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Notice for the PhD Viva Voce Examination

Mr Moosath Harishankar Vasudevan (Registration Number: 1530081), PhD scholar at the School of Psychological Sciences, CHRIST (Deemed to be University), Bangalore will defend his PhD thesis at the public viva-voce examination on Thursday, 14 November 2024 at 11.00 am in Room No. 044, Ground Floor, R & D Block, CHRIST (Deemed to be University), Bengaluru - 560029.

- Title of the Thesis** : **Decision Making in Depression: A Neuroeconomic Perspective**
- Discipline** : **Psychology**
- External Examiner (Outside Karnataka)** : **Dr Joseph G Johnson**
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- External Examiner (Within Karnataka)** : **Dr Himani Kashyap**
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- Supervisor** : **Dr Madhavi Rangaswamy**
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The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts and research scholars of all the branches of research are cordially invited to attend this open viva-voce examination.

Place: Bengaluru
Date: 11 November 2024


Registrar

ABSTRACT

Background: The current study aimed to explore differential value based and social decision-making patterns across three groups- individuals diagnosed with mild to moderate depression, a healthy matched Healthy Control Group and a Negative Mood Induction Group.

Method: In the current study, drug and therapy naïve individuals diagnosed with first episode of mild to moderate depression (depression group) (n=40), healthy individuals matched on age, gender and education (n=40), and healthy individuals (healthy controls) with no current, past or family history of any psychiatric conditions in a negative mood induced state (Negative Mood Induction Group) (n=40) were administered the following value based and social decision making tasks- the IOWA Gambling Task (IGT), the Balloon Analog Risk Task (BART), Delay Discounting Task, The Ultimatum Game, the Dictator Game and the Prisoners Dilemma.

Results: Results indicated that individuals with depression showed heightened punishment sensitivity on both the IGT and the BART ($p < 0.05$ on the BART and $p < 0.05$ on the IGT), performed poorly on the IGT indicating poor and slow learning ($p < 0.01$). A similar, less severe, pattern was observed in the Negative Mood Induction Group. On the Delay Discounting task, there was a significant difference in the rate of discounting among the three groups, with the individuals with depression and the Negative Mood Induction Group showing a preference for a delayed and a larger reward ($p < 0.01$). A similar significant difference was identified in the Dictator Game, where the individuals with depression proposed a fairer split as compared to the other two groups ($p < 0.01$). There were no significant differences identified in the Ultimatum Game and the Prisoner's Dilemma.

Conclusions: Individuals with mild to moderate depression performed poorly on tasks of value-based decision making. The significance of process factors in decision making such as reward and punishment sensitivity, valuation of outcomes and learning were highlighted in this study. The study also demonstrated how a negative affective state, without the other clusters of depressive symptomatology, can also lead to a less severe, but impaired decision-making.

Keywords: Depression, Value based decision making, Social Decision Making, Mood induction

Publication:

1. Moosath, H., & Rangaswamy, M. (2023). Comparing Influence of Depression and Negative Affect on Decision Making. *Psychological Studies*, 1-9.