

The effect of identification with a “successful” character on the relationship between academic expectancy, motivation, and performance

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Introduction

This study investigated the effect of identification with a social media character on the viewer's academic motivation and academic performance to examine the possibility that simulated narrative experience could backfire and impair actual behavior.

I. The effect of narrative identification on actual behavior

When people refer to their favorite movie, they often praise the encouraging influence that the movie has. For example, the Golden Globe Award winner movie “The Martian” by Ridley Scott (2015), which described the struggle of a marooned astronaut who survived his lonely life on Mars and of his colleagues trying to rescue him, attracted many people. Fans said that they learnt the importance of never giving up or that the movie gave them the energy to struggle with what difficulty they are facing now.

As seen above, narrative has traditionally been reported to enhance people's motivation or performance or to promote related behaviors by providing a behavioral model and fostering self-efficacy (Bandura, 1986; Hinyard & Kreuter, 2007). In the 2000s, following the innovative work of Green and Brock (2000) that enabled empirical examination of the narrative impact in the persuasion domain, many studies consistently showed that reading stories can change people's attitudes and behavioral intentions by inhibiting counterarguments and promoting corresponding emotions (for a review, see Komori, 2016; Shen, Sheer, & Li, 2015; van Laer, de Ruyter, Visconti, & Wetzels, 2014).

Green and Brock (2000) pointed out that the strength of the narrative impact should depend on the degree of the subjective immersive experience into the narrative (which they call “narrative transportation”) while reading or watching the narrative, and they developed a new scale that focused on

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measuring the experience. Other studies have taken a similar position and emphasized the role of the subjective immersive experience into the narrative world, or into the specific story character, which is called “identification.” The narrative impact has been demonstrated in a variety of domains, such as health communication and merchandising (e.g., Banerjee & Greene, 2012; Wang & Calder, 2006). However, while these studies have shown that reading or watching a narrative basically leads to motivational, attitudinal, or behavioral change, they have also found several moderators of the effect such as need for affect, which means that the role of the narrative experience is rather complicated and that more detailed examination is needed (Appel & Richter, 2010; Thompson & Haddock, 2012).

Some researchers have taken a broader perspective and discussed the function of the narrative as a whole. Mar and Oatley (2008) suggested that the narrative offers a simulation of the social world and interactions, and that people develop their social ability through the narrative. By describing the complex social events in a more comprehensible way, narratives enable readers to draw on the story character’s experience of each event in the narrative and to learn what these events bring as a consequence. Readers can also focus on what the characters think and feel in each scene, which could provide effective cues for understanding people in reality. Through this kind of simulation, readers learn what it is like to experience particular events and how to deal with them. For example, in a case of a success story, readers learn what it is like to accomplish (or fail to accomplish) one’s goal, and what the necessary steps to succeed are by reading the story, which could be useful for their own success. When readers or viewers identify with the story character, the simulation could take a more realistic form, and the character’s success could provide so much of an emotional impact that they feel as if they themselves have succeeded, which could boost their motivation.

However, from the findings of self-regulation research, we can observe another side of the relationship between simulation in a narrative and related behavior. Pham and Taylor (1999) contrasted two types of simulation (process or outcome) and showed that students’ academic performance was only improved by engaging in process simulation, which involves mentally simulating the steps they must go through to reach their desired state. They also showed that outcome simulation, which involves imagining what would happen after they had a positive result, could impair performance. Moreover, according to Oettingen’s fantasy realization theory, indulging in positive fantasy impairs performance (Oettingen & Cachia, 2016). For example, job seekers who frequently spend time in fantasies send fewer curricula vitae and have a lower wage after becoming employed, while job seekers who spend less time in fantasies succeed according to their expectancy (Oettingen & Mayer, 2002). In addition, students with more positive fantasies about their academic performance actually achieve worse grades (Kappes, Oettingen, & Mayer, 2012). Oettingen and her colleagues found that the impairment in the

performance caused by the positive fantasies was due to the low energization and an illusional state of goal attainment (Kappes & Oettingen, 2011; Oettingen & Mayer, 2002).

