumination, guilt |
| 36 | Kopacz et al. 2015 | Veteran | Deep sadness, guilt, desire for forgiveness, suicidal ideation, questioning the purpose of life, struggling with a sense of humanity, difficulty adjusting to home life, social isolation, difficulty forgiving oneself, internal disharmony and conflict |
| 37 | Haight et al. 2020 | Civilians | Intense sadness, anger, feelings of spiritual or existential crisis, loss of divine presence in a person, destruction of existence, estrangement of the soul and disintegration of the mind/soul/body triad, decrease in the joy of living, suicide |
| 38 | Haight et al. 2017a | Personnel working in foster families | Anger, disappointment, betrayal, sadness, grief, pain, existential questioning, questioning the existence of goodness in the world, defining the world as scary, job change |
| 39 | Haight et al. 2022 | Civilians | Anger, shame, guilt and betrayal, feelings of vulnerability, confusion and worthlessness, long-term relationship problems, deterioration of mental health and substance abuse disorders |
| 40 | Williamson et al. 2019 | Veteran | Emotional numbness, suicidal thoughts, self-harm, excessive rumination and self-harm (e.g. self-loathing, shame, and guilt over the event) and negative evaluations of others (e.g., other people are untrustworthy), worthlessness, poor self-care, engaging in risky behaviors or neglecting oneself (e.g., poor hygiene and wearing inappropriate clothing) |
| 41 | LaFrance et al. 2020 | Veteran | Guilt and depressive symptoms |
| 42 | Passardi et al. 2022 | Refugees | Regret, sadness, wishing to die, loss of trust in people, negative view of the world and oneself, loss of identity (who am I), loss of health, hopelessness, physical ailments (skin diseases, kidney and bladder stones, various chronic diseases, unnatural hair loss, ear and eye problems, physical ailments such as Alzheimer's disease), mental disorders (fear, depression, emotional numbness, sleep problems, obsessive-compulsive behaviors, irritability), guilt, self-harm, suicide, dehumanization, fear |
| 43 | Song et al. 2021 | Healthcare professional | Social isolation, loneliness, guilt, emotional dullness |

