Behind the Scenes: Affiliate Stigma and Posttraumatic Distress Among Mothers of Children with Neuropsychiatric Disorders

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Abstract

Mothers of children with neuropsychiatric disorders, such as autism and mental health disorders, are at risk for posttraumatic stress symptoms (PTSS) due to exposure to trauma related to their children's upbringing. Additionally, research suggests that these mothers may develop affiliate stigma, meaning they internalize the stigmatization associated with their children, which may further heighten their vulnerability to trauma. However, this supposition has not yet been tested. Bridging this knowledge gap, this cross-sectional study explored the role of affiliate stigma in the relationship between the number of traumatic events and PTSS in mothers of children with autism and mental health disorders. An online survey was conducted among Israeli mothers using self-report measures. The sample consisted of 1,448 mothers: 208 mothers of children with autism or mental health disorders, and 1,240 mothers of children without disabilities. Results indicated that mothers of children with autism or mental health disorders were exposed to a greater number of traumatic events and exhibited elevated PTSS compared to mothers of children without disabilities. Affiliate stigma was associated with PTSS and moderated the relationship between the number of traumatic events and intrusion and hyperarousal symptoms: although the number of traumatic events explained increased intrusion and hyperarousal symptoms, this effect was stronger under conditions of high affiliate stigma. The present results suggest that mothers of children with neuropsychiatric disorders who internalize stigmatization regarding their children may be particularly vulnerable to posttraumatic distress. Therefore, clinical interventions targeting affiliate stigma may be imperative for this population.

Keywords: affiliate stigma; PTSD symptoms; mothers of children with neuropsychiatric disorders; autism; mental health disorders

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Mothers of children with disabilities face a considerable caregiving burden that involves providing physical care, maintaining constant supervision, and heightened vigilance to potential risks. This burden often does not diminish as the child grows older (McCann et al., 2012). It may be particularly prominent in mothers of children with mental health disorders and autism--two neuropsychiatric disorders characterized by dysfunctions in prefrontal neural systems, which often disrupt thinking, emotional regulation, mood, behavior, and overall functioning (Vinogradov et al., 2011).

In Israel, mothers are often viewed as the primary caregivers, a role deeply rooted in cultural expectations and gender norms (Kestler-Peleg, 2023). As a result, the caregiving burden of raising a child with a disability may be particularly pronounced for these mothers, potentially increasing their emotional and psychological strain. This study focuses on Israeli mothers raising children with autism or mental health disorders, aiming to gain a deeper understanding of their unique experiences and challenges within this specific sociocultural context.

The repercussions of this caregiving burden are extensive and negatively affect various aspects of mothers' lives. These include work and finances (Mandic et al., 2017), family life (e.g., Craig et al., 2016; Estes et al., 2009), physical health (e.g., Lovell, 2021), and mental health (e.g., Lach et al., 2009; Picardi et al., 2018). Previous studies have documented elevated psychological distress and psychopathology among mothers of children with mental health disorders or autism, including high rates of anxiety and depression (e.g., Middeldorp et al., 2016; Schnabel et al., 2019; Stricher-Stern et al., 2025; Tan & Rey, 2005).

Furthermore, evidence suggests that parents of children with disabilities may be at risk for posttraumatic distress, manifested in posttraumatic stress symptoms (PTSS). Posttraumatic stress symptoms consist of four clusters related to the traumatic event (American Psychiatric Association, [APA], 2013). The intrusion symptoms cluster signifies an individual's experience of past trauma as reoccurring in the present, and including intrusive memories, nightmares, and flashbacks. The avoidance symptoms cluster reflects efforts to avoid trauma-related thoughts, or external reminders, such as people, conversations, activities, or situations reminiscent of the past trauma. The negative alterations in cognitions and mood cluster is characterized by negative beliefs about oneself, others, or the world, along with persistent negative emotions (e.g., guilt, shame). Lastly, the alterations in arousal and reactivity cluster encompasses symptoms such as irritability, angry outbursts, and hypervigilance.

Although research on PTSS among mothers of children with mental health disorders or autism has been limited, findings indicate elevated levels of PTSS in this population. A recent systematic review of seven studies involving 1,717 participants found that 24% of parents of children with autism exhibited PTSS (Hinde et al., 2025). Additionally, a study conducted among parents of children with intellectual and developmental disorders, including autism and ADHD, found that 60.3% of parents reported PTSS exceeding the clinical cutoff (Xiong, McGrath, Stewart, et al., 2022). Furthermore, a study comparing parents of children with autism to parents of typically developing children revealed a higher prevalence of PTSS among the former, with approximately 18.6% of parents of children with autism meeting the criteria for posttraumatic stress disorder (Stewart et al., 2020).

Given that PTSS, by definition, follows trauma exposure (APA, 2013), one may wonder whether the elevated PTSS in this population could be explained, at least partially, by exposure to a greater number of traumatic events related to the upbringing of a child with a

disability, such as witnessing a severe accident or serious self-harming behavior of the child (Xiong, McGrath, Yakovenko, et al., 2022). Two recent studies have explored this subject (Xiong, McGrath, Stewart, et al., 2022; Xiong, McGrath, Yakovenko, et al., 2022). These studies, conducted among parents of children with intellectual and developmental disorders, utilized the Parenting Trauma Checklist (PTC), a new self-report questionnaire that assesses traumatic events related to children's upbringing (Xiong, McGrath, Yakovenko, et al., 2022). The results of these studies have provided support for the psychometric properties of the PTC and revealed relations between the number of traumatic events related to children's upbringing and PTSS among parents (Xiong, McGrath, Stewart, et al., 2022; Xiong, McGrath, Yakovenko, et al., 2022).

