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Autistic Features, Social Camouflaging, and Identity Formation Within a Non-Clinical College Student Population

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Abstract

Research on autistic features and identity development has indicated that autistic traits are positively associated with disturbances in identity development. Characteristic attributes of autism, such as circumscribed interests and differences in social relatedness, align with self-rumination and challenges in navigating the components of identity formation. Nonetheless, research on this topic remains scarce. The present study examined the association between autistic features and identity formation processes in a non-clinical population while accounting for sociocultural factors, specifically social camouflaging and gender conformity. The sample consisted of college students enrolled in a large metropolitan city (N = 427) who completed an anonymous online survey battery. Autistic features were positively associated with both ruminative identity exploration and identity distress. Social camouflaging mediated these relationships, suggesting that the concealment of autistic traits may contribute to maladaptive identity formation rather than autistic traits themselves. Gender conformity further moderated the effect, with higher levels of conformity to traditional gender roles weakening the relationship between autistic features and social camouflaging. These findings signify the relevant role of social camouflaging in the relationship between autistic features and identity disturbances, highlighting the need for interventions and assessments that consider its prevalence and manifestation.

Keywords: autism spectrum disorder; identity; identity distress; social camouflaging; gender conformity

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1. Introduction

1.1. Autism Spectrum Disorder

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition-TR (DSM-5-TR) describes autism spectrum disorder (ASD) as a neurodevelopmental disorder that manifests as persistent deficits in social communication and interactions across multiple contexts, including skills in developing, maintaining, and understanding relationships. Other characteristics of this spectrum include repetitive and circumscribed interests and behaviors, challenges in theory of mind (i.e., the ability to understand the mental state of oneself and others), and sensory processing differences [1,2]. Moreover, the developmental differences associated with ASD generally occur in personal, social, academic, or occupational functioning [3].

Approximately one in thirty-six children is diagnosed with ASD, an estimate that has increased throughout the years and is expected to continue rising, demonstrating the importance of acknowledging and understanding this disorder [4]. ASD can be diagnosed

in children as young as three years of age. Despite the possibility of receiving a diagnosis at any life stage, an ASD diagnosis typically occurs during childhood [5]. However, there is a growing focus on understanding its prevalence and clinical manifestation in adults [6].

Autistic individuals often experience behavioral, emotional, economic, and social challenges throughout their lives [7]. An early diagnosis not only answers questions about specific behavioral and developmental concerns but also provides access to necessary evidence-based interventions and support that contribute to an improved lifestyle and sense of self [8]. Even in the event of a delayed diagnosis, autistic individuals can stabilize their identity formation (i.e., the personal selection of roles, goals, values, and beliefs about the world which can give one's life direction and purpose, typically occurring during later adolescence and emerging adulthood [9]) by providing context to past experiences that harmed their self-perception [9,10]. Nonetheless, considering how heterogeneous this condition is, a diagnosis can be a positive, liberating, or oppressive outcome depending on the individual [11,12]. An ASD diagnosis can potentially disrupt the process of identity formation, as the autistic individual may come to terms with being different and redevelop their identity [10]. Furthermore, even those with subclinical autistic features (e.g., those with autistic symptoms not severe enough to rise to the level of ASD diagnosis) can have greater struggles with identity-related issues [13].

1.2. ASD and Identity Development Processes

Identity development has been conceptualized in terms of unique statuses defined by two key dimensions: exploration, the active process of evaluating potential identity alternatives such as life roles, goals, values, and beliefs about the world (e.g., what career should I choose?), and commitment, the selection of certain alternatives and the degree of personal investment in them (e.g., I have decided to become a teacher) [14]. Through these continuums, distinct identity statuses emerge based on the degree to which one has explored and/or committed to their personal sense of identity. An individual who has neither explored nor committed to identity alternatives is said to be in the diffused identity status (e.g., I don't know what I want out of life because I haven't really given it much thought). Some people prematurely commit without much exploration by uncritically adopting the identity alternatives offered by certain authority figures, which is known as the foreclosed status (e.g., I never needed to spend much time trying to figure out what I wanted to do with my life because I have always followed the direction that my parents laid out for me). The moratorium status, by contrast, is characterized by high exploration and low commitment, indicating an ongoing state of active yet unresolved identity questioning (e.g., I haven't yet figured out what I want out of life, but I am actively working on it). Finally, the achieved status reflects a resolved sense of self, characterized by high exploration followed by firm commitments (e.g., after much deliberation, I have finally determined what I want to do with my life). However, when exploration becomes disrupted by persistent doubt and worry rather than purposeful searching, it is referred to as ruminative identity exploration [15]. Identity distress, in turn, reflects a maladaptive process that is preceded by a prolonged inability to resolve identity questions [16].