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|---|-----------------------------|---|--|
| Number | Authors | Sample | Symptoms |
| 44 | Carter 2021 | Military personnel and healthcare professionals | Altered moods and negative beliefs about oneself, others, or the world that lead to blaming oneself or others |
| 45 | Houle et al. 2021 | Military personnel and veteran | Pessimism/disappointment, moral rigidity, moral confusion, increased sensitivity to moral situations, loss of trust in others and oneself, deterioration in interpersonal relationships, identity dissonance, devaluation of identity, deterioration in spirituality, rumination, internalization and externalization of behaviors and emotions [guilt-shame-anxiety (internalization) and anger (externalization)] |
| 46 | Zerach et al. 2021 | Veteran | Psychological, social and spiritual problems, guilt, inability to forgive oneself, isolating oneself from forgiving supports such as interpersonal relationships and religious/spiritual communities, hopelessness, self-punishment, distancing from possible family and other support sources and refusal to heal |
| 47 | Borges et al. 2023 | Veteran | Identity change, alcohol and marijuana use, loss of moral values and beliefs, perceiving oneself as less of a person, negative perceptions of oneself (e.g. I am a poop in a sack), belief that their actions pollute their identity and sense of social belonging, dullness of emotion-robotization |
| 48 | Yeterian et al. 2017 | Veteran | Grief, guilt, difficulty forgiving, condemnation of others and oneself |
| 49 | Eikenaar 2022 | Healthcare professional | Guilt, rumination, shame, identity loss confusion (questioning myself, am I this person?), existential crisis |
| 50 | Beck 2022 | Healthcare professional | Moral anxiety, guilt, self-condemnation |
| 51 | Schorr et al. 2018 | Veteran | Guilt, shame, dulled emotion, feeling permanently changed, sleep problems, helplessness, anger, loss of confidence, loss of respect for people |
| 52 | Worthen and Ahern 2014 | Veteran | Anger, social isolation, avoidance of social interaction, alcohol use, seeing oneself as different from other people, feeling unworthy of goodness and beauty, shame, withdrawal |
| 53 | Mooren et al. 2022 | Refugees | Guilt, shame and sadness, as well as feeling powerless, regret |
| 54 | Williamson et al. 2020 | Veteran | Changes in their evaluations of themselves, others and the world more generally, pervasive concerns that the world they live in is extremely dangerous, deep concerns that other people may be a possible threat, difficulty in social relationships or distrust of others, often beliefs that the world is a bad, corrupt place, hopelessness and loss of faith in humanity, often a persistent belief that they are bad, weak or cowardly as a person, deep shame, emotional reactions such as disgust and guilt, anger, damage to social relationships, self-hatred, poor self-care and also risk taking behaviors (eg. driving while intoxicated, speeding), substance use to ward off or temporarily suppress these feelings (e.g. alcohol, illicit drug use), poor self-care and risk-taking behaviors |
| 55 | Holtz et al. 2023 | Healthcare professional | Loss of identity, worthlessness-burnout, numb, lack of compassion, anxiety, fear, hopelessness, loss of purpose |
| 56 | Molendijk 2018 | Veteran | Blame others or self, remorse, anger, aggression, distrust of people, thinking people are insincere and malicious, engaging in habits that make one feel guilty and ashamed, confusion |
| 57 | Held et al. 2018 | Veteran | Rumination, guilt, shame, negative beliefs about oneself (e.g., thinking one is a monster), social isolation (people would loathe me if they knew), frequent job changes, marijuana use, quickly entering into romantic relationships and then treating partners so poorly that they leave on bad terms (poor occupational and social functioning), self-hatred, self-directed guilt, shame, anger, sadness |
| 58 | Williamson et al. 2023a | Veterinarians | Loss of self-confidence, self-blame, shame, anger, feeling permanently changed, describing themselves as more anxious, less trusting of others, and also undesirable, difficulty with self-care, often finding it difficult to exercise (or over-exercising) and drinking alcohol to drown out difficult feelings |
| 59 | Smith-MacDonald et al. 2020 | Veteran | Erosion of sense of self and identity, uncertainty of identity, deep sadness, hatred, anger, pain, loss of trust in people, self-judgment, fear of being judged by society, guilt, social isolation and family conflict, loss of sense of meaning and purpose, feeling alone, unwanted, ostracized, deep hopelessness or helplessness, a desire to disconnect from all connections and destroy oneself (substance use, engaging in aggressive or risky behavior, destroying relationships, behaviors such as homelessness and suicide, an inner acceptance) |

Symptoms Related to Moral Injury

The review's included studies identified that people reported symptoms across seven categories: emotional, cognitive, behavioral, social, spiritual, psychological, and physical.

| Emotional | Cognitive | Behavioral | Social | Spiritual | Psychological | Physical |
|---------------------------------|---------------------------------|--|---------------------------------------|---|---|--|
| Guilt | Change in self | Angry outbursts | Social isolation | Existential pain/crisis | Psychological distress | Sleep problems |
| Shame | Change in people | Rumination | Deterioration of social relationships | Disconnection from a divine power | Loneliness | Health problems |
| Regret/Remorse | Change in world | Loss of functionality | Feeling unwanted | Conflict in religious beliefs | Psychological difficulty (Depression, anxiety etc.) | Difficulty exercising or over-exercising |
| Helplessness | Confusion | Self-harming/sabotage/risk-taking behaviors | Exclusion | Identity crisis | Suicidal thoughts | |
| Disgust | Loss of control | Quitting/not keeping up with work-Job change | Disconnection from all connections | Disconnection from spiritual beliefs and values | Stress | |
| Anger/Rage/Hate | Catastrophizing | Aggression | | Loss of meaning and purpose | Decreased joy of life | |
| Pain/Grief | Condemnation of others and self | Lack of self-care | | Search for meaning | Loss of hope/Hopelessness | |
| Deep/Intense Sadness | | Avoidance of stimuli related to the experience | | Disintegration of the mind/soul/body triad | Nightmares and flashbacks | |
| Exhaustion/Weary | | | | | Seeking to forgive oneself/others | |
| Emotional Dullness/Robotization | | | | | Desire to be forgiven | |
| Disappointment | | | | | Inability to forgive oneself, people, creator | |
| Fear | | | | | | |
| Discomfort | | | | | | |

