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Behaviour, Performance and Psychosocial Issues in Space (1)

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ARE FINDINGS IN ICE PSYCHOLOGY GENERALIZABLE AND REPLICABLE? THE EXAMPLE
OF COPING STRATEGY**Abstract**

The body of literature on the psychology of ICEs (Isolated, Confined Environments) incorporates data from many types of situations, some of the most popular being polar stations, submersibles and submarines, caves, high mountains, remote communities, and actual or simulated spacecraft. Within each of these categories there are many specific individual locations, which differ along dozens of variables. The psychosocial factors studied are similarly varied, and almost all are measured via several alternative assessment tools. The purpose of this study is to consider whether it makes sense, given this “blooming, buzzing confusion” of measures and locations, to think in terms of one ICE psychology. The answer to that question resides in the extent to which research can document that the various ICE environments have similar psychosocial effects. This is a particularly important issue given that some ICEs are routinely used as analogues of others that are more difficult and/or expensive to study directly, and that the results from these analogues are used to predict and prepare for outcomes from the environment of actual interest. The overview presented in this paper is a qualitative summary of ICE studies using coping strategy as the dependent variable. Coping is an everyday process in any environment, but is thought to change as it responds to unique ICE problems. Coping measures include content analyses of oral and written participant accounts, self-report scales, and observer reports. This review summarizes the results of such measures, collected in several polar stations and space habitats, and originally analyzed as they fit into different theoretical schemas. The cross-situational and cross-method reliability of conclusions about the effects of ICEs on coping styles is tested by the comparison of outcomes from this body of research. ICE coping does show some moderately consistent cross-environmental patterns. With more standardization of measures and a larger number of studies, meta-analysis should be possible. Beyond coping, analysis of publications that focus on a range of psychosocial effects is a requirement for a full understanding of ICE effects and their implications for selection, training, environmental design, and the development of countermeasures.