Although these studies substantially advanced our understanding of trauma-related distress among parents with disabilities and included mothers of children with autism or ADHD, they suffered from two main limitations. First, they did not include mothers of children with other types of mental health disorders or a control group. Moreover, these studies did not explore potential moderators in the associations between the number of traumatic events and PTSS among parents (Xiong, McGrath, Stewart, et al., 2022; Xiong, McGrath, Yakovenko, et al., 2022). Thus, it remains unclear whether the elevated PTSS in mothers of children with neuropsychiatric disorders, compared to mothers of children without disabilities, could be explained by a greater number of traumatic events related to the child's upbringing. Additionally, it is uncertain whether the link between the number of traumatic events and PTSS in mothers of children with neuropsychiatric disorders may be shaped by other factors that reflect the unique challenges of raising children with disabilities.

One such factor appears to be affiliate stigma. Stigma denotes the societal treatment of a social group based on stereotypes and perceived characteristics, often rooted in ignorance, prejudice, and discrimination (Alshaigi et al., 2020). In the case of

neuropsychiatric disorders, social stigma perpetuates negative and alienating stereotypes, leading to harmful labeling, social isolation, and the exclusion of affected individuals (Pescosolido et al., 2007). Furthermore, the stigma may not be limited to the targeted group; it may also extend to parents (Corrigan & Miller, 2004), resulting in the phenomenon of affiliate stigma.

Affiliate stigma refers to the internalization of stigma among associates of targeted individuals. In mothers of children with neuropsychiatric disorders, affiliate stigma manifests as a condition in which these mothers adopt the stigma associated with their children and perceive themselves through the lens of their children's disorders (Mak & Cheung, 2008). Research has documented high levels of affiliate stigma in the parents of children with mental health disorders (e.g., Drent et al., 2022) and those with autism (e.g., Zhou et al., 2018).

Affiliate stigma in mothers of children with neuropsychiatric disorders appears to be another source of strain that intensifies their psychological distress. The internalization of stigma may lead to low self-esteem, negative perceptions of parenting abilities, social isolation, and feelings of shame and guilt (Corrigan & Watson, 2002). Research on parents of children with mental health disorders or autism has documented a link between affiliate stigma and elevated levels of depression and psychological distress (e.g., Shi et al., 2019; Zhou et al., 2018).

Therefore, one may wonder whether affiliate stigma is linked to PTSS in this population. Specifically, mothers of children with neuropsychiatric disorders who experience traumatic events and adopt negative views about their children and themselves may suffer from higher levels of posttraumatic distress. Furthermore, the adverse effects of affiliate stigma might intensify mothers' vulnerability when exposed to a greater number of traumatic events and moderate its relationship with PTSS. To the best of our knowledge, no study has

yet investigated the relationships between affiliate stigma and PTSS, nor the role of affiliate stigma in the relationship between the number of traumatic events and PTSS in mothers of children with neuropsychiatric disorders.

The current study aimed to bridge this knowledge gap. It was conducted among mothers of children with autism or mental health disorders, and mothers of children without disabilities. Based on the aforementioned literature the following hypotheses were explored: 1) Mothers of children with autism or mental health disorders would report a greater number of traumatic events related to their upbringing of their children than mothers of children without disabilities; 2) Mothers of children with autism or mental health disorders would have elevated PTSS compared to mothers of children without disabilities; 3) Affiliate stigma would be related to PTSS levels in mothers of children with autism or mental health disorders; and 4) Affiliate stigma would moderate the relationship between the number of traumatic events and PTSS in mothers of children with autism or mental health disorders.

Method

Participants and procedure. An online survey was conducted among a convenience sample of Israeli parents. The survey was accessible through Qualtrics, a secure web-based data collection system. It took an average of 35 minutes to complete and was open from May 17, 2023 to September 1, 2023. Participation was anonymous, and no data were collected that linked participants to recruitment sources. The Tel Aviv University review board (IRB) approved all procedures and instruments. Clicking on the survey link guided potential respondents to a page containing information about the study's purpose, the nature of the questions, and a consent form stating that participation was voluntary, respondents could withdraw at any time, and their responses would remain anonymous. The first page also

included contact information for the researchers, as well as for several organizations in Israel that provide support and treatment for parents of children with disabilities.

A total of 1,900 mothers responded to some of the survey's questionnaires, with 1,448 providing data regarding the study variables, constituting the present sample. Among them, 71 reported having a child with autism, 137 reported having a child with a mental health disorder, and 1,240 reported that none of their children had a disability. Participants' ages ranged from 20 to 80 (M = 41.09, SD = 8.56). Most had a bachelor's or master's degree (75.4%), were employed (76.7%), and had below-average to average incomes (61.9%). The majority had 1 to 3 children (89.6%) and were married (75.1%).

Measures

Background characteristics. Participants completed a brief demographic questionnaire that assessed age, education, income, religiosity, sexual orientation, and relationship status.

Affiliate stigma. Affiliate stigma was assessed using the Hebrew version (Werner & Shulman, 2013) of Mak and Cheung's (2008) scale. This version consists of 19 of the original 22 items. Items were adapted to reflect mothers' internalization of stigma concerning their child with a disability. Each item was rated on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. A total score was calculated by determining the mean of the items. Internal consistency for the original scale (Mak & Cheung, 2008) as well as for the Hebrew version (Werner & Shulman, 2013) was high (.94, .93, respectively). Internal consistency in this study was excellent (.93).

Number of traumatic events. The number of traumatic events experienced by participants while caring for their children was assessed using the Parenting Trauma Checklist (PTC; Xiong, McGrath, Yakovenko, et al., 2022). This scale aligns with the definition of "traumatic events" as per *DSM-5* Criterion A and consists of 17 items (e.g., "Witnessing a life-threatening situation involving your child," "Fearing that your child would die while waiting

for care," and "A situation in which your child threatened the health or life of you or someone else").

