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The Clinical Assessment of Impulsivity

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ORIGINAL ARTICLES

- 16 Health-related Quality of Life among Menopausal Women
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- 32 Impact of Educational Intervention on Knowledge, Attitude, and Practice of Pharmacovigilance among Nurses
- 36 Suicidality in Somatization and Undifferentiated Somatoform Disorders: A Hospital-Based Study
- 40 The Burden of Polypharmacy and Pattern of Comorbidities among Chronic Kidney Disease Patients in Clinical Practice
- 48 Efficacy of Mulligan's Self-Sustained Natural Apophyseal Glides in Decreasing Pain, Disability, and Improving Neck Mobility among the Nursing Professional Suffering from Work-Related Neck Pain
- 54 Comparative Assessment of Basic Life Support Knowledge between Professional Nurses and Nursing Students
- 59 Typhoid Intestinal Perforation: Analysis of the Outcome of Surgical Treatment in Kano, Nigeria
- 64 Immunohistochemical Characterization of Small Round Blue Cell Tumors of Childhood at Ile-Ife, Nigeria: A 10-Year Retrospective Study
- 70 Yoga Therapy for Sustained Attention

REVIEW ARTICLES

- 73 Dietary and Antioxidant Therapy for Autistic Children: Does it Really Work?
- 81 Neuropharmacological Classification of Antidepressant Agents Based on their Mechanisms of Action

- 95 The Clinical Assessment of Impulsivity
- 99 Recent Advances and Current Trend in the Pharmacotherapy of Obesity

CASE REPORTS

- 117 First Case Report of Surgical Site Infection Due to *Buttiauxella agrestis* in a Neurocare Center in India
- 120 Xanthogranulomatous Appendicitis: Entity of Surprise
- 122 Cytological, Histopathological and Immunohistochemical Features of Merkel Cell Carcinoma- A Case Report
- 126 Multifocal Skeletal Tuberculosis Mimicking Multiple Myeloma and Secondary Bone Metastasis: An Unusual Case Scenario
- 130 Gossypiboma: A Diagnosis Not to Forget
- 134 Ocular Complications of Lamellar Ichthyosis
- 136 Unusual Case of Immunoglobulin G4-related Disease
- 139 *Cryptococcus neoformans* Meningitis in a Non-HIV Infected, Nonorgan Transplant, Immunocompromised Individual
- 143 Weyers Acrofacial Dysostosis (Curry-Hall Syndrome): Report of a Rare Case

MEDICAL EDUCATION

- 147 Student Selection for Medicine: Still a "Thorny" Issue
- 152 The Educational Challenge of End-of-Life Conversations for Our Junior Doctors

SPECIAL ARTICLES

- 157 Revisiting Hansen's Disease: Recognizing the Many Neurodermatologic Faces and its Diagnostic Challenges
- 171 Novel Herbal Drug Delivery System: An Overview

HISTORY ARTICLE

- 180 Historical Perspectives on Personality – The Past and Current Concept: The Search is Not Yet Over

TEACHING IMAGES

- 187 Dehiscent Mastoid Segment of the Facial Nerve

SHORT COMMUNICATION

- 189 The Need for Indian Physiotherapy Research Publications: Understanding Journalology and Predatory Journals

The Clinical Assessment of Impulsivity

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Abstract

The term impulsivity is often used to describe behavior that is both spontaneous and detrimental. Impulsivity is multidimensional and derives from personality, general psychopathology as well as specific mental disorders. Thus, the construct of impulsivity is important as it is associated with numerous mental disorders as well as socially deviant behaviors ranging from behaviors targeted towards others such as aggression, to behaviors targeted toward oneself, for example, self-harm and suicide. As a clinical construct impulsivity is highly predictive of poor prognosis thus further emphasizing its clinical relevance. Therefore, the need exists for impulsivity to be clinically assessed and this assessment should take place at the same time as the assessment of risk. As risk and impulsivity are interrelated and interact. Although there are existing self-report rating scales for trait-based impulsivity, a dearth exists in regards to assessment of impulsivity in clinical practice that is focused and pragmatic. Thus, a pragmatic rubric to guide the individualized assessment of impulsivity in a clinical population is proposed. The quadrants espoused will assist both with the formulation of questions and categorization of responses to determine the most appropriate interventions for the client.

