



IMPULSIVITY AS A CRITICAL PREDICTOR OF SUICIDE RISK: A PROPOSAL FOR INTEGRATING IMPULSIVITY ASSESSMENT INTO STANDARDIZED SUICIDE RISK ASSESSMENT TOOLS

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Cite this article:

F. E., Duyilemi (2026), Impulsivity as a Critical Predictor of Suicide Risk: A Proposal for Integrating Impulsivity Assessment into Standardized Suicide Risk Assessment Tools. African Journal of Health, Nursing and Midwifery 9(3), 136-153. DOI: 10.52589/AJHNM-9SJ6E7TE

Manuscript History

Received: 25 Jun 2026

Accepted: 22 Jul 2026

Published: 1 Aug 2026

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ABSTRACT: *Suicide continues to be a major public health concern worldwide, accounting for an estimated 727,000 deaths every year. The common factors in suicide risk assessment tools primarily focus on suicidal ideation, suicidal intent, previous suicide attempts, hopelessness, and psychosocial stress, while giving limited attention to impulsivity. This is a systematic review of six peer-reviewed studies retrieved from PubMed, PsycINFO, CINAHL, and Google Scholar and published between 2015 and 2026 that explored the association between impulsivity and suicidal behavior framed within the Urgency, Premeditation, Perseverance, Sensation-seeking (UPPS) model. It is noted that impulsivity, especially negative urgency, is a risk factor consistently associated with suicidal ideation, attempts, and completed suicide across a variety of populations. Also, evidence suggests that impulsivity accelerates transition from suicidal thinking to action, potentially decreasing the possibility to undertake clinical interventions. Thus, improved tools are required to assess this dynamic risk factor. Implementing brief impulsivity screening as part of the standardized suicide risk assessment may have a profound effect on predictive validity and patient safety.*

KEYWORDS: Impulsivity, Psychiatric Nursing, Suicide, Suicidal Behavior, Suicide Risk, Suicide Risk Assessment.



INTRODUCTION

More recently, researchers like Bruno et al. (2023) and Lee et al. (2025) have demonstrated the substantial association between impulsivity and suicidal ideation, suicide attempts, and completed suicide, beyond other known risk factors. Suicide is one of the most intractable public health issues in the world today, with the World Health Organization estimating that there are about 727,000 cases of suicide each year, most of which take place in low- and middle-income countries (World Health Organization, 2025). Yet, despite the significant efforts that have been made in research and clinical practice to prevent suicide, detecting those at immediate risk is still a challenge for healthcare providers (Lee et al., 2025). Galynker (2023) affirms this, noting that while clinicians are well-positioned to identify individuals at imminent suicide risk based on prior interactions, detecting individuals who will attempt suicide in the immediate future remains very challenging. This is complicated further by the fact that scales designed to measure risk factors for suicide, such as the SAD PERSONS scale described in Patterson et al. (1983), which emphasize static aspects of depression, such as hopelessness and previous suicidal attempts, neglect the dynamic aspects of impulsivity and acute risk. This ongoing challenge reflects a lack of conceptual understanding of tools available for the assessment of suicide risk, rather than a lack of clinical effort.

Impulsivity can be described as a general psychological tendency to react quickly and without careful consideration to internal or external stimuli, within clinical and non-clinical contexts (Huang et al., 2024). It is a multifaceted phenomenon, including dimensions of urgency, lack of premeditation, lack of perseverance, and sensation-seeking (Berg et al., 2015; Whiteside & Lynam, 2001). In the past decade, studies have consistently shown that impulsivity, especially affective impulsivity, is associated with suicidal ideation, suicide attempts, self-destructive behaviors, substance use disorders, post-traumatic stress disorder (PTSD) and mood disorders (Bruno et al., 2023; Lee et al., 2025; McHugh et al., 2019). Of particular clinical concern is the potential that people with high trait impulsivity may go from suicidal thought to suicidal action more quickly than people with lower trait impulsivity (McHugh et al., 2019). This may create a shorter time frame for assessing, planning for safety, and intervening than is commonly used in current practice.

Given the apparent significance of impulsivity in suicide-related behavior, its near-absence from many widely used suicide risk assessment instruments represents a notable gap in clinical practice. Thus, the aim of this article is to conduct a systematic review of the recent literature that examined the relationship between impulsivity and suicide risk and to assess whether and how impulsivity assessment can be more formally included in standardized suicide risk assessment.

Problem Statement

Existing suicide risk assessment instruments are based on a relatively limited number of well-established risk factors: suicidal ideation, suicidal intent, past attempts, hopelessness, depressed mood and symptoms, lethal means accessibility, and other psychosocial stressors (Patterson et al., 1983; Posner et al., 2011). Although the clinical value of these factors is obvious, recent literature indicates that impulsivity is a measurable personality trait and that it is a unique risk factor for suicide that is not necessarily captured by current instruments (Bruno et al., 2023; Sanz-Gómez et al., 2024; Teismann et al., 2026). This indicates that there could be a dimension of risk (impulsivity) that is not being adequately captured in the standard



assessment process. In fact, Teismann et al. (2026) document that in the last 50 years, whereas research on suicide prevention has increased, no significant improvement has been made in the prediction of suicide attempts and suicide. Therefore, it is possible that people who present with high impulsivity may be systematically underestimated in clinical assessment, and thus opportunities for timely intervention may be missed. This presents a critical gap in suicide risk assessment in clinical practice.

