You Are What You Read: The Relationship between Experience-Taking and Performance

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This thesis titled
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Performance

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ABSTRACT

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You Are What You Read: The Relationship between Experience-Taking and Performance

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The process by which readers engage with characters in a narrative is referred to as experience-taking. Through this process, purportedly, readers lose self-awareness as they adopt a character’s perspective. In Study 1, participants read a narrative about a character that performed successfully on an achievement task - anagram solving - and then they solved anagrams themselves. According to the results, higher reported levels of experience-taking were associated with enhanced anagram performance. In Study 2, participants read a narrative written in either a first- or third-person perspective in which a character either performed successfully or unsuccessfully on a test of verbal ability. Although neither perspective type nor character outcome exerted differential effects on performance, regression analyses indicated that self-reported levels of experience-taking, perceived similarity to the character and feelings of inspiration derived from the character’s performance predicted enhanced anagram performance, and similarity was found to mediate the relationship between experience-taking and performance. Discussion focuses on both the theoretical and practical implications of the association between experience-taking and performance.
DEDICATION

This work is dedicated to my family, without whom none of this would have been possible.

Thanks Mom and Dad for always indulging my love of reading and stories,

This is for you.
ACKNOWLEDGMENTS

I would like to thank my advisor, Dr. Keith Markman, for his invaluable assistance throughout this project. I would also like to thank Drs. Mark Alice and Kim Rios for their insightful and helpful comments.

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INTRODUCTION

"It seems incredible the ease with which we sink through books quite out of sight, past clamorous pages into soundless dreams." (Gass, 1971, p. 27)

Literary characters have captivated and inspired the imagination throughout the long tradition of storytelling. For instance, millions of readers around the world have fallen in love with Katniss Everdeen of *The Hunger Games* trilogy (S. Collins, 2008). Readers dive into her dystopian world of teenage death games and feel personally involved in her fight for equality. Indeed, many readers report losing track of time and an awareness of what is happening around them because they feel as if they are really sharing an experience with Katniss. To what extent, then, do readers also become Katniss while they read— a phenomenon referred to as experience-taking? Do they believe that they could outrun bloodthirsty competitors while effortlessly handling a bow? That is, do the identities of readers1 merge with those of the characters in the narrative? Moreover, can this integration of identities affect readers’ abilities and subsequent behavior?

The psychological literature on experience-taking has focused on defining the concept (Carroll, 2011; Cohen, 2001; Kaufman & Libby, 2012; Kaufman, 2009; Oatley, 1994, 1999) and establishing its antecedents (Cohen, 2001; Kaufman & Libby, 2012; Kaufman, 2009; Oatley, 1999) and consequences (Green, Brock, & Kaufman, 2004; Green, 2005). However, only one previous study (Kaufman & Libby, 2012, Study 4) has examined the behavioral effects of experience-taking. Specifically, Kaufman and Libby

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1 Throughout this proposal, I will employ the term reader because I am interested in the effects of narratives on readers. It is important to note, however, that experience-taking is not limited to the world of narratives. People can engage with characters within a variety of other media including television, films, and video games.
found that readers that engaged in experience-taking with a character who had voted in a recent election were more likely to vote in an actual election themselves. To date, however, this is the only study that has investigated the relationship between experience-taking and behavior, and thus research has yet to explore whether experience taking can predict performance in achievement domains. Therefore, the goal of the present two studies is to extend existing research by investigating the relationship between experience-taking and performance. Study 1 seeks to examine the relationship between experience-taking with an academically successful character and readers’ own performance on an anagram task. Study 2 aims to induce experience-taking via a perspective-taking manipulation and also manipulate the performance outcome of the character in the narrative in order to examine the influence of experience taking and character outcome on readers’ anagram performance.

The History of Narrative

Since the dawn of recorded history, humans have felt a need to share stories with one another, either through the medium of cave painting, or by the spoken or written word. Before humans developed a formal written language, ancient peoples used cave paintings to convey stories about hunts, exceptional occurrences and general musings about life. It was also commonplace for our distant human ancestors to sit around a fire and share stories with one another after a long day of hunting and gathering. Generations of human beings passed down these spoken stories and histories to successive generations. Eventually, humans developed the written word, at which point narratives took on a completely new form that was capable of being more easily passed along. The
oldest form of written narrative is believed to be the Epic of Gilgamesh from Ancient Sumeria, dating back to 2750-2500 BCE, that chronicles the myriad adventures of the King of Uruk (Academy for Ancient Texts, 2004). Many centuries later, contemporary survey studies indicate that reading remains a cherished activity for many. In 2002, the U.S. Census Bureau interviewed 17,000 U.S. adults and found that 46.7% of them had read at least one work of literature in the prior year (Keen, 2007). Clearly, then, stories have occupied a significant niche in the lives of humans throughout history and they continue to do so today.

One reason why readers may enjoy stories so much is that they may facilitate an escape from self-awareness (Nell, 1988). Stories may accomplish this by transporting the reader to another time and place, allowing them to leave the cares and worries of the real world behind. Narratives may also supply readers with something of an immortality delusion (Nell, 2002), in that they provide readers with an escape from the paralyzing grip of existential terror (i.e. an awareness of the inevitability of their own death) (Greenberg, Pyszczynski, & Solomon, 1986) as they read about and empathize with the story protagonist (Nell, 1988). The protagonist, or hero, is generally believed to be invulnerable to harm, thereby providing a momentary distraction from the knowledge that death is unavoidable.

The pleasure obtained from reading can also be explained by the Aristotelian idea that the quintessence of happiness is to be wholeheartedly engaged in an activity (Oatley, 1994). Readers can experience this type of immersive engagement through the process of ludic reading (Nell, 1988). Heavy readers (i.e., who, on average, read at least one book
per week) experience ludic reading more commonly, but it is possible for lighter readers
to do so as well. During ludic reading, the reader is thought to enter a trancelike state.
Arousal is very high during ludic reading, and then drops when reading is completed. The
cyclical rise and fall of arousal can possibly account for why so many people make
reading their final waking activity. Following ludic reading, the body enters a state of
very low arousal that enables people to relax and fall asleep (Nell, 1988). A more
common process that leads to total immersion and engagement with a narrative (without
the requirement of being a heavy reader) is that of transportation into the narrative.