In the present study, a Hebrew version of the PTC was utilized. The original inventory (Xiong, McGrath, Yakovenko, et al., 2022) was translated into Hebrew by two independent translators. These translations were discussed, differences were resolved by consensus, and a final version was created, which was then back-translated into English. After comparing the back-translation to the original, several minor revisions were made. Additionally, for the purpose of the current study, two items related to physical or sexual abuse of the child by other children or authority figures (e.g., kindergarden teacher, school teachers) were added. Participants were asked to indicate whether they had experienced each event (yes = 1, no = 0), with the total number of traumatic events ranging from 0 to 19. The PTC demonstrated good construct validity (Xiong, McGrath, Yakovenko, et al., 2022).

Posttraumatic stress symptoms. PTSS were measured using the PCL-5 (Weathers et al., 2013). This 20-item self-report measure asks participants to indicate the extent to which they experienced each symptom in the past month, using a five-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). The original version was adapted so that the index event(s) pertained to trauma related to their children's upbringing.

Items correspond to PTSD symptom criteria in the Diagnostic and Statistical Manual of Mental Disorders (5th ed., DSM–5; APA, 2013). Research suggests that a cut-off score of 33 is a useful threshold for indicating clinical symptomatology (Bovin et al., 2016). The PCL-5 demonstrates high internal consistency and test-retest reliability (Bovin et al., 2016). In this study, the internal consistency reliability was.89, .82, .89, and .86 for intrusion, avoidance, negative alterations in mood and cognition, and hyperarousal symptoms, respectively.

Covariates. Given that age and education are known to be associated with PTSS, these variables were treated as covariates in the analyses.

Analytic Strategy

Analyses were performed using SPSS version 29. No missing data were present. To explore the number of traumatic events and PTSS as a function of study group, one-way analyses of variance and multivariate analysis of variance (ANOVA and MANOVA) were conducted. These analyses compared mothers of children with autism, mothers of children with mental health disorders, and control mothers regarding the number of traumatic events and PTSS. To investigate the relationship between affiliate stigma and PTSS among mothers of children with autism and those with mental health disorders, Pearson correlation analyses were performed on the variables. Finally, to examine the moderating role of affiliate stigma in the relationship between the number of traumatic events and PTSS in mothers of children with autism or mental health disorders, four moderation analyses were conducted using the PROCESS computational macro (Model 1) developed by Hayes (2012). Age and years of education were included as covariates.

Results

Number of Traumatic Events and PTSS as a Function of Study Group

As shown in Table 1, significant differences in the number of traumatic events and PTSS were found among the groups. Mothers of children with mental health disorders reported the highest number of traumatic events, followed by mothers of children with autism and the control group, respectively. Additionally, mothers of children with mental health disorders and mothers of children with autism exhibited elevated levels of intrusion, avoidance, hyperarousal, negative alterations in mood and cognition, as well as a higher total PTSS score compared to the control group.

It should be noted that the partial eta squared (η^2) values ranged from 0.04 to 0.15, indicating effect sizes from small to large based on Cohen's (1988) conventional thresholds. Specifically, two effects fell within the small-to-medium range ($\eta^2 = 0.04$ and 0.06), two were in the medium-to-large range ($\eta^2 = 0.08$ and 0.09), and one exceeded the threshold for a large effect ($\eta^2 = 0.15$). These values suggest that while some group differences explain a modest proportion of variance, others represent substantial and practically meaningful differences in the outcomes.

Associations Between Affiliate Stigma and PTSS in Mothers of Children with Neuropsychiatric Diseases

As shown in Table 2, the Pearson correlations between affiliate stigma and PTSS were significant, ranging from $r = .15$ to $r = .33$. According to Cohen's (1988) guidelines, these correlations reflect small to moderate effect sizes, indicating meaningful associations between the variables. Higher scores in affiliate stigma corresponded to increased levels of intrusion, avoidance, hyperarousal, and negative alterations in mood and cognition, as well as a higher total PTSS score.

The Moderating Role of Affiliate Stigma in the Relationship Between Number of Traumatic Events and PTSS

The four moderation analyses were significant and explained 26% of the variance in intrusion symptoms, 14% in avoidance symptoms, 29% in hyperarousal symptoms, and 25% in negative alterations in mood and cognitions (see Table 3). The models revealed significant effects of the number of traumatic events on all four PTSS clusters, as well as significant effects of affiliate stigma on negative alteration in mood and cognitions and hyperarousal symptoms.

More importantly, the results indicated that affiliate stigma had a significant effect in moderating the relationship between the number of traumatic events and intrusion and hyperarousal symptoms. These significant interactions were probed using the PROCESS (Model 1) computational macro (Hayes, 2012) by computing their conditional effects at 1 SD below and 1 SD above the mean of the moderator, that is, affiliate stigma. Probing these interactions revealed a similar trend, as depicted in Figures 1 and 2: although number of traumatic events had a positive effect in explaining elevated intrusion and hyperarousal symptoms, this effect was stronger under conditions of high levels of affiliate stigma ($\beta = .49$, $p=.00$; $\beta = .46$, $p=.00$, respectively) compared to conditions of low levels of affiliate stigma ($\beta = .26$, $p=.002$; $\beta = .25$, $p=.005$, respectively).

Discussion

This study revealed for the first time the link between traumatic events related to children's upbringing, PTSS, and affiliate stigma in mothers of children with neuropsychiatric disorders. The findings indicated that mothers of children with autism and mental health disorders experienced a greater number of traumatic events and exhibited elevated PTSS, compared to mothers of children without disabilities. Furthermore, analyses conducted among mothers of children with autism and mental health disorders uncovered the relationship between affiliate stigma and PTSS, highlighting the moderating role of affiliate stigma in the relationship between the number of traumatic events and intrusion and hyperarousal symptoms.

