Me, Myself and I: The Relationship between Identity Disturbance and Psychopathology

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Abstract

While identity has been studied by developmental psychologists for decades, clinical psychology has only in recent years gained an interest in identity and its potential relationship to psychopathology. At present there are few clinical studies that assess the link between identity disturbance and psychopathology. The aim of this study was to examine the relationship between identity disturbance and psychopathological traits in a non-clinical sample. Another aim of the study was to see if childhood trauma can serve as a moderator in the relationship between identity and psychopathological traits. For this study we used a sample (N = 378) of first-year psychology students (241 females, 135 males, 2 “other”) from the University of Groningen. We used two scales to measure identity and 7 scales that measured psychopathological traits, while another scale measured types of childhood maltreatment. The correlations between identity and psychopathological traits were moderate at best, with the highest correlations being between “Lack of identity” and BPD, PTSD and depression. We used PROCESS to assess the moderating role of trauma. Only the interactions of BPD with physical abuse showed an effect on identity, along with the interaction of depression with physical abuse and physical neglect. Our conclusion is that more research is needed to assess the correlation between identity and psychopathology. A suggestion would be to conduct future studies on a clinical sample

Keywords: identity, identity disturbance, psychopathological traits. Childhood trauma as moderator

Me, Myself, and I: The Relationship between Identity and Psychopathology

Identity has been studied for decades in the field of developmental psychology, but it has been largely overlooked in the field of clinical psychology. Only in recent years this field has come to notice the importance of identity as a subject for clinical research and its potential links to the development and maintenance of various disorders (Kaufman et al.,2014,2015). This study aims to assess the relationship between identity and psychopathological traits, in order to see to what degree psychopathology might affect identity.

Identity formation is a developmental process that begins in early childhood and expands throughout the entire adult life. Erikson (1956) theorized that every life stage involves re-shaping one's identity, but late adolescence represents the most crucial phase as it is the period in which individuals converge their childhood identifications into a consolidated identity, leading to a stable sense of self, which in turn gives individuals the ability to navigate through major life events. Identity diffusion appears when individuals cannot form a consolidated identity during adolescence. This diffusion of identity is marked by sustained incoherence in identity across time and inability to commit to social roles.

Marcia (1966) theorized that identity formation is based on the interplay between one's commitments to functioning in different domains like vocation, friendships, religious affiliation etc., and the amount of time one spends on exploring alternatives before making those commitments. For instance, an individual might try different types of jobs before deciding which one is the most suited for him. This is reflected in four identity statuses. *Identity achievers* are those who have made commitments after

exploring alternatives. *Moratoriums* are still in the exploration phase and have not made any commitments. *Foreclosures* have made commitments without previous exploration and those in *identity diffusion* have made no commitments and have not gone through any exploration. Those in identity diffusion are highly dependent on social acceptance, conforming to group norms in order to feel accepted, and are unable to form significant relationships. This status is also associated with low self-esteem and anxiety, insecure attachment style, and poor coping mechanisms used in stressful situations which involve decision making. (Marcia,1966; Kroger & Marcia,2011).

The identity processing style theory (Berzonsky, 1988) suggests that there are three distinct approaches by which individuals achieve one of the four statuses mentioned above. These processes characterize how individuals make decisions, solve problems and process identity-related information. *Information-oriented* individuals are open to experience and have a complex way of thinking. They are autonomous and self-reflective, making careful life decisions and having adaptive problem-focused coping styles. Individuals within the identity achievement and moratorium statuses present this type of processing style. *Normative* individuals seek out the opinions of significant others when making important decisions and have a lower tolerance for ambiguity. They usually try to distance themselves from stress inducing situations and have an inflexible way of thinking. This processing style underlines the foreclosure identity status. Lastly, *diffuse-avoidant* individuals avoid dealing with problems until the last moment and show maladaptive emotion focused decisional strategies. This processing style is marked by avoidant coping and procrastination and is used by individuals within the diffuse identity status. As processing styles reflect how individuals perceive, analyze and solve their daily

problems, we believe individuals manifesting psychopathological traits might present a more dysfunctional processing style.

