



Camouflaging and suicide behavior in adults with autism spectrum condition: A mixed methods systematic review

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ABSTRACT

Different studies have identified that adults with Autism Spectrum Disorders (ASD) are at risk of suicidal thoughts and behaviors. However, the relationship between both variables is still understudied. This systematic review aims to examine the relationship between camouflaging—an adaptive strategy used by adults with Autism Spectrum Disorder to mask or modify their social behaviors—and suicidal thoughts and behaviors. Following PRISMA guidelines, a comprehensive search was conducted across multiple databases, including PubMed, ScienceDirect, Scopus, APA PsycArticles, Google Scholar, and APA PsycInfo, without restrictions on sample size, gender, or functionality level. Only studies in English were considered. A total of 6,901 articles were identified, and after screening and applying the inclusion criteria, 11 articles were included in the final analysis. Camouflaging in adults with ASD is consistently associated with a higher risk of suicidal behavior. However, the causal mechanisms linking camouflaging to suicide remain unclear. Most studies highlight that the psychological burden of camouflaging may exacerbate mental health issues, contributing to elevated suicide risk. Given the limited evidence, future research should focus on elucidating the pathways through which camouflaging impacts suicidal behaviors.

1. Introduction

Many autistic individuals employ various strategies to mask their symptoms and mimic neurotypical behaviors to fit into social groups, a phenomenon referred to as Masking by the autistic community and Camouflaging by the scientific community (Milton & Sims, 2016; Hull et al., 2017; Miller et al., 2021; Alagband-Rad et al., 2023). This concept has gained increasing recognition. However, understanding of it remains constrained by a lack of awareness among healthcare professionals and society at large. The failure to account for the internal experiences of autistic individuals has, until recently, limited comprehension of the phenomenon (Miller et al., 2021). Camouflaging emerges as an adaptive response to social pressures, allowing individuals with Autism Spectrum Disorder (ASD) to navigate social interactions more successfully. Yet, while it may facilitate their integration into neurotypical environments, it often comes at a high cost, contributing to anxiety, stress, depression, low self-esteem, and emotional exhaustion, all of which negatively impact mental health (Cage & Troxell-Whitman, 2019; Hull et al., 2020; McQuaid et al., 2022).

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According to [Pearson and Rose \(2021\)](#), research has shown that dehumanizing attitudes towards people with ASD remain prevalent despite awareness and acceptance campaigns. This can lead to numerous challenges in the diagnostic process of adults with ASD, resulting in late diagnoses that present complications for self-concept and self-perception ([Stagg & Belcher, 2019](#)). It has been shown that psychiatric comorbidity in ASD leads to a notable increase in difficulties in adaptive responses, affects daily activities, decreases quality of life and accentuates problems such as restlessness, passivity, social isolation, aggressiveness, irritability or self-harm ([Fitzpatrick et al., 2016](#)). [Cassidy et al. \(2022\)](#) found that individuals with diagnosed or possible undiagnosed autism had a significantly higher prevalence of suicide compared to the general population (41.4 % vs. 1.1 %), with a risk of suicide up to 19 times greater. Although risk factors were high across all groups, the high prevalence of autism among those who died by suicide is critical. These findings align with meta-analytic evidence showing alarmingly high rates of suicidality among autistic and possibly autistic individuals without intellectual disability, with a prevalence of suicidal ideation at 34.2 %, suicide plans at 21.9 %, and suicide attempts or behaviors at 24.3 % ([Newell et al., 2023](#)).

Several forms of suicidal behavior can be placed on a spectrum, encompassing both cognitive and behavioral aspects ([Espada et al., 2023](#)). This includes suicidal ideation, which refers to thoughts about ending one's life. This ideation can be active, involving the act of taking one's life, even considering a concrete plan, or passive, characterized by a desire to die, such as thoughts of death or wishes to no longer live ([Espada et al., 2023](#)). Additionally, suicidal behaviors consist of attempts to end one's life or even death by suicide.

Non-suicidal self-injury (NSSI) can also appear in the population with ASD. NSSI refers to deliberate behaviors aimed at causing physical harm without the intent to die ([American Psychiatric Association, 2022](#); [Pérez-Arqueros et al., 2023](#)). NSSI is typically driven by a regulatory function, particularly related to managing negative emotions, and presents a complex challenge. Crucially, NSSI is conceptually and clinically distinct from suicidal behaviors ([Al-Halabí et al., 2021](#)), although both can sometimes coexist in individuals, adding complexity to their assessment and treatment. NSSI is a significant concern among adults with autism, with 50 % reporting a history of NSSI and higher prevalence observed in women. Interestingly, while the characteristics of NSSI in autistic individuals are similar to those in the general population, they appear to be unrelated to depression or emotion regulation difficulties in this group ([Maddox et al., 2017](#)). Environmental factors, such as restricted access to typical means of self-injury can also influence the methods used. For instance, headbanging—a behavior commonly associated with autism—may become more prevalent across diagnostic groups in such settings due to the limited availability of alternative methods ([Mournet et al., 2024](#)). Additionally, autistic individuals may not perceive certain behaviors, such as headbanging, as self-injury but rather as a form of sensory regulation or stimming.

From the point of view of [O'Connor and Kirtley \(2018\)](#), camouflaging could potentially be relevant to the psychological constructs described in the Integrated Motivational-Volitional Model of Suicide (IMV), particularly in understanding the mental processes linked to suicidal thoughts and behaviors. The IMV model explains suicide risk through three key phases: pre-motivational, motivational, and volitional. In the pre-motivational phase, factors such as genetics, environment, and social influences create a context in which suicidal thoughts may develop. The motivational phase is where feelings of defeat and entrapment arise leading to suicidal ideation. Finally, the volitional phase involves the transition from suicidal thoughts to attempts, facilitated by specific triggers or volitional moderators like impulsivity or access to means. This proposal suggests that camouflaging behaviors could exacerbate feelings of defeat and entrapment by forcing individuals to conceal their true emotions and struggles to conform socially. Such masking could increase social isolation or rejection, contributing to a sense of failure or inadequacy, and heightening the risk of suicidal ideation ([Ordoñez et al., 2021](#)). Although this connection is not explicitly outlined in the IMV model, this interpretation offers a potential link between camouflaging and increased vulnerability to suicidal thoughts, given the psychological strain involved in such behaviors.

In this regard, the focus on camouflaging and its relationship with feelings of entrapment and defeat is aligned with the findings of [Cage and Troxell-Whitman \(2019\)](#), which observed gender differences in the reasons for camouflaging. Specifically, autistic women were more likely to camouflage for "conventional" reasons, such as surviving in formal environments like work, while both genders tended to use camouflaging primarily in social situations for functional purposes. Additionally, the study found that engaging in camouflaging extensively across all contexts, or selectively in certain contexts, was associated with poorer mental health outcomes. There is evidence that autistic people and those who are not diagnosed but present high autistic traits experience external indicators of defeat and entrapment, factors that are directly related to a higher risk of suicidal tendencies ([Cassidy et al., 2023](#)). Furthermore, the Interpersonal Theory of Suicide (IPTS) posits that feelings of perceived burdensomeness and acquired capability are critical to understanding suicidal tendencies. [Moseley et al.'s research \(2022\)](#) indicates that past-year suicide ideation was associated with feelings of burdensomeness and mental rehearsal of suicide plans, both of which are relevant to autistic individuals. The study suggests that individuals with high autistic traits may experience a heightened sense of burdensomeness and reduced fear of death, factors that correlate with increased risk of suicidal ideation and attempts.