Keywords: Assessment, impulsivity, psychiatric disorders

INTRODUCTION

Impulsive behavior or impulsivity is often used to describe behavior that is spontaneous and reactive having negative or detrimental consequences. Impulsivity is viewed as being both trait based and dispositional as well as deriving from mental illness. The term impulsivity is commonly used to denote behavior that has not been properly conceived before execution and is contrary to the situational expectations.^[1,2] Impulsive behaviors are said to comprise of a wide spectrum of actions characterized by quick and unplanned reactions to external and internal stimuli; without taking into account the possible negative consequences for the individual or others. Fundamentally, impulsive behavior lacks restraint. Impulsivity incorporates cognitive, affective and behavioral components.

Impulsivity is best conceptualized as an umbrella term; with the term encompassing multiple types and subtypes of impulsivity. As impulsivity is a multi-dimensional construct composed of multiple heterogeneous domains.^[3] Impulsivity is identified within multiple personality theories and is implicated in general psychopathology as well as the diagnosis of specific mental disorders.^[4] That is content that can be considered as synonymous to impulsivity is found across a range of higher

and lower order personality traits across different theories of personality.

Historically, impulsivity is evident in Eysenck's three-factor theory of personality (extraversion, neuroticism, and psychoticism) with impulsivity being related to both extraversion and psychoticism.^[5] Specifically, in the most recent formulation, impulsivity was related to the dimensions of venturesomeness and impulsiveness being related to extraversion and psychoticism, respectively.^[5] More recently, the five-factor theory of personality developed by Costa and McCrae has lower order factors with content synonymous with impulsivity derived from the higher-order factors of neuroticism, extraversion, agreeableness, and conscientiousness.^[5] In regards to impulsivity deriving from psychopathology associated with mental illness, the nature and manifestation of the impulsivity is dependent on the specific mental illness and will be further discussed later. The relationship between impulsivity, mental disorders, and personality is summarized in Figure 1. The diagram

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schematically represents the differing areas from which impulsivity derives hierarchically.

WHY IS IMPULSIVITY IMPORTANT?

Impulsivity is one of the most common diagnostic criteria in the DSM being present in the diagnosis of many disorders.^[6] Further impulsivity is evident in the disorders of each of the following disorder classes; bipolar disorders, personality disorders, eating disorders and addictive disorders and disruptive, impulse-control and conduct disorders. These classes and the associated disorders that encompass impulsivity as a key feature are illustrated in Figure 2 below. Impulsivity is associated with numerous personality disorders being most highly associated with Cluster B personality disorders as reflected below. An addictive disorder as modeled below denotes substance use disorders such as alcohol and other drug use as well as gambling disorder. In regards to eating disorders, impulsivity is mainly associated with bulimia nervosa and binge eating disorder.

Beyond these disorders impulsivity cuts across the bound of mental illnesses generally being evident as general psychopathology and is also a prevalent personality trait [Figure 1]. Not all impulsivity has clinical relevance; however, impulsivity either clinically based or trait based that is above the clinical threshold can have detrimental impacts. As impulsivity is commonly associated with a range of socially deviant behaviors as such impulsivity is arguably one the most socially relevant constructs as it has far-reaching impacts across a number of key systems within society, specifically, education, business, criminal justice, and the mental health.^[7] Impulsivity in regards to psychopathology is generally defined as a reaction without conscious thought and the tendency to react in a manner that would not align with the behavior of individuals of similar abilities and knowledge.^[8] Thus, impulsivity is associated with a myriad of negative consequences most notably aggression, antisocial behavior, poor treatment compliance, self-harm, and suicide.^[9-11] Thus

as a clinical construct impulsivity is highly predictive of a poor prognosis thus further emphasizing its clinical relevance.

Impulsivity is known to be related to both internalizing and externalizing problems. Recent research has demonstrated a relationship between emotion-focused impulsivity that triggers action and externalizing problems such as aggression and substance use.^[11] In regards to internalizing problems, another emotion-focused facet of impulsivity has been found to be related to depression and anxiety. Specifically, this facet represents the influence of negative emotions on the individual's view of the world and their automatic thoughts.^[11]

Impulsivity is also known to be highly related to self-harm and suicide; a recent meta-analysis demonstrated general support for this ideology demonstrating a relationship