Our results indicated differences in the number of traumatic events related to the upbringing of the child among the three groups of mothers. Specifically, we found that mothers of children with mental health disorders reported the highest number of traumatic events, followed by mothers of children with autism and then the control group. These findings support the view that being a parent of a child with a disability may involve more

frequent exposure to traumatic events specifically connected to the rearing of that child (Xiong, McGrath, Yakovenko, et al., 2022). Mothers of children with neuropsychiatric disorders often face challenging behaviors from their children (Jang et al., 2011), such as aggressive acts and self-harm (Swaab et al., 2021), suicidal behavior (Mayes et al., 2013), and running away (Lang et al., 2010), which may involve or result in actual or threatened death, serious injury, or sexual violence, thus constituting trauma exposure (APA, 2013). Additionally, evidence indicates a high risk of physical and sexual violence perpetrated by other caregivers and peers against children with disabilities (e.g., Jones et al., 2012). This suggests another possible cause for the increased number of traumatic events that mothers of children with neuropsychiatric disorders may experience.

Yet, our findings regarding the differences between mothers of children with autism and mothers of children with mental health disorders in the number of traumatic events, suggest that, although both groups often face traumatic events related to their children's upbringing, the latter experiences more frequent exposure. This difference between the groups may be rooted in the timing of the children's diagnosis. While autism is usually diagnosed in childhood (Pierce et al., 2019), mental health disorders typically arise and are diagnosed during adolescence (Kieling et al., 2024). Therefore, mothers of children with autism have more time to seek support, receive counseling, and acquire tools to protect their children from violent acts perpetrated by others and to manage some of their children's behaviors that may lead to trauma exposure. In contrast, mothers of children with mental health disorders may be less capable of doing so, resulting in greater exposure to traumatic events related to their children's upbringing.

Our results indicated that mothers of children with autism or mental health disorders had elevated PTSS compared to controls. Although these findings are consistent with previous studies that found higher rates of PTSS among caregiver families compared to the

general population (e.g., Hinde et al., 2025), they are nevertheless innovative, as they uncover mothers' post-traumatic distress related to specific traumatic events associated with their children's upbringing.

The current findings also suggest that affiliate stigma may contribute to PTSS in this population. We found that affiliate stigma among mothers of children with autism or mental health disorders was related to elevated post-traumatic stress symptomatology. Additionally, affiliate stigma moderated the relationships between the number of traumatic events and symptoms of intrusion and hyperarousal. This moderating effect remained significant even after accounting for age and education.

Research thus far has highlighted the profound negative effects of affiliate stigma. Previous studies have shown that parents of children with disabilities who experience high levels of affiliate stigma exhibit increased burden, depression, and distress (Shi et al., 2019). Our findings reveal that affiliate stigma is also associated with heightened distress following trauma exposure, manifested through symptoms of intrusion, avoidance, hyperarousal, and negative alternations in mood and cognition. Two main, not mutually exclusive, explanations may be suggested for these findings.

According to the first explanation, the relationship between affiliate stigma and PTSS reflects the implications of PTSS on affiliate stigma. As mentioned, symptoms of post-traumatic stress include re-experiencing the trauma, avoiding reminders of it, and experiencing negative changes in views and beliefs (APA, 2013). In the current study, these symptoms were not assessed in a general manner but rather in the specific context of the child's upbringing. Thus, mothers of children with autism or mental health disorders who reported elevated PTSS may have experienced some interactions with their children as

distressing reminders of their trauma. Consequently, they may have been inclined to internalize the stigmatization associated with their children.

According to the second explanation, the relationship between affiliate stigma and PTSS worked in the opposite direction, indicating that affiliate stigma intensified mothers' posttraumatic distress. Mothers of children with autism or mental health disorders who internalized stigma may have experienced elevated distress initially, which hindered their ability to cope with traumatic events. As a result, these mothers exhibited higher levels of PTSS following trauma exposure.

Although both directions of the relationship between affiliate stigma and PTSS may exist, our moderation analyses suggested that affiliate stigma plays an important role in explaining posttraumatic distress. The results indicated that affiliate stigma moderated the relationship between the number of traumatic events and symptoms of intrusion and hyperarousal. While the number of traumatic events had a positive effect in explaining elevated intrusion and hyperarousal symptoms, this effect was significantly stronger under conditions of high levels of affiliate stigma. Thus, affiliate stigma appears to intensify the adverse effects of exposure to a higher number of traumatic events.

Several processes may be involved in this effect. Affiliate stigma may have intensified mothers' feelings of isolation and alienation, thereby harming their social support–a well-known protective factor in the face of trauma (Ozer et al., 2003). Furthermore, the guilt and shame associated with affiliate stigma may have impeded mothers' ability to reprocess their trauma (Kip et al., 2022; Pugh et al., 2015; Saraiya & Lopez-Castro, 2016), leading to elevated symptoms of intrusion and hyperarousal. Given that the present study did not explore these suggested processes, further research is imperative.