Transportation into Narrative

One idea that has had a long history in narrative research is transportation. Freud
(1908), for instance, related the notion of transportation to dreaming. He speculated that
by visualizing the events of a story and imagining taking in part in those events, readers
are, in essence, engaging in vicarious day-dreaming. More recently, Gerrig (1993),
adopting the metaphor of physical transportation (i.e., the reader as “traveler”), specified
six stages of narrative transportation whereby: (1) the traveler is transported into the story
world, (2) by some means of transportation (3) as a result of performing certain actions.
(4) The traveler goes some distance from the world of origin (5) which makes some
aspects of the world of origin inaccessible. (6) The traveler then returns to the world of
origin being somewhat changed by the journey. Presently, transportation is
conceptualized as a distinct mental process that occurs when a reader becomes immersed
in a story to such a degree that they no longer attend to things that are happening in the
real world around them (Green, 2005; Green & Brock, 2000), or, similarly as “an
integrative melding of attention, imagery and feelings focused on story events” (Green, 2004). Thus, all of the reader’s mental systems and capacities are focused on the events occurring in the narrative as opposed to the events that are actually occurring around them.

A study conducted on children’s beliefs about monsters (Harris, Brown, Marriott, Whittall, & Harmer, 1991) helps shed some light on the processes involved in transportation. The first series of studies suggested that children are able to make accurate distinctions between real and imagined items. The second set of studies then investigated how children would act towards those imagined items. To begin, the researcher told the children to imagine that there was a monster in one box and a puppy in another box. The children then responded by describing how they would react to the boxes and what they thought was inside of each of the boxes. Although all of the children insisted that the monster was just pretend and was not really inside the box, they acted towards the box (when left alone with it) in a manner consistent with the belief that there really was a monster inside. In fact, several of the younger children refused to be left alone with the box and others admitted that they believed people could make things become real by using only their imagination. The general explanation for these findings is that once children begin to imagine that there is a monster in the box, they start to wonder whether the box really does contain a monster, and then, after imagining the monster in the box, they cannot completely discount the possibility (Harris et al., 1991). Feasibly, this same process may occur when narratives and movies transport adults into the story-world. In horror stories and films, for example, people know, rationally, that such horrifying
creatures do not really exist. However, after transportation into the story world has occurred and people have returned to the real world, they have trouble completely discounting the presence of such monsters and thus experience fear, even though they would most likely say that such creatures do not really exist (Harris et al., 1991).

Transportation has been treated as both an individual difference variable (Green & Donahue, 2009), measured via either a situational or dispositional transportation scale (Green, 1996), as well as an experimentally manipulated variable. Efforts to manipulate transportation have met with moderate success. The most common finding with regard to manipulating transportation is that it can be diminished but not enhanced (Green, 1996). Factors that have been shown to diminish transportation include asking participants to pay attention to grammar or surface aspects of the story (Green, 1996; Green & Donahue, 2009), employing a boring story (Green, 1996), providing negative self-relevant feedback, disrupting the logical order of the story (Green & Donahue, 2009), and telling participants to identify words that would be difficult for a fourth-grader to understand (Green & Brock, 2000). A recent study (Green, 2004) attempted to manipulate transportation using three conditions: explicit instructions to engage in transportation, instructions to pay specific attention to content, and a control group that received no additional instructions. Results indicated that the manipulation of transportation was unsuccessful, as no differences in transportation were found between the three groups. However, knowing a real-life person who shared an important characteristic with the protagonist of the narrative increased the degree to which participants reported being transported by the narrative.
Transportation into narrative is a pleasant and enjoyable experience for readers in several different ways. For one, it is believed to serve as an escape from things such as self-awareness and existential terror (Nell, 1988). Even though transportation is cognitively demanding, researchers believe it may be effective at restoring self-regulatory resources, and maybe even more so than sleep (Green, 2005). This is due to transportation’s ability to let the reader escape from the self and leave the world of origin behind, which therefore serves as a form of rest. This feels enjoyable and restorative because the reader can let go of personal concerns, problems and social contexts (Green & Brock, 2002) and explore new, imaginative worlds. This can become problematic, however, if transportation is leaned upon too heavily as a form of escapism from real world problems (Green, 2005).

Transportation can also allow readers to experience “the dark side” of life through role-playing (e.g., death and breaking the law) without posing any actual harm to the self (Green et al., 2004). The story world becomes a safe place where the reader can explore different emotional experiences and visualize alternative (desired) selves (Oatley, 1999). The characters in the story can also help to satisfy an individual’s need to belong by providing close others to whom the reader can feel connected (Green et al., 2004).

There are other possible outcomes related to transportation into narrative. When readers return to the real world from the story world they are usually somewhat changed by the experience (Green & Brock, 2002). If nothing else, there is at least a memory for what was read. Often, however, transportation can lead to the adoption of story-consistent beliefs (Green, 2005). The area of narrative persuasion has spawned a plethora of
research and much of it shows that narratives can have a substantial impact on the beliefs and behaviors of readers. For example, one study that examined romance novel reading and sexual behavior (Diekman, McDonald, & Gardner, 2000) found that 89.7% of romance novels make absolutely no mention of condom use during acts of sexual intercourse. This led to the interesting effect that higher levels of romance novel reading were associated with less positive attitudes toward condom use and less intentions to use condoms in the future. In a second study, those participants who were given romance novel excerpts in which the character does use a condom reported more positive attitudes toward condom use than participants who read a version of the excerpt that did not mention condom use (Diekman et al., 2000). These results suggest that narratives have the potential to serve as highly effective transmitters of persuasive material and can even have an effect on behavioral intentions and outcomes.

Narratives are an effective persuasion tool because they reduce the amount and effectiveness of counter-arguing or logical consideration of the message at hand. This occurs because readers do not generally think of narratives as persuasive appeals and, thus, the persuasion attempt can essentially “fly under the radar,” and avoid detection by the reader (Dal Cin, Zanna, & Fong, 2004). In addition, the content of a narrative is more difficult to refute than the content of a traditional persuasive appeal because it is hard to discount the actual experiences of a person. Even though narrative characters are generally fictional and do not exist in the real world, readers view the experiences of the characters as plausible, thereby making them hard to contest. Furthermore, characters’
beliefs are typically implied and not explicitly stated, which works to inhibit counter-arguing as there are no specific stated arguments to challenge (Dal Cin et al., 2004).

When readers are transported into the narrative, the persuasive effect of narratives is further increased (Green & Brock, 2000). There are several different reasons for why this occurs. First, when engaging in transportation, there is not enough cognitive capacity left over for the reader to scrutinize the persuasive message effectively. There is also a lack of motivation to analyze the message because the reader wants to stay engaged and transported (Dal Cin et al., 2004). Lastly, transportation increases persuasion because it interrupts the reality testing feedback loop (Green, 2005). The default response when receiving information is to first believe every assertion, and then later go back, revise, and reject information that is deemed to be false (Gilbert, Tafarodi, & Malone, 1993). Transportation, however, is thought to interrupt the revision process. Instead of discounting the false information, most of the information obtained during transportation is later remembered as true (Green, 2005).