Purpose of this Article

The purpose of this systematic review is to provide a synthesis of current evidence to investigate the relationship between impulsivity and suicidal behavior and determine if impulsivity is an independent predictor of suicide, beyond the already known risk factors, including suicidal ideation, hopelessness, and previous suicide attempts. The article also reviews the current limitations in suicide risk assessment instruments, especially in their capacity to assess impulsivity as a dynamic, affect-construed process. It builds on this analysis and suggests the addition of brief screening for impulsivity to the mainstream tools used for suicide screening. It also highlights the importance of empirical evidence to support the use of such screening in clinical practice before it is introduced. Lastly, it explores the implications of these findings for psychiatric nursing, veteran mental healthcare, and for wider suicide prevention research and programs.

Research Questions:

This systematic review answers the following four research questions:

1. What evidence supports impulsivity as a predictor of suicidal behavior?
2. How does impulsivity influence the transition from suicidal ideation to suicide attempt?
3. To what extent do current suicide assessment tools evaluate impulsivity?
4. How might impulsivity assessment improve suicide risk prediction and clinical decision-making?

THEORETICAL FRAMEWORK

This article is based on the Urgency, Premeditation, Perseverance, Sensation-seeking (UPPS) model of impulsivity that offers a multi-dimensional view of impulsive behaviors. The UPPS model is especially relevant to suicide research because it separates out different aspects of risky and excessive behaviors leading to impulsivity instead of considering it as a unified personality trait (Rochat et al., 2018). In clinical practice, this distinction is important as affective impulsivity, in particular negative urgency (the tendency to act impulsively when experiencing strong negative emotions), is consistently demonstrated to be a powerful predictor of suicidal ideation and attempts (Beach et al., 2022; Bruno et al., 2023; Smith & Cyders, 2016). The strength of UPPS, thus, is that it captures the dynamic nature of suicide risk. Suicide risk assessment scales are directed at stable factors such as suicidal attempts, hopelessness, and access to lethal means, as Patterson et al. (1983) and Posner et al. (2011) suggest. While these are important considerations, they do not adequately convey the sense of urgency in making an impulsive decision. The UPPS model illuminates that people who have high negative urgency



can go from suicidal thoughts to suicidal action quickly, with little time for intervening, as Beach et al. (2022), McHugh et al. (2019), and Rasmussen et al. (2024) have noted. This ability to describe the acceleration of risk over time makes the model particularly valuable when used in conjunction with current assessment procedures.

The UPPS model also fits with evidence that psychiatric comorbidities like post-traumatic stress disorder, mood disorders, and substance use are linked to impulsivity, and that these comorbidities are common in high-risk groups such as veterans (Lee et al., 2025; Pérez-Balaguer et al., 2022). The multidimensional perspective has the advantage of differentiating impulsivity traits that contribute to vulnerability from less clinically relevant types of impulsivity. The model offers a theoretical rationale for the implementation of brief screening for impulsivity in routine psychiatric suicide evaluations. Therefore, this review is embedded in the UPPS framework, which allows an evidence- and theory-based analysis to promote the relevance of the recommendations in different healthcare contexts.

METHODOLOGY

Study Design

A systematic review method was used in this study to explore, assess, and collate the evidence available regarding the association between impulsivity and suicidal behavior. A systematic review design was chosen as it would offer a structured way of identifying relevant literature, as well as applying pre-established eligibility criteria, assessing available evidence, and synthesizing the findings related to impulsivity as a predictor for suicide risk. The review procedure included literature identification, literature screening, literature eligibility assessment, data extraction and narrative literature synthesis.

Findings were interpreted using a theoretical framework of impulsivity: the Urgency, Premeditation, Perseverance, and Sensation-Seeking (UPPS) model. The UPPS model is a conceptualization of impulsivity as a multidimensional construct of urgency, lack of premeditation, lack of perseverance, and sensation-seeking, not a single behavioral characteristic. This framework was chosen as it offers a thorough examination of the specific dimensions of impulsivity related to suicidal ideation, suicide attempts, and completed suicide.

Reporting Guidelines

The review was performed and reported in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines as documented by Page et al. (2021). To increase transparency and reproducibility in reporting identification, screening, eligibility, and inclusion of studies, the PRISMA recommendations were applied. A PRISMA flow diagram (*See Figure 1*) was developed to demonstrate the study selection process, including records identified through database searches, records screened, full-text articles assessed for eligibility, reasons for exclusion, and studies included in the final synthesis.



Search Strategy and Information Sources

An extensive literature search was completed using electronic databases appropriate to psychiatric nursing, psychology, behavioral health and suicide literature. The databases used for searching were PubMed, PsycINFO, CINAHL, and Google Scholar. A search strategy was designed with keywords and Boolean operators with regards to impulsivity and suicide-related outcomes. The search terms included the following combinations: impulsivity, impulsive behavior, negative urgency, UPPS model, suicide risk, suicidal ideation, suicide attempt, suicidal behavior, completed suicide, psychiatric nursing, post-traumatic stress disorder (PTSD), and substance use. Boolean operators (AND/OR) were used to combine search keywords and improve retrieval of relevant studies. The search included only peer-reviewed studies from 2015 to 2026 for more recent evidence on the association between impulsivity and suicidal behavior. Studies published in languages other than English were not included.

