



Childhood trauma and self-stigma in mood disorders

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ABSTRACT

Childhood maltreatment and mood disorders are associated and linked to self-stigma. In this study, we assessed the relationship between childhood trauma and self-stigma in patients with mood disorders. Patients with bipolar disorder ($n = 69$) and unipolar disorder ($n = 111$) were recruited from the Mood Disorders Unit of the Geneva University Hospitals in Switzerland. All participants underwent a semi-structured interview to assess mood disorder and fulfilled the Internalized Stigma of Mental Illness (ISMI) scale and the Childhood Trauma Questionnaire (CTQ). The results showed that overall self-stigma was not significantly different between the groups. Linear regression modeling revealed that the ISMI total score was significantly associated with the CTQ total score (estimate = 0.01, $p = 0.045$). Our findings support the assumption that childhood trauma promotes the development of self-stigma in patients with mood disorders. Therefore, this study underscores the importance of assessing childhood trauma in the management of self-stigma in patients with unipolar and bipolar disorder.

1. Introduction

The concept of stigma became popular after Erwin Goffman's seminal book in 1963 (Goffman, 1963). Dominant beliefs and attitudes in a society lead to stereotypes, prejudices, and discrimination against stigmatized groups, resulting in detrimental outcomes in the distribution of life opportunities in the stigmatized groups (Link and Phelan, 2001). Public stigma refers to the general public's attitude towards a stigmatized group and can lead to segregation. The reactions to public stigma include indifference to the stigma, accumulation of righteous anger against it, or internalization of it. This self-stigma leads to members of a stigmatized group to develop negative perceptions and feelings about themselves, which are associated with lower expectations (Corrigan, 2005; Corrigan and Watson, 2002).

Self-stigma affects approximately one-third of people with serious mental disorders and has been well documented in people living with mood disorders (Latalova et al., 2013; Yen et al., 2005). In a qualitative study, Favre et al. (2023) showed that persons with bipolar disorder (BD) were sensitive to the representation of BD in the media. Public stigma was perceived as having both general characteristics of mental illness

(e.g. dangerous) and specific to BD (e.g. creative). Moreover, perceptions, awareness, and feelings of stigma are important factors that impair social functioning and quality of life (Holubova et al., 2018; Lysaker et al., 2007). Self-stigma as well as chronic feelings of shame can even affect patients who have been euthymic for several years (Aydemir and Akkaya, 2011; Brohan et al., 2011; Levy et al., 2015). The greater the experience of self-stigma, the greater the functional disability in the social and emotional domains, which in turn leads to social withdrawal, decreased quality of life, and lower quality of care (Cerit et al., 2012; Pascual-Sanchez et al., 2020; Perlick et al., 2001; Yen et al., 2009). Self-stigma can influence a patient's personal or professional choices, such as getting married, having children, applying for job offers, and accepting positions of responsibility (Meiser et al., 2007; Michalak et al., 2006). It also negatively impacts the disease course, showing a correlation with more severe symptoms, more relapses, more frequent hospitalizations, and poorer adherence to medical management and treatment (Aydemir and Akkaya, 2011; Barney et al., 2006; Conner et al., 2010; Levy et al., 2015). Moreover, even a good therapeutic alliance might be ineffective against these negative effects (Kondrat and Early, 2011). In a recent pilot cohort study, Oakes-Cornellissen et al. (2023) indicated that stigma-free

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interventions such as lifestyle medicine and positive psychology strategies may benefit persons with mood disorders. [Ociskova et al. \(2022\)](#) recognized self-stigma reduction as one of the seven elements found to be effective in the psychosocial intervention with BD, mainly through psychoeducation about BD and its treatment.