Research on identity formation among autistic individuals remains limited but is growing. The inherently social nature of identity formation, typically reliant on peer comparison, social feedback, and relational exploration, may present unique challenges for autistic individuals in this developmental process, given well-documented differences in social processing and peer relationship quality [17]. Findings that autistic traits tend to be more strongly associated with the diffused identity status, while age is more associated with the achieved status [10], suggest that the relationship between recognizing one's autistic traits and age are associated with greater identity certainty in older cohorts.

Ratner and Berman [13] found among a non-clinical college sample that autistic features negatively predict identity commitment while positively predicting identity exploration and identity distress. Furthermore, they observed that characteristic attributes of ASD, such as circumscribed interests and differences in social relatedness, may complicate engagement in the components of identity formation (i.e., commitment and exploration). Consistent with this information, common characteristics of ASD (e.g., social anxiety) were associated with identity distress and existential anxiety [13].

Studies have reported a correlation between self-rumination and ASD, along with a possible association between rumination and depressive symptoms in autistic individuals [18,19]. Moreover, Gotham and colleagues [19] found a relationship between rumination and the perseverative tendencies typically seen in ASD (i.e., routine, rituals, and circumscribed interests). Currently, no studies have examined the relationship between autism and ruminative identity exploration, underscoring the need for further research.

1.3. ASD in College Students

The college years represent a critical developmental window for identity formation, as emerging adults, typically between ages 18 and 29, engage in heightened exploration across multiple domains, including career and relationships [20,21]. For autistic students, however, the social demands of postsecondary education may intensify the need to camouflage or hide their unique traits [6], making this an especially relevant context for examining the intersection of autistic features, social camouflaging, and identity development.

Many students with ASD graduate from secondary schools unprepared to transition into higher education or a profitable job market [22]. Both economic and academic success play an essential role in an individual's quality of life [23]; therefore, it is essential to learn how best to address and support the needs of autistic college students.

Autistic individuals experience co-occurrence with mental health issues (i.e., anxiety, depression, loneliness) at higher rates than their neurotypical peers [24]. A study conducted by Gelbar and colleagues [25] found that among the most recurring psychopathologies found in postsecondary students with ASD, anxiety was the most reported condition at 71%, followed by loneliness at 53%, and depression at 47%. Furthermore, women with ASD tend to internalize their problems at higher levels and externalize behaviors at lower levels than men with ASD [24]. Research suggests that being a woman with a neurodevelopmental disorder may provide a higher risk regarding internalization of psychopathology [26], which calls for additional screening and treatment.

McMorris and colleagues [27] noted that there are specific barriers that stop autistic students from accessing mental health services, such as the wait time for services being too long, the process feeling too overwhelming, and issues conveying their needs or struggles once they can communicate with a specialist. The authors also concluded that, despite most of their sample reporting the ability to access mental health services (e.g., a psychologist), 40% expressed a desire for more support programs. Additional psychological services, academic accommodations, skill workshops, career and academic counseling, and self-advocacy training are among the services or support that students with ASD would most like to receive, yet are unable to access. These challenges faced by college students with ASD highlight the need for targeted support and interventions. It is essential to understand the perspective of autistic individuals when addressing mental health services in postsecondary institutions.

1.4. Social Camouflaging in Autistic Individuals

Masking, or social camouflaging, is the ability to conceal behaviors related to ASD by developing strategies that help acquire social competence [28]. Some examples of masking

include mimicking the facial expressions of those with whom the individual interacts, forced eye contact, suppressing topics of interest, rehearsing conversations, and acquiring and following social scripts [29,30].