Important limitations of the study should be noted. First, its cross-sectional design limited the ability to determine the directionality of the relationships found in the study. Second, the study relied on convenience sampling and self-report measures, which may be subject to response bias and shared-method variance. Additionally, the study focused exclusively on Israeli mothers, which may reflect local caregiving norms and gendered roles. This cultural specificity could limit the generalizability of the findings to other contexts. To build on these results, future research should adopt longitudinal designs that can more accurately capture the temporal dynamics between affiliate stigma and posttraumatic stress symptoms (PTSS). Incorporating both self-report instruments and standardized clinical assessments would help mitigate methodological biases and strengthen the validity of the findings. Furthermore, future studies should aim to include more diverse samples, encompassing fathers and caregivers from various cultural, ethnic, and socioeconomic backgrounds. Such diversity would enable cross-cultural comparisons and provide a more comprehensive understanding of how affiliate stigma and PTSS manifest in different sociocultural environments. It may also be beneficial to investigate potential moderating or mediating factors, such as social support, coping styles, or the availability of mental health services, which could further elucidate the mechanisms linking affiliate stigma to parental distress.

Despite these limitations, this study provided the first empirical evidence of the relationships between trauma exposure, PTSS, and affiliate stigma in mothers of children with autism or mental health disorders. The results suggested that these mothers are vulnerable to PTSS due to trauma related to their children's upbringing. Furthermore, the findings indicated that mothers' vulnerability is not uniform; it is intensified by levels of affiliate stigma. Therefore, trauma-informed care--encompassing primary prevention, early detection, and the provision of information, support, and treatment--should be offered to this

population. Additionally, addressing affiliate stigma as part of the prevention and treatment of posttraumatic distress in this group is crucial. Specifically, there is a clear need for the development of clinical interventions aimed at reducing affiliate stigma. These interventions could include psychoeducational programs, support groups, and cognitive-behavioral strategies that challenge internalized stigma and promote resilience. Approaches that foster self-compassion, enhance social connectedness, and validate caregivers' experiences may be particularly effective in alleviating the psychological burden associated with stigma. Additionally, integrating stigma-reduction components into broader family-centered therapeutic models can ensure that mental health care addresses not only the needs of the child but also the emotional well-being of the caregiver. Finally, collaborative efforts from various sectors of society, especially policymakers and the therapeutic community, are crucial to combat the stigma surrounding neuropsychiatric disorders, ultimately contributing to the reduction of posttraumatic distress among affected families.

References

Alshaigi, K., Albraheem, R., Alsaleem, K. A., Zakaria, M., Jobeir, A., & Aldhalaan, H. (2020). Stigmatization among parents of autism spectrum disorder children in Riyadh, Saudi Arabia. *International Journal of Pediatrics and Adolescent Medicine, 7*(3), 140–146. https://doi.org/10.1016/j.ijpam.2019.06.003

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed). American Psychiatric Association.

Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric properties of the PTSD checklist for diagnostic

and statistical manual of mental disorders–fifth edition (PCL-5) in veterans. *Psychological Assessment*, *28*(11), 1379–1391. http://dx.doi.org/10.1037/pas0000254

Corrigan, P. W., & Miller, F. E. (2004). Shame, blame, and contamination: A review of the impact of mental disorder stigma on family members. *Journal of Mental Health*, *13*(6), 537–548. https://doi.org/10.1080/09638230400017004

Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, *1*(1), 16–20.

Craig, F., Operto, F.F., De Giacomo, A., Margari, L., Frolli, A., Conson, M., & Margari, F. (2016). Parenting stress among parents of children with neurodevelopmental disorders. *Psychiatry Research*, *242*,121-129.

https://doi.org/10.1016/j.psychres.2016.05.016

Drent, H. M., van den Hoofdakker, B., Buitelaar, J. K., Hoekstra, P. J., & Dietrich, A. (2022). Factors related to perceived stigma in parents of children and adolescents in outpatient mental healthcare. *International Journal of Environmental Research and Public Health*, *19*(19), 12767. https://doi.org/10.3390/ijerph191912767

Estes, A., Munson, J., Dawson, G., Koehler, E., Zhou, X.-H., & Abbott, R. (2009). Parenting stress and psychological functioning among mothers of pre-school children with autism and developmental delay. *Autism*, *13*(4), 375–387. https://doi.org/10.1177/1362361309105658

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. Retrieved from http://www.afhayes.com/ public/process2012.pdf.

Hinde, K., Hald, G. M., Hallford, D. J., Lange, T., Arendt, M. C., Pavan, S., & Austin, D. W. (2025). *Interrater reliability of the DSM-5 and ICD-11 Criterion A for PTSD and complex PTSD in parents of children with autism using the Life Events Checklist. BJPsych Open 11 (2), e36. https://doi.org/10.1192/bjo.2024.848.*

Jang, J., Dixon, D. R., Tarbox, K., & Granpeesheh, D. (2011). Symptom severity and challenging behaviours in children with ASD. *Research in Autism Spectrum Disorders, 5,* 1028–1032. https://doi.org/10.1016/j.rasd.2010.11.008.

Jones, L., Bellis, M. A., Wood, S., Hughes, K., McCoy, E., Eckley, L., ... & Officer, A. (2012). Prevalence and risk of violence against children with disabilities: A systematic review and meta-analysis of observational studies. *The Lancet, 380*(9845), 899-907. http://dx.doi.org/10.1016/S0140-6736(12)60692-8

Kestler-Peleg, M. (2023). The cost of pleasing social expectations: A serial mediation of Israeli mothers' anxiety and depression in the relationship between defensiveness and parental self-efficacy. *Feminism & Psychology*, *33*(4), 692–701. https://doi.org/10.1177/09593535221130698

Kieling C, Buchweitz C, Caye A, et al.(2024). Worldwide prevalence and disability from mental disorders across childhood and adolescence: Evidence from the global burden of disease study. *JAMA Psychiatry, 81*(4),347–356. doi:10.1001/jamapsychiatry.2023.5051

Kip, A., Diele, J., Holling, H., & Morina, N. (2022). The relationship of trauma-related guilt with PTSD symptoms in adult trauma survivors: A meta-analysis. *Psychological Medicine*, *52*(12), 2201-2211.http:// doi:10.1017/S0033291722001866

Lach, L. M., Kohen, D. E., Garner, R. E., Brehaut, J. C., Miller, A. R., Klassen, A. F., & Rosenbaum, P. L. (2009). The health and psychosocial functioning of caregivers of

children with neurodevelopmental disorders. *Disability and Rehabilitation, 31*(9), 741–752. https://doi.org/10.1080/08916930802354948

Lang, R., Davis, T., O'Reilly, M., Machalicek, W., Rispoli, M., Sigafoos, J., et al. (2010). Functional analysis and treatment of elopement across two school settings. *Journal of Applied Behavior Analysis, 43*(1), 113–118. https://doi.org/10.1901/jaba.2010.43-113.