People who are exposed to trauma also frequently experience feelings of shame, guilt, and low self-esteem ([Stotz et al., 2015](#)). Survivors of sexual and intimate crimes may experience stigmatization through victim-blaming messages from society, which may be internalized as self-blame and shame ([Kennedy and Prock, 2018](#)). Childhood maltreatment, particularly emotionally abusive acts and sexual abuse, is associated with an increased probability of a lifetime diagnosis of several mental disorders ([Sugaya et al., 2012](#)), especially mood disorders ([Chapman et al., 2004](#); [Janiri et al., 2015](#); [Maniglio, 2010](#)). Although the mechanism remains unclear, childhood trauma can lead to modifications in emotional regulation and cognitive abilities. In their review, [Barczyk et al. \(2023\)](#) suggested that childhood trauma is associated with poorer cognitive functioning in people with mood disorders. [Berthelot et al. \(2022\)](#) assessed the presence of trauma in offspring of persons with DSM-IV schizophrenia, BD, and unipolar disorder (UD). The results showed an association of childhood trauma with the accumulation of four risk indicators (e.g., cognitive impairments, psychotic-like experiences, nonpsychotic nonmood childhood DSM diagnoses, poor global functioning) in genetically high-risk youths, and more so in young boys. Some studies have suggested that childhood trauma may stimulate the neuroendocrine stress response, causing enlarged vulnerability to depression in adult life ([Menke et al., 2018](#); [Moraes et al., 2018](#)). Childhood trauma may also lead to induction of fast cycles, episodes with psychotic characteristics, substance dependence, resistance to treatment, and suicidality ([Aas et al., 2016](#); [Agnew-Blais and Danese, 2016](#); [Douglas and Porter, 2012](#); [Etain et al., 2013, 2017a, 2017b](#); [Jansen et al., 2016](#)). [Drachman et al. \(2022\)](#) showed that in BD, aggression and impulsivity were both elevated and associated with childhood maltreatment (CM), particularly emotional CM, depression, substance use disorders and suicide attempts. Aggression scores were associated with gray matter volume (GMV) decreases in bilateral orbitofrontal cortex and left posterior insula brain regions, while motor impulsiveness scores were associated with GMV decreases in anterior cingulate cortex implicated in mood and behavioral dyscontrol. Both domains were associated with suicide behavior and modifiable risk factors of CM, depression and substance use disorders that could be targeted for prevention. Childhood trauma plays a pervasive role in the development and course of BD and, currently, early interventions for BD are lacking, particularly ones that are tailored to the needs of those with a history of childhood trauma, and emotional abuse specifically ([Hett et al., 2022](#)). They recommended the assessment of childhood trauma in routine clinical practice to help aid clinical decision-making around treatment plans.

Although both self-stigma and childhood trauma are associated with detrimental disease outcomes and affect treatment-seeking in persons living with mental disorders, research combining childhood trauma, self-stigma, and mental illness is scarce ([Coffey et al., 1996](#); [Outcalt and Lysaker, 2012](#); [Stolzenburg et al., 2018](#); [van Zelst et al., 2015](#); [Whetten et al., 2008](#)). Studies in different psychiatric populations, such as those with schizophrenia, alcohol dependence, or psychosis ([Outcalt and Lysaker, 2012](#); [Stolzenburg et al., 2018](#); [van Zelst et al., 2015](#)) have shown a connection between childhood trauma and self-stigma. However, it is unclear whether childhood trauma contributes to self-stigma associated with mental illness in persons with mood disorders. Although BD and UD both include depressive episodes, they are distinguished by the presence of manic (or hypomanic) episodes in BD and by specific epidemiological and etiopathological characteristics (e.g., sex, lifetime prevalence, age of onset, hereditary risk factors) ([Johansson et al., 2019](#); [Otte et al., 2016](#); [Rowland and Marwaha, 2018](#); [Sullivan et al., 2000](#)). The lower prevalence rate of BD in comparison to UD, and the spectacular and sometimes aggressive behaviors associated with manic episodes could lead to higher self-stigma in patients with BD.