By the word “fantasy,” Oettingen means free thoughts and images about future events or behaviors without consideration of the probabilities. Therefore, these findings are related to freely generated fantasies, but fantasy is also an important factor when reading a narrative. When reading stories or watching a movie, people actively imagine the events in the story based on the text (Gernsbacher, Goldsmith, & Robertson, 1992). They even add original aspects when imagining the character and events in the narrative to produce a more vivid and realistic representation of the story, which could be regarded as story-driven fantasy. These products of imagination could be free from realistic probabilities. Consistent with this, some researchers have labeled the tendency to identify with story characters as fantasy (Davis, 1983), or they regard realistic imagination to be a component of the narrative immersive experience (Green & Clark, 2013). Taking these findings into consideration, positive fantasy and narrative immersive experience have a lot in common; thus, there might be a negative effect on performance when people indulge in simulation in a narrative.

Therefore, based on the discussion above, this study aimed to explore how identification with a story character influences the audience’s academic motivation and actual academic performance in an academic setting. While past research has investigated the effect of the positivity of a freely generated fantasy on related performance, this study examined the relationship between the degree of identification with a main character in an academic study-related short movie with a happy ending and the viewer’s academic performance. It was hypothesized that the identification would foster the participants’ academic motivation but impair their actual academic performance.

II. Method

1. Participants

The participants were 84 university students who attended a social psychology class (49 males, 33 females, and two unknowns, mean age = 19.44 years) for extra credit. The study was approved by the research ethics committee of Shitennoji University (permission number 29-2). All of the data, including the participants’ test scores, were acquired from only those who had agreed to provide them on the consent form distributed before the questionnaire. During each session, the participants were reminded that participating in the study and providing data was voluntary; thus, refusing to participate did not lead to detrimental treatment.

2. Procedure

The research was divided into three phases; the pre-survey, main procedure, and final session.

In the pre-survey phase, the participants' expectancy of their grade was assessed according to Oettingen and Mayer's (2002) study 3. They stated their grade expectancy (A+, A, B, C, or F), the probability of obtaining the expected grade, and the importance of obtaining a good grade.

One week after the pre-survey, the main procedure was taken. The study was explained as "a study of a YouTuber's image". The participants first rated their initial liking of YouTubers in general. Then, they watched a six-minute short movie of a Japanese YouTuber broadcasting his university grade on-the-spot (<https://www.youtube.com/watch?v=8NYDeA70dLc>). In the movie, the YouTuber nervously checked his grade via the internet and found out that he had passed the classes in the final term and achieved a sufficient amount of school credits to graduate.

After watching the movie, the participants answered five items from the Identification Scale (Tal-Or & Cohen, 2010) on a 7-point scale (e.g., "While viewing the program, I felt as if I was part of the action"), about how motivating or dubious the movie was, and responded about their mood (good, bad, relaxed, bored, and none) on a 5-point scale. They also indicated their plan and academic motivation for their final exam by estimating the amount of time and effort they would be spending on the exam.

Two weeks later, in the final session, their scores for the final exam and the actual study effort (hours and effort spent on the final exam) were assessed on the questionnaire attached at the end of the final exam.

III. Results

Out of 84 participants, 72 attended all of the sessions. Two participants refused to provide their grade data, and one outlier was dropped from the data because it skewed the overall result¹. This left a sample of 69 participants in the analysis.

First, the motivating function of the narrative fantasy (i.e., "identification" in this study) was examined using a simple correlation analysis (Table 1). The main result showed that the more the participants identified with the main character, the more motivating they felt the movie was ($r(69) = .55, p < .01$).