Eligibility Criteria

Eligibility criteria were pre-defined so as to ensure methodological consistency and transparency. Included publications were those that specifically focused on impulsivity as a measurable psychological and/or behavioral construct and evaluated its relationship with suicide-related outcomes (e.g., suicidal ideation, suicide attempt, suicidal behavior, or suicide mortality). Studies eligible for inclusion had to draw on validated measures or constructs of impulsivity (UPPS dimensions, inhibitory control, impulsive decision making). Reviews that included clinical, psychiatric, behavioral health or any other nonclinical population were eligible. The publications included were only those published in English between 2015 and 2026. The eligible designs were systematic reviews, meta-analyses and review articles with a well-defined evidence-synthesis methodology. Dissertations, conference abstracts, non-peer reviewed publications, opinion articles and primary empirical studies were not included. Reviews that only explored impulsivity without suicide outcomes or that only addressed aggression, risk-taking, or behavioral dysregulation without suicide outcomes were also excluded. It is acknowledged that this targeted strategy enhanced the uniformity of conceptualization and measurement of impulsivity.

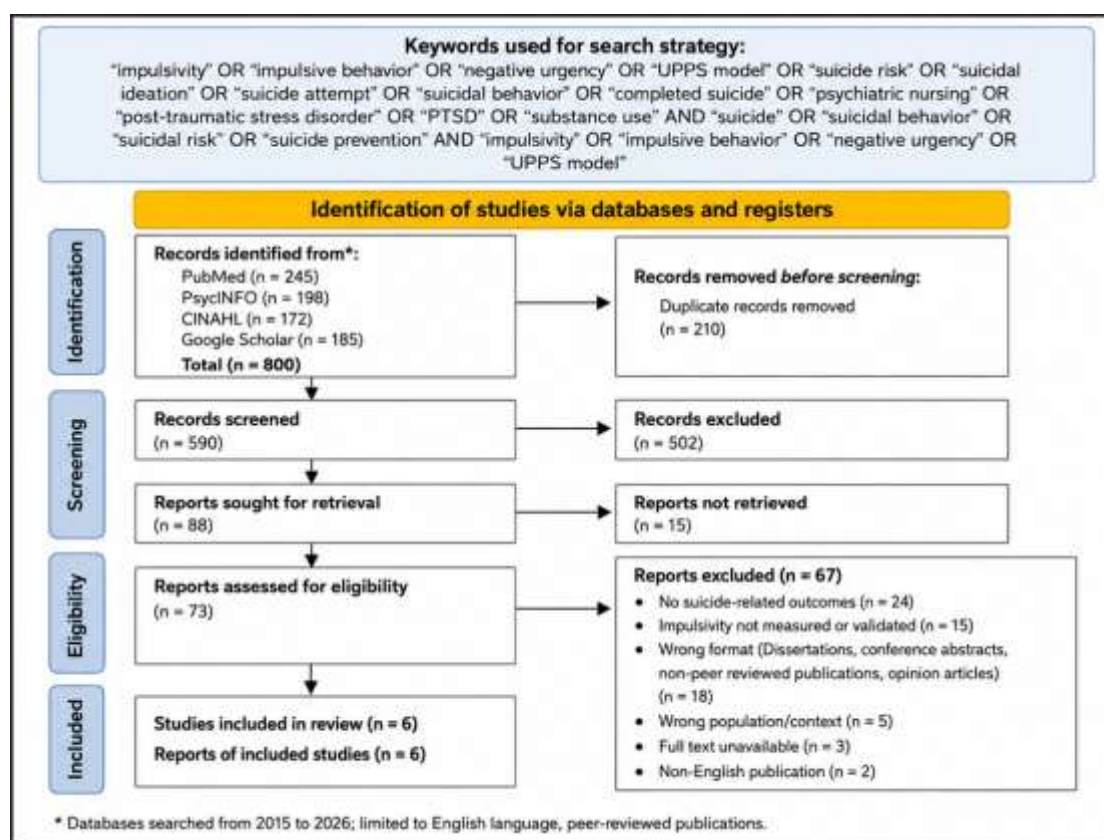
Study Selection Process

A search strategy was performed in accordance with the PRISMA guidelines, which informed how studies were selected. The titles and abstracts of identified records were first screened for relevance and potential eligible studies were then assessed in full text for compliance with the pre-established inclusion and exclusion criteria. Only studies that explored the relationship between impulsivity and suicidality-related outcomes were included in the final synthesis. A wider literature base was available relating to impulsivity, but only six studies were eligible for this review according to the criteria set for the review. With only six studies meeting inclusion criteria, the selected studies were deliberately limited to research that examined impulsivity as a measurable construct and its relationship with suicide-related outcomes, with particular attention given to studies informed by or consistent with the UPPS model of impulsivity. This method minimized heterogeneity of conceptualization and measurement of impulsivity across studies, but also limited the number of eligible studies and the extent to which results could be generalized to populations measured with other impulsivity evaluation tools. Importantly, the number of studies included is not intended to imply that there was little literature available, but rather a focus on studies that examined validated constructs of impulsivity and suicide-related



outcomes. Figure 1 shows the full identification, screening, eligibility assessment and inclusion process in the form of a PRISMA-style flow diagram. As noted, following the initial database searches, 800 records were identified, but after removing 210 duplicated records, 590 records remained that underwent title and abstract screening. Of these records, 502 did not meet the eligibility criteria, especially because some examined impulsivity without suicide-related outcomes, used non-validated impulsivity measures, focused on aggression or general risk-taking rather than suicide, publication type (e.g., dissertations, conference abstracts, non-peer-reviewed articles), or non-English language and so were excluded. The remaining 88 records were assessed full text for eligibility based on the inclusion criteria, which resulted to the exclusion of 82 records. Six studies were included in the final synthesis after a full-text assessment of the eligibility criteria.