Despite the relevance of this topic, evidence on the relationship between camouflaging in adults with ASD and suicidal thoughts and behaviors, remains scarce. Camouflaging is increasingly identified as a unique risk factor for suicidality in autistic individuals, yet the reasons behind this heightened risk are still unclear and under-researched ([Cassidy et al., 2018](#); [Cassidy, 2020](#)). [Cremone et al. \(2023\)](#) emphasized that camouflaging, while often used to facilitate social inclusion, is significantly associated with psychological distress, including anxiety, depression, and feelings of entrapment. Current suicide models do not adequately account for autism-specific traits, leaving critical gaps in understanding how these behaviors influence mental health and suicide risk ([Cassidy, 2020](#); [Reid et al., 2024](#)). Addressing these gaps presents an opportunity to deepen knowledge about the consequences of camouflaging and develop strategies for healthier social adaptation in autistic individuals. Furthermore, [Cremone et al. \(2023\)](#) noted the necessity of conducting further systematic reviews to advance the understanding of this phenomenon.

Therefore, the general objective of the research is to carry out a systematic review, to better understand if there is a relationship between camouflaging as an adaptive strategy and suicidal thoughts and behaviors in adults with ASD.

2. Method

2.1. Search strategy and information sources

This systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. This systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The search strategy used Boolean operators ("AND") and the key terms "Camouflaging, autism AND suicide", "Masking, autism AND suicide", "Camouflaging AND autistic AND suicidal," "Masking AND autistic AND suicidal," "Camouflaging AND ASD AND suicidal," and "Masking AND ASD AND suicidal." Searches were conducted across multiple databases, including PubMed, ScienceDirect, and Scopus, with no additional filters applied except restricting results to "Research Articles" in ScienceDirect. The final search was completed in August 2024, incorporating additional databases such as APA PsycArticles, Google Scholar, and APA PsycInfo.

2.2. Eligibility criteria

Articles selected for inclusion focused specifically on a population of adults with Autism Spectrum Disorder (ASD) or individuals exhibiting autistic traits (defined as a range of social, communicative, and behavioral features that may manifest in varying degrees,

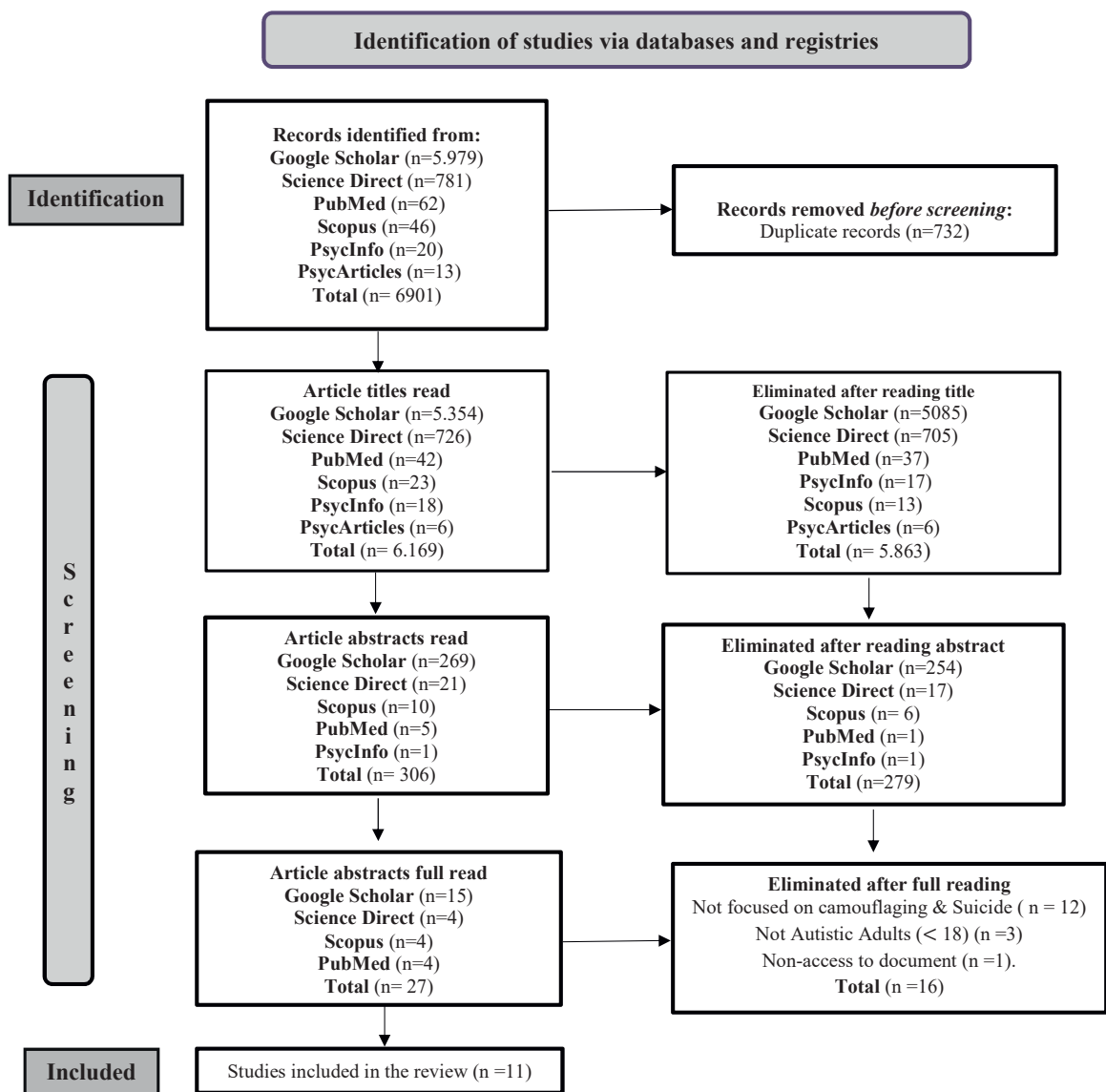


Fig. 1. Prisma Flowchart.

even in the absence of a formal ASD diagnosis), with emphasis on the study of camouflaging and its relationship to suicidal thoughts and behaviors. Investigations that included people under 18 years of age were excluded, as well as those that did not address thoughts and behaviors and camouflaging as the principal variables. For the synthesis, studies were grouped according to their design (quantitative/qualitative study). There were no restrictions regarding study sample size, patient sex/gender, or level of functionality. Only articles written in English were considered.