Stories have an unmistakable place in people’s lives, but even more specifically than the stories themselves, the characters in those stories can have an enormous impact on readers’ thoughts, feelings, and behaviors. When transported readers enter the story world, they encounter many different characters that dwell within. However, readers do not simply passively observe these characters. Instead, they actively engage with them, most commonly through the process of experience-taking.
Experience-Taking with Fictional Characters

“Readers may not only enter a narrative world, they may also become highly involved with the people they find there.” (Green & Brock, 2000, p. 702)

Many readers begin to care deeply about the characters they meet within the story world. Readers take an interest in these fictional characters for the same reasons they care about other people in the real world - humans are hardwired to forge social bonds (Vermeule, 2011). Readers encounter these fictional others and experience a desire to bond with them, much as they would when meeting a new acquaintance. The most intimate way a reader can bond with a character is through a merging of identities, which is now commonly referred to as experience-taking (Kaufman & Libby, 2012) or, in the past, as identification\(^2\) (Cohen, 2001). Freud (1940/1989) described the experience-taking process as non-conscious and imaginative, whereby the child incorporates the parent into the self and thus becomes part of the superego. It is believed that this ability to engage in experience-taking develops early in the life cycle (Freud, 1940/1989). Research has suggested that three-year-olds are able to identify with a character that has a goal similar to one with which they have had personal experience. However, it is not until the age of five that a child is able to identify with a character that is pursuing a goal with which they have had no personal experience (Oatley, 1994).

In general parlance, there is some confusion about what it means to engage in experience-taking with a character. When most people say they identify with a character, what they usually mean is that they think the character is “cool” or that they have had a

\(^2\) To remain consistent, the term “experience-taking” will be used even if in the cited work the concept is referred to as identification.
similar experience as that of the character (Carroll, 2011). However, these notions are more related to a feeling of affinity for the character and, as such, should be referred to as affiliation instead of experience-taking (Carroll, 2011). Today the most frequently used definition of experience-taking is:

…the imaginative process of assuming the perspective and identity of a character in a work of fiction, which leads individuals to experience, through simulation, the events of a narrative as if they were a particular character and to take on that character’s thoughts, emotions, behaviors, goals, and traits, while in the story world. (Kaufman, 2009)

This immersion of the self and character requires the reader to completely transcend all self-other boundaries and, in essence, “become” the character (Kaufman & Libby, 2012). The reader leaves the self behind and takes on the identity of the character and experiences the events in the narrative as if they were really happening (Cohen, 2001). Thus, when readers engage in experience-taking they will accept the character’s decisions, goals, plans, experiences, outcomes and reactions as their own (Kaufman & Libby, 2012), whether they are positive or negative in valence (Oatley, 1999). Due to the loss of self associated with experience-taking, the reader is unaware of the process, although it can be recalled afterwards (Cohen, 2001). Therefore, a reader is unable to say they are engaging in experience-taking while the process is occurring but is able to do so once experience-taking has ceased. Some researchers have broken experience-taking down into several central dimensions. According to Oatley (1994), there are four elements that must be present for experience-taking to successfully occur: 1) the goals of
the protagonist must be adopted, 2) an imaginary world must be created, 3) the writer must use speech acts conducive to experience-taking, and 4) there must be the potential for the constructive integration of incongruent features of the narrative. In a somewhat similar vein, Cohen (2001) described the four key features as empathy, the cognitive aspect of sharing the perspective of the character, the motivation to share goals and absorption or transportation into the narrative.

When readers engage in experience-taking, there are numerous possible outcomes. For example, a reader may attribute the character’s personality traits to the self, share the character’s attitudes, beliefs and goals and even enact the same behaviors that are performed by the character (Kaufman & Libby, 2012). Experience-taking can also be a great source of pleasure for a reader by providing an avenue for exploration of ideal or possible selves (Green et al., 2004). In addition, a narrative can provide specific pathways to goals through the character enacting those goals and the outcomes being “observed” by the reader. If a narrative is able to provide these pathways it may be effective in motivating the reader to reach for that same goal and possibly increase the reader’s optimism about their ability to achieve that goal (Green, 2005). This idea is similar to that proposed by Lockwood and Kunda (1997) in regards to superstar role models. The narrative will have a positive effect on the reader (i.e., the reader will be motivated to achieve the goal) when the goal is seen as attainable but it will have a negative effect when the goal is seen as unattainable.

Though experience-taking is common, it is not a certain occurrence of reading (Kaufman & Libby, 2012), as not all readers will engage in experience-taking and not
every narrative is conducive to experience-taking. Instead, several factors can influence whether or not experience-taking occurs. The most common antecedent to experience-taking is perceived similarity with the character (Jose & Brewer, 1984). This similarity can be achieved either through demographic or attribute variables (Cohen, 2001). The more similar the character seems to the reader, the more likely that reader is to experience-take with that character. Similarity can also more broadly refer to the character’s in-group status. A recent study (Kaufman & Libby, 2012) found that readers are more likely to experience-take with a member of the in-group and this increased experience-taking led to greater behavior change such that the reader was more likely to enact the same focal behaviors as the character. It was also found that delaying the revelation of out-group status until the end of the narrative produced higher levels of experience-taking than when it was revealed at the beginning of the narrative. Revealing a character’s out-group status at the beginning of a narrative inhibits readers from engaging in experience-taking because the reader immediately dismisses the character based on their perceived level of dissimilarity. However, waiting to reveal the out-group status until the end of the narrative does not influence experience-taking because the process has already occurred.

Self-concept accessibility also influences whether or not a reader will engage in experience-taking. Results of a recent study (Kaufman & Libby, 2012) suggest that chronically low self-concept accessibility, as well as manipulated self-concept accessibility (lowered via deindividuation instructions and increased by reading in front of a mirror) all affect levels of experience-taking. Experience-taking involves letting go
of the self and accepting the character as being part of the self. Therefore, lowered self-concept accessibility is conducive to engagement in experience-taking because it makes it easier to include the character in one’s own self-construal. A similar study (Kaufman, 2009) found that asking participants to focus on their self-discrepancies increased their likelihood of engaging in experience-taking with a character and then internalizing that character’s traits. Awareness of self-discrepancies evokes negative arousal, which the reader wants to avoid. Engaging in experience-taking with the character and leaving the self behind offers a feasible means by which to escape from a negative arousal state.

