

Lessons Learnt From Research in Learning Transfer Around Participant Mortality

Aitana González Ortiz de Zárate & Carla Quesada Pallarès

Udima (Universidad a Distancia de Madrid) & Autonomous University of Barcelona

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Abstract

Extended Summary

Abstract

Recent studies in learning transfer appear to be using the same approach, measuring transfer through cross-sectional designs. Though, few studies have examined transfer -and the factors that influence transfer- through longitudinal lens, having pointed at the high drop-out rate as one of the main reasons. This study aimed at discussing challenges related to the measurement of learning transfer and transfer factors by analyzing participant mortality rates on three studies that measured transfer quantitatively from a longitudinal perspective. Descriptive analyses showed examples of two studies with acceptable response rates, and one study with low response rates. Research investigating participant retention strategies as applied in other areas is encouraged. Discussion around the pertinence of the questions, designs, and measures are provided, and a call

for challenging latent consensus is made. Results are relevant to the domain of adult learning in work settings.

Keywords: learning transfer, mortality rates, longitudinal research, adult learning.

Extended Summary

Introduction

Learning transfer, understood as the degree in which learnings are applied at work, have been extensively studied in the past forty years (Baldwin & Ford, 1988; Ford et al., 2018). Recent studies appear to apply the same research approach, measuring transfer cross-sectionally in a single time-period, and from a single source; however, few studies have analyzed transfer and the factors that influence transfer through longitudinal designs (Quesada-Pallarès & Gegenfurtner, 2014; Schoeb et al., 2019). The high drop-out rate after each measure could be moving the field away from the application of longitudinal designs (Shih & Fan, 2009).

Aims

We discussed the challenges related to the measurement of learning transfer and transfer factors by analyzing participant mortality rates on three studies that measured transfer quantitatively from a longitudinal perspective.

Methods

This work analyzed participant mortality on three research experiences of the authors (Table 1), that measured transfer and some of the factors that influence transfer in Spanish public employees -intentional sampling- who participated in various training areas (technical, IT, languages for business, and skills).

Table 1.

Longitudinal studies.

	Study 1	Study 2	Study 3
Design	Longitudinal research, prospective data	Quasi-experimental pre-post two groups	Longitudinal research, prospective data
Final Sample	n = 204	n = 64	n = 726
Measures	t1: before the training t2: three months after the training	t1: at the beginning of the training t2: at the end of the training t3: 1,5 months after the training t4: three months after the training	t1: at the end of the training t2: four months after the training
Instruments	t1: Initial Intention to Transfer questionnaire (ITI) (164 items, 9 factors, Likert-type) (Quesada-Pallarès & Gegenfurtner, 2015) t2: Perceived Transfer questionnaire (6 items, 1 factor, Likert-type)	t1: revised version of the ITI (96 items, 14 factors, Likert-type) t2: final Intention to Transfer questionnaire - adapted ITI- t3: a reminder of the specific plans generated, only for the experimental group	t1: Factors Predicting Transfer questionnaire (30 items, 4 factors, Likert-type) t2: Efficacy questionnaire (7 items, 1 factor, Likert-type) (González-Ortiz-de-Zárate et al., 2020; Pineda-Herrero et al., 2020)

Study 1	Study 2	Study 3
(Quesada-Pallarès, 2014)	t4: Perceived Transfer questionnaire (Quesada-Pallarès, 2014)	

Note. Data was managed according to the regulation (EU) 2016/679 on the protection of natural persons regarding the processing of personal data and on the free movement of such data. Psychometric properties of all questionnaires were analysed. Data analyses included descriptive, inferential, correlational, multivariate analyses, and structural equation modelling, performed through SPSS and the Amos module.

In this paper, we will focus on descriptive analyses only.

Findings

Results are shown in Table 2.

Table 2.

Participant Mortality Analysis.

	Study 1	Study 2	Study 3
Initial Sample	943	1,009	2,617
Retention strategy	Online reminders	Online reminders	Online reminders
Respondents to t1	430	667	1,475
Respondents to final measure	282	64	726
Final valid sample	204	64	726
Response rate (final n/t1 n)	47%	10%	50%

Theoretical and Educational Significance of the Research

After a recent review pointed at the trend in transfer studies, in which researchers appeared to be replicating a research approach based on measuring transfer cross-sectionally in a single time-period (Schoeb et al., 2019), and after considering the high drop-out after each measure as a possible explanation (Shih & Fan, 2009), this study analyzed participant mortality in three recent studies that applied a longitudinal design.

Findings show examples of two studies with acceptable response rates -above the average for studies that use data from organizations (36%) (Baruch & Holtom, 2008)-, and one study with low response rates. Differences in response rates are not clear; however, Study 2 presented the more complex research design, with four measures at various moments. Learning transfer should be studied over time, but it is stated that the more measures we use, the highest drop-out rate we get.

Future research should investigate participant retention strategies as learnt from other areas, such as longitudinal clinical research studies (e.g., Anshire et al., 2017), as they might help in the challenge of retaining, for months, participants that have attended a short learning activity -of 16-54 hours (Schoeb et al., 2019)-. We encourage future research to ask different questions, apply innovative designs, and change the way transfer is measured. Results, as relevant to the domain of adult learning in work settings, will be discussed.

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