INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
SHORT ABSTRACT OF THESIS

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Thesis Title:
The Maintaining Factors of Subjective Wellbeing Homeostasis and Resilience among the Victims of Recurrent Floods.

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SHORT ABSTRACT

Floods are quite common among natural disasters and may cause a large amount of physical, social and psychological destructions. The magnitude of the flood, the extent of loss of resources, fear of future occurrences are quite unpredictable aspects which creates anxiety, panic, depression and adds on to the existing level of stress of the survivors. These flood-related extreme experiences consequently have a subjective component, which negatively affects individual's emotions, cognitions & psychological adjustment as well as hinders physical & social developments. Such extreme events and their psychosocial consequences upon survivors has become a focus of attention in the current research. A careful assessment of the physical, psychological, and social aspects of the survivors is essential to plan out effective help aids and rehabilitation programs for the at-risk population.

This study attempts to explore various factors maintaining subjective well-being homeostasis and resilience among the recurrent flood victims. The data was collected from two severely flood-affected districts of Assam, that is, Majuli Island, and Demaji district. This research includes two studies using both quantitative and qualitative research designs. *Study 1* is a quantitative study that aims to test and extend the SWB homeostasis model in the context of recurrent flood victims by integrating COR theory and resilience. The *study 2* is a qualitative investigation focusing on exploring various traditional and culture-specific coping strategies by which the victims of recurrent floods adapt and cope with floods.

The results of the *Study1* indicated that the level of SWB homeostasis is well within the normative range of 60-90 points on a 100 point continuum. However, the score falls towards the lower end indicating that the present sample is highly vulnerable for SWB homeostasis breakdown. The analysis of dimensions of SWB (in Personal Well-being Index) showed that the level of satisfaction is significantly higher in personal relationship, community connectedness and spirituality/religion domains of life satisfaction in the present sample. The present study findings also imply to the phenomenon of '*Domain Compensation*' where the dissatisfaction or lower level of satisfaction in safety, standard of living, future security and health life domains of SWB are compensated by the significantly greater level of satisfaction in the domains of spirituality, personal relationship, community connectedness and achievement in life.

SWB homeostasis theory proposes that the experienced level of SWB is usually stable and maintained within a set point range, yet levels deviating from the range of homeostasis are regulated through adaptation process whereby cognitive buffers (optimism, control, and self-esteem) restore the level of SWB to its normal range. The Integrated model of this study extends this proposition by suggesting that in addition to the first order determinants, the external

resources (object resources, condition resources, and energy resources) and environmental stressors will also influence the cognitive buffers which in turn will determine the level of SWB. Further, the model proposes that the same sets of variables are likely to influence the resilience; as both SWB and resilience are positive in nature. The analysis of this integrated model provided interesting insights associated with SWB and resilience and the mechanisms of their maintenance.

The results of the direct path model indicates that the significant contributors of SWB include environmental stressors (*safe shelter*); personality traits (*neuroticism, extraversion, openness, and Agreeableness*); external resources (*condition and object resources*); affect (*negative affect*); cognitive buffer (*psychological control, and optimism*) and education. Indirect path model further reveals that 'optimism' is the most significant cognitive buffer that maintains the level of SWB by acting as a mediator between the personality traits, affect, and external resources and SWB.

The factors that were found to be significant contributors of 'resilience' in the direct path model were age, condition resources, and psychological control. The indirect path model further revealed that 'psychological control' is the most significant cognitive buffer that maintains the level of resilience by acting as a mediator between environmental stressors, personality traits (neuroticism), affect (positive and negative affect), external resources (object and energy resources), and 'resilience'.

This study validates the role of various factors included in the SWB homeostasis model and further extends the model by including other significant factors proposed by COR theory such as different types of resources and environmental stressors. It was observed from the integrated

model that almost the same categories of determinants of SWB could explain the mechanism of the maintenance of resilience. There were both common (condition resources & control) and unique predictors of SWB and resilience as well. Furthermore, testing of the integrated model provided insights into the dynamics of the SWB and resilience in terms of identifying the crucial factors responsible for the maintenance of SWB as well as resilience in the context of the present sample. Psychosocial interventions for these factors can be addressed by various agencies, government bodies and NGOs for effective disaster mitigation programs.

The second study- a qualitative case study on Majuli Island (world's largest river Island-also one of the two sites of the 1stquantitative study) revealed the role and importance of traditional knowledge systems and skills in adaptation to flood-related disasters. The inhabitants of Majuli Island have been surviving and adapting successfully to recurrent floods. This study revealed that one of the main reasons for their successful adaptation is the effective use of various traditional coping strategies. Various traditional coping strategies included traditional designs of house and means of transportation, food security and crop diversification, migration, community bonding and support, local governance and leadership, and religious beliefs and rituals. This study provided examples of traditional coping strategies, among the inhabitants of close-knit communities, can act as the catalyst in effective disaster mitigation programs. These traditional knowledge strategies, if properly acknowledged and preserved, can be of significant help in forming culturally relevant effective disaster mitigation programs and risk reduction.