Social camouflaging increases the difficulty of a clinical diagnosis since many autistic individuals use constructive coping and adjustment strategies to assimilate neurotypical social communication patterns [31]. Although social camouflaging is observed across genders, it has been most extensively studied in autistic girls and women, noting that camouflaging often results in delayed or missed diagnosis [29,31]. However, it is important to note that autistic men and gender-diverse individuals also engage in masking, albeit it may manifest differently across groups [32]. The environment plays an essential role in the manifestation of masking, as some environments (e.g., home) may not require the same level of assimilation as others (e.g., school); therefore, there is high variation in the presentation of camouflaging [29,33].

Masking is frequently associated with adverse effects [10]. Many autistic individuals who camouflage their traits report feeling emotionally, mentally, and physically exhausted following a prolonged session of masking, along with an altered sense of self, resulting from the continuous disguise of their unfiltered traits [28]. While autistic individuals who regularly mask their traits may appear socially successful on the surface, the concealment of authentic behaviors carries high psychological costs, including stress, anxiety, depression, and suicidality [28,32,34].

Since masking requires mimicking behaviors perceived as socially accepted and concealing unique characteristics (e.g., circumscribed interests), it may affect an individual's identity development [10]. Hull and colleagues [28] found that autistic individuals who extensively resort to social camouflaging report losing their sense of self, noting that playing countless roles can distort their identity. In some cases, autistic individuals can rely on special interests, such as hobbies, topics, or occupations, to define their identities instead of relying on social conformity and gender expectations; this aligns with research suggesting that autistic women, in particular, may experience tension between their authentic identity and the social identity presented to others, frequently navigating conflicts between their autistic and feminine identities [33]. These dynamics indicate that conformity to gender norms may play a significant role in shaping camouflaging behavior. Gender conformity, the extent to which an individual adheres to traditional gender role expectations [35], could amplify the relationship between autistic features and camouflaging, as individuals facing greater pressure to conform to expectations of their gender may feel a stronger need to mask their autistic traits to meet those social standards [29,32].

1.5. Rationale

Despite growing evidence linking autistic traits to difficulties in identity formation, the mechanisms underlying this relationship remain underexplored. Specifically, no study to date has examined the roles that social camouflaging and gender conformity may serve in the relationship between autistic features and maladaptive identity formation processes. Social camouflaging and gender conformity may directly hinder identity development by concealing the unique characteristics that shape autistic individuals' sense of self [36]. The purpose of this study was to examine the roles of social camouflaging and gender conformity in supporting the relationship between autistic features and maladaptive identity formation among college students, with the aim of informing future research on targeted support strategies for this population.

The present study puts forth the following hypotheses:

1. Autistic features will be positively correlated with identity distress and ruminative identity exploration, while negatively correlated with commitment-making and identification with commitment.
2. Social camouflaging will mediate the relationship between autistic features and identity functioning, such that higher levels of autistic features will be associated with greater social camouflaging, which in turn will predict higher identity distress and ruminative identity exploration, and lower commitment-making and identification with commitment.
3. Gender conformity will moderate the relationship between autistic features and social camouflaging, such that higher levels of gender conformity will magnify the relationship between autistic features and social camouflaging.

2. Materials and Methods

2.1. Participants

Participants (N = 427) were students enrolled at a southeastern university located in a large metropolitan city of the United States. Students submitted their responses via an anonymous online survey. Participation was voluntary, and course credit was given upon completion. Ages ranged from 18 to 62 years (M = 19.66, SD = 4.84). The gender composition included 62.1% women, 34.7% men, 1.4% transgender, 1.4% non-binary, and 0.5% classified as other. The racial/ethnic formation comprised 49.6% White, 19% Hispanic or Latino, 10.5% Black, 9.8% Asian or Pacific Islander, 0.2% Native American or Alaskan Native, and 10.8% mixed ethnicity or other.

2.2. Measures

A demographic questionnaire asked participants about their age, gender, ethnicity, and year in college.

The Autism-Spectrum Quotient Short was used to assess autistic traits in individuals from the general population [37]. This abridged version of the Autism-Spectrum Quotient (AQ) comprises 28 questions administered to obtain a total average score of autistic traits in the sample. Participants were asked to rank their agreement with each statement on a 4-point scale, ranging from 1 (definitely disagree) to 4 (definitely agree). A sample item is "I enjoy social occasions." It is important to note that this value falls within the questionable reliability range, which may have reduced the precision of autistic features scores and contributed to modest effect sizes.