Lovell, B., Elder, G. J., & Wetherell, M. A. (2021). Sleep disturbances and physical health problems in caregivers of children with ASD. *Research in Developmental Disabilities, 113*, 103932. https://doi.org/10.1016/j.ridd.2021.103932

Mak, W. W., & Cheung, R. Y. (2008). Affiliate stigma among caregivers of people with intellectual disability or mental illness. *Journal of Applied Research in Intellectual Disabilities, 21*(6), 532–545. https://doi.org/10.1111/j.1468-3148.2008.00426.x

McCann, D., Bull, R., & Winzenberg, T. (2012). The daily patterns of time use for parents of children with complex needs. *Journal of Child Health Care*, *16*(1), 26–52. https://doi.org/10.1177/1367493511420186

Mandic, C. G., Johaningsmeir, S., Corden, T. E., Earle, A., Acevedo-Garcia, D., & Gordon, J. B. (2016). Impact of caring for children with medical complexity on parents' employment and time. *Community, Work & Family*, *20*(4), 444–458. https://doi.org/10.1080/13668803.2016.1202195

Mayes, S. D., Gorman, A. A., Hillwig-Garcia, J., & Syed, E. (2013). Suicide ideation and attempts in children with autism. *Research in Autism Spectrum Disorders, 7*(1), 109–119. https://doi.org/10.1016/j.rasd.2012.07.009

Middeldorp, C. M., Wesseldijk, L. W., Hudziak, J. J., Verhulst, F. C., Lindauer, R. J. L., & Dieleman, G. C. (2016). Parents of children with psychopathology: Psychiatric

problems and the association with their child's problems. *European Child & Adolescent Psychiatry, 25*(8), 919–927. https://doi.org/10.1007/s00787-015-0813-2

Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological bulletin, 129*(1), 52. https://doi.org/10.1037/0033-2909.129.1.52

Pescosolido, B. A., Perry, B. L., Martin, J. K., McLeod, J. D., & Jensen, P. S. (2007). Stigmatizing attitudes and beliefs about treatment and psychiatric medications for children with mental disorder. *Psychiatric Services, 58*(5), 613–618. https://doi.org/10.1176/appi.ps.58.5.613

Picardi, A., Gigantesco, A., Tarolla, E., Stoppioni, V., Cerbo, R., Cremonte, M., Alessandri, G., Lega, I., & Nardocci, F. (2018). Parental burden and its correlates in families of children with autism spectrum disorder: A multicentre study with two comparison groups. *Clinical Practice & Epidemiology in Mental Health, 14*(1), 143–176. https://doi.org/10.2174/1745017901814010143

Pierce, K., Gazestani, V. H., Bacon, E., Barnes, C. C., Cha, D., Nalabolu, S., ... & Courchesne, E. (2019). Evaluation of the diagnostic stability of the early autism spectrum disorder phenotype in the general population starting at 12 months. *JAMA Pediatrics, 173*(6), 578-587.

Pugh, L. R., Taylor, P. J., & Berry, K. (2015). The role of guilt in the development of post-traumatic stress disorder: A systematic review. *Journal of Affective Disorders, 182,* 138-150. http:// doi: 10.1016/j.jad.2015.04.026.

Saraiya, T., & Lopez-Castro, T. (2016). Ashamed and afraid: A scoping review of the role of shame in post-traumatic stress disorder (PTSD). *Journal of Clinical Medicine, 5*(11), 94. http://doi: 10.3390/jcm5110094

Schnabel, A., Youssef, G. J., Hallford, D. J., Hartley, E. J., McGillivray, J. A., Stewart, M., Forbes, D., & Austin, D. W. (2019). Psychopathology in parents of children with autism spectrum disorder: A systematic review and meta-analysis of prevalence. *Autism*, *24*(1), 26–40. https://doi.org/10.1177/1362361319844636

Shi, Y., Shao, Y., Li, H., Wang, S., Ying, J., Zhang, M., Li, Y., Xing, Z., & Sun, J. (2019). Correlates of affiliate stigma among family caregivers of people with mental disorder: A systematic review and meta-analysis. *Journal of Psychiatric and Mental Health Nursing*, *26*(1–2), 49–61. https://doi.org/10.1111/jpm.12505

Stewart, M., Schnabel, A., Hallford, D. J., McGillivray, J. A., Forbes, D., Foster, M., Shandley, K., Gardam, M., & Austin, D. W. (2020). Challenging child behaviours positively predict symptoms of posttraumatic stress disorder in parents of children with autism spectrum disorder and rare diseases. *Research in Autism Spectrum Disorders*, *69*, 101467. https://doi.org/10.1016/j.rasd.2019.101467

Stricher-Stern, H., Shalev, A., & Lahav, Y. (2025). Broken trust–Institutional betrayal and posttraumatic distress in mothers of children with neuropsychiatric disorders. *Social Science & Medicine*, *381*, 118289. https://doi.org/10.1016/j.socscimed.2025.118289