Emotional Symptoms

A review of the screening results reveals that guilt and shame are the most prevalent moral injury symptoms across numerous studies. Individuals experience profound distress when they commit wrongdoings or fail to act righteously, leading to feelings of guilt, shame, regret, and remorse. These symptoms are often accompanied by self-disgust and revulsion towards the situation and their actions. Some people also develop self-directed hatred and anger alongside these emotions. Furthermore, witnessing events that contradict their moral values or experiencing betrayal by a trusted superior can evoke feelings of disappointment, anger, rage, and hatred in these individuals. While some may suffer from burnout, others reportedly become emotionally detached and desensitized following these experiences.

Cognitive Symptoms

Research suggests that people who undergo potential moral injury experience cognitive alterations. Such individuals may face disruptions in their worldview and value systems, leading to substantial shifts in their cognitive frameworks. In the aftermath of a morally injurious event, affected persons often develop negative perceptions about themselves, others, and the world around them.

Individuals experience a decline in self-esteem, feeling worthless and perceiving themselves as inadequate, unsuccessful, cowardly, and inferior. They view themselves as tainted, unclean, and even inhuman (e.g., monstrous). Self-judgment leads them to believe their lives lack importance, resulting in self-cruelty and a sense that they deserve punishment. They feel permanently altered, distinct from others, and harbor negative beliefs about their humanity (e.g., believing others would be repulsed if they knew, considering themselves terrible, undeserving of praise, happiness, goodness, or beauty). There may be a tendency to assign blame to themselves or others for past mistakes or experiences.

An incident can cause significant negative shifts in a person's perceptions of others. This includes a loss of trust, respect, and faith in people, along with the development of negative beliefs about others (e.g., viewing people as untrustworthy, frightening, insincere, malicious, evil, and lacking empathy). They may fear societal judgment, perceive others as potential threats, and lose faith in humanity overall. A person's worldview can undergo substantial changes following a moral injury. Their beliefs about the world may become overwhelmingly negative (e.g., seeing the world as a terrible, corrupt, and frightening place). They might conclude that no good exists in the world and develop widespread concerns about its extreme dangers.

Behavioral Symptoms:

A review of scanned studies indicates that individuals often experience outbursts of anger following periods of intense sadness and pain. Their lives are significantly impacted by deep contemplation and persistent preoccupation with the event. Observations include job resignations, inability to continue working, loss of job meaning, and career changes. Believing they deserve punishment, some individuals engage in self-destructive behaviors. These behaviors encompass problematic alcohol and substance use, suicide attempts, avoidance of meaningful activities, actions inducing guilt and embarrassment, shunning beneficial experiences, and resistance to healing. Additionally, some neglect personal care, manifesting in poor hygiene and inappropriate attire. Amid these responses, certain individuals have attempted to manage their pain by steering clear of stimuli that evoke memories of the event.

Social Symptoms

People who experience shame and guilt over their actions may perceive themselves as social outcasts, believing they are unwelcome in society. These feelings can lead such individuals to withdraw from social interactions and become more introverted, preferring a solitary lifestyle. The emotional distress they endure may manifest in their interpersonal relationships, potentially causing harm to their connections with family members, friends, and romantic partners.

Spiritual Symptoms

When individuals act contrary to their beliefs or witness events that challenge their values, it can lead to a disruption in their spiritual convictions. Some people have reported questioning the existence of a creator and losing their sense of life's purpose. This can trigger an identity crisis, with individuals wondering about their true nature. Others have expressed feeling that their actions have tainted their identity. These experiences may result in a disconnection from a higher power.