In recent years, identity has also become a subject of interest in the clinical field. Starting with the DSM-III(APA,1987), identity disturbance has been included as a criterion for Borderline Personality Disorder. Identity disturbance is "when identity diffusion becomes clinically relevant or genuinely psychological" (Westen et al., 2012). In the DSM-5 (APA,2013), identity is mentioned in "identity disturbance due to prolonged and intense coercive persuasion" under "Other specified dissociative disorders" (p. 306). The DSM-5 (APA,2013), however also presents the "Alternative DSM-5 Model for Personality Disorders", which establishes identity as a core dimension to personality, and thus presents identity disturbance as a core feature of all personality disorders, not just BPD.

Research has shown that identity disturbance might be linked to other mental disorders as well (Kaufman,2014). The study conducted by Inder et al. (2008) suggests that bipolar disorder affects the development of a clear sense of self. In bipolar patients, mood seems to play a central role in how individuals identify themselves. Individuals manifest different characteristics, sometimes contradictory (introverted vs. extroverted), from one illness state to another. This leads patients to experience confusion and lack of a sense of self, as it is sometimes difficult for them to tell if they behave in a certain way due to their illness or to their identity style. Studies on eating disorder patients have shown that patients with anorexia and bulimia had a higher number of negative self-representations which made them more receptive to weight-related stimuli, as opposed to the control group and bulimics use binge eating as an escape from confronting important

identity issues such as feeling like a failure (Stein & Corte, 2007; Wheeler et al., 2009). Lysaker & Lysaker (2010) also suggest that symptoms in schizophrenia patients are influenced by the inability to maintain a clear sense of self.

These clinical studies suggest that identity disturbance might play a significant role in the development and/or maintenance of various mental disorders, but more research needs to be conducted in this area. Studies so far have independently focused on one mental illness or another, and thus have used different theories related to each particular disorder. In addition, these studies have used different instruments to measure identity, and the association between mental disorders and "identity disturbance" in particular has been so far mostly neglected, since most of these studies make reference to identity styles or just identity diffusion. This study aims to assess the association between various psychopathological traits and identity styles. We will also use the instrument suggested by Kaufman et al. (SCIM,2015), which measures three dimensions of identity, to see the correlation between psychopathological traits and these dimensions, which are "consolidated identity", "disturbed identity" and "lack of identity". *Consolidated identity* represents individuals who can make commitments to self-defining roles, have stable beliefs, attitudes and values and have a sense of consistency across time or self-continuity. It allows people to find a place in society, be autonomous, achieve intimacy and navigate through major life events. *Disturbed identity* is characterized by pathological processes such as the identity diffusion, self-concept differentiation, in which the individual cannot integrate self-attributes into a cohesive whole and false-self, in which the individual takes on contradictory attributes in various social roles. *Lack of identity* is a construct that needs to be examined more in the clinical settings, but it is an

aspect that is often mentioned by BPD patients as experiencing a feeling of emptiness, being lost, broken or not knowing who they are. We expect that individuals who score higher on psychopathological traits will also score high on “disturbed” or “lack of identity”, and will present a diffuse-avoidant processing style.

Another subject of interest for this study is whether childhood trauma might play a role in moderating the relationship between identity and psychopathological traits. Studies show that trauma can alter the course of identity development (Tay et. al., 2015; Zheng & Lawson, 2015) and that trauma also increases the chances of developing a form of psychopathology (Edwards et al., 2013, Teicher & Samson, 2013). In this study we will investigate the moderating role of trauma on the relationship between identity and psychopathological traits. We expect to see that the interaction between trauma and psychopathological traits has an effect on identity.

Methods

This study is based on the data collected for a larger project conducted by The Behavioral and Social Sciences Faculty, University of Groningen. The larger study used more questionnaires than the ones presented in this study. We used only the data from the questionnaires relevant to the subject of this study.

Participants

The initial sample included 433 first year Psychology students from The University of Groningen. The exclusion criteria include participants who did not manage to successfully complete the questionnaires, those who were under the influence of drugs or alcohol while answering the questionnaires and those who admitted to not completing the questionnaires seriously. The survey included the Chapman Infrequency scale as well. A cutoff score of 3 is

used to determine whether the participants pay attention to what they are answering. We excluded any participant who had a score of 3 or higher. The participants were not excluded based on presenting any mental illness or taking any medication. The final sample included 378 participants, of which 241 (63.8%) were females, 135 (35.7%) were males, and 2 participants (0.5%) who selected "other". The age range was between 17 and 38 years (M = 20.11, SD = 2.13). The sample consisted of both International and Dutch bachelor program. The majority of respondents were German (41.8%), followed by Dutch (28.9).