Swaab, L., Goodwin, J., Wroe, J., Woolard, A., McCormack, L., & Campbell, L. E. (2021). Stigma associated with parenting an autistic child with aggressive behaviour: A systematic review. *Review Journal of Autism and Developmental Disorders*, *10*(2), 281–294. https://doi.org/10.1007/s40489-021-00292-5

Tan, S., & Rey, J. (2005). Depression in the young, parental depression and parenting stress. *Australasian Psychiatry, 13*(1), 76–79. https://doi.org/10.1080/j.1440-1665.2004.02155.x

Vinogradov, S., Fisher, M., & De Villers-Sidani, É. (2011). Cognitive training for impaired neural systems in neuropsychiatric disorder. *Neuropsychopharmacology*, *37*(1), 43–76. https://doi.org/10.1038/npp.2011.251

Weathers, F., Litz, B., Keane, T., Palmieri, T., Marx, B. P., & Schnurr, P. (2013). The PTSD checklist for DSM-5 (pcl-5).

Werner, S., & Shulman, C. (2013). Subjective well-being among family caregivers of individuals with developmental disabilities: The role of affiliate stigma and psychosocial moderating variables. *Research in Developmental Disabilities*, *34*(11), 4103–4114. https://doi.org/10.1016/j.ridd.2013.08.029

Xiong, T., McGrath, P. J., Stewart, S. H., Bagnell, A., & Kaltenbach, E. (2022). Risk and protective factors for post-traumatic stress and post-traumatic growth in parents of children with intellectual and developmental disorders. *European Journal of Psychotraumatology*, *13*(1). https://doi.org/10.1080/20008198.2022.2087979

Xiong, T., McGrath, P. J., Yakovenko, I., Thomson, D., & Kaltenbach, E. (2022). Parenting-related trauma exposure among parents of children with intellectual and developmental disorders: Development and validation of the Parenting Trauma Checklist. *Journal of Traumatic Stress*, *35*(2), 759-770.

Zhou, T., Wang, Y., & Yi, C. (2018). Affiliate stigma and depression in caregivers of children with autism spectrum disorders in China: Effects of self-esteem, shame and family functioning. *Psychiatry Research*, *264*, 260–265. https://doi.org/10.1016/j.psychres.2018.03.071

Table 1

Univariate F Results of Number of Traumatic Events and PTSS as a Function of Study Group (n=1448)

	Mothers of children with autism (n=71)		Mothers of children with mental health disorders (n=137)		Mothers of children without disability (n=1240)		*F*(2, 1445)	η^2_p	Group comparisons
Variable	*M*	*SD*	*M*	SD	*M*	SD			
Number of traumatic events	6.32	3.53	7.38	3.28	3.99	2.47	122.64***	.15	b>a>c
Intrusion	7.08	5.13	7.77	4.71	4.42	4.25	46.59***	.06	a,b>c
Avoidance	3.15	2.41	2.97	2.08	1.75	2.09	33.52***	.04	a,b>c
Hypererousal	10.18	5.74	10.22	4.72	5.70	5.10	69.65***	.09	a,b>c
Negative alterations in mood and cognitions	10.54	5.84	11.12	5.90	5.98	6.04	59.19***	.08	a,b>c
PTSS total score	30.96	17.38	32.08	15.06	17.84	15.36	71.59***	.09	a,b>c

Note. The group comparisons column compares the mean level of the variable in each group: a = mothers of children with autism; b= mothers of children with mental health disorders; c= mothers of children without disability. ***p<0.001

Table 2

Inter-correlations Between Affiliate Stigma and PTSS (n=208)

Measure	1	2	3	4	5	6
1. Affiliate stigma	-					
2. Intrusion	.20**	-				
3. Avoidance	.15*	.67***	-			
4. Negative alterations in mood and cognitions	.33***	.69***	.62***	-		
5. Hyperarousal	.30***	.70***	.55***	.69***	-	
6. PTSS total score	.31***	.89***	.75***	.90***	.87***	-
M	2.06	7.54	3.04	10.92	10.21	31.70
SD	.60	4.86	2.20	6.22	5.12	16.09

** p < .05; ** p < .01; *** p < .001*

Table 3

The Moderating Role of Affiliate Stigma Within the Relations Between Number of Traumatic Events and PTSS (n=208)

	Intrusion		**Avoidance**		**Negative alterations in mood and cognitions**		**Hyperarousal**	
	$\hat{\beta}$	R^2	$\hat{\beta}$	R^2	$\hat{\beta}$	R^2	$\hat{\beta}$	R^2
Age	-.07	.26***	-.13*	.14***	-.12*	.25***	-.15**	.29***
Education (years)	.16**		-.09		-.04		-.05	
Number of traumatic events	.35***		.27***		.28***		.23***	
Affiliate stigma	.06		.08		.24**		.15*	
Affiliate stigma * Number of traumatic ts	.15**		.05		.07		.11*	

Note. All study variables were standardized ** $p < .01$ **$p < .01$ *** $p < .001$

