

Validation of the Spanish version of the Game Transfer Phenomena Scale – Short Form: A preliminary study

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INTRODUCTION

Game Transfer Phenomena (GTP) refer to the phenomenon wherein **experiences from video games are transferred to real-life contexts, resulting in altered sensory perceptions, automatic mental processes, and behaviours** (Ortiz de Gortari, 2019). The GTP can be assessed using three assessment tools: 1) The GTP Scale (GTPS) developed by Ortiz de Gortari, Pontes, and Griffiths (2015), which comprises 20 items measuring altered perceptions across various sensory channels, automatic thoughts, and behavioural changes; 2) a shorter version (GTP5-SF; Ortiz de Gortari, et. al, 2023) containing 5 items; and 3) the GTP Multidimensional Scale (GTP MDS) developed by Ortiz de Gortari and Diseth (2022), consisting of 38 items assessing cognitive/sensorial intrusions, perceptual distortions, impulses, and dissociations.

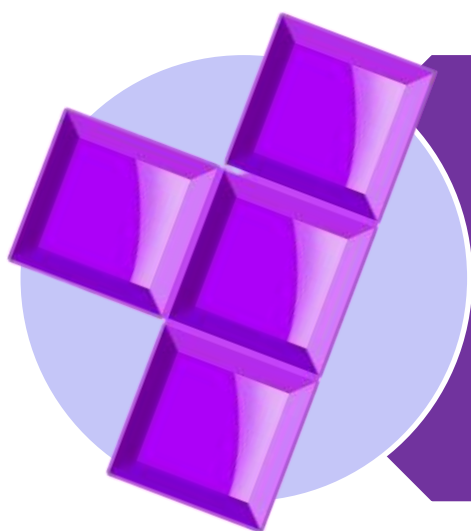
OBJECTIVE

The objective of this study was to preliminary validate the European Spanish version of the GTP5-SF to observe if it is suitable to assess GTP among the Spanish population.

METHODS

A sample of 120 Spanish gamers (51.67% women, mean age 25.83 years, *SD* = 9.87) participated. They were playing a mean of 3.41h per week (*SD* = 1.94, range: 1-6). The GTP5-SF was adapted from English to the Spanish language using **parallel translation**. Item descriptives were obtained. Unidimensionality of the GTP5-SF was tested using confirmatory factor analysis. Internal consistency of scores was assessed computing Cronbach's alpha and McDonalds' omega. Finally, GTP5-SF score was correlated with gaming disorder. Analyses were carried out with the R packages *lavaan* and *psych*.

THE GAME TRANSFER PHENOMENA SCALE-SHORT FORM



Have you ever seen something from a video game, perceived environments or objects distorted in colour, shape, etc. or misinterpreted an object in the real world with something from a video game? Example: seen images from a video game when you closed your eyes



Have you ever heard music, melodies, sounds or voices from a video game in real life or misinterpreted some sound or speech in the real world with something from a video game? Example: heard a sound from a video game when you were walking in the city.



Have you ever experienced a tactile sensation, vibration or some body movement related with a video game? Example: felt the sensation of your fingers touching the screen, felt your fingers move involuntarily.



Have you ever found yourself thinking about using something from a video game in the real world or felt the urge to do something in the real world as in a video game? Example: Felt the urge to arrange real world objects as when solving a puzzle in a video game.



Have you ever unintentionally performed some behaviour or action associated with a video game? Example: unintentionally approached an object similar to an object in a video game, found yourself following a path similar as one in a video game.

RESULTS

Item response distribution appeared to be right-skewed (see Table 1). The one-factor structure was confirmed (CFI = 1, SRMR = .020), with **item loadings** ranging from **.78** to **.96** (see Figure 1). The **Cronbach's alpha** and **omega** coefficients reached values of **.86** and **.88**, respectively. The GTP5-SF score strongly correlated with the Gaming Disorder Test (GDT) and the Internet Gaming Disorder Test- Short Form (IGDS9-SF), measures of problematic gaming (see Table 2).