Psychological Symptoms

People who struggle to cope with their experiences often face psychological challenges. Alongside feelings of isolation, some individuals exhibit symptoms of depression, anxiety, post-traumatic stress disorder, and obsessive-compulsive behaviors. The burden of these experiences and a perceived lack of meaning in life have led some to contemplate suicide. Those who have lost their enthusiasm and excitement for life often experience a diminished zest for living. It has been noted that these individuals have become hopeless and lost faith in the future. Some seek forgiveness from others for their mistakes, while others attempt to forgive themselves or others. Recurring nightmares and persistent flashbacks related to the incident have also been reported by some individuals.

Physical Symptoms

Research has shown that individuals experiencing moral injury often suffer from a significant decline in their physical well-being. These people may be at risk of losing their health due to a wide range of symptoms. These include dermatological issues, urinary tract stones, various long-term illnesses, excessive hair shedding, auditory and visual problems, Alzheimer's disease, nausea, elevated heart rate, anxiety or tension, and tingling sensations, all of which can cause physical strain. Additionally, studies have revealed that many of these individuals struggle with sleep disorders.

Discussion

This systematic review sought to uncover the symptoms of moral injury. Three databases were analyzed, resulting in the inclusion of 59 articles that met the review criteria of this study. Individuals who experienced potential moral injury events were found to experience challenges across the emotional, cognitive, behavioral, social, spiritual, psychological, and physical domains. These results indicate that moral injury extends beyond psychological difficulties and impacts various aspects of a person's life. Furthermore, the findings suggest that moral injury affects individuals' health and functionality, necessitating a broader, multidimensional evaluation approach. Despite the studies in this review covering different occupational groups, it is notable that the majority focused on veterans. Consequently, there is a perceived need for further research on moral injury in the context of public health, encompassing diverse occupational and other groups (Currier et al. 2021, Williamson et al. 2021a).

The systematic review revealed that individuals experiencing moral injury face emotional difficulties. Numerous studies have identified guilt, shame, and regret as the most prevalent emotional symptoms (Held et al. 2019, Ricciardelli et al. 2022, Nielsen et al. 2024). It is not uncommon for someone who acts against their values or commits a wrongdoing to experience guilt, shame, regret, and remorse following the incident. For instance, a war veteran in one study expressed intense guilt and shame over killing innocent children during the war. The veteran's belief that he had violated fundamental human values led to emotional distress (LaFrance et al. 2020). Additionally, emotions such as self-blame, anger, resentment, and disgust are frequently observed following traumatic events experienced by individuals (Kvitsiani et al. 2023, Skelton et al. 2023). In a separate study involving public safety personnel, a participant expressed frustration with the system's fairness due to resource allocation issues. They described a situation where healthcare workers had to leave an elderly person on the floor for an extended period because of more pressing emergencies (Smith-MacDonald et al. 2021). Another study during the Covid era revealed that healthcare workers faced significant challenges due to high patient volumes, insufficient resources (such as protective equipment), and lack of institutional backing. Despite being hailed as heroes by the public, the extreme uncertainty, inadequate healthcare resources, and institutional neglect during the pandemic triggered feelings of guilt and shame, leading to a sense of inadequacy and burnout (Sherman and Klinenberg 2024). Making errors or failing to take appropriate action can cause individuals to become self-angry, engage in self-blame, and dwell on the incident. Frequent rumination often results in sleep disturbances (MacNeil et al. 2017). Beyond sleep issues, some participants experienced physical health deterioration after moral injury. In a study involving immigrants, one participant described the hardships they endured during detention and the moral injury resulting from mistreatment. They reported being healthy prior to the mistreatment but subsequently developed various physical ailments, including skin conditions, kidney and bladder stones, chronic diseases, hair loss, ear and eye problems, and Alzheimer's disease (Passardi et al. 2022). Research has shown that individuals experiencing moral injury also undergo cognitive changes, affecting their beliefs about themselves, others, and the world. These alterations can be explained by cognitive dissonance theory, which describes the internal unease that occurs when a person's beliefs and actions are inconsistent. This contradiction or incompatibility creates mental stress (Festinger 1962). After experiencing moral injury, a person who previously considered themselves good may struggle with the fact that they did something wrong, potentially thinking, "I am a bad person, I do not deserve happiness" (Straud et al. 2022). Following a violation, people may develop pessimistic views about the world and others. They might start believing that "There is no good in the world, the world is a terrible place and people are untrustworthy" (Williamson et al. 2021b). To address the resulting inconsistency or contradiction, individuals can employ three strategies: altering behaviors or cognitions, forming new thoughts that align with the behavior, or diminishing the significance of the inconsistency (Festinger and Carlsmith 1959). This process may lead to the adoption of new beliefs and thoughts, often accompanied by feelings of guilt. Concurrently, individuals might exhibit behaviors that correspond to their newly formed beliefs. They may engage in self-punishment, driven by the notion that they are inherently bad and undeserving of positive experiences (Zerach et al. 2021). This can manifest as withdrawal from enjoyable activities, neglect of self-care, and a desire to leave their jobs (Borges 2019, Denham et al. 2023). As individuals distance themselves from pleasurable pursuits, they may become increasingly isolated, leading to weakened social connections. It is not uncommon for someone grappling with guilt or betrayal by a trusted individual to retreat from social interactions.