Second, to examine whether the fantasy realization theory could apply to a narrative fantasy, the relationships between the identification, grade expectancy, and academic performance were examined using a correlation analysis, as was performed by Oettingen and Mayer (2002) with fantasy positivity and expectancy. The results showed a different pattern from the fantasy realization theory research. While grade expectancy was correlated positively with the academic performance score ($r(54) = .45$,

Table 1. Means, standard deviations, and correlations between identification, academic motivation, study time, and academic performance score

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Identification	3.76	1.27	–	.55**	.01	.03	.05
2. Motivation	4.23	1.70		–	.03	.22 †	-.11
3. Planned study time (min)	289.08	293.29			–	.18	.06
4. Actual study time (min)	127.93	106.60				–	.32*
5. Final score	62.94	16.51					–

Note. *N* = 69, † $p < .10$, * $p < .05$, ** $p < .01$

$p < .01$), identification did not correlate with the academic performance. Partial correlations that controlled for the other predictor variables found the same result. In addition, identification and grade expectancy did not correlate significantly.

Third, to evaluate if any other factors affected the academic performance, a multiple regression analysis that included the grade expectancy, identification, and their interaction as an explanatory variable was conducted on the final score (Figure 1). It was found that the main effect of grade expectancy ($\beta = .46$) and the unexpected interaction effect between the identification and grade expectancy ($\beta = -.33$) were significant ($F(3, 53) = 7.70, p < .001, R^2 = .30$). Among those who had a low expectancy of their grade, the identification significantly promoted their academic performance ($p < .05$).

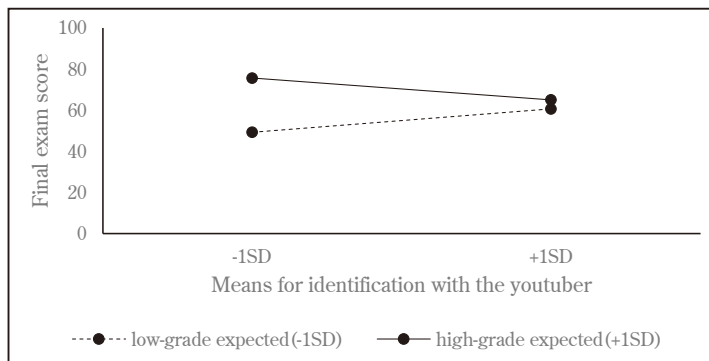


Figure 1. The relationship between identification and the academic performance score in terms of the grade expectancy

Fourth, the participants were divided into a high-grade expectancy group (A+ and A, $n = 28$) and low-grade expectancy group (B, C, and F, $n = 32$) to explore the process in more detail. The results showed that the relationship between identification and academic motivation was very strong in the

low-grade expectancy group ($r(32) = .74, p < .001$), but it was not significant ($r(28) = .24, ns$) in the high-grade expectancy group. Academic motivation was positively related with study time in the low-grade expectancy group ($r(28) = .39, p < .05$), but not in the high-grade expectancy group ($r(25) = .11, ns$).

Finally, a path analysis was conducted of the low-grade expectancy group regarding the correlation analysis results (Figure 2). It was found that identification significantly led to heightened academic motivation ($\beta = .28$), and the relationship between identification and study time was attenuated ($\beta = .04$) when considering the effect of academic motivation on study time ($\beta = .36$). However, as the relationships between identification and the total study time, and between academic motivation and the total study time were not significant, there was no evidence of a mediation effect.

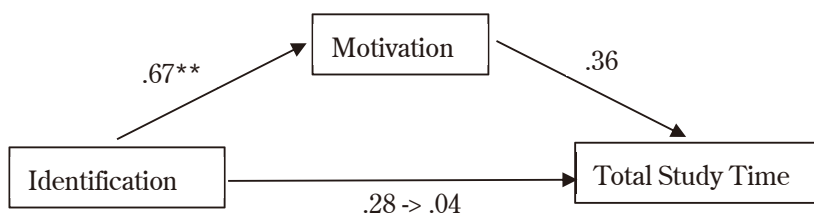


Figure 2. Results of the mediation analysis for the low-grade expectancy group

IV. Discussion

The aim of this study was to explore the relationship between identification with a story character, the related academic motivation, and the actual academic performance. It was found that identification with the successful character heightened the participants' academic motivation. However, it was also found that the effect of identification on the actual academic performance interacted with their grade expectancy, which meant that the interpretation of the results was complicated. Identification had a beneficial influence on those who had low grade expectancy, but not on those who had high grade expectancy, which could be interpreted in some different ways.