Table 1: Item characteristics

Item	Frequency of item endorsement (%)					Skewness	Kurtosis
	1	2	3	4	5		
1	88 (13.33)	12 (10.00)	12 (10.00)	6 (5.00)	2 (1.67)	1.82	2.34
2	76 (63.33)	18 (15.00)	22 (18.33)	2 (1.67)	2 (1.67)	1.36	1.15
3	103 (85.83)	7 (5.83)	8 (0.58)	1 (0.83)	1 (0.83)	3.00	9.30
4	87 (71.67)	17 (14.17)	13 (10.83)	1 (0.83)	3 (6.67)	2.06	4.05
5	107 (89.17)	6 (5.00)	3 (2.5)	1 (0.83)	3 (2.5)	3.80	14.41

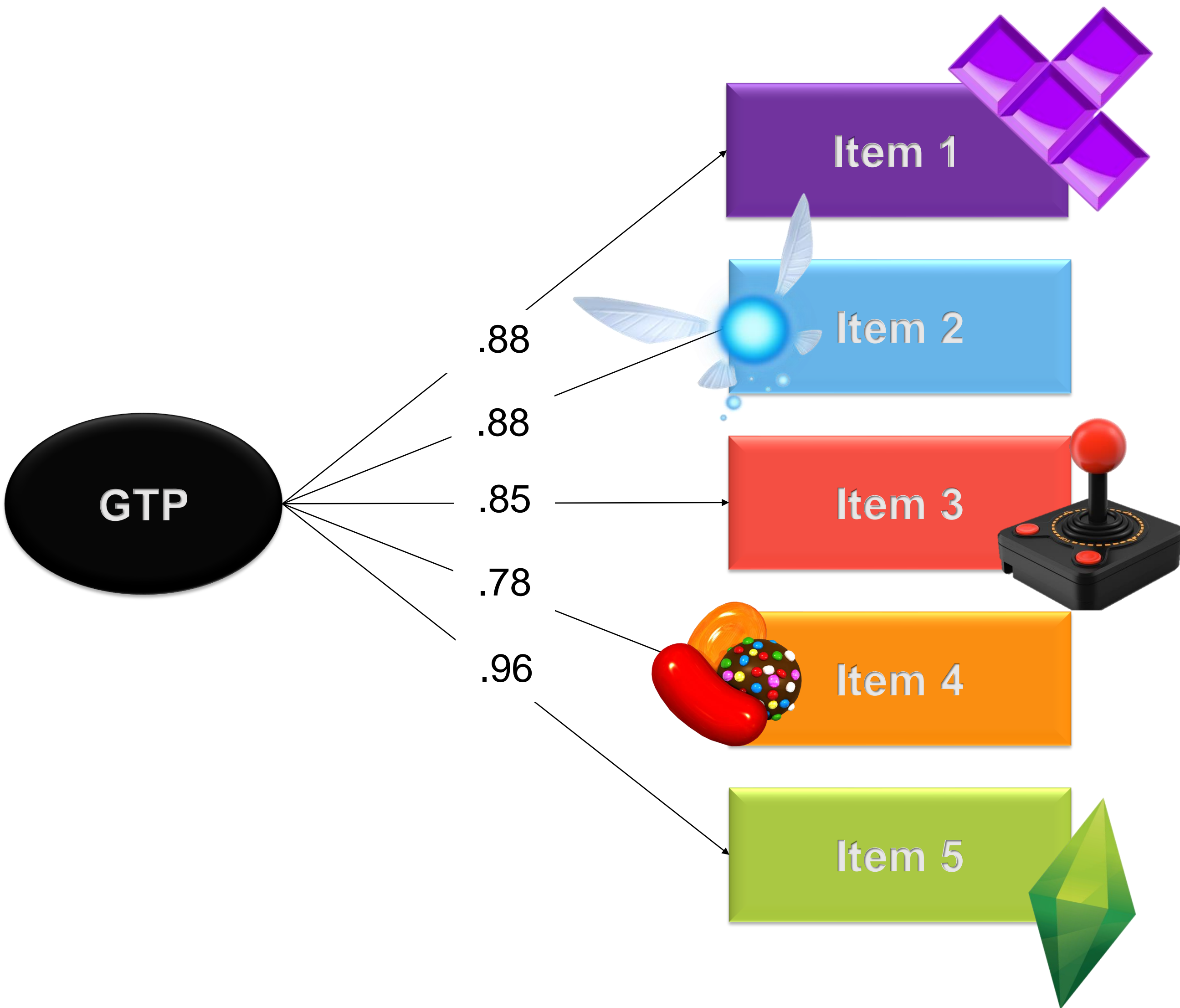


Figure 1: Path diagram of the Game Transfer Phenomena Scale-Short Form

Table 2: Correlations with other variables

Variable	M	SD	Correlation
GTPS	7.11	3.49	
IGDS9-SF	15.48	6.96	.75** [.65, .82]
GDT	7.18	3.74	.61** [.48, .71]GT

GTPS: Game Tranfer Phenomena Scale; IGDS9-SF: Internet Gaming Disorder Scale- Short Form; GDT: Gaming Disorder Test

CONCLUSIONS

The preliminary analysis of the psychometric properties of the Spanish version of the GTP5-SF suggests that it is a suitable assessment instrument for measuring GTP and reveals a preliminary prevalence of the phenomena of 46.67% among Spanish gamers.

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