Moreover, people with BD are often perceived as violent, dangerous, or at least partially responsible for their condition, unlike those with UD ([Ellison et al., 2013](#); [Latalova et al., 2013](#)). In contrast, some studies have reported that BD can be associated with certain positive aspects, such as creativity ([Galvez et al., 2011](#)); ([Parker, 2012](#)), whereas positive beliefs are less frequently associated with UD ([Forgeard et al., 2016](#); [Parker, 2012](#)). Furthermore, [Lemvigh et al. \(2022\)](#) suggested that theory of mind and empathy may represent areas of potentially spared cognitive functioning in BD. As many patients with BD have experienced adversity during developmental periods in which theory of mind and empathy develop, these abilities may be markers of resilience in the disorder. They advocate for therapeutic interventions for BD, which may include practical ways that a patients' knowledge of intact theory of mind and empathy could be utilized to reduce self-stigma and promote self-efficacy, improved well-being and functioning.

This study aimed to compare the levels of self-stigma in BD and UD and to investigate the effect of childhood abuse history on patients' levels of self-stigma. We hypothesized that (1) patients with BD would exhibit higher levels of self-stigma than patients with UD and that (2) the severity of childhood trauma would be associated with heightened levels of self-stigma in both populations.

2. Method

2.1. Participants

Participants were recruited from the outpatient adult Mood Disorders Unit of the Psychiatric Specialties Service of Geneva University Hospitals in Switzerland in this cross-sectional study. The overall assessment was made by psychiatrists specialized in adult mood disorders. The French version of the Mini-International Neuropsychiatric Interview ([Sheehan et al., 1998](#)) was used by trained psychologists (DSM-IV-TR criteria ([American Psychiatric Association, 2000](#))). The severity of depression was evaluated with the Montgomery-Åsberg Depression Rating Scale (MADRS) ([Bondolfi et al., 2010](#); [Montgomery and Asberg, 1979](#)) and the severity of hypo/mania with the Young Mania Rating Scale ([Favre et al., 2003](#); [Young et al., 1978](#)).

2.2. Measures

Diagnosis and sociodemographic data (age, gender, marital status, and occupation) were collected during clinical interviews. Additionally, all participants completed the Internalized Stigma of Mental Illness (ISMI) scale ([Ritsher et al., 2003](#)) and the short version of the Childhood Trauma Questionnaire (CTQ) ([Bernstein et al., 1997](#); [Bernstein et al., 1994](#); [Bernstein et al., 2003](#); French version, [Paquette et al., 2004](#)).

The ISMI scale is a widely employed 29-item self-report questionnaire that sizes internalized stigma. Each item is scored on a 4-point Likert-type scale. The total score ranges from 29 to 116, with higher scores indicating higher levels of self-stigma. The 29 items were divided into five subscales: alienation (the subjective experience of not being a full member of society), stereotype endorsement (the degree of agreement with the common attributes associated with the illness), discrimination experience (the experience of discrimination reported by the person), social withdrawal (social avoidance because of illness), and stigma resistance (the experience of not being affected by stigma and resisting the negative view of mental illness). Internal consistency ($\alpha > 0.90$) and test-retest reliability ($r = 0.92$) of the ISMI, and concurrent validity for all subscales (internal consistency > 0.70) are valid, except for stigma resistance (0.58) ([Ritsher et al., 2003](#)). In our sample, the internal consistency was acceptable or good for the total score ($\alpha = 0.93$) and the four subscales but not for stigma resistance (alienation: $\alpha = 0.86$; stereotype endorsement: $\alpha = 0.72$; discrimination experience: $\alpha = 0.73$; social withdrawal: $\alpha = 0.83$; and stigma resistance: $\alpha = 0.63$). In this study, the ISMI total score consisted of four ISMI subscales (excluding stigma resistance), as described previously ([Brohan et al., 2010, 2011](#); [Evans-Lacko et al., 2012](#)).