2.3. Selection process and data collection

The selection process followed a systematic multi-phase approach conducted by a team of four researchers. Initially, duplicate records were removed. Then, the titles and abstracts of the remaining articles were screened according to the inclusion criteria. In each stage, a double-review process was applied, meaning that four researchers independently reviewed and cross-checked the selection of studies to ensure reliability and minimize bias. To assess inter-rater reliability, Fleiss' Kappa coefficient was calculated. This method is commonly used to evaluate agreement when more than two raters independently review categorical data (Fleiss, 1971). Discrepancies were resolved through majority agreement among the four researchers. In cases where consensus could not be reached, an external expert was consulted to make the final determination. The final set of studies meeting all criteria was selected for full-text review, focusing on aspects related to camouflaging, adults with ASD, and suicidal thoughts and behaviors. An external expert supervised the process, ensuring rigorous adherence to the established protocols. The articles were registered in a manually designed template without the need for automatization software.

2.4. Risk of bias assessment

Risk of bias was assessed with the Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies. This tool was developed by the National Heart, Lung and Blood Institute (NHLBI, 2021). The tool contains 14 items designed to assess the quality of research. Each question has three possible responses: "yes", "no" or "other". This third response (other) can have three different responses: "cannot determine" (CD), "not applicable" (NA), and "not reported" (NR). The first five items refer to the assigned procedure, the next five refer to comparability between groups, and the last four refer to the analyses. This tool provides a final rating for the overall quality of the study (good, fair, or poor).

3. Results

3.1. Study selection

The database search identified a total of 6901 articles from the following databases: Google Scholar ($n = 5979$), Science Direct ($n = 781$), PubMed ($n = 62$), Scopus ($n = 46$), PsycInfo ($n = 20$), and PsycArticles ($n = 13$). After removing 732 duplicates, a total of 6169 records were screened by title. Subsequently, 5863 articles were excluded for not meeting the research criteria. A total of 306 articles proceeded to the abstract review phase, during which 279 articles were excluded. After this, 27 articles were selected for full-text assessment, of which 16 articles were excluded for the following reasons: lack of focus on camouflaging ($n = 12$), participants being under 18 years of age ($n = 3$), not being autistic adults ($n = 3$), or non-access to the document ($n = 1$). Finally, 11 articles met the inclusion criteria and were included in the systematic review. For a detailed description of the selection process, see PRISMA flowchart (Fig. 1). The Fleiss' Kappa value obtained was 0.58, which, based on Landis and Koch's classification (1977), indicates substantial agreement among the raters.

3.2. Study characteristics

Table 1 presents the data extracted from the selected studies, including authors, study design, year of publication, country, participant characteristics, outcome measures, and a summary of findings. The studies were published between 2018 and 2024. Among them, six employed a cross-sectional design (Cassidy et al., 2018; Cassidy et al., 2020; Beck et al., 2020; Cassidy et al., 2021a; Cassidy et al., 2023; Moore et al., 2024), while five utilized qualitative methodologies (Livingston et al., 2019; Bradley et al., 2021; Miller et al., 2021; Grove et al., 2023; Dean, 2024). Most studies were conducted in the United Kingdom (Cassidy et al., 2018; Cassidy et al., 2020; Livingston et al., 2019; Bradley et al., 2021; Cassidy et al., 2021a; Miller et al., 2021; Cassidy et al., 2023; Dean, 2024; Moore et al., 2024), while one study was based in the United States (Beck et al., 2020) and another in Australia (Grove et al., 2023). The total number of participants across these studies was 2261.

In terms of demographics, the age of participants ranged from 18 to 77 years old. Regarding gender distribution, 64.3 % of participants identified as female, 26 % as male, 6.3 % as non-binary, and 3.4 % as another gender or preferred not to disclose. This distribution shows a predominant female representation across the studies.

With respect to the measures employed across the studies, a combination of standardized psychological assessments and qualitative methods were used. Among the standardized instruments, the Suicide Behaviors Questionnaire-Revised (SBQ-R) (Osman et al., 2001) was utilized in five studies (Cassidy et al., 2018; Cassidy et al., 2020; Beck et al., 2020; Cassidy et al., 2021a; Cassidy et al., 2023), assessing lifetime suicidal behaviors, suicidal ideation within the past 12 months, and the likelihood of future suicidal actions. Additionally, the Suicidal Behaviors Questionnaire – Autism Spectrum Conditions (SBQ-ASC) (Cassidy et al., 2021a), a version specifically adapted for autistic individuals, was used in one study (Moore et al., 2024). To measure camouflaging behaviors, the

Table 1
Characteristics of the 11 studies included in the Systematic Review.

N°	Authors*	Study Design	Year	Country	Participants	Measures	Findings
1	Cassidy et al.	Cross-Sectional, comparative	2018	U.K	333 participants (General Population: 54 % Female, ASD-Group: 60 % Female). Ages between 20 – 60 years old.	<ul style="list-style-type: none"> – SBQ-R. – NSSI – AT. – AQ. 	Relation between Camouflaging & SBQ-R. ($p < .01$, $r = 0.2$; $r^2 = 3.5$ %; $\beta = 0.196$).
2	Livingston et al.	Qualitative Study	2019	U.K.	136 participants (Diagnosed group: 64 % Female, 22 % Male, 14 % Other [including transgender and non-binary individuals]; Self-identified group: 47 % Female, 42 % Male, 11 % Other [including transgender and non-binary individuals]; Non-diagnosed group: 86 % Female, 14 % Male). Ages between 18–77 years old.	<ul style="list-style-type: none"> – AQ–10 – Survey elaborated by authors on Social Compensatory Strategies (including success, effort, and likelihood of recommendation). 	Participants reported that compensation was associated with suicidal ideation. Some described experiencing suicidal planning as a direct consequence of prolonged compensatory efforts.
3	Beck et al.	Cross-Sectional, comparative	2020	U.S.A.	58 (100 % female, 31 % ASD diagnosis). Subgroups (High Camouflage = 32; Low Camouflage =26). Ages between 18 - 42 years old.	<ul style="list-style-type: none"> – BAPQ. – DASS–21. – SBQ-R. – WHODAS. – ADOS–2. – SRS–2. – AQ. – CAT-Q. – WASI-II. – FSIQ–2. 	Relation between CAT-Q & SBQ-R; HC group ($p < .04$; $r = .4$), LC group ($p = .81$, $r = .05$)
4	Cassidy et al.	Cross-sectional	2020	U.K.	160 participants (87 % Female) (6.3 % scored above AQ cut-off for ASD diagnosis) Ages between 18 - 23 years old.	<ul style="list-style-type: none"> – AQ-S. – CAT-Q. – INQ–15. – PHQ–9. – GAD–7. – SBQ-R. 	Relation between CAT-Q & SBQ-R; Total Score ($p < .01$; $r = .32$); Compensation ($r = .3$); Masking ($r = .21$); Assimilation ($r = .29$). Camouflaging is linked to lifetime suicidality ($F(1158) = 13.821$, $p < .001$).
5	Bradley et al.	Qualitative Study	2021	U.K.	277 participants (ASC(D): 62 % Female, ASC(SI): 79 % Female). Ages between 26 - 53 years old.	<ul style="list-style-type: none"> – Survey elaborated by authors about Suicide Behavior and Camouflaging. 	Participants reported that camouflage made them more prone to “mental health breakdowns,” “suicidal thoughts,” and “self-injury” due to social pressure.
6	Cassidy et al.	Cross-sectional	2021	U.K.	308 participants (73 % female). Ages between 26 – 53 years old.	<ul style="list-style-type: none"> – AQ-S. – CAT-Q. – INQ–15. – ASA-A. – PHQ–9. – TB. – PB. – SBQ-R. – SBQ-ASC. 	Relation between Camouflaging & SBQ-R. ($p < .01$, $r = .20$) & SBQ-ASC ($p < .01$, $r = .20$).
7	Miller et al.	Qualitative Study	2021	U.K.	144 participants (70 % Female, 10 % Non-Binary). Ages between 18 – 74 years old.	<ul style="list-style-type: none"> – Survey elaborated by authors about experiences and views of Camouflaging in Autistic people. 	Autistic people mentioned that camouflage sometimes makes them feel suicidal.
8	Cassidy et al.	Cross-sectional	2023	U.K.	180 participants (77 % female). Ages between 18–67 years old.	<ul style="list-style-type: none"> – AQ–10. – CAT-Q. – PHQ–9. – SBQ-R. – GAD–7. – SDES. 	Relation between CAT-Q & SBQ-R ($p < .001$, $r = .5$). Camouflaging is linked ($F(1178) = 49.96$, $p < 0.001$) lifetime suicidality.
9	Grove et al.	Qualitative Study	2023	Australia	31 participants (83.9 % Female, 16.1 % Gender Diverse: 6.5 % Non-binary, 3.2 % Transgender, 3.2 % Autistic gender, 3.2 %	<ul style="list-style-type: none"> – Semi-structured Interviews (open-ended questions on diagnosis, daily experiences, support, and research priorities). 	Participants reported that trying to fit in resulted in suicidality and self-harm, describing suicide attempts as a response to the

