



Socio-Psychological Perspectives on the Potential for Serious Games to Promote Transcendental Values in IWRM Decision-Making

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Description / Abstract

Modern day challenges of water resource management involve difficult decision-making in the face of increasing complexity and uncertainty. However, even if all decision-makers possessed perfect knowledge, water management decisions ultimately involve competing values, which will only get more prominent with increasing scarcity and competition over resources. Therefore, an important normative goal for water management is long-term cooperation between stakeholders. According to the principles of integrated water resource management (IWRM), this necessitates that managerial decisions support social equity and intergenerational equity (social equity that spans generations). The purpose of this discussion is to formulate preliminary recommendations for the design of serious games (SGs), a potential learning tool that may give rise to shared values and engage stakeholders with conflicting interests to cooperate towards a common goal. Specifically, this discussion explores whether SGs could promote values that transcend self-interest (transcendental values), based on the contributions of social psychology. The discussion is organized in the following way. First, an introduction is provided as to why understanding values from psychological perspectives is both important for water management and a potential avenue for learning in SGs. Second, a review of the description of values and mechanisms of value change from the field of social psychology is presented. This review highlights key psychological constraints to learning or applying values. Based on this review, recommendations are made for SGs designers to consider when developing games for water management, in order to promote transcendental values. Overall, the main conclusions from exploring the potential of value change for IWRM through SGs design are as follows: 1-SGs design needs to consider how all values change systematically; 2-SGs design should incorporate the many value conflicts that are faced in real life water management, 3-SGs could potentially promote learning by having players reflect on the reasoning behind value priorities across water management situations, and 4-value change ought to be tested in an iterative SGs design process using the Schwartz's Value Survey (SVS) (or something akin to it)

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