Exploring the relationship between experience-taking and performance

Hannah Kadel; Stephanie M. S. Thomas, PhD
Department of Psychological Science, LaGrange College

Abstract

When a person engages in experience-taking with a narrative's protagonist, their attitudes/behaviors tend to become more in line with those of the protagonist (Libby & Kaufman, 2007). The goal of Study 1 was to examine the relationship between an individual's level of experience-taking and their verbal performance. Participants completed the time 1 anagram task, read a short narrative about a student who performs exceptionally well on test of verbal ability, completed questions to determine experience-taking, and finally completed the time 2 anagram task. Results showed that there was no significant correlation between experience-taking and increased anagram performance. Study 2 also examined the relationship between experience-taking and verbal performance however, for this study, participants completed the study on a computer rather than with paper and pencil. Results for this study showed a significant correlation between experience-taking and verbal performance such that higher experience-taking was related to increased verbal performance.

Introduction

- Consuming a narrative is much like running a simulation on a computer; however, in this case, the computer is the mind. The individual enters the story world and the mind brings the narrative to life (Oatley, 2002).
- Narratives can induce self-change through the phenomenon of experience-taking. This occurs when an individual "becomes" a character in the narrative they are engaged with; they assume that character's perspective and identity, including their thoughts, emotions, traits, behaviors, and goals (Kaufman, 2009).
- To date, literature on experience-taking has focused on defining the concept (e.g., Cohen, 2001; Kaufman, 2009; Oatley, 1994) as well as exploring its antecedents (Cohen, 2001; e.g, Cohen, Tal-Or, & Mazor-Tregerman, 2015; Kaufman & Libby, 2012) and consequences (e.g, Dal Cin, Gibson, Zanna, Shumate, & Fong, 2007; de Graaf, Hoeken, Sanders, & Beentjes, 2012; Hoeken & Sinkeldam, 2014; Kaufman, 2009).
- However, research examining behavioral effects in a performance related domain is almost nonexisten
  - Previous research, though, has indicated that engaging in experience-taking with a successful character is related to increased performance in a similar evaluative domain (Smith, 2014).
- Thus, the goal of studies 1 and 2 is to replicate this previous finding and examine whether methodology (specifically using a computer versus a paper and pencil delivery) effects results.

Study One Methods

- I recruited participants (n = 100) through the LaGrange College psychological science research pool and they received class credit for participation (28 male, 62 female, 1 failed to respond).
  - Exclusion of 9 participants from all analyses left 91 total participants.
    - Participants were excluded for not following instructions (n = 3), failing the recall test (i.e., missing two or more of the three recall questions, n = 1), or indicating they had a learning disability that affects their reading and/or writing (n = 5).
- The study was completed using paper and pencil.
  - At the beginning of each session I would walk through the basics of anagram solving and answer any questions before beginning with the Time 1 anagram task.
  - At their own pace, participants completed the Time 1 anagram task and then brought it to me at the front of the classroom.
  - Upon completion of the previous task, participants would follow the same routine for the narrative, then the survey, then Time 2 anagram task, and lastly for the final demographic questions.

Study One Results

- The 7 items on the experience-taking scale showed high reliability, $\alpha = 0.859$
- The 11 items on the transportation scale showed high reliability, $\alpha = 0.738$

Correlations

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Experience-Taking	1											
Transportation	0.625**	1										
T1 Performance	0.167	0.048	1									
T2 Performance	0.167	0.056	0.691**	1								
Overall Performance	-0.005	0.000	-0.360**	0.426**	1							
Similarity	0.619**	0.590**	0.114	0.063	-0.100	1						
Inspiration	0.331**	0.409**	-0.139	-0.306**	-0.197	0.372**	1					
Motivation	0.329**	0.423**	0.069	0.099	0.020	0.420**	0.233*	1				
Expectation	0.226*	-0.032	0.009	-0.051	-0.111	0.124	0.015	0.311**	1			
Confidence	0.171	-0.036	-0.019	-0.193	-0.258*	0.236*	0.048	0.215*	0.686**	1		
T1 Estimate	0.188	0.213*	0.389**	0.234*	-0.172	0.158	0.049	0.378**	0.270**	0.206	1	
T2 Estimate	0.277**	0.197	0.254*	0.472**	0.301**	0.120	0.045	0.360**	0.241*	0.044	0.523**	1