The short version of the CTQ is broadly used in clinical research to determine traumatic experiences in childhood and/or adolescence. The validity and reliability of the CTQ have been described in various populations (Jiang et al., 2018; Karos et al., 2014; Liebschutz et al., 2018). The CTQ is divided into five subscales (five-item each): emotional abuse (“verbal assault on a child’s sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person”), physical abuse (“bodily assault on a child by an adult or older person that posed a risk of or resulted in injury”), sexual abuse (“sexual contact or conduct between a child younger than 18 years of age and an adult or older person”), emotional neglect (defined as “the failure of caretakers to meet children’s basic emotional and psychological needs, including love, belonging, nurturance, and support”), and physical neglect (“the failure of caretakers to provide for a child’s basic physical needs, including food, shelter, clothing, safety, and health care”). To track the underreporting of maltreatment (Bernstein and Fink, 1998), three-items were also included (Minimization/Denial validity scale). The total score of the CTQ ranges from 25 to 125 and is obtained by summing the 25 items of the five maltreatment subscales, whereas the three items are not scored. Higher CTQ scores reflect more severe childhood maltreatment.

2.3. Ethics

The study was approved by the Ethics Committee of the Geneva University Hospitals. All participants provided written informed consent.

2.4. Statistical analysis

Descriptive statistics included percentages and number (n) for categorical data and means and standard deviations for continuous variables. A linear regression was performed with the ISMI total score as the dependent variable and group (UD and BD), CTQ total score, and an interaction term between the group and CTQ total score as independent variables, after adjusting for age, sex, and MADRS scores. The MADRS score was added as an adjustment variable to control for the effect of depressive symptoms. The final sample size for the adjusted analyses was n = 163 (17 missing values). No significant differences were found in the other study variables for participants with missing MADRS scores. Statistical significance was at p < 0.05. Analytical and descriptive statistics were computed using Statistical Package for the Social Sciences version 25 (IBM Corp., Armonk, NY, USA).

3. Results

3.1. Description of the sample

For the main analyses there were 180 participants (111 with UD and 69 with BD) (Table 1). The CTQ total and subscale scores of the two groups are reported in Table 2. The level of childhood trauma was similar in the UD and BD groups. In both groups, the highest scores were found in the emotional abuse and emotional neglect subscales. The ISMI total scores of the two groups are reported in Table 3. Additionally, the level of self-stigma was analogous in UD and BD groups.

3.2. Relation between the ISMI scale and diagnosis and between the ISMI scale and CTQ

The linear regression model showed that the ISMI total score was not significantly associated with the disorder (estimate = 0.01, p = 0.987) (Table 4.) This finding contradicts our first hypothesis that postulated that patients with BD would report more from self-stigma than patients with UD.

The ISMI total score was significantly associated with the CTQ total score (estimate = 0.01, p = 0.045). After controlling for sex, age, and level of depressive symptoms, a higher level of childhood trauma was

Table 1
Sample demographic description and mean MADRS and YMRS scores.

		UD		BD			
		n	%	n	%		
Gender	Male	46	41.4	19	27.5		
	Female	65	58.6	50	72.5		
Marital status	Single	46	41.4	20	29.0		
	Married or living as married	55	49.5	41	59.4		
	Divorced/ Separated/ Widowed	10	9.0	8	11.6		
Education (highest level)	Elementary school	11	9.9	8	11.6		
	Apprenticeship training	41	36.9	20	29.0		
	High school	19	17.1	10	14.5		
	University or similar	40	36.0	31	44.9		
		n	mean	SD	n	mean	SD
Age		111	44.0	13.2	69	42.7	13.0
MADRS score		101	14.9	9.5	62	12.9	10.1
YMRS score		101	0.7	1.8	61	1.1	2.1

Note. UD: Unipolar Disorder; BD: Bipolar Disorder; MADRS: Montgomery-Åsberg Depression Scale; YMRS: Young Mania Rating Scale; SD: standard deviation.

Table 2
Mean (SD) for CTQ total score and subscale scores for UD and BD groups.