Figure 1: PRISMA Flow Diagram



Data Extraction and Quality Assurance

A standardized data extraction form was created to gather information from each study included. Data extracted consisted of author(s), publication year, study design, sample characteristics, population characteristics, clinical setting, impulsivity measurement approach, suicide related outcomes, theoretical framework, major findings and implications for suicide risk assessment. See *Table 1* below for more information. Since this review was conducted by a single reviewer, procedural steps were taken to limit potential bias and strengthen consistency. All the information collected was checked for accuracy with the original publications and conclusions were drawn by comparing the findings from one study to another for similarities, differences, and gaps in the evidence.

**Table 1: Characteristics, Key Findings, and Thematic Contributions of Included Studies**

Study	Study Design	Population/Context	Impulsivity Constructs	Suicide-Related Outcomes	Key Findings	Thematic Domain(s)
Beach et al. (2022)	Systematic literature review	Clinical and nonclinical populations represented across studies examining impulsivity dimensions and suicidal behavior.	UPPS model dimensions of impulsivity, including urgency, premeditation, perseverance, and sensation seeking	Suicidal ideation, suicide attempts, and suicidal behavior	The review identified negative urgency as the impulsivity dimension most consistently associated with suicidal outcomes. Findings supported the importance of assessing impulsivity as a multidimensional construct rather than a single behavioral tendency.	Impulsivity and suicidal behavior; Negative urgency and suicidal behavior; Neurobiological, cognitive, and behavioral mechanisms linking impulsivity to suicide risk
Bruno et al. (2023)	Systematic review and meta-analysis	Psychiatric and behavioral health populations across	UPPS-based conceptualization of impulsivity,	Suicidal ideation and	Impulsivity traits demonstrated significant	Impulsivity and suicidal behavior;



		studies examining impulsivity and suicide-related outcomes	with emphasis on affective impulsivity and negative urgency	suicide attempts	associations with suicide-related outcomes beyond several established risk factors. Negative urgency showed a particularly strong relationship with suicide attempts, supporting its potential independent contribution to suicide risk.	Negative urgency and suicidal behavior; Impulsivity as a factor in transition from suicidal ideation to suicidal behavior
McHugh et al. (2019)	Systematic review and meta-analysis	Adolescents and young adults with self-harm and suicidal behaviors	Behavioral impulsivity measures, including inhibitory control and impulsive decision-making constructs	Self-harm, suicidal ideation, and suicidal behavior	Impaired inhibitory control and impulsive decision-making were associated with self-harm and suicidal behavior, suggesting a possible role for impulsivity in the progression	Impulsivity and suicidal behavior; Transition from suicidal ideation to suicidal behavior; Neurobiological, cognitive, and behavioral mechanisms linking



					from suicidal thoughts to actions.	impulsivity to suicide risk
Pérez-Balaguer et al. (2022)	Systematic review and meta-analysis	Populations with histories of childhood maltreatment and suicide-related outcomes represented across included studies.	Impulsivity assessed as a psychological mechanism associated with suicide risk	Suicidal behavior following childhood trauma exposure	Impulsivity was identified as a mediator between childhood maltreatment and suicidal behavior, suggesting that trauma-related disruptions in emotional and cognitive regulation may contribute to suicide vulnerability.	Impulsivity as a domain of variance across populations and clinical groups; Neurobiological, cognitive, and behavioral mechanisms linking impulsivity to suicide risk
Lee et al. (2025)	Review article	Psychiatric populations, including individuals with PTSD, substance use, and other	Measures examining impulsivity, behavioral regulation, aggression-related	Suicide risk and suicidal behavior	Findings indicated that impulsivity interacts with psychiatric comorbidities, particularly PTSD and	Impulsivity and suicidal behavior; Impulsivity as a domain of variance across populations and clinical groups;



		clinical vulnerabilities	impulsivity, and inhibitory control		substance use, to increase vulnerability to suicidal behavior.	Neurobiological, cognitive, and behavioral mechanisms linking impulsivity to suicide risk
Sanz-Gómez et al. (2024)	Systematic review and meta-analysis of psychological autopsy studies	Individuals who died by suicide across psychological autopsy investigations	Retrospective assessment of impulsivity characteristics and related behavioral risk factors	Suicide mortality/death by suicide	Higher impulsivity was identified among some suicide decedents, particularly younger individuals and those with substance-use involvement. Findings suggested variation in impulsivity-related suicide risk across populations.	Impulsivity and suicidal behavior; Transition from suicidal ideation to suicidal behavior; Impulsivity as a domain of variance across populations and clinical groups



Data Analysis

Because of the variability among the included studies in terms of type of study design, participant characteristics, methods to assess impulsivity, and measures of the outcomes of suicide, quantitative meta-analysis was not deemed appropriate. Thus, a narrative synthesis and thematic synthesis were used to synthesize the findings. Thematic synthesis was facilitated by the UPPS model and grouped into the following five thematic domains: 1) Impulsivity and suicidal behavior (general), 2) Negative urgency and suicidal behavior, 3) Impulsivity as a risk factor for the transition from suicidal ideation to suicidal behavior, 4) Impulsivity as a domain of variance across populations and clinical groups, and 5) Neurobiological, cognitive and behavioral mechanisms linking impulsivity to suicidal behavior risk. This allowed for a synthesis of evidence across varied study designs and the detection of similarities, differences, and gaps in existing evidence on assessment of impulsivity and prediction of suicide risk.