Narrative voice (i.e., the perspective from which the story is written) is another important factor that influences experience-taking. Employing a first-person writing style (telling the story through the voice of a character in the narrative) is more effective than employing a third-person writing style (telling the story through an omniscient narrator) (Kaufman & Libby, 2012). A first-person writing style makes experience-taking an easier task to engage in because it gives readers access to the thoughts and feelings going on inside the character’s head. On the other hand, the third-person writing style is conducive to invoking a feeling of spectatorship or being a “fly on the wall”. This writing style does not allow for as of deep access into a character’s head as does the first-person style, thus making experience-taking more difficult and less likely to occur (Oatley, 1999). Other factors that influence a reader’s propensity to engage in experience-taking with a character include: a reader’s fondness for a character, the perceived realism of the character, length of exposure to the character and character attributes such as physical attractiveness and favorable personality traits (Cohen, 2001).
Several factors can undermine the process of experience-taking. For example, experience-taking can be interrupted when the reader is suddenly made self-aware (Cohen, 2001). If the reader’s self-concept comes back into self-awareness while experience-taking is occurring, the reader can lose the connection with the character, thereby terminating experience-taking. Other factors include: textual stimuli (such as a character directly addressing the reader), or the story reaching a conclusion (Cohen, 2001).

Similarities and Differences between Experience-Taking and Related Constructs

Experience-taking is conceptually similar to several other concepts commonly found in the literature on narratives. As such, this section will outline several similar and related constructs as well as detail how experience-taking is distinct and offers contributions beyond those currently offered by these theories.

Transportation

As discussed earlier, transportation occurs when a reader is fully immersed in the world of the story and leaves the real world behind (Green & Brock, 2000). Transportation and experience-taking are related, but are separate and distinct concepts. Transportation is a necessary but not a sufficient condition for experience-taking to occur (Kaufman & Libby, 2012). This means that in order for experience-taking to occur, a reader must engage in transportation. However, just because a reader engages in transportation does not mean experience-taking will necessarily ensue. With transportation, the reader is not specifically identifying with one character. Instead, the reader’s self is transported into the story world and is thus imagining how the self, not the
character, would react to the events and experiences that occur there. On the other hand, with experience-taking the reader becomes the character in the story world. Therefore, the reader is mentally simulating how they believe that specific character would act and not, necessarily, how the self would act.

*Parasocial Interaction*

Parasocial interaction (PSI) occurs when a reader responds to a character as if that character were actually a personal acquaintance (Giles, 2002). These interactions are one-sided, non-dialectical, and are controlled by the reader (Horton & Wohl, 1956). Parasocial interactions serve two main functions for readers: development of personal identity and, most importantly, companionship (Giles, 2002). Individuals that are seeking to fulfill their need to belong will turn to characters in narratives as a means of fulfilling that belongingness need. Notably, parasocial interactions are comparable to normal, everyday social interactions. For the reader, the experience of a parasocial interaction is a real experience, not an imaginary one and those readers that experience parasocial interactions should not be pathologized (Giles, 2002).

There is an easily made distinction between parasocial interactions and experience-taking. Parasocial interactions occur when a reader interacts with a character but does not engage in experience-taking with that character (Giles, 2002). In addition, for experience-taking to occur, the reader must note some type of similarity between themselves and the character in question. With parasocial interactions, no similarity is needed, which allows readers to engage with characters that are extremely different from
themselves or that they actively dislike (which is not possible with experience-taking) (Giles, 2002).

**Perspective-taking and Empathy**

Another concept related to experience-taking is perspective-taking. Perspective-taking is the conscious, effortful, and imaginative process of attempting to understand and experience another’s thoughts and feelings as if one were in the shoes of the other (Batson, 2009b; Coplan, 2011; Kaufman, 2009). There are two types of perspective-taking: self-oriented and other-oriented (Batson, 2009b). When people think about the term “perspective-taking,” they most typically bring to mind the self-oriented type. Here, a person represents themselves in another’s situation; in other words, I imagine what it is like for me to be in your situation (Batson, 2009b). This type of perspective-taking usually leads to a kind of pseudo-empathy (Coplan, 2011). This false empathy occurs because people mistakenly believe this type of perspective-taking gives them access to the other’s point of view. In reality, however, it does not, because the observer is imagining how they would react in a given situation, not how the target would react.

Personal distress, false consensus effects and general types of misunderstandings of others are all issues associated with the self-oriented type of perspective-taking (Coplan, 2011). In other-oriented perspective-taking, by contrast, a person attempts to represent the other’s situation from the other’s point of view, thereby simulating the individual’s experiences as though they were the target individual (Batson, 2009b; Coplan, 2011); in other words, I imagine that I am you in your situation as you. This type of perspective-taking requires motivation and control and is not automatic or involuntary (Coplan,
It also requires that the person attend to the relevant differences between the self and the other in order to accurately represent the other’s situation (Batson, 2009b). Therefore, when a reader engages in perspective-taking, no loss of self occurs. The reader remains herself and simply tries to understand what the character is experiencing. Other-oriented perspective-taking generally evokes empathy (Batson, 2009b).

A commonly used definition of empathy is “an emotional state that involves feeling in oneself the feelings of another person,” and empathy is generally believed to lead to altruistic actions (Bachen, Hernández-Ramos, & Raphael, 2012; Batson, 2009b). The term empathy has been used in regards to several different and distinct concepts in the literature. Batson (2009a) described eight different conceptions of empathy that have been examined by researchers. These include knowing another person’s internal state, including his or her thoughts and feelings, adopting the posture or matching the neural responses of an observed other, and sensing or projecting oneself into another’s situation (Einfühlung), which are not commonly used in the field of social psychology. The fourth conception is coming to feel as another person feels. This reflects a concern with emotion matching (having the same emotion as the observed) and emotion catching (being able to discern the emotion of the other). This has also been referred to as emotional contagion and affective empathy (Batson, 2009a). The fifth conception, imagining how another is thinking and feeling, relates back to the imagine-other perspective that was discussed earlier, and the sixth conception, imagining how one would think and feel in the other’s place, describes the imagine-self perspective that was also discussed (Batson, 2009a). The seventh conception refers to feeling distress at witnessing another person's suffering,
which has commonly been called empathic distress. This is feeling distressed by the state of another person, not feeling distressed for the other person (Batson, 2009a). The final and eighth conception, feeling for another person who is suffering, is one of the most common definitions of empathy in social psychology. Empathy, in this sense, is an other-oriented-congruent emotion. This means that the emotion is felt for the other person and the valence of the emotion reflects that person’s state (e.g., the valence is negative if the person is suffering). When the other is in a state of suffering, the terms pity, compassion, sympathetic distress, and sympathy have all been used (Batson, 2009a).