Procedure

Firstly, the study was reviewed and approved by the Ethical Committee of Psychology (ECP). Following that, the first-year psychology students received a link which enabled them to access a Qualtrics platform via computer or smartphone. The students who signed up to complete the survey first read and agreed to the conditions of the study by signing an informed consent. Next they completed a battery of self-assessment questionnaires which consisted of three identity measuring instruments, one childhood trauma questionnaire, seven instruments that measured various psychopathological traits and the Chapman Infrequency scale. Details about the instruments are described in the "Measures" section. One of the instruments measuring identity will not be presented in this study as the data collected from it was irrelevant for the subject addressed here. There were 12 questionnaires to complete in total, after which participants also filled out demographics and indicated whether they had received or were receiving any pharmacological or psychological treatment at the time they completed the survey and whether they were under the influence of drugs or alcohol. The completion of the entire survey took about 70 minutes. The students who completed the survey were granted credits for a course in their study program.

Measures

The Self-Concept and Identity Measure(SCIM) (Kaufman, Cundiff, & Crowell, 2015) is a 30-item self-report questionnaire consisting of 3 subscales: "Consolidated Identity" (12 items), "Disturbed Identity" (12 items) and "Lack of Identity" (6 Items). Responses are rated on a 7-item Likert scale ranging from 1 (completely disagree) to 7 (completely agree). The internal consistency reported by Kaufman and colleagues in the initial study (2015) is .93. An example of an item on the "Lack of identity scale" is: "I feel like a puzzle and the pieces don't fit together".

The Identity Style Inventory (ISI-5) (Berzonsky et. al., 2013) consists of three subscales which assess three types of personality styles, namely the "informational" style, "normative" and "diffuse-avoidant" style. Each subscale has 9 items rated on a five-point Likert scale ranging from 1 (*not at all like me*) to 5(*very much like me*). An item example for the "Diffuse-avoidant" scale is: "When personal problems arise, I try to delay acting as long as possible". The initial study reported a Cronbach's alpha of $\alpha = .77$ for the informational scale, $\alpha = .75$ for the normative scale and $\alpha = .79$ for the diffuse-avoidant scale.

The Borderline Personality Disorder-Checklist (Bloo, Arntz, Schouten, 2018) is 9 item self-report questionnaire aimed to assess the symptoms of Borderline Personality Disorder as defined by the DSM-IV(APA,). The items are rated on a 5-point Likert scale from 1 (*Not at all*) and 5 (*Extremely*) and assesses the distress caused by the symptoms during the last month. The initial study showed a Cronbach's alpha of $\alpha = .97$.

The Community Assessment of Psychic Experiences (CAPE-42) (Konings et. al., 2006; Stefanis et al.,2002) is a 42-item self-report questionnaire measuring attenuated psychotic-like experiences. The instrument consists of three subscales. The first one (20 items) measures positive symptoms. The second one (14 items) measures negative symptoms. The third subscale

(8 items) measures depressive symptoms. For each item the respondents rate the frequency of their symptoms on a 4-point Likert scale ranging from 1 *(Never*) to 4 (*Nearly always)* and then they indicate their level of distress on another 4-point Likert scale ranging from 1 (*Not distressed*) to 4 (*very distressed*). The alpha value for this instrument is 0.91.

The Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994) is a 28-item self-report questionnaire consisting of 4 subscales: "Restraint", "eating concerns", "weight concerns" and "shape concerns". Respondents report the frequency of the behaviors regarding each subscale on a 7-point Likert scale ranging from 0(*no days/not at all*) to 6(*every day/markedly*). The answers express the frequency of behaviors reported in the last month. A study assessing the validity of the instrument (Mond et al., 2004) reported a sensitivity of 0.83, and specificity of 0.96.

The curious experiences scale (CES) (Goldberg, 1999) is a 31-item questionnaire consisting three subscales measuring: absorption (8 items), depersonalization (8 items) and amnesia (5 items). Respondents indicate the frequency of dissociative experiences on a 5-point Likert scale ranging from 1 (*This never happens to me*) to 5 (*This is almost always happening to me*). The initial study reported an alpha of .84.