(continued on next page)

Table 1 (continued)

N°	Authors*	Study Design	Year	Country	Participants	Measures	Findings
					Gender fluid). 83 % diagnosed autistic, 17 % self-identified. Ages between 21 – 63 years old.		emotional toll of masking and social expectations. Some expressed that existence felt too painful, leading to cycles of self-harm and suicidal ideation.
10	Dean	Qualitative Study	2024	U.K.	7 participants (57 % Non-binary, 29 % Female, 14 % Male). 86 % diagnosed autistic, 14 % self-identified. Ages between 20 – 40 years old.	– Semi-structured Phenomenological Interviews (explored suicidality, camouflaging, and Autistic experiences).	Camouflaging intensified suicidality, with participants seeing suicide as a "safety net" from the relentless exhaustion of masking.
11	Moore et al.	Cross-Sectional	2024	U.K.	627 participants (52 % Female, 19.3 % Male, 19.6 % Non-binary, 9.1 % Self-described/Prefer not to say). 59.6 % formally diagnosed with ASD, 40.4 % self-identified or suspected ASD. Ages between 18 – 70 years old.	– AQ–10. – ASIS. – HADS. – SBQ-ASC. – WEMWBS. – CAT-Q.	Camouflaging was significantly associated with suicidality ($p < .05$, $\beta = 0.51$), primarily through assimilation ($p < .05$, $\beta = 0.08$). Among camouflaging, assimilation ($p < .01$, $r = .24$) and compensation ($p < .05$, $r = .10$) were significant, while masking ($p = n.s.$, $r = .005$) was not.

Abbreviations: ADOS-2: Autism Diagnostic Observation Schedule; AQ: Autism Spectrum Quotient; AQ-S: Autism Spectrum Quotient-Short; ASA-A: Autism Anxiety Scale Adult; ASC-D: Autism Spectrum Condition Diagnosed; ASC-SI: Autism Spectrum Condition Self-Identified; ASIS: Autism Spectrum Identity Scale; BAPQ: Broad Autism Phenotype Questionnaire; BPD: Borderline Personality Disorder; CAT-Q: Camouflaging Autistic Traits Questionnaire; DASS-21: Depression Anxiety Stress Scales 21; FSIQ-2: Two-scale full-scale IQ; GAD-7: Generalized Anxiety Disorder-7 item; HADS: Hospital Anxiety and Depression Scale; INQ-15: Interpersonal Needs Questionnaire; M.: Male; MDD: Major Depressive Disorder; NSSI-AT: Non-Suicidal Self-Injury Assessment Tool; PB: Perceived Burdensomeness; PHQ-9: Patient Health Questionnaire-9 item; SAD: Social Anxiety Disorder; SBQ-R: Suicide Behaviors Questionnaire-Revised; SBQ-ASC: Suicide Behaviours Autism Spectrum Condition; SDES: Short Defeat and Entrapment Scale; SRS-2: Social Responsiveness Scale; TB: Thwarted Belongingness; WASI-II: Wechsler Abbreviated Scale of Intelligence; WEMWBS: Warwick-Edinburgh Mental Well-Being Scale; WHODAS: World Health Organization Disability Assessment Schedule

Camouflaging Autistic Traits Questionnaire (CAT-Q) (Hull et al., 2019) was included in five studies (Cassidy et al., 2020; Beck et al., 2020; Cassidy et al., 2021a; Cassidy et al., 2023; Moore et al., 2024), assessing the extent of social camouflaging as a coping mechanism. In parallel, autistic traits were evaluated using the Autism Spectrum Quotient (AQ) (Baron-Cohen et al., 2001) in two studies (Cassidy et al., 2018; Beck et al., 2020), while shorter variations, such as the AQ-10 and AQ-Short, appeared in five studies (Cassidy et al., 2020; Livingston et al., 2019; Cassidy et al., 2021a; Cassidy et al., 2023; Moore et al., 2024). Beyond these core measures, specific tools were employed to assess additional psychological dimensions. One study incorporated the Non-Suicidal Self-Injury Assessment Tool (NSSI-AT) (Whitlock et al., 2014) to evaluate both primary and secondary characteristics of self-injurious behavior (Cassidy et al., 2018). Moreover, Moore et al. (2024) utilized mental health and well-being measures, such as the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007), to assess psychological distress and subjective well-being. In contrast to these standardized measures, five studies employed qualitative methodologies, utilizing semi-structured and phenomenological interviews, as well as thematic analyses of open-ended survey responses, to explore suicidality, camouflaging, and autistic lived experiences (Livingston et al., 2019; Bradley et al., 2021; Miller et al., 2021; Grove et al., 2023; Dean, 2024). Dean (2024) conducted semi-structured phenomenological interviews via email-based methods, allowing participants time to reflect on their responses, ensuring depth, and reducing researcher bias (Benford, 2008; Finkenauer et al., 2012). These interviews explored four main areas: autism diagnosis, suicidal behaviors, the recovery process, and the awareness of autistic traits in relation to suicidality. Similarly, Grove et al. (2023) employed semi-structured interviews, analyzed using thematic analysis within a social ecological framework, examining the interplay of individual, community, and systemic influences on autistic suicidality. Livingston et al. (2019) applied thematic analysis to explore open-ended responses regarding social compensatory strategies, while Bradley et al. (2021) and Miller et al. (2021) utilized inductive thematic analysis to examine qualitative data on camouflaging.