Though there seems to be some conflict in the literature about what empathy actually is, there are generally three essential features of empathy: (1) affective matching (experiencing identical emotions though they may vary in intensity), (2) other-oriented perspective-taking, and (3) self-other differentiation (Coplan, 2011). Most individuals are capable of experiencing empathy; nonetheless, it is possible to lack the ability to empathize with others. Lack of empathy is correlated with sociopathic behavior and is typically found in the personality profiles of serial killers and autistic individuals (Keen, 2007). There is also an interesting link between empathy and reading. Research suggests that high empathizers are better readers (and enjoy reading more) than low empathizers. This occurs because empathic individual’s role-taking abilities allow them to better understand the causal relations in the narrative (Keen, 2007).

Compared to perspective-taking, then, experience-taking is a natural and spontaneous response that does not rely on any intention to try to adopt the perspective of the other (Kaufman, 2009). When readers engage in experience-taking, they lose their
sense of self and actually experience what the character is experiencing. Instructing a reader to actively try to take on the perspective of a character actually increases activation of the self-concept and thereby inhibits engaging in experience-taking (Kaufman, 2009). More often, this type of instruction will lead the reader to engage in perspective-taking. Therefore, when researchers are interested in experience-taking, the readers are usually left alone to let the process occur naturally, whereas when researchers are interested in perspective-taking, the readers must be explicitly instructed to attempt to take on the perspective of the character (Kaufman, 2009).

Experience-taking and empathy, on the other hand, do have some facets in common. For example, a core idea of both constructs is that the reader be in the same emotional state as the character in question (Batson, 2009a; Carroll, 2011; Kaufman, 2009). In addition, it is possible for one to cause the other (i.e., if a reader experiences empathy with a character, it may lead them to experience-take as well or vice versa). It is also possible for a reader to experience one without ever having the other occur (Keen, 2007). Where these two constructs diverge is in regards to the self-other distinction. While experiencing empathy, a clear self-other differentiation is necessary, and thus the reader must remain aware that the target is a separate entity that has unique thoughts and feelings (Batson, 2009a; Coplan, 2011). Experience-taking, however, goes a step further than empathy by involving an alteration of the reader’s self-concept as they become the character (Bachen et al., 2012). In order to experience-take, the reader must leave the self behind and fully become the character (Cohen, 2001; Kaufman & Libby, 2012), and as such, empathy is no longer possible because the self-other distinction has been lost.
Experience-taking and Behavior

The main goal of the present studies is to examine whether experience-taking can translate into behavioral outcomes. There is some evidence from the experience-taking literature as well as research on social comparison that suggests that this might be the case.

When readers engage in experience-taking, they feel as though they are the character in the story they are reading. Previous research (Kaufman & Libby, 2012) has shown that engaging in experience-taking leads participants to change their behavior to conform to that of the character. In Kaufman and Libby’s (2012) Study 4, participants read a narrative about a character who votes during an election. Results showed that participants who engaged in experience-taking with the character were more likely themselves to actually vote in an election that occurred two weeks after reading the narrative. As discussed previously, researchers have also suggested that it may be possible for a narrative to motivate readers to achieve goals and increase readers’ optimism about their ability to achieve goals (Green, 2005). Taken together, this research suggests that it may be possible to increase motivation and optimism by engaging in experience-taking with a character in a narrative, which can then lead to behavior change.

Research on social comparison also offers some evidence that engaging with a character could possibly lead to inspiration and motivation that could result in behavior change. In a review of upward social comparison research, Collins (1996) concluded that upward comparisons (comparing with a “better off” other) generally lead to assimilation effects. This is believed to occur because people are likely to see themselves as more
similar to an upward comparison target than to a downward comparison target. By seeing
the self as similar to the upward target, the self is allowed to move up in ability ranks into
the target’s higher performance category. This can lead to increases in positive mood,
self-evaluations, and self-esteem. However, levels of chronic self-esteem and shared
distinctiveness moderate this effect. Individuals with high self-esteem (compared to those
with low self-esteem) are more likely to see themselves as similar to an upward
comparison target, which is more likely to result in assimilation effects. Also, knowing
that one shares a distinctive attribute with the target (e.g., having the same birthday), can
lead to expectations that other attributes will also be the same which, in turn, will also
yield assimilation effects (R. L. Collins, 1996). Related research has also shown that
reading about a “superstar” performer will increase an individual’s self-evaluation when
the outcome achieved by the superstar is viewed as attainable (Lockwood & Kunda,
1997).

The processes of experience taking and social comparison are distinct in the sense
that in order to engage in social comparison one must be aware of the self so that the self
may be compared to another’s standing (Wood, 1996). Experience-taking, on the other
hand, requires the reader to let go of the self and become the character in question in such
a way that self-awareness is reduced (Cohen, 2001). However, this research does suggest
that it may be possible to expose individuals to a successful other and observe positive
outcomes such as increases in self-evaluations and inspiration that could potentially lead
to corresponding behaviors such as increased performance in a relevant and attainable
domain.
THE PRESENT STUDIES

The goal of the two present studies is to examine whether engaging in experience-taking can lead readers to emulate the successful performance of a character in a narrative. More specifically, it is hypothesized that participants’ self-reported level of experience-taking with a successful character will be positively correlated with performance on a subsequent and similar task.

Study 1

When readers engage in experience-taking, their identities merge with those of the characters about which they read (Kaufman & Libby, 2012). The primary goal of Study 1 was to assess whether differential levels of self-reported experience-taking would be associated with enhanced performance on a task similar to the one engaged in by the main character of the narrative.

Participants

Participants (n = 133) were recruited from Ohio University’s experimental system and received partial course credit for their participation (38 males, 68 females, and 2 participants who did not identify their sex). Twenty-five participants were excluded from all analyses, leaving a total of 108 participants in the final sample.

Procedure

First, all participants were seated at computers and given an informed consent. After all participants read and signed the informed consent, the computer instructed them

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3 These participants were excluded for reasons such as experimenter error (e.g. informed consent issues and computer malfunctions, n = 2), failure to accurately recall the narrative (n = 11), expressions of difficulty with the English language (n = 2), correctly guessing the experimental hypothesis (n = 1), not following instructions (n = 3), or scoring 2 standard deviations above the mean on the T1 anagrams (n = 6).
to begin the study. Participants first received instructions informing them how the anagram task would work. This task was adapted from a procedure used by Shah, Higgins, and Friedman (1998). The task consists of twenty total anagrams, ten given at Time 1 (T1), and ten given at Time 2 (T2) (See Appendix A). The task requires participants to unscramble a series of letters into as many words as possible. After receiving the instructions, all participants completed two practice anagrams. Afterwards, participants received a reiteration of the instructions, which suggested that if they did not understand the task they should ask the experimenter for clarification at that time. All participants then completed the T1 anagram task. Participants’ persistence on the anagram task was recorded as the amount of time they spent working on the task.

