A longitudinal survey on flow's antecedents and affective outcomes in creative practitioners

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Introduction

- Flow is an optimal experience characterized by absorption, effortless control, and intrinsic reward. Experiencing an episode of flow has been associated with positive affective outcomes[1].
- However, professional creative practitioners often experience poor mental health and well-being[2], despite frequently engaging in what could be flow-inducing activities.
- The aim of this study is to investigate the required conditions (antecedents) and affective outcomes of flow as a first step to improving the mental health and well-being of creative practitioners.
- Two main antecedents are cited as being important conditions for flow to occur[1]: challenge-skill balance (CSB) and high motivation.
- CSB suggests that feelings of competence and perceived difficulty of a task must be balanced for flow to occur. This link has been empirically supported[3,4], but also refuted[5, 6] (in some studies, an imbalance towards feelings of competence has been found to be preferable to flow to occur).
- Few papers examine motivation as an antecedent of flow[1].
- The operationalization of motivation as a flow antecedent is often vague – hence, this study measures three types of motivation: intrinsic, identified, and external.
- This is a pilot study, and further data collection is on-going.

Methods

- A longitudinal daily-diary study was conducted in a sample of professional, student, and hobby creative practitioners, engaging in composition, practice, or performance.
- CSB was measured in three antecedents: feelings of competence, perceived difficulty, and CSB itself.
- Motivation was measured in three antecedents: intrinsic motivation, identified regulation, and external regulation.
- The sample consisted of 29 creative practitioners between the ages of 21 and 76 (M = 45, SD = 18.6). 65.5% were female, 31% male, and 3.5% non-binary.
- Participants completed between 2 and 14 days of the survey (M = 6.14 , Mdn = 5, SD = 3.68).
- Creative disciplines were freely chosen and ranged across sound art, visual art, writing, and movement.
- Data was analysed using linear mixed effects models. In every analysis, participant ID was the cluster variable. In the affect analyses, flow was the predictor and change in positive/negative affect was the dependent variable. In the antecedent analyses, antecedents were the predictors and flow was the dependent variable.

Timeline of employed scales

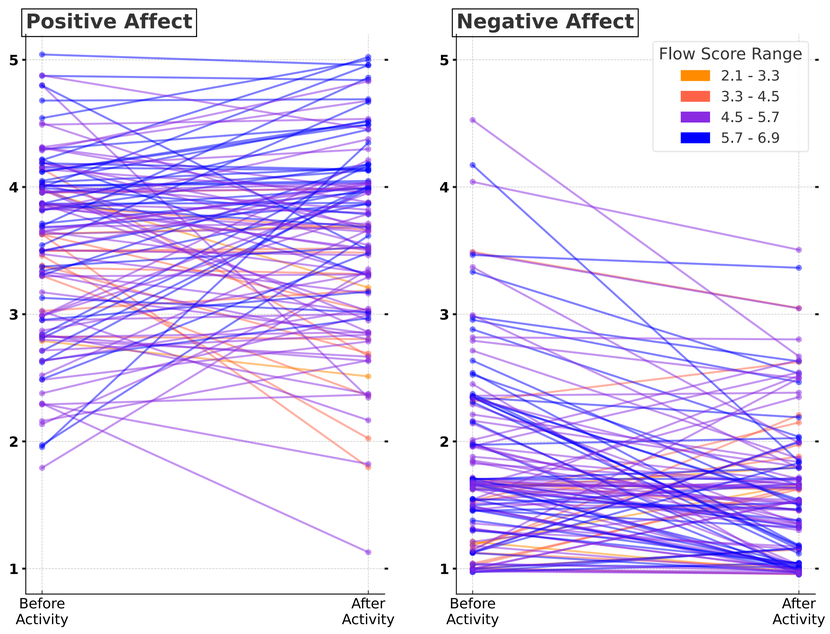
Motivation	Situational Motivational Scale[7] (1-7)
Affect	Scale of Positive and Negative Experience[8] (1-5)

Flow	Psychological Flow Scale[9] (1-7)
CSB	Flow Short Scale[10], CSB subscale (1-9)
Affect	Scale of Positive and Negative Experience[8] (1-5)