The Childhood Trauma Questionnaire, Short Form (CTQ-SF) (Bernstein et al., 2003) is a 28-item self-report questionnaire consisting of five subscales measuring: physical abuse, sexual abuse, emotional abuse, physical neglect and emotional neglect. The frequency of traumatic experiences is rated on a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Always*). The initial study conducted by Bernstein et al. (2003) showed a high reliability and internal consistency of the instrument.

The Quick Inventory of Depressive Symptomatology Self-Report Version (QIDS-SR) (Rush et al.,2003) is a 16-item self-report inventory rating the current severity of depressive symptoms. The items are based on the DSM-5 (APA,2013) diagnostic criteria of depression. The answers are rated on a 4-point Likert scale ranging from 0 (*least severe*) to 3 (*most severe*). The internal consistency reported by Rush et al. (2003) was α= 0.86.

Hypomania Checklist 32 (HCL-32) (Angst et al.,2005) is a 32-item self-report questionnaire which assesses past or present hypomanic symptoms by answering "yes" (*happened to me*) or "no" (*did not happen to me*). The internal consistency reported in the initial study was α= .84

The Posttraumatic stress disorder Checklist for DSM-5 (PCL-5) (Blevins et al. 2015) is a 17-item questionnaire which assesses PTSD symptoms corresponding to the diagnosis criteria in the DSM-5 (APA,2013). Responses are rated on a 5-point Likert scale ranging from 1 (*Not at all*) to 5 (*Extremely*). Answers show how much the respondents have been bothered by their symptoms in the last month. The initial study reported an internal consistency of .94.

The Chapman Infrequency scale (CIS) (Chapman, 1983; Roivainen et. al., 2016) consists of 13 items which present nonsensical statements with obvious responses. Answers are given in a yes/no format. The aim of the scale is to detect careless responses. Validity studies for this scale are non-existent.

Data Analysis

The first step before testing our hypotheses was to calculate the total results for each of the scales used, by summing up all of the items responses or calculating their mean as instructed by the authors of each scale. The scores for the SCIM and ISI-5, as well as for the CES and

EDE-Q were calculated by subscale so we could have a better view on how each subscale correlated with results on the other measurements during the main analysis process. One of the items from the CTQ-SF "emotional neglect" subscale and the entire "physical neglect" subscale had to be reversed before calculating the final results. After calculating the participants' final scores on all scales/subscales, we proceeded to check if any normality assumption was violated. The results on the Kolmogorov-Smirnov Normality Test was checked for each scale/subscale. All scales/subscales showed of p-value of <.05, indicating a violation of the normality assumption. To check for outliers, we also looked at the Q-Q and box-plots. The box-plots showed a large number of extreme outliers on the "physical abuse" and "sexual abuse" subscales from the CTQ. We checked the raw data to see if there were any mistakes in coding the responses and also looked at the 5% trimmed mean to see how much these outliers affected the mean. The effect of the outliers on the mean was negligible, so we decided to perform the rest of the data analysis without excluding the outliers.

Since the distributions of the data were not normal, we decided to analyze the relationship between our variables using Spearman's correlation. To test our first hypothesis, each of the subscales from the SCIM and the ISI-5 were correlated with the results on scales assessing psychopathological traits. For the second hypothesis, we used PROCESS to assess the moderating effect of childhood trauma on the relationship between identity and psychopathological traits.

Results

Table 1. presents the correlations between the SCIM subscales and the scales that measure psychopathological traits. As we can see, the SCIM "Consolidated Identity" subscale

was negatively correlated with all the psychopathology scales. The only strong positive correlations were between SCIM "Lack of Identity" and the PCL (r_s = .617, p < .001), QIDS (r_s = .659, p < .001) and BPD Checklist (r_s= .666, p < .001). The "Lack of Identity" scale also had moderate correlations with the CAPE "Depression Symptoms" and "Negative Symptoms" subscales and the CES "Depersonalization" subscale. The "Diffuse Identity" subscale had mostly weak or very weak correlations with the other scales, except for the one with the BPD Checklist, which was moderate (r_s= .485, p < .001). The HCL showed insignificant correlations with the "Consolidated Identity" and "Lack of Identity" subscales, and a negative, very weak correlation with the "Diffuse Identity" subscale. All of the EDE-Q subscales had very weak to weak correlations with all of the SCIM subscales.