Following completion of the T1 anagram task, participants read a narrative about a university student who is applying for a scholarship. To determine the recipient of the scholarship, the character must take a test that consists of anagrams, which is described as a test that assesses intellectual ability and predicts performance at both school and work (see Appendix B). Participants then completed a series of different measures. First, the Experience-Taking Scale (Kaufman & Libby, 2012) (see Appendix C) was administered to measure the extent to which participants believed that they had been experience-taking with the main character while reading the narrative. Next, participants filled out the Transportation Scale (Green & Brock, 2000) (see Appendix D) in order to assess whether any subsequently reported statistical relationships were solely attributable to experience-taking with the character and not to transportation into the narrative more generally. Participants then completed a series of questions assessing recall of information from the
narrative (to ensure that they read and paid attention to the narrative) as well as various questions assessing expectations and confidence regarding T2 performance (see Appendix E). After completing all of these measures, participants completed the T2 anagram task (see Appendix A), and persistence on the task was again recorded. Participants were then debriefed and thanked for their participation.

Results and Discussion

T1 performance scores were calculated by summing the total number of legitimate words created from the ten anagrams that were solved before reading the narrative, and T2 performance scores were calculated by summing the total number of legitimate words created from the ten anagrams that were solved after reading the narrative. T1 and T2 performance scores were then converted to z-scores. Participants were removed if their T1 scores were more than 2 SDs above the mean (n = 6). Descriptive statistics for all variables of interest appear in Table 1, and zero-order correlations between all variables of interest appear in Table 2.
Table 1

*Descriptive Statistics for all Variables of Interest (Study 1)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience-taking</td>
<td>6.60</td>
<td>1.23</td>
</tr>
<tr>
<td>Transportation</td>
<td>3.82</td>
<td>.63</td>
</tr>
<tr>
<td>Similarity</td>
<td>5.82</td>
<td>1.92</td>
</tr>
<tr>
<td>T1 Performance</td>
<td>10.21</td>
<td>3.54</td>
</tr>
<tr>
<td>T2 Performance</td>
<td>9.36</td>
<td>3.95</td>
</tr>
</tbody>
</table>

Note: \(N = 108\). Experience-taking and similarity are measured on 1-9 scales, transportation is measured on a 1-7 scale, and both time 1 and time 2 performance are the unstandardized scores with time 1 ranging from 0 to 26 and time 2 from 0 to 25.

Table 2

*Zero-Order Correlations Between all Variables of Interest (Study 1)*

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Experience-Taking</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transportation</td>
<td>.41†</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance</td>
<td>.23*</td>
<td>.06</td>
<td>.07</td>
<td>.37†</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Persistence</td>
<td>.071</td>
<td>.07</td>
<td>.37†</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Confidence</td>
<td>.06</td>
<td>.14</td>
<td>.14</td>
<td>.32†</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Expectations</td>
<td>.05</td>
<td>.11</td>
<td>.10</td>
<td>.28†</td>
<td>.89†</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>7. Similarity</td>
<td>.56†</td>
<td>.53†</td>
<td>.13</td>
<td>.10</td>
<td>.11</td>
<td>.08</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* \(p < .05\)  
† \(p < .01\)  
‡ \(p < .001\)
A simple hierarchical linear regression analysis was then conducted to examine the correlation between experience taking and T2 performance. T2 performance served as the criterion variable, and T1 performance and experience taking were entered as predictors. Consistent with the main hypotheses for Study 1, experience-taking significantly predicted T2 performance while controlling for T1 performance, $\beta = .16$, $t(105) = 2.03$, $p < .05$ (see Figure 1).

In order to distinguish experience-taking from transportation, a hierarchical linear regression analysis was conducted with T2 performance as the criterion variable and T1 performance and transportation as the predictor variables. Transportation did not significantly predict T2 performance while controlling for T1 performance, $t < 1$. 

Figure 1. Correlation Between Experience-Taking and Performance (Study 1)
Because similarity and experience-taking were highly and positively correlated with each other (see Table 2), an analysis was attempted to determine if similarity mediated the relationship between experience-taking and performance. However, because similarity was not found to predict T2 performance, no evidence for mediation was provided.

Study 2

The purpose of Study 2 was to attempt to manipulate experience-taking and assess its’ effect on performance. Study 1 was a correlational design so the focus in this study was to investigate whether experience-taking could be manipulated and if manipulated experience-taking would have the same effects on performance. In order to manipulate experience-taking, a manipulation was taken directly from previous research (Kaufman & Libby, 2012; Oatley, 1999) where it has been shown to be effective, the use of first versus third person perspective. Another manipulation was also added in order to assess whether or not the same effects of experience-taking would hold when the character fails (i.e. would engaging in experience-taking with a character that fails at a task lead to decreased performance on a similar task for the participant). To do this, I created another version of the narrative where, instead of achieving success, the character fails at the performance task. Assessing experience-taking’s effects in this area will assess whether or not it influences performance in both directions. For this study, questions were also added to assess participants’ inspiration received from the character. Based on previous research (Lockwood & Kunda, 1997) it was hypothesized that engaging in experience-
taking with a character may increase inspiration to perform well on the task, which would, in turn, increase performance.

It was hypothesized that participants reading the success narrative written in the first-person perspective would engage in higher experience-taking, as well as increased performance relative to those who read the success narrative written in the third-person perspective. It was also hypothesized that those participants that read the failure narrative written in the first-person perspective would engage in higher experience-taking and decreased performance relative to those who read the failure narrative written in the third-person perspective. Previous research into experience-taking has mostly examined positively valenced or somewhat neutral characters. However, the recent study by Kaufman and Libby (2012) showed that increased experience-taking with an introverted character led to participants who also described themselves as more introverted. Though this is not an extremely negatively valenced attribute, it is generally less favored as compared to extraversion in Western cultures (Francis & James, 1996). Therefore, this lends some support to the idea that experience-taking with a character results in adoption of that character’s traits, beliefs, and goals, regardless of valence of that character.

Participants

Participants (n = 125) were recruited from Ohio University’s experimental system and received partial course credit for their participation. Twenty-seven participants were excluded from all analyses4, which left 98 total participants (29 males and 69 females).

4 These participants were excluded for reasons such as experimenter error (e.g. informed consent issues and computer malfunctions) (n = 3), expressing difficulty with the English language (n = 5), having a learning disability (n = 8), not following instructions (n = 8), or scoring 2 standard deviations above the mean on the T1 anagrams (n = 3).
Procedure

First, all participants were seated at computers and given an informed consent. After all participants read and signed the informed consent, the computer instructed them to begin the study. Participants first received instructions informing them how the anagram task worked. All aspects of the anagram task were identical to those used in Study 1 (see Appendix A).