The results might be interpreted as support for the hypothesis and evidence for a restriction in academic performance, as suggested by positive fantasy theory, among the high-grade expectancy group. However, when taking the contents of the story into consideration, a more plausible account for the result can be established. In the movie, the YouTuber aimed to acquire enough credits for graduation, but not for obtaining a better grade. Acquiring a B or C grade was sufficient for him to achieve his goal of graduation. The low-grade expectancy group may have shared this goal with the YouTuber, and

thus gained a high level of academic motivation from identification, which boosted their study time and final score. However, for the high-grade expectancy group, identifying with the YouTuber may not have been as motivating because their goal was different from the YouTuber.

Another possibility relates to the function of the academic motivation in each grade expectancy group. The grade expectancy score could be regarded as their willingness to prepare for the exam. The low-grade expectancy group might have been reluctant to study for the exam before watching the movie, but the identification enhanced their motivation to study after watching the movie. On the other hand, as the high-grade expectancy group might have had enough academic motivation and inclination to prepare for the exam from the beginning, identifying with the YouTuber might not have been sufficient for them to obtain a better grade.

The generalization of the results of this study to all narrative effects is premature. Though this study showed some meaningful pattern, it also had some limitations. The YouTuber movie used in this study was not a typical success story in several aspects, and other stories that include typical narrative characteristics might yield different results. For example, the movie in this study only depicted the scene of the character discovering his success. It tracked how his academic grade emerged as it was revealed on the computer, and his joy after he learnt that he will graduate. However, the movie did not describe how he made an effort to achieve the grade or what his success yielded him afterwards. In most of the positive fantasy research, participants identify with the process or the outcome of their success; as such, the participants in this study might not have been provided with enough content to fantasize about. In addition, the YouTuber in the movie spoke to the audience, which a typical narrative would not do. To investigate the influence of narrative-based fantasy on behavior in more detail, manipulating the degree of the fantasy or identification is also necessary.

Despite the present study's limitations, its findings are still highly relevant. First, the results show that the identification with a successful character surely boosts viewers' motivation at that particular moment. A second and more critical finding of this study is that narrative-boosted motivation does not always lead to related behavior. The motivating influence of a narrative or story is sometimes assumed too powerful, having a decisive influence on the reader's or viewer's behavior. This study empirically shows that those assumptions are too simple; the relationship between character identification and actual behavior is more complicated than these mere assumptions.

Conclusion

Using successful exemplars in narratives is a commonly used method in parenting, education, and public communication. However, in this particular study, it was found that parents, teachers and

policymakers should not automatically assume that the showing of successful experiences of media characters always bear fruit to its receiver at the behavior level. Future research should overcome the limitations listed above, and should focus on the effect of diverse narratives in a more precise manner to investigate the relationship between fictitious narratives and real-world behavior.

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Endnote

1) Including the outlier data produced a significant simple slope effect of identification in the high-grade expectancy group. The data (identification mean = 1, study time = 600 minutes) was judged to be an outlier from a scatterplot of identification and the total study time.

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This study investigated the effect of identification with a social media character on the viewer's academic motivation and academic performance to examine the possibility that simulated narrative experience could backfire and impair actual behavior. Eighty-four undergraduates first reported their grade expectancy, then watched a YouTuber's play-by-play movie of his grade announcement. Participants rated the degree of identification with the YouTuber immediately after the viewing, and they had their own final exam two weeks later. The results indicated that YouTuber identification was strongly correlated with their academic motivation, and there was a significant interaction between identification and grade expectancy that affected the actual academic performance. Those who had a low-grade expectancy for the class improved their academic performance as they identified with the YouTuber, but for those who had a high-grade expectancy, identification did not influence their academic performance. There was a possibility that high-grade expectancy group did not share the goal of the YouTuber who had cared only about the acquisition of the credits.