

# Predicting Adolescent Creativity from Openness to Experience and Intrinsic Motivation

Laura. Bennett<sup>1</sup>, Samuel. Moreau<sup>2\*</sup>, Brian. Matthews<sup>3</sup>


<sup>1</sup> Department of Educational Psychology, University of Toronto, Toronto, Canada

<sup>2</sup> Department of Family Counseling, McGill University, Montreal, Canada


<sup>3</sup> Department of Health Psychology, University of Michigan, Ann Arbor, USA


\* Corresponding author email address: samuel.moreau@mcgill.ca

## Editor

Gholamreza Rajabi  
Professor of Counseling  
Department, Shahid Chamran  
University, Ahvaz, Iran  
rajabireza@scu.ac.ir

## Reviewers

**Reviewer 1:** Shahrokh Makvand Hoseini  
Associate Professor, Department of Psychology, Semnan University, Iran.  
Email: shmakvand@semnan.ac.ir

**Reviewer 2:** Davood Taghvaei  
Department of Psychology, Arak Branch, Islamic Azad University, Arak, Iran.  
Email: d-taghvaei@iau-arak.ac.ir

## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

The claim “Intrinsic motivation fuels exploration, persistence, and playfulness—hallmarks of creative expression” would benefit from a theoretical framework citation, such as Deci & Ryan’s Self-Determination Theory, to ground this in motivational psychology.

The statement “This study... seeks to address this gap by examining the predictive roles...” would be stronger with a specific research question or hypothesis. Consider explicitly stating: “This study hypothesizes that openness to experience and intrinsic motivation will significantly predict adolescent creativity.”

The phrase “based on the Morgan and Krejcie sample size table” needs elaboration. Please include the population size that was assumed to justify the use of this sampling framework.

The demographics are well-reported, but there is no mention of socioeconomic status or ethnic background, both of which may impact creativity. Consider discussing this limitation or reporting available data.

The correlation coefficients ( $r = .52$  and  $r = .47$ ) are interpreted as significant, but the strength of these correlations (moderate) is not discussed. Please include a brief justification for interpreting these as practically meaningful.

The adjusted  $R^2$  value is 0.33, indicating 33% variance explained. The sentence “substantial proportion of variance” should be qualified—this is moderate, not high. Consider revising the language to “a meaningful but partial proportion.”

The phrase “without requiring external validation or constraints” needs clarification. Is the intention to suggest that openness allows for intrinsic creativity regardless of extrinsic reward systems? Please elaborate with supporting theory.

Authors uploaded the revised manuscript.

## 1.2. Reviewer 2

Reviewer:

The sentence “These dynamics are particularly salient during adolescence, when motivational orientations and personality traits are still in flux...” is conceptually strong but underdeveloped. Please reference developmental psychology literature to support the claim that adolescence is a critical period for creativity development.

The sentence “Aziz (2023) highlighted the predictive value of openness...” should be strengthened by indicating the specific creative domains (e.g., visual, verbal, abstract) measured in that study, allowing for better comparability with the present study.

The phrase “suggesting that internal psychological mechanisms can shape the influence of external technological factors” in reference to Malik et al. (2020) is quite broad. Please clarify which mechanisms were considered (e.g., metacognition, emotional regulation) and whether these are relevant to adolescence.

The TTCT description does not clarify which form (verbal or figural) was used in this study. Please specify and justify the choice, as these forms tap into different domains of creativity.

The IMI subscales selected (e.g., interest/enjoyment, value/usefulness) may vary in conceptual overlap with creativity. Please explain why these specific subscales were chosen and whether others (e.g., pressure/tension) were excluded.

The manuscript states “Preliminary analyses ensured assumptions... were met” without providing test statistics or exact procedures. Please report numerical values (e.g., skewness/kurtosis thresholds, Shapiro-Wilk p-values) for transparency.

The manuscript claims “motivation acts as a psychological enabler,” which is theoretically plausible. However, a stronger argument could be made by referencing dual-pathway models of creativity (e.g., Nijstad et al., 2010).

The sentence “This is consistent with the notion that creativity emerges from a synergy between stable personality dispositions and situational motivational states” would benefit from a citation to interactionist models (e.g., Amabile’s componential theory).

The claim “reinforcing the idea that motivation functions as a bridge between environmental inputs and internal creative expression” is powerful but vague. Please clarify what “environmental inputs” are considered (e.g., technology use, peer influence).

Authors uploaded the revised manuscript.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.