The Camouflaging Autistic Traits Questionnaire was used to assess camouflaging behaviors [38]. Participants were asked to rate 25 statements on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) regarding whether they camouflage in social situations. In the present study, Cronbach's alpha for the average degree of social camouflaging was 0.91. A sample item is "I have developed a script to follow in social situations."

The Comfort and Conformity of Gender Expression Scale was used to assess comfort and discomfort with conformity and nonconformity in gender expression [39]. Participants were asked to rate on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree) 24 statements indicating the degree to which each statement reflected their experiences and attitudes toward gender expression. In the present study, Cronbach's alpha for the entire scale was 0.83. A sample item is "I am uncomfortable interacting with others in ways that do not conform to gender expectations."

The Dimensions of Identity Development Scale was used to assess three dimensions of identity development: commitment-making, identification with commitment, and ruminative exploration [15]. Participants answered 15 items on a 5-point Likert scale, from 1

(strongly disagree) to 5 (strongly agree). In the present study, Cronbach's alpha included 0.87 for ruminative exploration, 0.89 for identification with commitment, and 0.94 for commitment-making. Sample items included "I have decided on the direction I want to follow in my life" for commitment-making, "My plans for the future match with my true interests and values" for identification with commitment, and "It is hard for me to stop thinking about the direction I want to follow in my life" for ruminative exploration.

The Identity Distress Scale measured distress and worry regarding several identity-related factors [16]. Participants assessed their distress levels by responding to questions in a singular format: "To what degree are you currently or recently upset, distressed, or worried over any of the following issues in your life?" The factors listed were long-term goals, career choice, friendships, sexual orientation and behavior, religion, values and beliefs, and group loyalties. Answers for all 7 items were recorded on a 5-point scale from 1 (none at all) to 5 (very severely). In the present study, Cronbach's alpha was 0.81 for the average identity distress.

2.3. Procedure

Upon Institutional Review Board approval from the authors' university, the measures included in a single survey battery were uploaded to an online platform for student access. Participants could partake in the study in exchange for course credit while remaining anonymous. Those who consented to participate were then redirected to the Qualtrics survey battery, an online data collection platform. Once the survey was initiated, participants were introduced to the Explanation of Research, which outlined the study's details and expectations. Those who did not wish to move forward would automatically reach the end of the survey, and no data would be collected. Individuals who declined to participate were offered alternative assignments or participation in other studies to compensate for the course credit.

3. Results

3.1. Preliminary and Descriptive Analyses

Descriptive statistics for all study variables can be seen in Table 1. Examination of skewness and kurtosis indicated that all study variables were approximately normally distributed. Skewness ranged from −0.97 to 0.74 and kurtosis ranged from −0.64 to 1.18, values that fall within commonly accepted limits for normality.

Table 1. Descriptive statistics of study variables.

Measure	M	SD	Possible Range	Actual Range	Skewness (S.E.)	Kurtosis (S.E.)
Autistic Features	8.12	2.77	0.00–29.00	0.00–15.00	−0.12 (0.12)	−0.36 (0.24)
Gender Conformity	61.79	11.82	24.00–120.00	26.00–96.00	0.06 (0.12)	0.12 (0.24)
Social Camouflaging	98.35	22.96	25.00–175.00	35.00–170.00	0.10 (0.12)	0.28 (0.24)
Ruminative Exploration	3.04	1.02	1.00–5.00	1.00–5.00	−0.10 (0.12)	−0.64 (0.24)
Identity Distress	2.14	0.79	1.00–5.00	1.00–5.00	0.74 (0.12)	0.29 (0.24)
Commitment Making	3.91	0.88	1.00–5.00	1.00–5.00	−0.97 (0.12)	1.18 (0.24)
Identification with Commitment	3.80	0.83	1.00–5.00	1.00–5.00	−0.59 (0.12)	0.12 (0.24)

The performance of several statistical tests revealed the following individual differences among the study variables. Gender differences were analyzed using independent sample t-tests. Results indicated that men scored significantly higher than women on gender conformity ($t = 3.75$, $p < 0.001$, and $d = 0.39$, indicating a small effect).