	UD (n = 111)		BD (n = 69)	
	mean	SD	mean	SD
CTQ total	45.67	15.18	43.66	17.28
Emotional Abuse	11.23	5.11	10.02	5.38
Physical Abuse	7.04	3.25	6.97	3.21
Sexual Abuse	6.70	3.75	7.02	4.10
Emotional Neglect	13.17	4.95	12.18	5.45
Physical Neglect	7.63	3.00	7.47	3.25

Note. UD: Unipolar Disorder; BD: Bipolar Disorder; CTQ: Childhood Trauma Questionnaire; SD: standard deviation.

Table 3
Mean (SD) for ISMI total and subscales scores and comparison between groups.

	UD (n = 111)		BD (n = 69)	
	mean	SD	mean	SD
ISMI total	2.12	0.54	2.19	0.55
Alienation	2.55	0.74	2.65	0.81
Stereotype Endorsement	1.89	0.50	1.90	0.51
Discrimination Experience	1.89	0.57	1.97	0.55
Social Withdrawal	2.17	0.67	2.22	0.66
Stigma Resistance	2.54	0.58	2.59	0.61

Note. UD: Unipolar Disorder; BD: Bipolar Disorder; ISMI: Internalized Stigma of Mental Illness scale; SD: standard deviation.

found to be associated with a higher level of self-stigma. This result confirms our second hypothesis that predicts that the severity of childhood trauma is positively associated with increased levels of self-stigma in both populations. However, the magnitude of the effect seemed rather small (an increase of 0.01 point on the ISMI score when the CTQ total score increased by 1 point).

No significant association was detected between the ISMI total score and both groups, and no significant interaction between group and CTQ total score. This indicated that the relationship between the ISMI and CTQ total scores was not influenced by the group.

4. Discussion

This aim of this study was to investigate the relationship between

Table 4

Multivariable linear regression with ISMI total score as dependent variable and disorder and CTQ total score as independent variables (with adjustment for age, gender and MADRS score), n = 163.

Independent variables:	Dependent variable: ISMI total		
	estimate	t	p
Disorder (reference: UD)	-0.01	-0.02	.987
CTQ total score	0.01	2.02	.045
Interaction disorder/CTQ total score	<0.01	0.44	.663
Gender	0.05	0.54	.590
Age	>-0.01	-0.96	.340
MADRS score	0.02	4.15	<.001

Note. ISMI: Internalized Stigma of Mental Illness scale; CTQ: Childhood Trauma Questionnaire; UD: Unipolar Disorder; MADRS: Montgomery-Åsberg Depression Scale.

traumatic childhood experiences and self-stigmatization in patients with mood disorders. Research on the association between traumatic childhood experiences, self-stigma, and mental illness remains scarce. To the best of our knowledge, no previous cross-sectional study has explored this issue in this population. The results showed that the level of self-stigma did not differ significantly between the UD and BD groups. Moreover, self-stigma was significantly associated with traumatic childhood experiences in both UD and BD groups.

Overall, the mean level of self-stigma in our sample was low to moderate, which was consistent with the results of other studies (ex: 2.11 for UD and 1.94 for BD in [Brohan et al., 2011](#); respectively 2.09 and 2.29 in [Chang et al., 2016](#)). The average scores of the alienation and social withdrawal subscales were high in both UD and BD groups. This weighting of the subscales was also accorded to former findings ([Brohan et al., 2011](#); [Chang et al., 2016](#)).

Similar levels of self-stigma in both groups (UD and BD) were also consistent with the results of prior studies, suggesting that self-stigma was not significantly associated with any specific mental disorder ([Brohan et al., 2011](#); [Drapalski et al., 2013](#); [Evans-Lacko et al., 2012](#)). In contrast, a recent study found that patients with BD had a higher level of self-stigma than those diagnosed with UD ([Chang et al., 2016](#)).