RESULTS

Impulsivity and Suicidal Behavior

In all the six studies included in this review, impulsivity emerged as an important factor in suicidal behavior, regardless of population and clinical context. Studies included in the review varied in design, population characteristics and means of measuring constructs of impulsivity, but each addressed the association of measurable impulsivity constructs with suicide-related variables. Several studies highlighted affective impulsivity while others highlighted more general mechanisms such as inhibitory control, impulsive decision-making, trauma vulnerability, and psychiatric comorbidity. This tendency indicates that impulsivity is likely to be a risk factor for suicide along many different paths, not just one psychological one. Beach et al. (2022) and Bruno et al. (2023) identified significant relationships between UPPS-related impulsivity dimensions, particularly negative urgency, and suicide-related outcomes. Likewise, McHugh et al. (2019) found that deficits in inhibitory control and impulsive decision-making are significant correlates of self-destructive actions and suicidal behaviors among adolescents and young adults. Further research confirmed this relationship and revealed that psychiatric and related disorders such as PTSD, mood disorders, and substance use disorders can interact with impulsivity to enhance suicide risk (Lee et al., 2025; Sanz-Gómez et al., 2024). Pérez-Balaguer et al. (2022) also provided evidence of impulsivity as a pathway between childhood maltreatment and suicidal behaviors.

From these studies, although there were clear relationships between suicidal outcomes and impulsivity, variability was found across dimensions and mechanisms of impulsivity. In some studies, affective impulsivity was mainly studied, while in others, behavioral regulation and cognitive control were primarily studied. A notable gap that remains throughout the reviewed studies is the lack of studies directly testing the predictive value of adding impulsivity measures to existing suicide risk assessment tools.

Negative Urgency and Suicide Risk

Negative urgency was the single most consistent dimension of impulsivity found in UPPS-informed research that was associated with suicidal outcomes. Negative urgency is defined as acting impulsively when experiencing high levels of negative emotions, which is especially



important when considering acute suicidal crises. Affective impulsivity, specifically negative urgency, was found to be strongly related to suicide attempts (Bruno et al., 2023) and urgency-related impulsivity was found to have stronger relationships with suicidal behavior compared to other impulsivity measures such as sensation seeking and lack of perseverance (Beach et al., 2022). The results indicated that negative urgency may also be a distinct route by which emotional distress can lead to suicidal behavior. Negative urgency is a more specific type of impulsivity that involves both emotional arousal and lack of behavioral self-control and thus may account for the tendency of some people to quickly escalate from suicidal ideation to suicidal behaviors. While McHugh et al. (2019) did not specifically identify negative urgency, their work on impaired inhibitory control and impulsive decision-making aligns with the behavioral-control mechanism by which emotional distress could be involved in suicidal behavior. Similarly, in their study, Lee et al. (2025) discovered that impulsivity was associated with psychiatric comorbidities and PTSD, implying that psychiatric comorbidities may amplify impulsive reactions during periods of acute distress. These findings are clinically relevant as individuals with high negative urgency are potentially having fewer "windows of opportunity" for intervention during episodes of acute distress. But, the existing evidence is still limited because of variations in study methodology and methods of measurement. Negative urgency seems to be a specifically important dimension of impulsivity, but future prospective studies are required to assess whether it can predict future suicidal behavior and whether there is an added value in including it in current risk prediction models.

Transitioning from Ideation to Attempt

In this review, impulsivity appeared to influence the transition from suicidal ideation to suicidal behavior by affecting decision-making, inhibition, and responses to emotional distress. Impulsivity is not necessarily a direct cause of suicidal behaviors, but rather acts as a process that shortens the interval between suicidal thinking and suicidal behavior. This is a dynamic pathway that distinguishes impulsivity from more static suicide risk factors like prior suicide attempts or psychiatric history. McHugh et al. (2019) demonstrated that deficits in inhibitory control and impulsive decision making were related to self-damaging behaviors and suicidal ideation, especially in adolescents and young adults. Consistent with this, Sanz-Gómez et al. (2024) found increased impulsivity in suicide decedents, especially younger people and those with substance-use involvement. These findings taken together indicate that impulsivity might be a factor in the rapid escalation of suicide risk in some vulnerable populations.

Nevertheless, variation between studies was evident in how the issue of transitioning from ideation-to-action was investigated. Some studies measured impulsive tendencies in people with suicidal thoughts and/or self-destructive behavior (McHugh et al., 2019), while others like that by Sanz-Gómez et al. (2024) used retrospective psychological autopsy methods for people who had died by suicide. However, of the included reviews in this analysis, none directly measured time lapse between the onset of suicidal ideation and subsequent suicide attempts, so the proposed accelerating function of impulsivity is therefore an interpretation based on associations made with inhibitory-control deficits, impulsive decision-making, and fatal suicidal behavior. These methodological discrepancies underscore the need for future studies looking at prospective associations between impulsivity and imminent suicidal behavior.



Population Variability

The association between impulsivity and suicidal behavior was inconsistent across populations, and thus is not a uniform risk factor in all clinical populations. Rather, impulsivity was found to vary based on developmental stage, exposure to trauma, psychiatric conditions and substance use patterns. Vulnerability to trauma and psychiatric comorbidities were consistently found to be important contextual factors in the studies reviewed regarding their impact on impulsivity-related suicide risk. Lee et al. (2025) showed that PTSD and substance use can interact with impulsivity to raise vulnerability to suicidal behaviors especially in people with complex psychopathology. Likewise, impulsivity was found to mediate the link between childhood maltreatment and suicidal behavior (Pérez-Balaguer et al., 2022), indicating that childhood adversity could impact suicidal behavior through its effects on emotion and behavior regulation.