Grade-level differences were analyzed using a series of one-way analyses of variance (ANOVAs). Findings indicated a significant effect for gender conformity ($F_{(3, 416)} = 6.31$, $p < 0.001$, $\eta^2 = 0.02$) and identification with commitment ($F_{(3, 417)} = 2.67$, $p = 0.047$, $\eta^2 = 0.02$); however, the effect sizes were small for both. Scheffé post hoc tests revealed that freshmen scored higher on gender conformity than sophomores ($F_{(1, 416)} = 7.58$, $p = 0.006$) and seniors ($F_{(1, 416)} = 5.94$, $p = 0.015$).

Lastly, a Pearson's correlation matrix was used to assess whether age differed significantly from the study variables. Age was significantly and negatively associated with gender conformity ($r = -0.12$, $p = 0.017$, indicating a small effect), suggesting that gender conformity decreases with age. In contrast, age was positively associated with identification with commitment ($r = 0.35$, $p < 0.001$) and commitment-making ($r = 0.35$, $p < 0.001$), both with moderate effect sizes, suggesting stronger identity commitment processes among relatively older participants.

3.2. Main Analyses

3.2.1. Hypothesis 1

To examine the association between autistic features and disturbances in identity formation, a Pearson bivariate correlation analysis was conducted. Findings indicate a significant positive correlation between autistic features and both ruminative identity exploration ($r = 0.16$, $p = 0.001$) and identity distress ($r = 0.14$, $p = 0.003$), but both effect sizes were small. However, there was no significant correlation between autistic features and either commitment-making or identification with commitment. Therefore, Hypothesis 1 was only partially supported. See Table 2.

Table 2. Correlation matrix of study variables.

Variables	1	2	3	4	5	6
1. Autistic Features	-					
2. Gender Conformity	0.04	-				
3. Social Camouflaging	0.34 ***	0.12 *	-			
4. Ruminative Exploration	0.16 **	0.10 *	0.38 ***	-		
5. Identity Distress	0.14 **	0.18 ***	0.26 ***	0.42 ***	-	
6. Commitment-Making	−0.01	0.10 *	−0.06	−0.43 ***	−0.16 ***	-
7. Identification with Commitment	−0.00	0.07	0.26 ***	0.45 ***	−0.19 ***	0.75 ***

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

3.2.2. Hypothesis 2

A moderated mediation model was conducted using the PROCESS macro for SPSS (Version 4.2) Model 7, which tests whether a mediator (social camouflaging) carries the effect of a predictor (autistic features) on an outcome (identity outcomes), and whether this indirect effect is moderated by a third variable (gender conformity) acting on the predictor-to-mediator path [40]. Conditional process modeling extends traditional mediation and moderation analyses by simultaneously estimating both processes within a single analytical framework. Bootstrap confidence intervals were generated based on 5000 resamples (95% bias-corrected) to estimate the indirect effects. Autistic features significantly predicted higher levels of social camouflaging ($b = 6.85$, $SE = 1.83$, $t = 3.75$, $p < 0.001$, 95% CI [3.26, 10.44]), indicating that individuals reporting a greater presence of autistic features also reported greater social camouflaging. The model predicting social camouflaging was significant ($F_{(3, 422)} = 22.53$, $p < 0.001$, $R = 0.37$, $R^2 = 0.14$), with a moderate effect size. First, social camouflaging significantly predicted greater identity distress ($b = 0.01$, $t = 4.68$, $r = 0.22$, $p < 0.001$), suggesting a small-to-moderate effect size. Once this relationship was established, the direct effect of autistic features on identity distress was not

significant. Furthermore, social camouflaging significantly predicted greater ruminative identity exploration ($b = 0.02$, $t = 7.66$, $r = 0.35$, $p < 0.001$), indicating a moderate effect, with the direct effect of autistic features on this variable being non-significant. Lastly, social camouflaging significantly predicted lower identification with commitment ($b = -0.01$, $t = -3.38$, $r = -0.16$, $p = 0.001$), suggesting a small effect size. The direct effect of autistic features on identification with commitment was non-significant once this association was established. Nonetheless, the indirect effect of autistic features on commitment-making via social camouflaging was not significant. Aligned with the original prediction, social camouflaging mediated the relationships between autistic features and three identity disturbances: identity distress, ruminative identity exploration, and low identification with commitment. However, commitment-making remained non-significant in the interaction. Thus, Hypothesis 2 was partially supported.