**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the 0.05 level (2-tailed)

- Experience-taking did not significantly predict T2 performance while controlling for T1 performance, $p = 0.556$

Study Two Methods

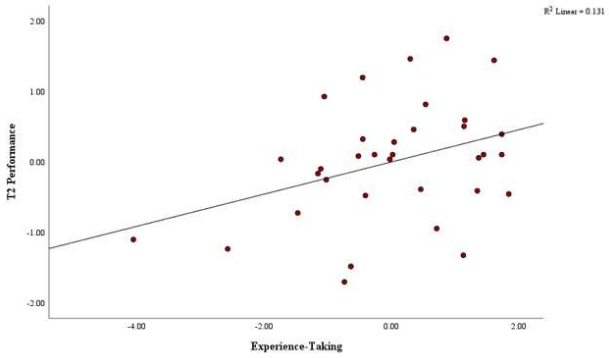
- I recruited participants (n = 42) through the LaGrange College psychological science research pool and they received class credit for participation (16 male, 18 female).
  - Exclusion of 8 participants from all analyses left 34 total participants. Participants were excluded for not following instructions (n = 7) or for declining to participate in the study after starting (n = 1).
- The methodology for this study is identical to that of study one except…
  - Participants completed the study on a computer rather than with paper and pencil.
  - Participants did not have to interact with the research between each section. Instead, all sections were presented consecutively through the computer.

Study Two Results

Correlations

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Experience-Taking	1										
2. Transportation	0.798**	1									
3. T1 Performance	-0.065	-0.107	1								
4. T2 Performance	0.290	0.280	0.461**	1							
5. Similarity	0.532**	0.613**	0.101	0.190	1						
6. Inspiration	0.309	0.484**	0.029	0.117	0.252	1					
7. Motivation	0.532**	0.561**	0.076	0.147	0.626**	0.199	1				
8. Expectation	0.416*	0.367*	0.380*	0.408*	0.360*	-0.008	0.392*	1			
9. Confidence	0.422*	0.468**	0.239	0.330	0.427*	0.041	0.474**	0.886**	1		
10. T1 Estimate	0.098	0.141	0.237	-0.258	0.005	0.035	0.141	0.311	0.261	1	
11. T2 Estimate	0.341*	0.423*	0.108	0.502**	0.117	0.222	0.264	0.569**	0.535**	0.188	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).



- Experience-taking significantly predicted T2 performance while controlling for T1 performance, $\beta = 0.321$, $t(31) = 2.159$, $p = 0.039$.

Conclusion

- The results of Study 2 suggest a significant relationship between experience-taking and T2 performance while controlling for T1 performance while the results for Study 1 were not significant.
  - The only difference between the two studies is within the methodology. In Study 2, participants completed the study at a computer. In Study 1, participants were given one piece of paper at a time which, upon completion, they were instructed to return for the next one.
  - The difference in results between the two studies could be that participants who completed the study on a computer did not have to break focus to return a piece of paper when they were done.
  - It is possible that participants in Study 1 had to break focus and concentration when they had to hand in one sheet of paper to receive the next. This disruption could have disrupted the flow of motivation or the effects of experience-taking.
- The results of Study 2 replicate previous research demonstrating a relationship between experience-taking and performance (Smith, 2014).

Limitations

- Reliance on a short-form narrative.
- Experimenter error. A typo on T1 anagram task in Study 1 could have caused a letter to be interpreted as an uppercase I or a lowercase L.
- Generalizability. Data was collected from a small population of participants all of which attend a small private school. These findings cannot be generalized to the rest of the population.

Future Research

- Examine experience-taking over the course of an entire novel
- How experience-taking effects performance in other domains such as mathematical ability
- Examine the lasting impact of experience-taking
- How experience-taking could benefit children with regards to academics as well as parenting
- Are environmental conditions an influencing factor for level of experience-taking. Meaning, do individuals report higher levels of experience-taking when they are in their own home as compared to reading in a classroom.