Regarding the findings of the included studies, quantitative studies provided robust evidence linking camouflaging behaviors to suicidal outcomes in autistic individuals. Cassidy et al. (2018) identified camouflaging as a significant and independent predictor of suicidal behaviors. Their findings revealed a significant correlation between camouflaging and SBQ-R scores ($p < .01$, $r = .2$, $r^2 = 3.5\%$; $\beta = 0.196$). Camouflaging explained additional variance in suicidality beyond that accounted for by depression or anxiety, highlighting its unique contribution as a risk factor. Building on these insights, Cassidy et al. (2020) demonstrated that camouflaging, as measured by the CAT-Q, was significantly associated with SBQ-R scores ($p < .01$; $r = .32$). Among its subscales, Assimilation showed the strongest association with thwarted belongingness ($r = .552$), a key mediator of suicidal thoughts. Regression analyses confirmed camouflaging as a predictor of lifetime suicidality ($F(1158) = 13.821$, $p < .001$), and its indirect link to suicidality through thwarted

belongingness underscores the nuanced role of assimilation in social struggles and feelings of exclusion. Similarly, Beck et al. (2020) emphasized the impact of high camouflaging efforts, particularly in a subgroup of individuals who used this mechanism. For this group, camouflaging was significantly correlated with psychological distress ($r = .36, p = .04$), suicidality ($r = .37, p = .04$), and functional challenges ($r = .46, p < .01$). These associations were absent in the low-camouflaging subgroup. Further evidence was provided by Cassidy et al. (2021a) in a validation study, where camouflaging was modestly but significantly correlated with suicidal behaviors, as measured by the SBQ-R ($p < .01, r = .20$) and SBQ-ASC ($p < .01, r = .20$). Although the correlations were moderate, camouflage was reinforced as a construct related to suicidal thoughts and behavior. Cassidy et al. (2023) expanded the analysis by exploring mediating factors in the relationship between autistic traits and suicidality. Autistic traits had a significant indirect effect on lifetime suicidality through camouflaging, defeat, and entrapment ($b = 0.079, BCa\ CI [0.05, 0.113]$), indicating partial mediation. Camouflaging alone was also a significant predictor of lifetime suicidality ($F(1178) = 49.96, p < .001; r = .5$). However, the combined effect of camouflaging with defeat and entrapment was less pronounced, explaining only 2 % of the variance in suicidal thoughts ($\chi^2(1) = 5.61, p = .02$). Finally, Moore et al. (2024) investigated the mediating role of camouflaging subtypes in the relationship between autistic traits and suicidality, focusing on assimilation, compensation, and masking. Autistic traits exhibited no direct effect on suicidality but showed a significant indirect effect through assimilation ($b = 0.08, SE = 0.025, 95\% \text{ CI } [0.036, 0.133]$), highlighting assimilation as the primary mechanism linking autistic traits to suicidality. Correlations revealed that among camouflaging subtypes, assimilation ($p < .01, r = .24$) and compensation ($p < .05, r = .10$) were significantly associated with suicidality, while masking ($p = n.s., r = .005$) was not. The mediation model accounted for 12 % of the variance in suicidality. Notably, 59 % of participants met the indicative cut-off for suicidality. Evidence points to subtle yet critical interactions among these factors, positioning camouflaging as a prominent contributor.

On the qualitative side, Livingston et al. (2019), Bradley et al. (2021), Miller et al. (2021), Grove et al. (2023) and Dean (2024) offered rich narratives illustrating the lived experiences of individuals who camouflage. The study by Livingston et al. (2019) found that participants described compensation - Alternative cognitive strategies to mask social difficulties, enabling the individual to appear neurotypical, but at the cost of significant emotional and psychological effort- as exhausting, stressful, and a source of anxiety, depression, and suicidal ideation. The relentless effort to blend into neurotypical environments led to loss of relationships, professional failures, and a profound sense of isolation. Some participants reported that their inability to sustain camouflaging over time prevented them from developing the social capital necessary for success. Furthermore, the emotional toll of this effort drove some to view suicide as an inevitable alternative when they could no longer conceal their autistic traits. In other words, camouflaging not only reinforces isolation but also deepens suicidal vulnerability. Bradley et al. (2021) described camouflaging as a socially adaptive but mentally taxing strategy, with participants linking it to depression, anxiety, mental health breakdowns, suicidal thoughts, and self-injury. The social pressure to maintain a mask, coupled with the fear of rejection, exacerbated these negative outcomes. Participants also reported coping strategies, such as using alcohol to navigate social situations, which further compounded their challenges. Miller et al. (2021) echoed these findings, revealing that autistic individuals uniquely associated camouflaging with increased suicidal ideation, a pattern not observed among non-autistic participants. Autistic individuals also described dangerous coping mechanisms, including restricted eating and substance use, to manage the demands of masking. On the other hand, Grove et al. (2023) indicated that the effort to fit into a neurotypical world (camouflaging) generates anxiety, emotional exhaustion, and a deep sense of shame and negative self-perception, as participants internalized the belief that they were defective or "incorrect." The constant pressure to appear normal led them to adopt harmful coping mechanisms, such as excessive tobacco and caffeine consumption, or simply enduring the day until they could get home, where they could finally stop acting. However, the exhaustion caused by this effort became unsustainable, and in many cases, suicide emerged as an alternative when camouflaging was no longer possible. Some participants described a cycle of attempting to fit in, experiencing failure, and falling into despair, which ultimately culminated in self-harm or suicide attempts. Suicide was a means of escaping continuous suffering, an option that remained ever-present when the pressure became unbearable. Additionally, the lack of understanding from mental health professionals exacerbated this vulnerability, as their failure to recognize the impact of camouflaging prevented them from providing appropriate support to address the underlying emotional exhaustion. Finally, Dean's (2024) study highlighted that autistic camouflaging emerges as a central and critical factor in suicidality among autistic adults, functioning as a survival strategy that, rather than offering protection, exacerbates psychological distress and fosters suicidal ideation. Participants described how the relentless need to conceal their autistic traits to blend into a neurotypical world led to severe emotional exhaustion, with anxiety, depression, and hopelessness becoming persistent states. The constant effort to maintain a "normal" appearance not only drained their energy but also stripped them of any sense of authenticity and belonging, leaving them trapped in a cycle of isolation and emotional suffering. The inability to sustain this camouflage indefinitely triggered profound emotional crises, in which suicide was perceived as the only viable escape — a "safety net" or an ever-present option. Some participants reported that their distress was not taken seriously by mental health professionals precisely because they camouflaged their suffering too effectively, leading them to believe that only a suicide attempt could validate their pain to others. Furthermore, feelings of alienation and the lack of adequate clinical support further intensified their vulnerability, as mental health professionals failed to recognize the devastating impact of camouflaging, focusing solely on surface-level symptoms rather than addressing the underlying exhaustion and despair.