Start of activity — End of activity

Results: Changes in affect

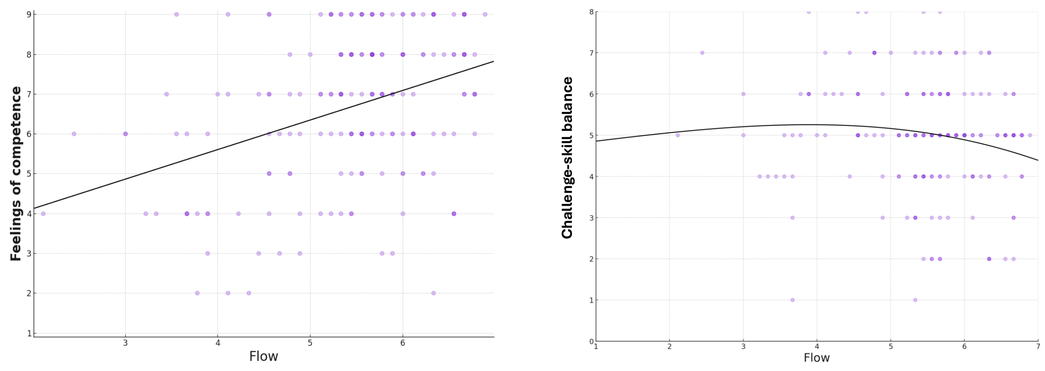
- The present study hypothesized that an episode of high flow would increase positive affect and decrease negative affect. This hypothesis was supported for both positive (B = .451, SE = .084, t = 5.392, p < .001) and negative affect (B = -0.323, SE = 0.089, t = -3.650, p < .001).



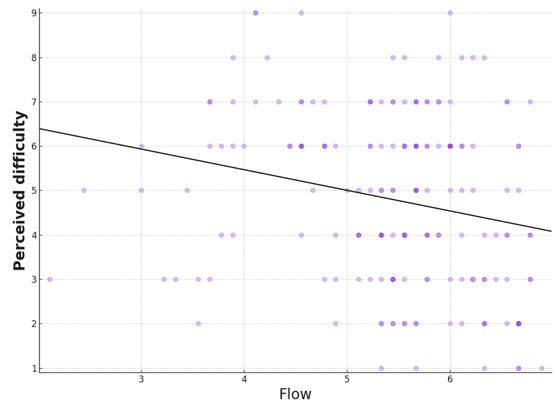
Results: Flow antecedents

- The present study hypothesised that:
  - CSB, feelings of competence, and motivation would positively predict flow.
  - The relationship between motivation and flow would be strongest for intrinsic motivation and weakest for external regulation.
  - CSB and/or feelings of competence would be stronger predictors of flow than intrinsic motivation.
- All three hypotheses were supported.

- Feelings of competence were the strongest positive predictor of flow (B = .3560, SE = .1038, t = 3.428, p < .001), followed by CSB (B = -.2162, SE = .0882, t = -2.45, p = .016 ; for this analysis, CSB was squared, so that 0 represented perfect balance and any departure from 0 represented an imbalance – therefore, the negative estimate value represents a positive relationship between the variables. The graph contains the raw, not squared score).



- Perceived difficulty was a negative predictor of flow (B = -.1993, SE = .0905, t = -2.202, p = .030).



- The three types of motivation measured (intrinsic motivation, identified regulation, and external regulation) did not have a significant effect on flow; however, in the sample, intrinsic motivation had a marginally significant small-to-moderate effect on flow (B = .2183, SE = .1278, t = 1.708, p = .091).

Discussion

- This study offers support for the importance of challenge and skill over motivation in fostering flow and corroborates studies which have found that feelings of competence are more strongly predictive of flow than challenge-skill balance.
- Discrepancies between these findings and those of other studies[3, 6] may be ascribed to different measurement instruments or the difference between achievement and non-achievement scenarios[11]. Activities with a clear standard of success (such as winning a race) may be associated with a qualitatively different flow state than activities without one (such as composing a piece of music).

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