3.2.3. Hypothesis 3

The moderated mediation model performed in the study also assessed whether gender conformity magnifies the relationship between autistic features and social camouflaging behavior. Gender conformity significantly predicted social camouflaging ($b = 0.73$, $t = 2.96$, $r = 0.14$, $p = 0.003$), indicating a small effect, and the interaction term between autistic features and gender conformity was significant ($b = -0.06$, $SE = 0.03$, $t = -2.27$, $p = 0.024$, $\Delta R^2 = 0.01$), with a small effect size. However, gender conformity weakened the relationship between autistic features and social camouflaging rather than magnifying it ($b = -0.06$, $t = -2.27$, $p = 0.024$, $r = -0.01$), with the interaction effect being small, suggesting that the interaction decreases as gender conformity increases, which is the opposite effect of what was hypothesized. Thus, Hypothesis 3 was not supported.

4. Discussion

As hypothesized, participants with higher levels of autistic features reported a more maladaptive identity exploration process. They were more likely to experience uncertainty and distress around their sense of self, which aligns with previous literature findings [36]. However, unlike the mentioned study, autistic features did not reflect low identity commitment or lack of investment in self-identity concepts (e.g., career, sexual orientation).

The positive correlation between age and identity commitment found in this study may explain this outcome. Ratner and Berman [13] observed a narrower age range of 18 to 25 in a similar non-clinical, neurotypical college sample, whereas the current sample ranged from 18 to 62. Furthermore, the responses recorded in this study included a lower percentage of freshmen than in the mentioned study (i.e., 48.1%, compared to 52.8%). This suggests that relatively older demographics may exhibit higher levels of identity commitment, aligning with previous findings indicating a positive association between age and achieved identity status in an autistic sample [10].

The mediation findings suggest that difficulties with identity may arise not directly from autistic traits themselves, but from the sustained effort to conceal and suppress those traits to fit into neurotypical expectations. Current results correspond with findings that describe a distortion of identity and adverse psychological effects in individuals who mask their autistic traits [28].

To our knowledge, this is the first study to examine gender conformity as a moderator in the relationship between autistic features and social camouflaging, thus the direction of the effect could not be firmly anticipated. The original hypothesis that higher gender conformity would magnify camouflaging was grounded in evidence that societal pressure to conform to gender norms has been identified as a key motivator of social camouflaging, predominantly in autistic women [29,33]. Rather than strengthening the pathway, higher

levels of gender conformity weakened the relationship between autistic features and social camouflaging behaviors. Because autistic individuals, particularly women, struggle with defining and presenting their gender according to societal norms, lower gender conformity could reflect uncertainty in gender presentation, greater societal pressure to conform, and a stronger need to assimilate into traditional gender roles [33].

This pattern may be understood through research suggesting that autistic individuals respond to identity-related social pressure in two distinct ways: some conceal their characteristics to assimilate to social norms, while others disengage entirely from those norms [41]. Lower gender conformity may emerge from an elevated awareness of social incongruence, which could contribute to greater reliance on masking autistic traits to achieve acceptance. The current study found that women reported lower gender conformity compared to men. These findings align with the knowledge that social camouflaging is predominantly observed in women and that autistic women report feeling disconnected from their femininity, relying on special interests to define their gender identity [42]. Future research should employ a situational approach to this concept. Because social camouflaging varies across environments, different contexts should be examined. Furthermore, research would benefit from investigating a gender-diverse sample to analyze differences among cisgender, transgender, and gender nonconforming identities.

Considering the increasing rates of autism spectrum disorder and autistic individuals in secondary education, these findings hold important implications for educational and clinical practice focused on improving the support for this demographic [42]. Interventions targeting the social pressures that drive social camouflaging behavior in autistic individuals should be prioritized, with a focus on reducing the need to mask authentic traits. Neurodiversity-affirming therapeutic approaches, such as Acceptance and Commitment Therapy (ACT), which target psychological flexibility and authentic self-expression, represent a promising avenue for supporting identity development in autistic individuals [41]. Additionally, clinical assessments should consider the presence and extent of social camouflaging as a factor impacting psychological well-being and identity formation.

