

Official Title of the Study:

**Process-Based Psychological Differences in Alcohol Use Disorder: A Case-Control
Study Using PBAT, PHQ-9, and GAD-7**

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Study Protocol and Statistical Analysis Plan

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Process-Based Psychological Differences in Alcohol Use Disorder: A Case-Control Study Using PBAT, PHQ-9, and GAD-7

Official Abbreviation/ Protocol ID:

PBATADD2026

Brief Summary:

This observational study investigates differences in psychological processes and emotional symptoms between individuals with Alcohol Use Disorder (AUD) and a non-clinical control group. PBAT, PHQ-9, and GAD-7 will be used. MANCOVA will test group differences controlling for demographics.

Detailed Description:

The present study is grounded in the process-based approach to psychopathology, which emphasizes the identification and modification of core psychological processes underlying mental disorders, rather than focusing exclusively on categorical diagnoses. A central theoretical framework guiding this approach is the Extended Evolutionary Meta-Model (EEMM), which conceptualizes psychological functioning and psychopathology through evolutionary principles:

- *Variation* – the ability to generate flexible and adaptive behavioral responses;
- *Selection* – the capacity to choose behaviors aligned with personal goals and contextual demands;
- *Retention* – the maintenance and consolidation of adaptive behaviors over time;
- *Context* – sensitivity to environmental and situational factors influencing behavior.

According to this model, psychopathology (including Alcohol Use Disorder) is characterized by psychological inflexibility, maladaptive behavioral selection, and poor retention of functional strategies, often in interaction with contextual insensitivity.

These processes operate across multiple domains, including affect, cognition, attention, motivation, self, and overt behavior.

The Process-Based Assessment Tool (PBAT) is used to operationalize these constructs. It measures both adaptive processes (e.g., flexibility, emotional openness, value-based action, social connection, health behaviors) and maladaptive processes (e.g., experiential avoidance, cognitive interference, behavioral rigidity, disconnection from values, interpersonal difficulties, harmful health behaviors). The scale includes 18 items, each involving a stand-alone, individual score, indicating the degree to which the responder engages in the specific process.

Alcohol Use Disorder is associated with emotional avoidance, rigid behavior patterns, maladaptive coping, and impaired value-based decision-making.

By comparing individuals with AUD to a non-clinical control group, this study aims to identify process-level differences underlying addiction and emotional distress.

In addition to PBAT, the study includes PHQ-9 (depression) and GAD-7 (anxiety), allowing simultaneous assessment of psychological processes and clinical symptoms.

Patient Health Questionnaire-9 (PHQ-9) involves the assessment of depressive symptoms, with a score range between 0 and 27. Scores between 5 and 9 mean mild depression, 10 to 14 moderate depression, 15 to 19 moderate to severe depression and above 20 severe depression (Kroenke et al., 2001).

Generalized Anxiety Disorder-7 (GAD-7) involves the assessment of anxiety symptoms, with a score range from 0 to 21. Scores between 5 and 9 indicate mild anxiety, scores between 10 and 14 moderate anxiety, while those above 15 show severe anxiety.

This integrated approach supports the development of personalized, process-based interventions.

Study Design

Type: Observational

Model: Case-Control

Time Perspective: Cross-Sectional

Sample Size: 200 participants

Eligibility Criteria

Clinical: AUD diagnosis, age ≥ 18 , consent

Control: age ≥ 18 , no psychiatric diagnosis

Exclusion: severe cognitive impairment, psychosis, inability to complete questionnaires

Outcome Measures

Primary: PBAT, PHQ-9, GAD-7

Secondary: correlations and subscale differences

Statistical Analysis Plan

MANCOVA with Group (AUD vs Control) as IV; PBAT, PHQ-9, GAD-7 as DVs;
covariates: age, gender, education

Hypothesis

AUD participants will show higher maladaptive processes, depression, and anxiety.

Ethical Considerations

The study will be conducted in accordance with the principles stated within the Declaration of Helsinki.

Ethical approval required. Informed consent mandatory. Data anonymized and securely stored.

References:

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