The main finding of our study was that self-stigma and childhood trauma were associated in mood disorders. This suggests that the propensity to internalize the public stigmatization of their disorder in adult patients with UD or BD is fostered by traumatic childhood experiences. This could help to explain why individuals belonging to a stigmatized group react differently to public stigmatization, where some but not all individuals exhibit internalization of the stigma. Self-stigma may arise from the intersection of multiple sources of stigma, including childhood trauma and mental illness as in this study. This increased propensity for self-stigmatization could be related to a greater experience or heightened perception of discrimination. Feelings of shame or diminished status derived from traumatic childhood experiences could alter stigma resistance and facilitate adherence to a negative stereotype of oneself. Additionally, conditions of both childhood mistreatment and mental disorder may be associated with common negative attributes and discriminatory attitudes, which further reinforce each other as sources of public stigmatization and self-stigma. A person could interpret the accumulation of negative life situations (childhood trauma and mental illness) and stigmatization experiences as evidence of something negative within them or that they are responsible for their fate by repeating wrong attitudes, thereby echoing the stereotypes of guilt or weakness associated with both childhood trauma and mental illness. The experience of childhood trauma could also influence personality development, diminishing the propensity or ability to fight public stigma through righteous anger as well as predisposing the individual to internalize the stigma. This hypothesis may be related to the childhood trauma-associated sensitization of the neuroendocrine stress response and increased vulnerability to depression in response to stress in adult life ([Menke et al., 2018](#); [Moraes et al., 2018](#)). The association of the CTQ total score with the ISMI total

score could be interpreted as the consequence of the presence of shared or mutually reinforcing stereotypes in stigmatized conditions, leading individuals to believe they should remain isolated and resulting in attitudes toward avoidance. However, the effect was of a small magnitude, i.e., a 1-point increase in the CTQ total score caused only a 0.01-point increase in the ISMI total score. Considering that the ISMI total score ranges from 29 to 116, this small effect size might suggest a low clinical relevance of this association. Nevertheless, our results highlight the impact of childhood trauma on the experience of psychiatric illness from the perspective of self-stigmatization. These findings are congruent with the results reported in other psychiatric pathologies.

Our findings emphasize the potential importance of addressing traumatic childhood experiences in interventions aimed at reducing self-stigma. This could be an effective approach since traumatic childhood experiences have not been taken into consideration in such interventions ([Büchter and Messer, 2017](#); [Mittal et al., 2012](#); [Modelli et al., 2020](#); [Yanos et al., 2015](#)). However, further studies are needed to achieve a better understanding of the mechanisms by which traumatic childhood experiences foster the development of self-stigma in mental illnesses.

5. Limitations

Three limitations can be stated. First, a cross-sectional design of this study does not imply causal relationships. Second, the retrospective self-reported measures used might have been influenced by memory/recall bias, resulting in underestimation or overestimation of the scores. Finally, the sample size of this study was small.

6. Conclusion

The study results support the hypothesis that the propensity to develop self-stigma in individuals with mood disorders is fostered by traumatic childhood experiences. Furthermore, this development of self-stigma by traumatic childhood experiences is not associated with the physiopathology of the mental disorder. In terms of clinical consequences, the results support the importance of assessing childhood trauma experienced by patients with mood disorders as well as of considering the impact of childhood traumatic experiences in the management of self-stigma in patients with mood disorders.

Contributors

Michel Hofmann: Methodology, Writing - Original Draft. **Stéphanie Baggio:** Methodology, Formal Analysis, Writing - Original Draft. **Françoise Jermann:** Conceptualization, Methodology, Formal Analysis, Writing - Review & Editing. **Anne-Lise Kung:** Formal Analysis, Writing - Original Draft. **Sophie Favre:** Writing - Original Draft, Writing - Review & Editing. **Alexandre Dayer:** Writing - Review & Editing, Supervision. **Jean-Michel Aubry:** Writing - Review & Editing, Supervision. **Hélène Richard-Lepouriel:** Conceptualization, Methodology, Writing - Original Draft, Writing - Review & Editing.

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Declaration of competing interest

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