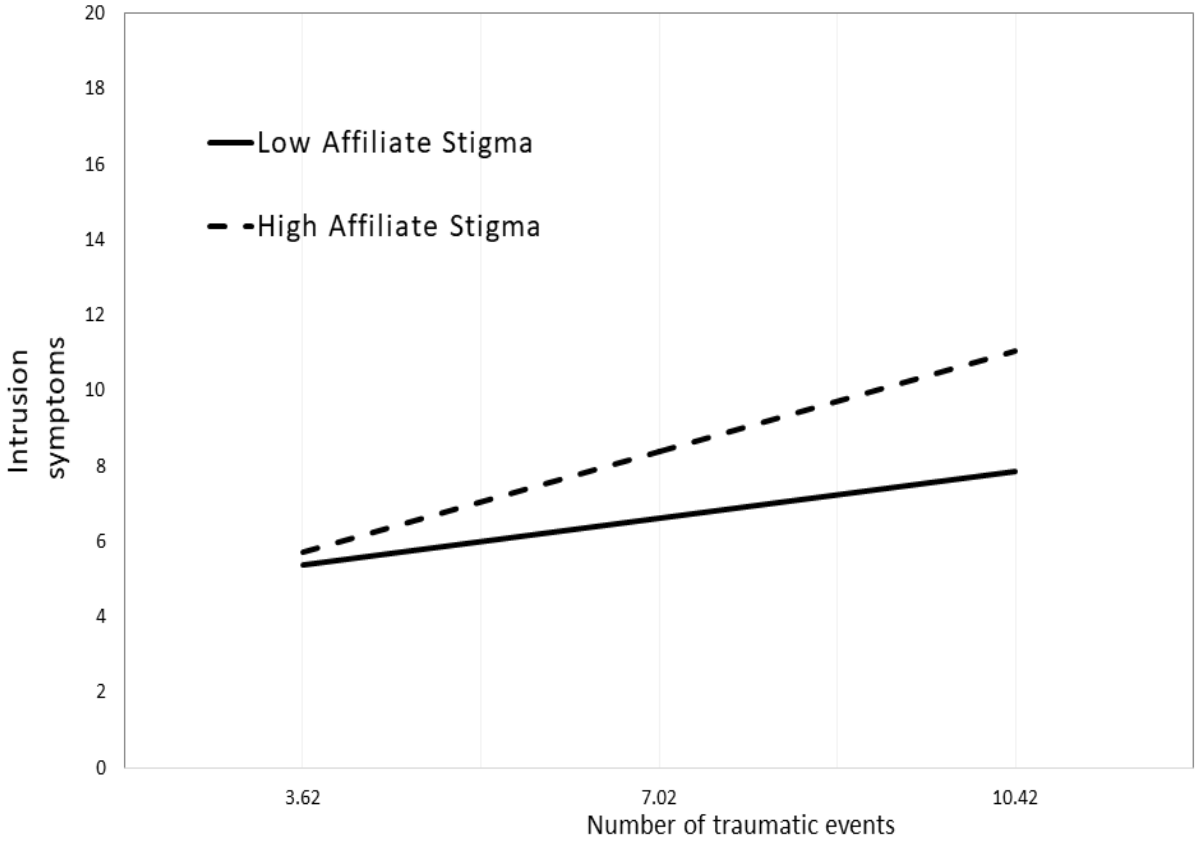

Figure 1. The Moderating Role of Affiliate Stigma Within the Relations Between Number of Traumatic Events and Intrusion Symptoms

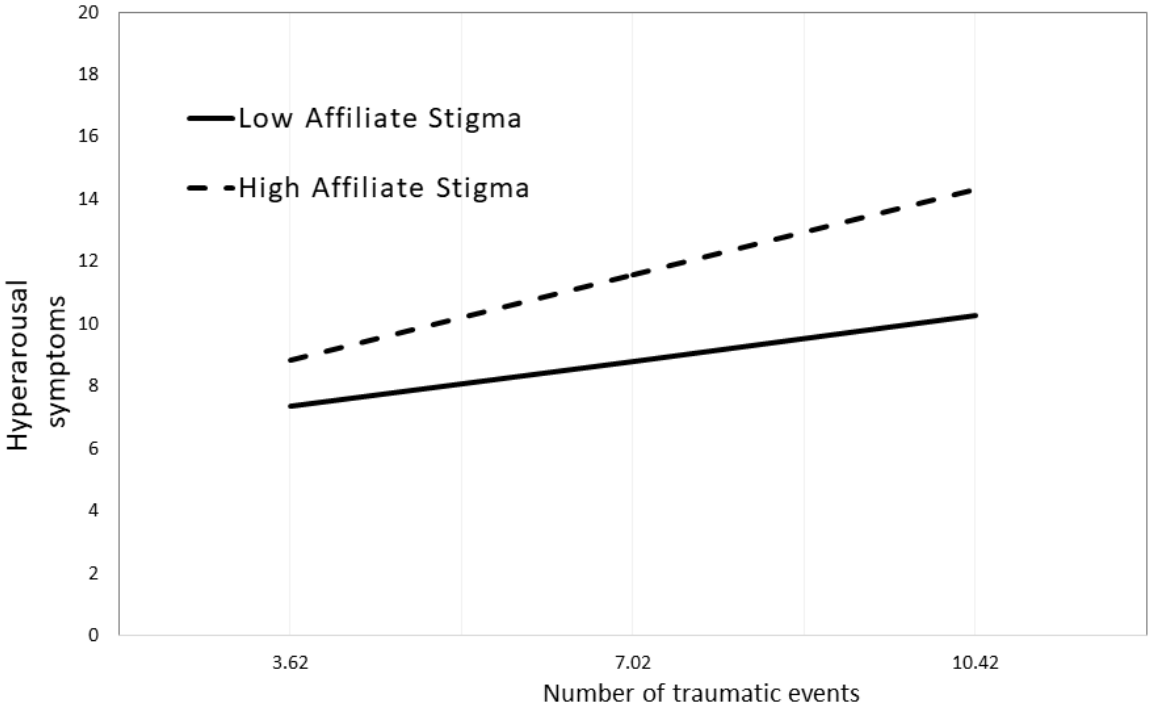

Figure 2. The Moderating Role of Affiliate Stigma Within the Relations Between Number of Traumatic Events and Hyperarousal Symptoms