The collective findings from the reviewed studies reveal a compelling and consistent narrative regarding the impact of camouflaging behaviors on suicidal thoughts and behaviors among autistic individuals, highlighting its association with profound emotional distress, psychological exhaustion, and self-destructive coping mechanisms. Camouflaging remains a distinct and independent predictor of suicidality, even after accounting for traditional risk factors such as depression and anxiety (Cassidy et al., 2018; Cassidy et al., 2020; Cassidy et al., 2023). Additionally, assimilation has been identified as the primary camouflaging construct linked to suicidality, demonstrating significant indirect effects through autistic traits (Moore et al., 2024). While compensation was correlated with suicidality, its association was weaker, whereas masking was not a significant factor (Moore et al., 2024). Qualitative studies

further illustrate the emotional toll of camouflaging, with autistic individuals describing it as mentally and physically exhausting, reinforcing feelings of isolation and entrapment (Livingston et al., 2019; Grove et al., 2023; Dean, 2024). Participants reported adopting harmful coping mechanisms, such as substance use, restrictive eating, and excessive consumption of cigarettes and coffee, to sustain their camouflaging efforts (Bradley et al., 2021; Miller et al., 2021; Grove et al., 2023). Moreover, camouflaging contributed to their distress being overlooked by mental health professionals, leaving them without adequate support (Grove et al., 2023; Dean, 2024).

3.3. Quality of quantitative studies

All six quantitative studies clearly stated their research question or objective (Q1) and specified the study population (Q2). None of the studies reported a participation rate of at least 50 % among eligible participants (Q3). All studies recruited participants from similar populations and applied inclusion/exclusion criteria consistently (Q4). However, only one of the studies provided a justification for the sample size or described power calculations (Q5). The assessment found that exposure measurements (P6), sufficient time to observe potential associations between exposure and outcomes (P7), and different levels of exposure in relation to outcomes (P8) were not applicable given the nature of the studies. All studies provided clear, valid, and consistent definitions for exposure variables (P9) and outcomes (P11), but none assessed exposures more than once over time (P10) or ensured that outcome assessors were blinded to participants' exposure status (P12), due to the methodological approach of the investigations. Losses to follow-up were not relevant as they were not applicable (P13). Finally, five out of six studies adjusted for key confounding variables (P14). Based on these criteria, all studies were classified as Fair Quality.

4. Discussion

The primary aim of this research was to conduct a systematic review to explore the potential relationship between camouflaging as an adaptive strategy and suicidal thoughts and behaviors in adults with ASD.

All eleven studies demonstrated a consistent association between camouflaging and suicidality, with quantitative data highlighting significant correlations (Cassidy et al., 2018; Cassidy et al., 2020; Beck et al., 2020; Cassidy et al., 2021a; Cassidy et al., 2023; Moore et al., 2024) with effect sizes ranging from low ($r = .10$) to moderate ($r = .5$). Moore et al. (2024) found no direct effect of autistic traits on suicidality, their findings suggest that assimilation—a construct linked to camouflage—serves as a crucial mediating factor. This suggests that the pressure to conform to neurotypical expectations may increase psychological distress, ultimately leading to suicidal thoughts and behaviors. The qualitative studies (Livingston et al., 2019; Bradley et al., 2021; Miller et al., 2021; Grove et al., 2023; Dean, 2024) corroborate this, the exhausting and unsustainable nature of camouflaging not only hinders authenticity but also undermines the identity of autistic individuals, severely affecting their psychological well-being (Dean, 2024). This loss of authenticity translates into a negative self-perception, manifesting as shame, isolation, and the deterioration of interpersonal relationships (Livingston et al., 2019; Grove et al., 2023). When maintaining camouflaging becomes impossible, suicide emerges as a "safety net", an ever-present option when the struggle to fit into a neurotypical world becomes unbearable. Within this context, hopelessness and self-harm serve as coping mechanisms to regulate emotional distress (Grove et al., 2023; Dean, 2024). However, one of the most striking findings is that suicide becomes an inevitable alternative for those whose ability to camouflage is no longer sustainable (Livingston et al., 2019). A particularly alarming aspect is that camouflaging extends into the therapeutic setting, compromising the foundation of trust necessary for effective mental health support. Autistic adults reported masking their distress even in therapy, as they felt their suffering was not taken seriously (Dean, 2024).

It should be noted that according to Bradley et al.'s research (2021), adults with ASD recognize certain benefits of practicing camouflaging in the context of their social interactions. However, most adults with ASD express that spending too much time camouflaging had a negative impact on their mental health (Cassidy et al., 2018; Cassidy et al., 2020; Beck et al., 2020; Cassidy et al., 2021a; Miller et al., 2021; Livingston et al., 2019; Bradley et al., 2021; Grove et al., 2023; Dean, 2024; Moore et al., 2024). These findings are further supported by Beck et al. (2020), Cassidy et al. (2018; 2021a; 2023), and Moore et al. (2024), which highlight the heightened risk of suicidality among autistic adults. Studies consistently report that a significant proportion of participants scored above established cut-offs for suicide risk, with concerning trends in self-reported suicidal thoughts and behaviors. For example, Beck et al. (2020) and Cassidy et al. (2018) found elevated suicide risk scores among autistic adults compared to the general population. Similarly, Moore et al. (2024) and Cassidy et al. (2021a; 2023) identified high rates of suicidal ideation, non-suicidal self-injury (NSSI), and lifetime suicide attempts within their samples. The authors emphasize that these findings reflect the significant challenges faced by autistic individuals in their daily lives. These results are not only alarming but also highlight the critical need for further research and targeted interventions to address suicidal thoughts and behaviors in ASD, underscoring both the progress made and the substantial work that remains to be done (Cassidy et al., 2021b).

During the assessment, certain statements from participants in Beck et al. (2020) stood out, such as "I am more worried about making a social mistake than dying" or "I am tired of trying to succeed socially." These remarks underscore the profound distress associated with navigating social interactions while relying on camouflaging as a coping mechanism. This aligns with findings from qualitative studies (Livingston et al., 2019; Grove et al., 2023; Dean, 2024), where participants described the overwhelming mental and emotional toll of masking their autistic traits to conform to neurotypical expectations. Moreover, Beck et al. (2020) suggest that the relationship between camouflaging and mental health is primarily linked to the intensity of camouflaging efforts rather than the severity of autistic traits. Cassidy et al. (2018) found that autistic adults exhibited a significantly higher prevalence of suicidal thoughts and behaviors and also highlighted that while women tend to engage in more NSSI behaviors than men, both genders are affected, probably due the

problems of emotional dysregulation (ED) which is known to be a prevalent challenge within the autistic population (Maddox et al., 2017; Bemmouna et al., 2022). Ultimately, camouflaging has been identified as a barrier to autism diagnosis, contributing to negative mental health outcomes. Its strong association with suicidal behaviors underscores the pressing need to address the risks associated with prolonged masking in autistic individuals.