Age group and clinical population differences were also found. While McHugh et al. (2019) highlighted difficulties with inhibitory control and impulsive decision-making among adolescents and young adults, Sanz-Gómez et al. (2024) found increased impulsivity in younger suicide decedents, especially when substance use was involved. These results suggest that population-specific methods for impulsivity assessment should be used instead of a universal interpretation. Therefore, additional studies are warranted to determine how the association between impulsivity and suicide risk is affected by demographic and clinical variables.

Mechanisms Linking Impulsivity to Suicide

The included studies indicated a number of potential cognitive, emotional, and behavioral processes by which impulsivity could be linked to suicidal behaviors. Inconsistent inhibitory control, emotional regulation problems, and trauma-related disturbances of cognitive processes were consistent factors throughout the evidence base in explaining the suicide risk linked to impulsivity. Lee et al. (2025) noted the connection between impulsivity, behavioral regulation difficulties, and suicide risk, whereas McHugh et al. (2019) identified problems in inhibitory control and decision-making as mechanisms linked to self-destructive actions and suicidal behavior. Moreover, Pérez-Balaguer et al. (2022) revealed that impulsivity could be a pathway by which childhood maltreatment leads to suicidal behavior in the future. These findings offer theoretical justification to conceptualize impulsivity as a dynamic risk factor for suicide, however, evidence is limited as the biological, psychological, and behavioral mechanisms have been studied independently. Combining these mechanisms in future studies could help to better understand the interplay between emotional regulation problems, cognitive control deficits, and environmental risk factors in driving suicide risk.

Overall Evidence Synthesis

Overall, the six reviewed studies revealed a consistent link between impulsivity and suicidal behavior, and important differences in the nature of this relationship across population and clinical setting. The most consistent results were found in relation to impulsivity as a significant suicide risk factor, specifically emotion-related impulsive responses and behavioral control impairment. There are, however, limitations in the evidence base due to inconsistencies in methods of measuring impulsivity, and the use of non-prospective designs, along with a lack of studies examining the utility of the assessment of impulsivity and its usefulness for



improving current suicide risk prediction instruments. The gaps suggest a need for further research on impulsivity as a clinical assessment domain and as a target for an intervention for suicide prevention. At present, however, there is limited evidence that screening for impulsivity is effective in predicting clinical outcome independently of other assessment methods for suicide risk.

DISCUSSION

This review's findings are consistent with the idea that impulsivity is a dynamic and independent suicide risk factor. Traditional assessment measures such as the Columbia Suicide Severity Rating Scale (C-SSRS) and SAD PERSONS scale are static and look at the history of suicide attempts, hopelessness, and access to lethal means (Patterson et al., 1983; Posner et al., 2011). Although these domains are clinically relevant, they are not enough to reflect the immediacy of risk related to impulsive decision-making. The UPPS model, by contrast, emphasizes dynamic factors, including urgency, premeditation, perseverance, and sensation-seeking, relevant to the understanding of impulsive suicide risk (Berg et al., 2015; Whiteside & Lynam, 2001). The findings presented here suggest that impulsivity, particularly negative urgency, accelerates a shift from suicidal ideation to suicidal action and therefore decreases opportunities for timely intervention. The authors suggest extending the definition of suicide risk assessment to include the formal domain of impulsivity to better identify persons at "imminent" risk.

Negative urgency has always been introduced as a clinically significant aspect of impulsivity. Bruno et al. (2023) showed that impulsivity in emotional situations was a risk factor for suicide attempts, underlining the importance of dynamic screening. In the UPPS model, negative urgency is consistently shown to be the most predictive factor of suicidal behaviors, and thus is a dimension of the model that is applicable in clinical screening (Berg et al., 2015; Whiteside & Lynam, 2001). The results suggest that the prevention of suicide attempts needs to be targeted at the situational and dynamic risk factor of affective impulsivity. Current tools have static indicators that may not detect opportunities for intervention for individuals with high negative urgency. Additional questions during screening that ask patients about their rash decision-making in distress could provide valuable insights into heightened suicide risk and also inform patient safety planning.

Population-specific findings underscore the need for the significance of tailored assessment approaches for impulsivity. Lee et al. (2025) suggested that PTSD and substance use interact with impulsivity to increase the risk of impulsive suicidal behavior, especially in veterans. The UPPS model allows for such differences, distinguishing between clinically relevant traits such as urgency, which is more associated with vulnerability in trauma-exposed groups, and less predictive traits, such as sensation-seeking (Berg et al., 2015; Whiteside & Lynam, 2001). Pérez-Balaguer et al. (2022) found impulsivity to be a mediator between childhood trauma and suicidal behavior, implying that those who have experienced childhood trauma may be at higher risk because of impulsivity. The identified deficits in inhibitory control have a strong association with self-harm and suicidal behavior in adolescents and young adults, particularly for early intervention strategies, according to McHugh et al. (2019). In addition, Sanz-Gómez et al. (2024) conducted psychological autopsy studies that revealed increased impulsivity among younger suicide victims, particularly concerning substance use. Together, these results



suggest that the risk of impulsivity varies across populations and thus should be assessed differently for vulnerable sub-groups through tailored assessment approaches.