These findings highlight the need to better understand the mechanisms that shape the relationship between neurodivergence and self-concept. Increased awareness of the dynamics involved with social camouflaging may help clinicians, researchers, and individuals who suspect an ASD diagnosis recognize the psychological impact of masking behaviors. Identifying and addressing the concealment of autistic traits could ultimately foster healthier identity development and more meaningful interpersonal connections, benefiting both neurodivergent and neurotypical individuals alike.

5. Limitations

Although this study demonstrated positive results, several limitations should be noted. First, the survey was distributed at a predominantly White, southeastern institution, meaning that the sample could have disproportionately represented this demographic. Research has documented meaningful differences in how autistic traits manifest and are perceived across racial and ethnic groups, with autistic individuals from minoritized communities facing compounded barriers to diagnosis and support due to intersecting experiences of racial and neurodevelopmental stigma [41,43]. Future studies could benefit from having a more ethnically diverse sample that reflects the manifestation of autistic features in misdiagnosed and underdiagnosed populations. Similarly, the predominantly female sample limits generalizability across gender identities, given emerging evidence that non-binary and gender-diverse autistic individuals report higher levels of camouflaging than both autistic men and women, suggesting that the relationship between gender identity and autistic traits remains underexplored [44].

Importantly, as autistic features were evaluated via self-report in a non-clinical university sample, the extent to which these findings generalize to individuals with a formal ASD diagnosis remains unclear and represents a key limitation of the present study. Future research could address this issue by focusing on individuals with a formal ASD diagnosis and implementing longitudinal and mixed-method analyses, including surveys and interviews. These approaches would offer greater insight into the directionality of observed relationships and help account for potential comorbid disorders that may influence the data.

Future studies should explore additional factors that potentially contribute to difficulties navigating identity formation among autistic individuals, such as minority stress, socioeconomic status, and comorbid psychological conditions, such as anxiety, depression, and obsessive–compulsive symptoms. Future studies should incorporate psychiatric symptom screenings (e.g., PHQ-9, GAD-7, OCI-R) to better isolate the unique association between autistic features and identity formation.

Another relevant limitation to note is that the recruitment method used in this study may have increased the risk of sampling bias. The participant recruitment system used in this study is primarily used by college students in psychology courses, who are more likely to be knowledgeable about the terminology of identity concepts and neurodevelopmental disorders. Expanding recruitment strategies through participatory action research to include a more diverse, representative sample would enhance the generalizability and relevance of future research.

At a systemic level, educational institutions should consider implementing or enhancing accommodations for neurodivergent students to reduce the social pressure to camouflage. Examples of such implementations include structured peer-support programs, explicit neurodiversity education, and flexible social expectations in academic settings.

6. Conclusions

Understanding a profound, personal, and complex process like identity helps advance the support systems for neurodivergent individuals. Findings suggest that higher reports of autistic features are associated with a prolonged and disruptive identity exploration process. Furthermore, higher levels of gender conformity, which were primarily observed in men, weakened the link between autistic features and identity disturbances. Considering these results, tailored interventions can be developed and implemented in educational institutions to promote personal growth, mental well-being, and academic success within the neurodivergent community.

The novel conclusion suggesting the mediating role of social camouflaging in the relationship between autistic features and disruptive identity exploration provides a significant context for the experiences of neurodivergent people. Acknowledging that maladaptive identity formation in autistic individuals may result from assimilation to neurotypical expectations rather than from neurodivergent traits informs interventions and assessments, deepening their consciousness of commonly misdiagnosed and underdiagnosed populations (e.g., women). The findings from this study highlight the importance of developing diverse, affirming educational and clinical practices that promote authentic expression within the ASD community and reduce reliance on camouflaging.

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Data Availability Statement: The data sets presented in this article are not readily available because participants were informed that the data would not be shared beyond the research team, as noted in the consent form.

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Abbreviations

The following abbreviations are used in this manuscript:

ASD	Autism spectrum disorder
AQ	Autism-Spectrum Quotient
ANOVA	Analysis of variance

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