

Design for fidelity - inscription of intended actions, participation and behavior in intervention frameworks

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Occupational health interventions are designed by researchers and occupational health professionals to improve psychosocial working conditions in workplaces. Many intervention frameworks have been designed but with differing outcomes and varied implementation success. Previous intervention studies point to some factors which improve the chances of successful implementation e.g. employee participation, management support and a structured intervention process. Thus many frameworks take these factors into account. For researchers to conclude whether or not an intervention has been successful or worked as intended, researchers advocate fidelity is important. Fidelity describes the extent to which the intervention has been implemented as it was originally intended, and is regarded critical for determining the validity of the research results.

In the present paper we introduce the concept of script analysis first coined by Akrich (1992), to analyze and discuss the “fidelability” of intervention frameworks - meaning a framework’s ability to impose fidelity. Intervention frameworks are often designed by researchers according to their earlier experiences and best practice. A script is the materialization of the designer’s more or less informed presumptions, visions and predictions about the relations between the design object, in this case the intervention framework, and the actors interacting with it. Akrich argues that “Technical objects define actors, the space in which they move, and ways in which they interact”. Thus, the specific design of an intervention framework guides the framework’s chances of successful implementation. This may not seem surprising, however, many designers are not aware of the constraints they ‘in-scribe’ into the framework, or how users ‘de-scribe’ the framework i.e. how users interpret the framework and act upon it, which in some cases can be in conflict with the designer’s intentions.

Using script analysis we analyze the PoWRS (Prevention of Work Related Stress) intervention framework tested in four Danish small and medium sized enterprises (SME). We discuss to which degree the framework can prescribe intended actions, participation and behavior of the involved actors and if it at all is possible to design for fidelity. The paper thus contributes with a theoretical discussion based on empirical insights.

The concept of scripts is useful to analyze intervention frameworks because it illuminates not only what the intervened companies or change agent did “right” or “wrong”, but also help us shed light on the “attributes” of the intervention framework itself and the designers’ intentions. Implementing an intervention in an organization is a

co-creating process between the intervention designers and the intervened organizational actors, although much discussion about intervention fidelity seems to be about how well the organization adheres to the framework, and not so much about how “well” the framework has been designed.

In our analysis of the PoWRS intervention framework we found, in accordance with other research projects, that employee participation, management support and a structured intervention process are keys in a successful implementation of an intervention. But our analysis also shows that these “attributes” were implemented very differently in the four SMEs. And the organizational context had an important role in how well these “attributes” were implemented or how well the organization adhered to the framework. The organizational context such as concurrent change processes in the organization, the financial situation, and the company’s history, had a large impact on the intervention process, factors that we had not foreseen or inscribed into the framework. It became thus clear that in order for the PoWRS framework to work, some adjustments along in the process had to be made. And the implementation process was thus co-created between the researchers and the participating organizations.

With respect to fidelity it is difficult to conclude whether it is possible or not to design fully for it. But our analysis shows that as researchers and designers of intervention frameworks it is important to be aware of the ever changing and dynamic contexts organizations live in, and in some way or another make room for this complexity in the intervention. The intervention framework should thus have some kind of flexibility build in to it, so it is adjustable to different companies in different contexts.

However, when discussing intervention fidelity we also argue that it is important to differentiate between different types of interventions. Some organizational interventions are very complex (e.g. changing a work system in a factory) and therefore has a lot of variables inscribed, whereas some clinical interventions (e.g. eating a pill) are of a much simpler construction. And it seems that the more complex an intervention is the harder it is to reach fidelity.

The paper contributes to the discussion on intervention fidelity and questions if fidelity is a constructive concept when discussing complex organizational interventions.