There is also theoretical support for the inclusion of impulsivity in the assessment of risk for suicide because there are mechanisms that connect impulsivity to suicide. Lee et al. (2025) discussed two biological pathways that are associated with an increase in impulsivity and suicide risk: serotonergic dysfunction and impaired inhibitory control. These mechanisms correspond to the multidimensional model of the UPPS that combines cognitive and affective mechanisms, as a continuum linking ideation to attempt (Berg et al., 2015; Whiteside & Lynam, 2001). Pérez-Balaguer et al. (2022) emphasized that the link between childhood maltreatment and suicidal behavior was mediated by impulsivity, which indicates that childhood maltreatment may affect cognitive and emotional regulation processes. These mechanisms reflect the conceptual coherence of including impulsivity in risk assessment, associating behavior with neurobiological and cognitive dysfunction. Understanding these pathways will enable clinicians to better evaluate impulsivity dynamically, connect with both biological and psychosocial vulnerabilities, and reinforce the value of including it in clinical practice.

The integration of impulsivity assessment is a major innovation in psychiatric nursing practice. Impulsivity may be overlooked or underestimated in the acute risk assessment undertaken by nurses, who are often the first to assess risk in inpatient, outpatient, and community settings. The use of brief screening questions for impulsive tendencies might improve the identification of at-risk individuals early, especially in populations where more than one condition occurs, such as veterans, trauma survivors, and patients with mood disorders. This practice can enhance psychiatric nurses' suicide prevention measures, treatment planning for each patient, and safe clinical outcomes. In addition, the evidence places nurses as leaders in suicide prevention by incorporating the dynamic risk factors into standardized protocols. Notably, this review indicates that there is a theoretical basis and clinical need for incorporating an assessment of impulsivity into suicide risk assessment. Impulsivity, in particular negative urgency, is a dynamic risk factor that can facilitate the shift from ideation to attempt, can interact with psychiatric comorbidities, and can vary among populations. But with its omission in current tools, this clearly highlights a void in clinical practice. Integration of impulsivity screening into routine assessment by psychiatric nurses and other healthcare professionals may be helpful to improve the predictive validity, create a strategy framework for prevention, and to improve patient safety outcomes in different healthcare environments.

Implications for Nursing Practice

The results from this review substantiate the clinical relevance of measuring impulsivity in psychiatric care. Bruno et al. (2023) emphasize that impulsivity is a measurable behavioral trait and a measurable psychological construct that could be incorporated in the risk assessment process to improve its predictive accuracy. McHugh et al. (2019) suggested that brief screening questions that seek to describe impulsive tendencies can be used to assist the early identification of such individuals, especially adolescents and young adults who are at high risk. Impulsivity could be a more useful tool in clinical practice for suicide prevention for veterans and trauma survivors because of the dynamic nature of the risk for PTSD and substance use (Lee et al., 2025). It is also highlighted that trauma-informed approaches are needed since impulsivity is identified as a mediator between the association of childhood maltreatment and suicidal behavior (Pérez-Balaguer et al., 2022). These findings put psychiatric nurses in a



position to spearhead the adoption of screening for impulsivity in the treatment of psychiatric patients. This enables nurses to expand their ability to create personalized treatment plans, to strengthen prevention strategies and, ultimately, to ensure the safety of clinical outcomes in healthcare settings.

Proposed Clinical Recommendation

In line with the reviewed evidence and results in this analysis, this article proposes adding a brief impulsivity domain to existing suicide assessment tools. Example screening questions may include:

1. Do you often act without thinking about the consequences?
2. When emotionally distressed, do you make sudden decisions you later regret?
3. Have you ever attempted to harm yourself impulsively during periods of intense emotional distress?
4. Do you find it difficult to delay actions when upset or angry?

Positive responses should prompt further assessment and safety planning. Such routine psychiatric nursing assessment could improve how high-risk patients are identified and improve patient safety.

Recommendations for Future Research

Regarding recommendations for future research, one possibility is for future research to examine the predictive validity of suicide assessment measures that include a more robust measure of impulsivity. This is relevant to the question of whether such interventions could enhance the capacity to accurately predict imminent suicidality. Second, studies could be conducted on the benefits of screening for impulsivity in veterans because it can factor into PTSD and substance use that increase vulnerability in this population. Third, this work could be extended by examining different patterns of interactions between PTSD symptoms and impulsivity that could lead to increased suicidal behaviors. Finally, there is a need for evidence-based nursing interventions that can potentially minimize impulsivity. These interventions can include improvement of emotional regulation and inhibitory control and equipping psychiatric nurses with practical strategies to reduce acute risk and improve patient safety.

CONCLUSION

This review demonstrates that extensive and growing literature links impulsivity and, in particular, negative urgency to suicidal ideation, attempted suicidal behavior, and suicide. As noted, however, current assessment tools and practices for suicide fail to consider dynamic risk factors, such as impulsivity. It is therefore concluded that when a short impulsivity screening domain is added to standard suicide risk scales, this could potentially benefit the identification of suicide risk, improve suicide prevention efforts, and boost patient safety, especially in populations where impulsivity, trauma and psychiatric comorbidities are documented to be co-occurring. As a result of their regular contact with vulnerable patients, psychiatric nurses are



well placed to lead the way in implementing this innovation in practice and contribute to improved suicide prevention outcomes across a range of healthcare settings.

Limitations

This review has several limitations. The number of included studies (6) is insufficient to draw firm conclusions or to generalize. The emphasis on UPPS-based or related measures may have excluded potentially relevant studies that employed other validated frameworks of impulsivity. Broadening the evidence based in future to include more studies including primary studies could strengthen understanding of ways impulsivity influences suicide risk in varied contexts and populations. The included studies also varied in their design, population, method of measurement and their outcomes regarding suicide. Such heterogeneity precluded statistical pooling and necessitated a narrative synthesis, which limited the ability to estimate the strength of association between impulsivity and risk of suicide. Additionally, some of the included sources were systematic reviews, meta-analysis, or retrospective studies but not prospective primary studies. It is likely that some findings may have been more influential because of potential overlap among primary studies, and retrospective studies are limited in determining causality or imminent suicidal behavior. Furthermore, only one reviewer was involved, there was no formal risk of bias assessment reported, and only English-language peer-reviewed studies were included. Lastly, none of the reviewed studies directly examined whether incorporation of impulsivity measures enhances current suicide risk assessment instruments, and the suggested screening questions have not been prospectively validated for routine clinical use.

