Validating a Locus of Control Teaching Demonstration Measure Terry F. Pettijohn, The Ohio State University-Marion Terry F. Pettijohn II & Donald F. Sacco, Jr., Mercyhurst College Presented at the 11th Annual American Psychological Society Teaching Institute, Chicago, Illinois, May 27, 2004 E-mail: pettijohn.1@osu.edu or tpettijohn@mercyhurst.edu

Abstract

College students completed Rotter's (1966) Locus of Control (LOC) Scale and Pettijohn's (1990) LOC scale. Pettijohn's LOC scale was originally developed as a classroom teaching demonstration. Although students scored similarly on both measures, the potential limitations of using Pettijohn's LOC scale in research settings outside the classroom are discussed.

Introduction

Locus of control is the general term that refers to the expectancy that an individual's reinforcements are controlled by either internal or external factors. People with an internal locus of control believe that they control their own destiny and that their actions affect their outcomes. Those individuals with an external locus of control perceive themselves as being controlled by fate or luck and believe their outcomes happen by chance. This concept was developed by the social learning theorist Julian Rotter (1966), who constructed the Locus of Control (LOC) Scale to assess the extent to which an individual possesses internal or external reinforcement beliefs. Research has shown that those with an internal locus of control tend to be more hardworking, have better coping skills, and practice more preventative health measures than those with an external locus of control.

Background on Pettijohn LOC

 Pettijohn (1990) developed a 20 question true/false teaching demonstration test based on Rotter's original concept to provide psychology college students with a general idea of where they stand on the LOC personality dimension. The measure can be found online

<a>http://www.dushkin.com/connectext/psy/ch11/survey11.mhtml>

• Over the years, many researchers have inquired about the reliability and validity of Pettijohn's LOC scale. These requests led the current researchers to consider the usefulness of this classroom demonstration as a LOC measurement tool.

Hypothesis

The Pettijohn LOC was originally constructed as a teaching tool, not a formal research instrument. Therefore, we hypothesized that the Pettijohn LOC measure would be moderately valid and reliable with regard to the original LOC measure developed by Rotter.

Methods

• Participants

One-hundred and fifty-five students (31% men, 65.8% women, Mean age=20.4 years, 89.7% Caucasian) from a small private college in the Northeastern United States and a large Midwestern University

• Materials and Procedures

 Participants completed Rotter's LOC scale, Pettijohn's LOC scale, and questions about age, year in school, and ethnicity for demographic purposes

Results

- Scores for both measures of LOC were correlated and a statistically significant relationship was found [r (153)=0.366, p <.001]
- Further analysis of the Pettijohn LOC scale revealed low internal consistency [alpha=0.397]
- Additional scale and item analyses are provided in the table

Scale Questions	Item	Item Std	Scale Mean if	Scale Variance if	Corrected Item-	Alpha if Item
1 Usually get what I want in life	mean	Dev	Item Deleted	Item Deleted	Total Correlation	Deteted
1. I peed to be kent informed about news events	3.270	2 100		10.073	0.101	0.371
	3.220	2.400	00.174	104.657	0.010	
3. Thever know where i scalar was observed	3.839	2.118	00.101	90.200	0.401	0.301
	1.013	2.345	/0.38/	104.719	0.014	0.415
"Selection in a could easily win a lottery.	4.645	1.288	67.355	109.516	-0.010	0.406
6. If I do not succeed on a task, I tend to give up.	4.323	1.717	67.677	106.908	0.030	0.403
7. I usually convince others to do things my way.	2.903	2.475	69.097	102.426	0.047	0.407
8. People make a difference in controlling crime.	4.742	1.110	67.258	107.855	0.079	0.392
The success I have is largely a matter of chance.	4.516	1.483	67.484	101.096	0.255	0.358
hage is largely a gamble for most people.	3.613	2.246	68.387	105.174	0.015	
People must be the master of their own fate.	4.290	1.751			-0.019	
It is not important for me to vote.	3.645	2.230	68.355	99.062	0.155	
life seems like a series of random events.	3.129	2.427	68.871	91.087	0.301	0.324
14. I never try anything that I am not sure of.	0.807	1.845	71.194	112.365	-0.124	0.439
15. Learn the respect and honors I receive.	4.903	0.691	67.097	107.750	0.187	0.384
	0.484	1.483	71.516	107.914	0.026	0.402
17. Leaders are successful when they work hard.	4.710	1.173	67.290	109.493	0.002	0.403
	4.871	0.795	67.129	108.100	0.132	0.388
19. It is difficult to know who my real friends are.	3.936	2.053	68.065	92.334	0.364	0.314
20. Other people usually control my life.	4.516	1.483	67.484	98.498	0.347	0.339
Nof cases = 155 Nof trans = 20 Alaba = 207						

Discussion

- Although the correspondence between the Rotter and Pettijohn LOC measures is moderate, the internal consistency of the Pettijohn measure was low. This information suggests that the measure, as it was created, provides a useful demonstration of LOC in the classroom, but investigators should be cautioned about using the scale in other research pursuits.
- Changing the response scale for the Pettijohn LOC scale to a more sensitive Likert scale where participants can more accurately indicate their level of agreement with each statement may yield stronger correspondence with the Rotter measure and greater internal consistency. This variation may be considered in future research.