An interesting finding that emerged from this review is the use of substances among autistic individuals, including alcohol, cigarettes, and caffeine, as a regulatory strategy. For instance, Bradley et al. (2021) reported that alcohol consumption was used to reduce anxiety and increase social ease, making individuals feel less self-conscious. Similarly, Grove et al. (2023) found that heavy caffeine and cigarette consumption were employed as stimulants to sustain executive functioning. Meanwhile, Miller et al. (2021), although not explicitly mentioning substances, described the use of strategies aimed at emotional and functional self-regulation. This pattern suggests that substance use may serve a self-regulatory function in the context of camouflaging, seemingly helping individuals navigate daily life stressors associated with masking. This notion aligns with findings from Lalanne et al. (2015), who reported that autistic individuals believed alcohol could improve social skills and reduce anxiety, with participants stating that they drank to manage unexpected events, sensory anomalies, and social interactions. Similarly, Weir, Allison, and Baron-Cohen (2021) found that motivations for substance use among autistic adults were primarily related to behavioral management, including becoming more sociable or coping with sensory overload. Additionally, Holmes et al. (2024) suggested that the relationship between masking and alcohol consumption may shift with age, accumulated stress, or burnout, with autistic adults increasingly using alcohol as a coping mechanism. While substance use may offer temporary relief, it poses significant long-term risks. It provides a short-term strategy for managing distress, yet its sustainability is questionable, particularly when it becomes the primary coping mechanism. In this context, "functional alcoholism" or substance dependence could act as a social lubricant and emotional anesthetic, offering a false sense of security to facilitate social interactions. However, this reliance may ultimately replace one maladaptive coping strategy with another (substance use), leading to further psychological and physiological challenges. Although substance use is not inherently problematic, it becomes concerning when it is the primary or sole coping mechanism, or when individuals struggle to regulate their consumption (Holmes et al., 2024).

According to Baryshnikov and Isometsä (2022) and Jager-Hyman et al. (2014), suicidal behavior is characterized by the presence of numerous distorted or protected signals, often accompanied by cognitive distortions, such as dichotomous "all or nothing" thinking. The authors argue that those who experience these behaviors often keep emotional pain hidden. This is similar to the concept of camouflaging and autism, as they deal with situations involving people who hide aspects of themselves due to social or personal pressures. The relationship occurs as both aspects feel the need to mask or camouflage part of their identity or experience, often due to the stigma or discrimination they face.

Below are some relevant aspects of the included studies. All quantitative studies employed cross-sectional designs. While these studies provide valuable insights into the relationship between camouflaging and suicidal behavior, they are limited in their ability to examine these dynamics over time. Longitudinal research is necessary to explore the causality and long-term effects of camouflaging on mental health outcomes in individuals with ASD.

Moreover, the gender distribution in the reviewed studies—predominantly female—raises concerns about the generalizability of the findings. While this representation highlights the increasing recognition of autism in women, it also underscores the need for more diverse and inclusive research samples. Nearly 10% of participants identified as non-binary or another gender. As Miller et al. (2021) emphasize, autistic identity cannot be examined in isolation from other intersecting factors such as gender, sexuality, and race/ethnicity. A more representative sample and expanded demographic data are necessary to fully understand how these identities shape masking experiences. Without this intersectional perspective, research risks oversimplifying the complexities of autistic camouflaging, limiting its applicability across different populations.

Regarding geographical origin, 9 out of the 11 studies come from the United Kingdom. This may also limit the generalizability of the results due to potential cultural differences in the understanding and expression of phenomena such as camouflaging in individuals with autism. However, it is important to highlight that the UK has been a pioneer in the research of this topic, with authors like Cassidy leading the study of camouflaging in relation to suicidal behavior, and Hull developing instruments like CAT-Q, both of which are fundamental for analyzing the relationship between camouflaging and mental health. This leadership in research largely explains why most studies originate from that region.

For this work, an exhaustive search was conducted using both 'masking' and 'camouflaging' terms, encompassing studies employing both more scientific terminology and those using concepts derived from the neurodiversity movement. However, this terminological diversity highlights an existing gap in literature, where a consensus on a common language to describe these behaviors has yet to be reached. It is crucial to advance towards terminological standardization that facilitates communication and understanding within the scientific community and society at large.

In addition, it should be noted that, at the time of conducting research on suicide in people with ASD, the most widely used models of suicide are the IPTS and IMV. These models are focused on neurotypical populations and do not specifically consider people with ASD and/or high autistic traits, nor the risk factors that are unique to them (Cassidy, 2020). Whatever the reference model is, previous work finds that camouflaging could present an indirect effect on suicidality (Cassidy et al., 2020; Cassidy et al., 2023).

If we focus on the IPTS, the work of Cassidy et al. (2020) suggests that masking is related to thwarted belongingness. That is, the presence of masking would increase the feeling of being alone. Suicidal ideation (and potentially behavior) would then increase. With respect to works focused on the IMV, masking has been related to other variables. In this case, entrapment and defeat, key variables in the development of suicidal ideation (Cassidy et al., 2023). The IMV also includes thwarted belongingness as a relevant variable, so this relationship must be considered. Subsequent work has attempted to study the role of masking as a moderator in the IMV. Although it appears to be a relevant variable, it does not seem to act as a moderator in the defeat, entrapment and suicidal ideation pathway

(Graham et al., 2024). It is necessary to investigate more to be able to know the exact causal chains that link masking and suicidal behavior; their role as a mediator or moderator in relationships; and the exact phase in which they would have the greatest effect.

Of the 11 studies included, Dr. Cassidy was the lead author in four (Cassidy et al., 2018; Cassidy et al., 2020; Cassidy et al., 2021a; Cassidy et al., 2023) and coauthored two others (Bradley et al., 2021; Moore et al., 2024), highlighting a significant lack of diversity in the team addressing this field. Moreover, autism-specific variables, such as camouflaging, have received little attention despite their importance. Recent studies (Pelton et al., 2024) emphasize that including autistic individuals in the research process leads to significant benefits, such as more relevant and accessible approaches. However, major challenges persist, including the lack of autism-specific tools and the exclusion of autistic individuals in suicide prevention policies. Therefore, it is crucial to develop inclusive strategies and solutions tailored to the characteristics and needs of autistic individuals; while also fostering their participation in research development to address the unique challenges they face (Cassidy et al., 2021a).

Regarding limitations, we acknowledge that the sample size in this review is inherently limited, which is a challenge common to studies on suicide (Barrigón & Baca-García, 2018). Research on neurodiverse populations, such as individuals with ASD, presents additional complexities due to several factors, including limited access to participants and the relatively lower prevalence of these conditions. Moreover, identifying suicidal thoughts and behaviors within this already smaller population is an even greater challenge, compounded by broader limitations in the field, such as funding constraints (Layinka et al., 2024). This restricted evidence base is reflected in the current systematic review, where only eleven relevant articles were extracted from a pool of over 6000, despite comprehensive search. While this highlights the nascent nature of the research on camouflaging and its association with suicidal behavior, it also underscores the need for expanded scientific efforts and reproducibility in this area. Also, gray literature was not considered in this work.

This review employed a search strategy that incorporated multiple terms related to camouflaging, autism, and suicidality. However, future reviews should consider ongoing refinements to search methodologies, including the incorporation of gray literature and alternative indexing systems, to ensure maximal inclusivity of relevant studies. Moreover, we acknowledge that the review was restricted to articles in English, reflecting the predominance of English in scientific communication and ensuring consistency in analysis. However, this criterion may have inadvertently excluded relevant studies published in other languages. While no such studies were identified in our search, expanding the inclusion criteria to cover multiple languages in future reviews could increase the diversity and scope of the evidence base, offering a more globally representative perspective on the topic.