REFERENCES

- Beach, V. L., Gissandaner, T. D., & Schmidt, A. T. (2022). The UPPS model of impulsivity and suicide: a systematic literature review. *Archives of Suicide Research*, 26(3), 985-1006. <https://doi.org/10.1080/13811118.2021.1892002>
- Berg, J. M., Latzman, R. D., Bliwise, N. G., & Lilienfeld, S. O. (2015). Parsing the heterogeneity of impulsivity: A meta-analytic review of the behavioral implications of the UPPS for psychopathology. *Psychological Assessment*, 27(4), 1129. <https://psycnet.apa.org/doi/10.1037/pas0000111>
- Bruno, S., Anconetani, G., Rogier, G., Del Casale, A., Pompili, M., & Velotti, P. (2023). Impulsivity traits and suicide related outcomes: A systematic review and meta-analysis using the UPPS model. *Journal of Affective Disorders*, 339, 571-583. <https://doi.org/10.1016/j.jad.2023.07.086>
- Galynker, I. (2023). *The suicidal crisis: Clinical guide to the assessment of imminent suicide risk*. Oxford University Press.
- Huang, Y., Luan, S., Wu, B., Li, Y., Wu, J., Chen, W., & Hertwig, R. (2024). Impulsivity is a stable, measurable, and predictive psychological trait. *Proceedings of the National Academy of Sciences*, 121(24), e2321758121.
- Lee, Y., Gilbert, J. R., Waldman, L. R., Zarate Jr, C. A., & Ballard, E. D. (2025). Suicide and its relationship to aggression and impulsivity. *Cognitive, Affective, & Behavioral Neuroscience*, 25(5), 1237-1260. <https://doi.org/10.3758/s13415-025-01321-0>
- McHugh, C. M., Lee, R. S. C., Hermens, D. F., Corderoy, A., Large, M., & Hickie, I. B. (2019). Impulsivity in the self-harm and suicidal behavior of young people: A systematic review



- and meta-analysis. *Journal of Psychiatric Research*, 116, 51-60. <https://doi.org/10.1016/j.jpsychires.2019.05.012>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *bmj*, 372. <http://dx.doi.org/10.1136/bmj.n71>
- Patterson, W. M., Dohn, H. H., Bird, J., & Patterson, G. A. (1983). Evaluation of suicidal patients: the SAD PERSONS scale. *Psychosomatics*, 24(4), 343-349. [https://doi.org/10.1016/S0033-3182\(83\)73213-5](https://doi.org/10.1016/S0033-3182(83)73213-5)
- Pérez-Balaguer, A., Peñuelas-Calvo, I., Alacreu-Crespo, A., Baca-Garcia, E., & Porras-Segovia, A. (2022). Impulsivity as a mediator between childhood maltreatment and suicidal behavior: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 151, 95-107. <https://doi.org/10.1016/j.jpsychires.2022.04.021>
- Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., ... & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American Journal of Psychiatry*, 168(12), 1266-1277. <https://doi.org/10.1176/appi.ajp.2011.10111704>
- Rasmussen, S., Martin, B., & Cramer, R. J. (2024). Multidimensional impulsivity and suicidal behaviour: A partial test of the integrated motivational-volitional (IMV) model of suicide. *Archives of Suicide Research*, 29(1), 26-44. <https://doi.org/10.1080/13811118.2024.2322118>
- Rochat, L., Billieux, J., Gagnon, J., & Van der Linden, M. (2018). A multifactorial and integrative approach to impulsivity in neuropsychology: insights from the UPPS model of impulsivity. *Journal of Clinical and Experimental Neuropsychology*, 40(1), 45-61. <https://doi.org/10.1080/13803395.2017.1313393>
- Sanz-Gómez, S., Vera-Varela, C., Alacreu-Crespo, A., Perea-González, M. I., Guija, J. A., & Giner, L. (2024). Impulsivity in fatal suicide behaviour: A systematic review and meta-analysis of psychological autopsy studies. *Psychiatry Research*, 337, 115952. <https://doi.org/10.1016/j.psychres.2024.115952>
- Smith, G. T., & Cyders, M. A. (2016). Integrating affect and impulsivity: The role of positive and negative urgency in substance use risk. *Drug and Alcohol Dependence*, 163, S3-S12. <https://doi.org/10.1016/j.drugalcdep.2015.08.038>
- Teismann, T., Janssen, W. C., & Heering, H. D. (2026). Suicide risk assessment: clinical implications of the unpredictability of suicidal behavior. *Frontiers in Psychiatry*, 17, 1844322. <https://doi.org/10.3389/fpsy.2026.1844322>
- Whiteside, S. P., & Lynam, D. R. (2001). The five-factor model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30(4), 669-689. [https://doi.org/10.1016/S0191-8869\(00\)00064-7](https://doi.org/10.1016/S0191-8869(00)00064-7)
- World Health Organization. (2025). *Suicide worldwide in 2021: global health estimates*. <https://www.who.int/publications/i/item/9789240110069>