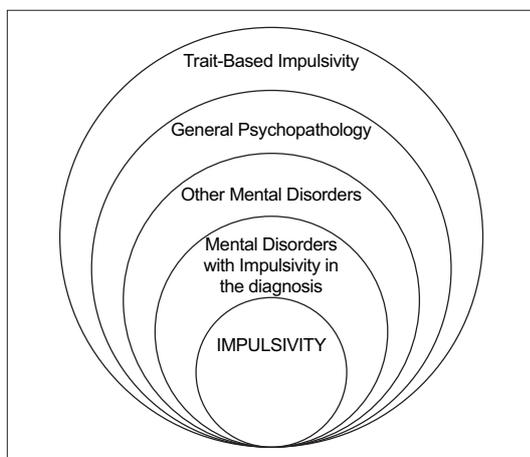


Figure 1: Relationship between impulsivity, mental disorders, and personality

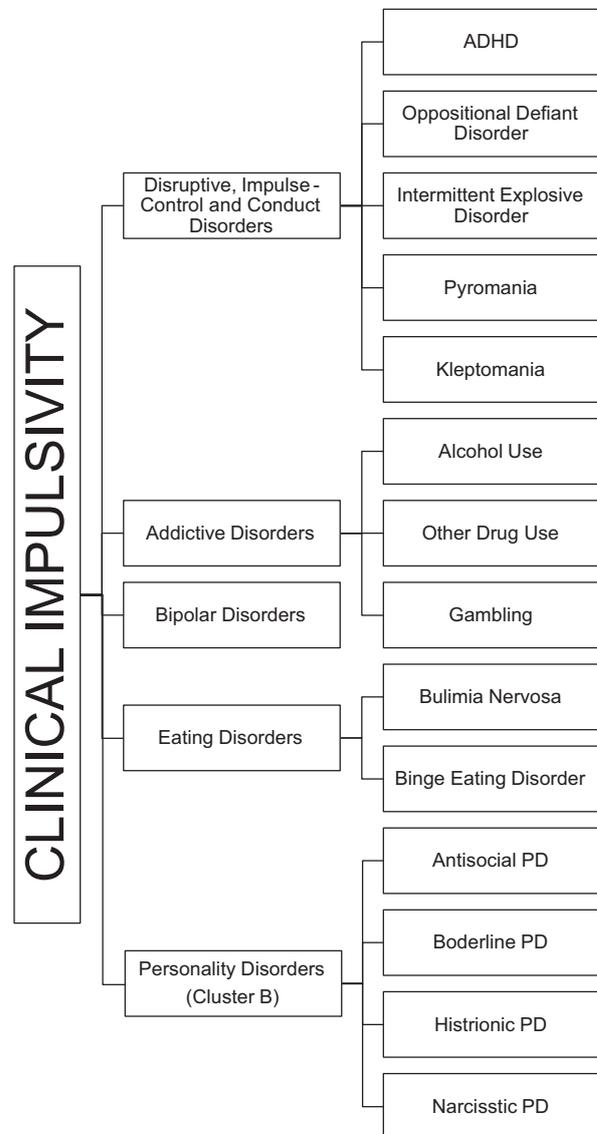


Figure 2: Clinical impulsivity associated with the diagnosis of specific mental disorders

between self-injurious behavior, thoughts about self-harm and impulsivity.^[12] Further results also indicated a relationship between behavioral impulsivity and suicide attempts.^[12] That is individuals who attempt suicide are distinct to individuals who merely ideate about suicide in their ability to think through the consequences of their actions.^[13] Thus, the assessment and recognition of impulsivity despite the clinical diagnosis is vital to the client's health, well-being, and outcomes.

THE ASSESSMENT OF IMPULSIVITY

As demonstrated above impulsivity is best construed as an umbrella term as the term is intended to capture and represent more than just acting before thinking and encompasses a broad array of impulsivity derived factors originating from multiple areas. Thus, the construct of impulsivity has been differentially defined and operationalized.

A measure of impulsivity utilized for >50 years is the Barratt Impulsiveness Scale; which is currently in its eleventh edition (BIS-11).^[7] The BIS is the most commonly used self-report measure to assess impulsivity in research and clinical practice; as such the BIS has had a significant impact on how impulsivity is conceptualized.^[7] The BIS-11 is composed of three higher order factors, namely attentional impulsiveness, motor impulsiveness, and nonplanning impulsiveness; each of these factors is composed of two primary factors.^[14] Attentional impulsiveness is composed of attention and cognitive instability. Motor impulsiveness is made up of the factors of motor and perseverance. Finally, nonplanning impulsiveness is composed of self-control and cognitive complexity.^[14]

Similarly, another measure of impulsivity commonly used in empirical research is the urgency, premeditation (lack of), perseverance (lack of), and sensation seeking scale (UPPS), and the later, extension including positive urgency (UPPS-P).^[15] The scale also postulates impulsivity as a multi-dimensional construct comprising originally of four factors and then five factors with the later addition of positive urgency. Impulsivity in this scale is also viewed as trait based similar to the BIS-11.