Table 2. shows the correlations between the ISI-5 subscales and the psychopathology scales. The „Normative" subscale showed insignificant correlations with all scales except for the CAPE-42 „Positive Symptoms" subscale, but the correlation was very weak. The „Informational" subscale also showed only one significant correlation with the CES „Amnesia" subscale, which was negative and also very weak. The „Diffuse- Avoidant" subscale had significant correlations with all scales except for the HCL and the entire EDE-Q. Most of its correlations were weak or very weak, except for the one with the BPD Checklist, which was moderate (r_s= .412, p < .001).

For the second hypothesis we used PROCESS to see how the interactions between the PCL, BPD Checklist, and QIDS with each subscale of the CTQ would affect identity. There were mostly no signifficant results of the moderation analysis. The interaction between BPD and physical abuse had p < .01. the interaction between the QIDS and and physical abuse had a p < .001 and the interaction between QIDS and physical neglect had a p < .001.

Table 1.

Pearson Correlations for SCIM and Psychopathology scales

	SCIM Diffuse Identity	SCIM Consolidated Identity	SCIM Lack of Identity
PCL	.388***	-.345***	.617***
QIDS	.388***	-.472***	.659***
HCL	-.169***	-.029	-.063
BPD Checklist	.485***	-.464***	.666***
CES Depersonalization	.356***	-.257***	.503***
CES Absorbtion	.371***	-.247***	.455***
CES Amnesia	.345***	-.209***	.350***
CAPE Positive Symptoms	.299***	-.217***	.423***
CAPE Depression Symptoms	.284***	-.317***	.565***
CAPE Negative Symptoms	.337***	-.325***	.543***
EDE-Q Restraint	.176***	-.122*	.258***
EDE-Q Eating Concerns	.259***	-.171***	.355***
EDE-Q Shape Concerns	.176***	-.217***	.378***
EDE-Q Weight Concerns	.165***	-.168***	.331***

Note. SCIM= "Self-concept and Identity Measure". PCL = "Posttraumatic Stress Disorder Checklist", QIDS = "Quick Inventory of Depressive Symptomatology", "HCL = Hypomania Checklist", BPD Checklist = "Borderline Personality Disorder Checklist", CES = "Curious

Experiesnces Survey", CAPE = "The Community Assessment of Psychic Experiences", EDE-Q = "Eating Disorder Examination Questionnaire".

***. Correlation is significant at the 0.001 level (2-tailed).

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

Table 2.

Pearson Correlations for ISI-5 and Psychopathology Scales

	ISI Diffuse Avoidant	ISI Informational	ISI Normative
PCL	.295***	.036	.087
QIDS	.328***	.020	-.064
HCL	.011	-.058	-.034
BPD Checklist	.412***	.038	.005
CES Depersonalization	.307***	.009	-.020
CES Absorbtion	.215***	.084	-.054
CES Amnesia	.296***	-.192***	.006
CAPE Positive Symptoms	.177***	.067	.130*
CAPE Depression Symptoms	.206***	.077	.046
CAPE Negative Symptoms	.253***	.089	.031
EDE-Q Restraint	-.004	.001	.076
EDE-Q Eating Concerns	.097	-.069	.041

EDE-Q Shape Concerns	.092	-.024	.039
EDE-Q Weight Concerns	.072	-.024	.063

Note. ISI = "Indentity style Inventory", PCL = "Posttraumatic Stress Disorder Checklist", QIDS = "Quick Inventory of Depressive Symptomatology", "HCL = Hypomania Checklist", BPD Checklist = "Borderline Personality Disorder Checklist", CES = "Curious Experiesnces Survey", CAPE = "The Community Assessment of Psychic Experiences", EDE-Q = "Eating Disorder Examination Questionnaire".

***. Correlation is significant at the 0.001 level (2-tailed).

*. Correlation is significant

at the 0.05 level (2-tailed).