Participants then read one of four narratives depending on condition employing a 2 (Perspective: first vs. third person) X 2 (Character Outcome: success vs. failure) between-participants design. The narrative described a character engaging in an intellectual task measuring verbal ability. In the first-person condition, the narrative was identical to the one employed in Study 1 (except for the added manipulation of success versus failure). The third-person narrative was identical to the first-person narrative except that all instances of the word “I” were replaced with the gender neutral name “Pat” or a gender appropriate pronoun. Participants were asked to identify their gender at the beginning of the study so that males read a narrative describing a male character and females read a narrative describing a female character. In the success condition, the narrative consisted of the same successful character as in Study 1. In the failure condition, the narrative was altered such that the character was described as struggling on the assessment of verbal ability, having low confidence in her performance, and ultimately being unsuccessful at completing the task (see Appendixes F – I for all four versions of the narrative).
After reading the narrative, participants completed a series of different measures. Participants first completed the Experience-Taking Scale (Kaufman & Libby, 2012) (see Appendix C). Next, participants completed an assortment of questions assessing thoughts about the character (including perceived similarity to the character and inspiration received from the character), thoughts about the anagram task as well as the task that the character completed, and questions assessing recall of information from the narrative (see Appendix J). Participants then completed a measure of self-efficacy (Chen, Gully, & Eden, 2001) (see Appendix K) as well as a measure of state self-esteem (Heatherton & Polivy, 1991) (see Appendix L). Finally, participants completed the T2 anagram task (see Appendix A) and responded to a question assessing the perceived difficulty of the task. Participants were then debriefed and thanked for their participation.

Results

As in Study 1, T1 performance scores were calculated by summing the total number of legitimate words created from the ten anagrams that were solved before reading the narrative, and T2 performance scores were calculated by summing the total number of legitimate words created from the ten anagrams that were solved after reading the narrative. T1 and T2 performance scores were then converted to z-scores. Participants were removed if their T1 scores were more than two SDs above the mean ($n = 3$), leaving 122 participants in the final sample. Descriptive statistics for all variables of interest appear in Table 3, and zero-order correlations between all variables of interest appear in Table 4.
Analyses of Non-Performance Variables

A series of 2 ( Perspective: first vs. third) X 2 ( Character Outcome: success vs. failure) ANOVAs were conducted on all variables of interest. These analyses revealed two significant main effects of Perspective: likeability, $F(1, 94) = 4.19, p = .043$, and perceived T2 difficulty, $F(1, 94) = 8.49, p = .004$ (see Table 3 for means). All other main effects of perspective were non-significant (all $Fs < 2.26$, all $ps > .14$). Analyses also revealed significant main effects of Outcome on several variables: inspiration, $F(1, 94) = 27.74, p < .001$, T2 expectations, $F(1, 94) = 10.10, p = .002$, perceived character intelligence, $F(1, 94) = 84.90, p < .001$, perceived character likeability, $F(1, 94) = 4.86, p = .030$, and state self-efficacy, $F(1, 94) = 6.88, p = .010$ (see Table 3 for means). All other main effects of Outcome were non-significant (all $Fs < 3.43$, all $ps > .067$). The Perspective X Outcome interactions were not significant, $Fs < 1$.

Anagram Performance

A Perspective X Outcome ANCOVA was conducted on T2 performance with T1 performance as a covariate. There were no significant main effects of Perspective or Outcome on T2 performance, and the Perspective X Outcome interaction was also non-significant (all $Fs < 1$).

Although the ANCOVA failed to reveal significant effects of Perspective or Outcome on performance, an additional regression analysis was conducted in order to examine whether Perspective moderated any of the correlational relationships between

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5 These variables included perceived likeability of the character, perceived intelligence of the character, self-reported experience-taking, perceived similarity between the self and the character, inspiration derived from reading about the character, state self-esteem, state self-efficacy, T2 performance expectations, T2 performance confidence, and perceived task difficulty (T2).
T2 performance and the predictor variables of experience-taking, similarity, and inspiration. To begin, experience-taking, similarity, and inspiration were centered (Aiken & West, 1991) and then used to create the Perspective X Experience-taking, Perspective X Similarity, and Perspective X Inspiration interaction terms. A hierarchical linear regression was then conducted in which T2 performance served as the criterion variable. T1 performance was entered first, followed by Perspective, Outcome, Experience-taking, Similarity, Inspiration, and the six interaction terms. Both Similarity β = .46, t(85) = 2.13, p = .036, and Inspiration, β = .44, t(85) = 2.22, p = .029, were found to positively predict T2 performance and, moreover, the Perspective X Similarity interaction was also found to be significant, β = -.435, t(85) = -2.13, p = .036. No other effects, including Experience-Taking, were significant. To explore the interaction more closely, separate slope tests in the first-person and third-person perspective conditions were conducted at 1 SD above and below the mean of the similarity variable predicting T2 performance. The slope test in the first-person perspective condition was significant, t(93) = 3.62, p < .001, whereas the slope test in the third-person perspective condition was not, t < 1 (see Figure 2). Thus, it appears that when participants read the narrative from a first-person perspective, increased perceptions of similarity to the story protagonist were associated with better anagram performance, whereas when participants read the narrative from a third-person perspective, similarity perceptions were not at all related to performance.
Figure 2. Interaction between Perspective and Similarity on T2 Performance

Given that experience-taking was not found to significantly predict T2 performance in the preceding regression analysis, a subsequent analysis (Baron & Kenny, 1986) was conducted in order to examine whether similarity mediated the positive relationship between experience taking and T2 performance (see Table 4). In step 1 of the mediation model, the regression of experience-taking on T2 performance while controlling for T1 performance was significant (replicating the results of Study 1), $\beta = .24$, $t(46) = 2.08$, $p = .043$. In step 2 of the mediation model, the regression of experience-taking on the mediator - similarity - was also found to be significant, $\beta = .53$, $t(47) = -4.32$, $p < .001$. Finally, step 3 indicated that whereas similarity predicted T2 performance (controlling for T1 performance), $\beta = .35$, $t(45) = 2.72$, $p = .009$, experience-taking no longer significantly predicted T2 performance, $t < 1$, suggesting full mediation.

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6 A similar mediational analysis was attempted that employed inspiration as a mediator. However, because inspiration was not found to correlate with experience taking on Step 2 ($p = .17$), evidence for mediation was not observed.
Moreover, the results of a Sobel (1982) test indicated that the proportion of variance in T2 performance accounted for by experience-taking was significantly reduced when similarity was controlled for, $z = 2.98, p = .003$.