Rigid reactions to moral injury often lead to unsuccessful attempts to manage or deal with distress. These attempts result in social, psychological, and spiritual anguish. This suffering causes individuals to dwell on narratives about moral injury instead of pursuing their values. An assessment of this situation reveals that

these people become detached from their principles and lose connection with their spirituality (Borges 2019). Straying from one's values can prompt self-questioning and a loss of purpose and self-identity (Ostermann et al. 2017). In a veteran-focused study, one participant who had experienced moral injury described feeling pain and losing their moral compass due to wartime actions against others. Another participant reported losing their original identity and developing a new one, which they compared to Frankenstein's monster, characterized by marijuana use and alcohol consumption (Borges et al. 2023). As individuals continue living in ways that diverge from their pre-incident values, their mental state deteriorates (Korkmaz and Dilmaç 2021). Recognizing one's values and aligning one's life with them contributes positively to mental well-being (Şimşir and Dilmaç 2018, Bojanowska and Piotrowski 2021). Feelings of guilt and shame, combined with experienced pain and a more negative perception of the world, oneself, and others, adversely affect a person's psychological state. Research indicates that individuals experiencing moral injury often suffer from depression, anxiety, and PTSD (Biscoe et al. 2023, Kvitsiani et al. 2023). Studies on this topic also show that these individuals are prone to suicidal behavior (Brémault-Phillips et al. 2022, McGowan 2022).

Conclusion

Research on moral injury has primarily focused on veterans, employing quantitative, qualitative, and mixed methodologies. This review excluded quantitative studies as they did not aim to uncover moral injury symptoms. The existing studies have examined veterans, soldiers, healthcare workers, and government employees. However, there is a need to investigate moral injury in the general population, considering its social dimension. The reviewed studies indicate that individuals experiencing potential moral injury face challenges in emotional, cognitive, behavioral, social, spiritual, psychological, and physical domains. Given this wide-ranging impact, mental health professionals should adopt a comprehensive approach to treatment, addressing all these aspects. The complexity of moral injury necessitates multidisciplinary strategies.

Future research should concentrate on developing treatment methods for moral injury symptoms and exploring mechanisms to mitigate its negative consequences. Creating intervention programs is crucial, and integrating treatment-oriented approaches with public health perspectives could effectively address moral injury, prevent it in at-risk individuals, and promote psychosocial-moral development.

Cultural context is vital in studying moral injury events and symptoms. As moral injury is linked to values, which vary across cultures, future studies should examine it within specific cultural frameworks. The complexity of moral injury requires a more comprehensive and contextualized approach, particularly when studying populations from different cultural backgrounds. Developing a Turkey-specific moral injury scale is recommended, given the scarcity of such tools in the country.

Mental health professionals must be knowledgeable about moral injury to avoid misdiagnosing it as trauma or other psychiatric conditions. The similarity between moral injury and PTSD symptoms underscores the importance of accurate differentiation for proper treatment planning. Careful evaluation of moral injury is crucial for safeguarding individuals' mental health and preventing suicide attempts.

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