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SOCIODIAGNOSTIC TOOLS AND THEIR LOOKOUT IN MONITORING CREWS IN PROLONGED ISOLATIONS

Abstract

Communication was proved as a key teamwork process in many studies. Researches indicated that communication is extremely important, especially in extreme conditions such as isolated crews during a long-term spaceflight.

The main aim of this study was to summarize the findings of space research studies that focused on communication of crew members in long-term isolation or confinement with the aim to capture recurring phenomena and to search for a prospective sociodiagnostic tool for assessing communication of a crew.

Results show that there are not many studies focusing on communication in spite of the huge importance of communication in teams. The methods used in the examined studies were diverse so the comparison of results was difficult. The meaningfulness of many of these studies is questionable and they should be modified.

The underestimation of communication research in terms of behavioural and psychosocial aspects of crews in space research, and insufficiency of methods used within this type of research is one of the findings of the current study that should be pointed out. Communication should neither be researched only at an individual level nor aggregated data of all crew members provide enough information about crew's state. A sociodiagnostic tool that enables the visualisation of team's relations is needed. One such method is sociometry even though it is obsolete and may be replaced by sociomapping.

Sociomapping mainly based on sociometry was considerated as the most suitable method in the field of space research of crews' psychosocial aspects. Sociomapping provides an instant analysis of team's relations including team's cohesion and thus enables an intervention if necessary. Sociomapping was proved as a suitable method in many researches. Additionally, the author conducted her own study confirming the validity of sociomapping. The main advantages of this method are instant results, clarity, and the possibility to capture development in team processes.