Discussion

The main aim of this study was to assess the relationship between identity styles and dimensions and psychopathological traits. To do this we correlated the results of 378 participants on the "Identity Style Inventory" (ISI-5) and the "Self-Concept and Identity Measure" (SCIM) with their results on various scales that assessed the presence of psychopathological symptoms. The results of our analysis showed that the identity styles measured by the "Identity Style Inventory" (ISI-5), namely the "Informational"," Normative" and "Diffuse-avoidant" styles had mostly insignificant or very weak correlations with psychopathological traits. The only moderate correlation that we could observe was between the Diffuse-avoidant style and Borderline Personality Disorder. The identity dimensions measured by the "Self-Concept and Identity Measure" (SCIM) showed mostly significant correlations with psychopathological traits,

but most of them were moderate at best. The only scales that showed strong correlations with "Lack of identity" were the "Borderline Personality Disorder Checklist", the "Posttraumatic Stress Disorder Checklist" and the "Quick Inventory of Depressive Symptoms". Another aim of this study was to see if childhood trauma played any role in moderating the relationship between identity and psychopathological traits, so we used PROCESS to see if the interaction between the "Borderline Personality Disorder Checklist", the "Posttraumatic Stress Disorder Checklist" and the "Quick Inventory of Depressive Symptoms" and each type of childhood maltreatment measured by the "Childhood Trauma Questionnaire", may have an influence on identity. Results showed that the interaction between Posttraumatic Stress and maltreatment had no significant effect on identity. The interaction between Borderline and physical abuse had a significant positive effect on "lack of identity", while the interactions between depression with physical abuse, sexual abuse and physical neglect had a significant but negative effect on "lack of identity".

These results suggest that, at least in the general population, identity does not seem to be significantly affected by the presence of Psychopathological traits. "Lack of identity" has showed a positive correlation with BPD in previous research as well (Kaufman et al.,2015), since patients suffering from BPD reported feelings of emptiness and not knowing who they are. But apart from BPD, there have not been studies that assess the relationship between lack of identity and other types of psychopathology, that is why we found it surprising to see that in the present study, it also showed a positive strong correlation to PTSD and depression as well. This might be something that would be worth looking into by future research papers. For more accurate information, correlation researchers should try to correlate "lack of identity" with symptoms of PTSD and depression reported by a clinical sample.

Although “consolidated identity” showed weak to moderate correlations with psychopathology, the fact that all of the correlations were negative might suggest that even though psychopathology does not necessarily disturb identity to a level that can be clearly detected, it does prevent individuals from attaining a true consolidation of identity

The high number of low to moderate correlations between psychopathology and identity might be due to the fact that the data were collected from a non-clinical sample. But further studies are needed to see if this is the case This limitation might have also influenced the results on the moderation effects of childhood trauma. Since most of the respondents from the non-clinical sample reported no history of trauma, the minority of respondents who reported actual incidents of childhood trauma were shown as outliers when we checked the box-plots. It is recommended that further studies should conduct a study using the same instruments, but on a clinical sample in order to compare the correlation results between the current study and the one conducted on the clinical sample.

Another limitation of the study might be that the data was collected only from first year psychology students. Since the process of identity consolidation takes place approximately before the majority of people decide to attend university, it might be that individuals showing a diffuse-avoidant style or that have identity disturbances might not be able to attend a higher form of education as identity disturbances also imply that one does not have any idea in terms of what career they wish to follow, or do not have the necessary motivation or skills to do so (Erikson, 1968). That is why the data should be collected from individuals at the age of late adolescence/ young adulthood, but not only from those who follow a higher form of education. Another possible limitation might be that since the sample was composed from psychology students, it might be that certain respondents would be aware of certain stigma that comes along with

presenting certain psychopathological traits, and therefore choose to give more socially desirable answers so they would not be stigmatized. The solution to this problem is the same as the one mentioned above, and that is collecting data from people that are not only university students.

Conclusion

To conclude, the aim of our study was to assess the correlation between identity and psychopathological traits in a non-clinical population. Results suggest that the traits related to depression, PTSD and BPD were the only ones to show strong positive correlations with the identity dimension "Lack of Identity". Another aim of the study was to see if childhood trauma had any moderating effect. We discovered the interactions between BPD with physical and sexual abuse had a positive effect on lack of identity. It might be that collecting data from a clinical population might lead to more relevant information on the relationship between psychopathology and identity, as well as on the moderating effect of trauma. Another recommendation for further research would be to collect the data from sample that includes individuals with different social situations, in order to obtain a more accurate view on the interaction between the studied variables.

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