Although such scales exist they are not commonly employed in routine clinical assessments; thus, there is a need for a succinct and simplified method to assist with the assessment of impulsivity in clinical practice. As impulsivity both clinically based and trait based should be thoroughly assessed in all mental health clients due to the potentially dangerous impact of impulsivity on the client and possibly others. The assessment of impulsivity should be undertaken at the same time as a risk assessment as impulsivity is highly related to risk in a clinical population to the point that there is an overlap between risk and impulsivity.

Although there are existing self-report rating scales for trait-based impulsivity, a dearth exists in regards to assessment of impulsivity in clinical practice that is focused and pragmatic. Thus, as shown in Figure 3, the proposed model is intended to be a quick rubric to guide the assessment of impulsivity in

clinical populations. The left-hand side of the model pertains to the context and temporal aspects of impulsivity; is impulsivity a fleeting state or stable for the individual? While the right-hand side of the model pertains to where the impulsivity derives from; does the impulsivity arise from a mental disorder or personality? Figure 4 defines the scope of each of the quadrants.

It will allow the clinician to quickly and efficiently assess impulsivity with the quadrants assisting with both the formulation of questions as well as the interpretation of responses. The categorization of context and derivation of the individual's impulsive behaviors and thoughts will, in turn, guide the most appropriate intervention strategies. Conceptualizing impulsivity in this manner allows the clinician to better intervene and manage a client's clinically significant levels of impulsivity. From this conceptualization, a client whose impulsivity is limited to the upper half of the model would require less intensive intervention and management. While a client on the lower half of the model or one that cuts across, all four quarters of the model would require much more intensive interventions.

CONCLUSION

A thorough understanding of impulsivity, its causes and consequences are vital for the mental health clinician. Further,

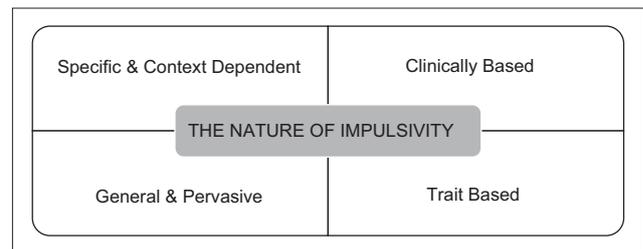


Figure 3: Model for the assessment of impulsivity in clinical populations

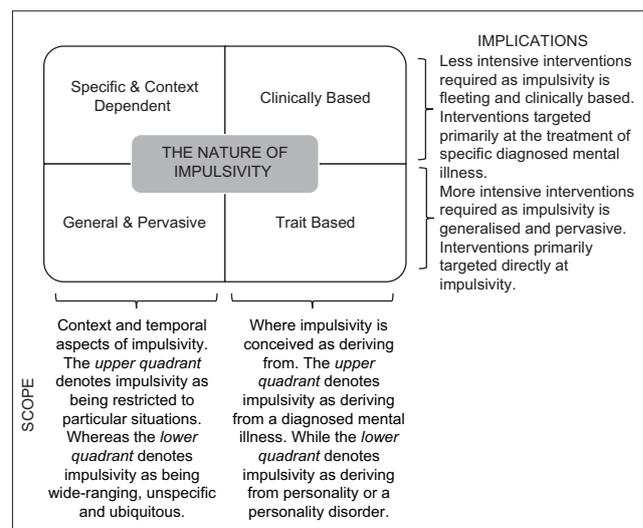


Figure 4: Model for the Assessment of Impulsivity in Clinical Populations: Scope of Quadrants and Implications

a comprehensive conceptualization of the construct and its relation to specific mental disorders, mental disorders, and psychopathology generally as well as impulsivity deriving from personality is paramount to optimal intervention and management for the client. The systematic model espoused for the assessment of impulsivity is both comprehensive and pragmatic providing the clinician with a quick and effective tool to inform the intervention and management of impulsivity that is both focused and targeted in diverse clinical populations.

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Conflicts of interest

There are no conflicts of interest.

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