Building on this, recent research has introduced autistic burnout as a novel concept that may be linked to suicidal thoughts and behaviors within the autistic community. This construct is thought to arise from prolonged stressors, including the sustained effort to camouflage autistic traits, which may exacerbate mental health challenges and contribute to suicidal risk (Arnold et al., 2023a). However, its role is not yet well understood, partly due to the absence of validated tools to reliably measure burnout (Arnold et al., 2023b) and distinguish it from other psychological states (Arnold et al., 2021). Addressing these gaps in measurement and understanding represents a critical avenue for future research to further elucidate the connections between burnout, camouflaging, and suicidality in autistic populations. In addition to burnout, other potential pathways, such as the interaction between camouflaging and ED, warrant further investigation. ED is both prevalent and detrimental within the autistic population, contributing to suicidality (Bemmouna et al., 2023; Weiner et al., 2023). While ED has been studied as a risk factor for suicide, its specific role in relation to camouflaging remains underexplored.

Regarding future research, Cassidy et al. (2018) included the Non-Suicidal Self-Injury Assessment Tool (NSSI-AT), it is the only study among the reviewed articles that addresses non-suicidal self-injury (NSSI). This highlights a significant gap in literature, as there are no in-depth studies exploring NSSI in the context of camouflaging in autistic individuals. Although Cassidy's study primarily focuses on suicidal thoughts and behaviors, there is a pressing need to investigate NSSI further, as it presents an important area for future research. We propose deeper exploration into this area, as it remains an under-researched yet critical area.

In terms of measurement tools, all the instruments used in the studies are of English origin. Given that phenomena such as suicide and camouflaging are transcultural, it is understandable that most research has emerged from English-speaking countries, with the primary validated instrument for measuring camouflaging being Hull et al. (2019) CAT-Q. However, it is essential that this phenomenon be studied in other cultural contexts to better understand how it manifests across diverse populations. While autism itself varies significantly from person to person, cross-cultural studies will provide valuable insights into how both masking and related behaviors may differ or remain consistent globally.

Lastly, the present systematic review provided significant contributions to the understanding of camouflaging in adults with ASD, as well as its influence on suicidal thoughts and behaviors. While evidence on this topic is still limited, the research available consistently indicates that camouflaging is associated with increased suicidal risk. Despite this, the exact causal chain between masking and suicide in autistic individuals remains unclear, highlighting the need for further investigation in this emerging and promising area. To date, the role of camouflaging has not been adequately considered in the study of suicidal thoughts and behaviors, even though it appears to be a significant risk factor that warrants close attention. This underscores the necessity of future studies to explore how camouflaging impacts the trajectory of suicide in autistic adults, an aspect that has been overlooked in traditional suicide models. Considering these findings, there are significant implications for comprehensively addressing mental health, particularly in relation to suicide risk. To our knowledge, this is the first systematic review conducted that incorporates both suicidal behavior and camouflaging in autistic adults. Therefore, our research fills an important gap by advancing our comprehension of how camouflaging may relate to or influence the development of suicidal thoughts and behaviors in this population.

This work has relevant clinical implications. First, camouflaging can act as a barrier when asking for help (Camm-Crosbie et al., 2019). Given the strong association between camouflaging and suicidal ideation found in this review, it is crucial that clinicians (such as psychologists and psychiatrists) receive specialized training in recognizing and addressing autistic masking behaviors. One

significant challenge highlighted in the qualitative findings is that autistic individuals often camouflage even in therapeutic settings (Dean, 2024), which may lead to misinterpretations of distress levels by clinicians. Therefore, university curricula and continuing professional education should integrate specific strategies for identifying camouflaging and addressing its mental health consequences.

A concrete clinical action emerging from these findings is the implementation of evidence-based therapeutic approaches tailored to autistic individuals at risk of suicidality. Dialectical Behavior Therapy (DBT) has shown promising results in reducing suicidal ideation and attempts in autistic adults. Huntjens et al. (2024) found that DBT is an acceptable, safe, and effective short-term intervention for suicidality in autistic individuals, emphasizing the need for clinician training in DBT techniques. Additionally, Ritschel, Guy, and Maddox (2022) provide preliminary evidence supporting the feasibility of DBT Skills Training (DBT-ST) for autistic adults in community-based settings, highlighting its perceived benefits for this population. Given the role of emotional dysregulation in suicidality among autistic individuals (Bemmouna et al., 2022), DBT's focus on emotional regulation, and interpersonal effectiveness could be particularly beneficial. While DBT is a promising avenue, more therapeutic options are necessary such as Mindfulness-based interventions (MBIs), this therapy gained attention as potential tools for reducing self-injurious behaviors. A systematic review by Simione et al. (2024) found that mindfulness-based therapies led to significant decreases in self-injurious and aggressive/destructive behaviors. These findings suggest that integrating DBT and mindfulness approaches into clinical practice could enhance therapeutic outcomes for autistic individuals at risk of suicidality. Furthermore, despite the significant efforts of Cassidy's research team to adapt suicide assessment tools for autistic individuals (Cassidy et al., 2021a), more diverse and autism-specific interventions are needed. Expanding research on DBT, mindfulness, and alternative therapies is crucial, particularly through larger-scale studies and clinical trials that validate their effectiveness in autistic populations. Overall, clinician training must evolve to better recognize, assess, and treat suicidality in autistic adults, incorporating a deeper understanding of camouflaging behaviors and the unique psychological challenges faced by this population. By fostering a more nuanced, evidence-based, and autism-informed approach, clinical practice can move toward more effective, inclusive, and life-saving interventions for autistic individuals at risk of suicide.

Registration and protocol

The review has been registered on the website of PROSPERO of the International Prospective Register of Systematic Reviews, under the title "Masking as a Predictor of Self-Injurious Behaviors in Adults with Autism Spectrum Disorder: A Systematic Review Study." The registration was completed on October 27, 2023, and assigned the identification number CRD42023472686. To access the registered review, please visit the official PROSPERO website at <https://www.crd.york.ac.uk/PROSPERO/> and enter the ID number provided.

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CRedit authorship contribution statement

Álvarez-Cabrera Percy: Writing – review & editing, Validation, Supervision. **Santander-Gonzalez Roberto:** Writing – original draft, Validation, Investigation, Formal analysis, Data curation, Conceptualization. **Pulgar-Vera Valeska:** Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Jamett-Cuevas Victoria:** Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Pérez-Arqueros María:** Writing – review & editing, Writing – original draft, Validation, Supervision, Software, Project administration, Methodology, Data curation, Conceptualization. **Pemau Andrés:** Writing – review & editing, Validation, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: The authors of the manuscript titled "Camouflaging and Suicide Behavior in Adults with Autism Spectrum Condition: A Mixed Methods Systematic Review" declare that they have no competing financial or personal relationships that could inappropriately influence or bias their work, including employment, consultancies, stock ownership, honoraria, paid expert testimony, or patent applications or registrations. AP received funding from an FPU grant (FPU20/01651) from the Spanish Ministry of Universities and a Universidad Complutense de Madrid Predoctoral contract for research staff in training (CT82/20-CT83/20). The funders had no role in the development of this protocol, and no additional grants or funding sources influenced this research.

Data availability

No data was used for the research described in the article.

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