![Figure 3. Mediation model.](image)

**Discussion**

The purpose of Study 2 was to manipulate experience-taking and character outcome in order to assess their effects on anagram performance. Although no main effects of either Perspective or Outcome were observed, regression analyses indicated that perceptions of experience taking, similarity (to the character) and inspiration (derived from the character’s performance) were positively associated with T2 anagram performance. Moreover, a Perspective X Similarity interaction indicated that when the narrative that participants read was written in the first-person, perceptions of similarity predicted T2 performance, whereas when the narrative that participants read was written in the third-person, perceptions of similarity did not predict T2 performance. Finally, the results provided evidence for a mediation model, such that similarity mediated the
relationship between experience-taking and performance in the first-person perspective condition.

Notably, a similar mediational analysis conducted on the Study 1 data failed to provide evidence for the mediating role of similarity. Conceivably, the relationship between experience-taking and performance may have been stronger in Study 1 than in Study 2 (and, likewise, the relationship between similarity and performance may have been stronger in Study 2 than in Study 1) because the description of the achievement activity completed by the character in the Study 1 narrative was closer (i.e., anagram performance) to the activity completed by participants than was the description of the achievement activity completed by the character in the Study 2 narrative (i.e., a test assessing verbal ability).
GENERAL DISCUSSION

Study 1 provided preliminary evidence for an association between self-reported levels of experience taking and performance. Study 2 attempted to manipulate experience-taking by having participants read a narrative from either a first- or third-person perspective (Kaufman & Libby, 2012), and also sought to examine the differential effects of character outcome (succeeding vs. failing) on participants’ performance. Although neither the perspective-taking manipulation nor the outcome manipulation exerted differential effects on performance, experience taking, similarity and inspiration were found to be positively associated with performance. In addition, similarity was found to predict performance when the narrative was written in the first person, and similarity was also found to mediate the relationship between experience taking and performance among participants assigned to the first-person perspective condition.

Although Study 2 failed to provide evidence for the causal role of experience taking in evoking differential levels of performance, the results of regression and mediation analyses offer support for a model in which experience-taking enhances perceived similarity between self and character and similarity perceptions, in turn, elicit performance enhancement. The challenge for future research, then, will be to specify the mechanisms by which similarity perceptions influence performance and behavior more generally. For example, similarity perceptions may inspire readers to try harder and adopt better task strategies. Research by Mussweiler and colleagues (e.g., Mussweiler, 2003) has demonstrated how engaging in social comparison renders standard-consistent information about the self accessible, and in a similar vein it may be the case that
experience-taking enhances the accessibility of self-aspects that are consistent with aspects of the character. In so doing, success may seem more attainable to readers (Lockwood & Kunda, 1997; Markman & McMullen, 2003). Moreover, the relationship between experience taking and performance was not moderated by character outcome, suggesting that readers can even be inspired by characters that fail. The protagonist in the narratives employed in both studies was described as an intelligent and hard-working individual who was applying for a prestigious academic scholarship. Thus, it seems reasonable that a reader could admire a character that tries hard but fails.

Despite the preceding analysis that argues for links between similarity, attainability, and enhanced performance – the downstream consequences of assimilative effects of comparisons on self-evaluations (e.g., R. L. Collins, 1996; Markman & McMullen, 2003; Mussweiler, 2003) – much of the research that has specifically examined the motivational and behavioral consequences of social comparisons suggests that upward comparisons will only enhance performance to the extent that the result of the comparison has a contrastive effect on self-evaluations. For example, Johnson (2012) reports a series of studies whose results indicate that threatening upward social comparisons that evoke negative affect are most likely to elicit enhanced effort and persistence on subsequent tasks. Likewise, Van de Ven, Zeelenberg, & Pieters (2011) found that reported levels of benign envy (i.e., wishing that you were as good as a comparison other) were more strongly predictive of intentions to improve and subsequent task performance than were reported levels of admiration. Likewise, functional models of counterfactual thinking (e.g., Epstude & Roese, 2008; Markman & McMullen, 2003)
posit that upward counterfactuals will most likely elicit behavioral change to the extent that they elicit negative feelings vis-à-vis a mechanism of affective contrast.

In an effort to understand when mental simulations involving a comparison other are more likely to enhance versus diminish performance via assimilation and contrast, an interesting route for future research might be to directly compare social comparison to experience taking in the same experiment. For example, some participants might read about a fictional character while other participants might read about a non-fictional person (i.e. a real person at their university) and then performance outcomes can be compared. It may be the case that readers are inspired by fictional characters because they represent a nonthreatening other with whom to compare. The reader does not have to be concerned about the fictional other actually “beating” them at the task in real life. Thus, the positive affect and inspiration received from this fictional other may lead to increased performance. On the other hand, comparing to a nonfictional (real) other might be a threatening experience, in that the comparison threatens the reader’s self-views.

A few limitations should be noted with the present studies. First, both studies relied on a short-form narrative as opposed to the more common, long-form (what people typically think of as a book). The short-form was used for pragmatic reasons (as it would be hard to have all participants read an entire novel) as well as because this is typically the type of narrative that is used in this area of research (e.g. Kaufman & Libby, 2012). Even though the narratives are of the short-form, it is interesting to note that the effects of these shorter narratives seem to hold for some time. For example, Kaufman and Libby (2012) found behavioral effects of experience-taking up to two weeks after the
experience-taking had occurred. However, in future studies, researchers could use a long-form narrative in a longitudinal design to examine how experience-taking’s effect changes over the course of reading an entire novel and how long lasting these effects may be.

There were also some limitations specifically with Study 2. For one, the mediational model that found support in Study 2 did not find support in Study 1. Also no differences in experience-taking were found as a function of the perspective or outcome manipulations. A possible reason may be that participants could not help but engage in experience-taking with the character because their situation so mirrored that of the character in the narrative. In previous research that has used the first vs. third person perspective as a manipulation of experience-taking (Kaufman & Libby, 2012), participants were not currently experiencing a situation that was closely mirrored by the situation encountered by the character in the narrative. Future research could examine this possibility by using several narratives that differ in their amount of overlap with the participant’s experience.

Another area for future research would be to examine whether experience-taking can lead to the adoption of negative or even harmful beliefs, goals, traits, and behaviors. For example, if a reader experience-takes with a character that enjoys smoking cigarettes and holds the belief that cigarettes are not harmful, would the reader then adopt those beliefs as well, and possibly even begin smoking herself?

Future research may also examine alternative ways of measuring experience-taking besides the questionnaire developed by Kaufman and Libby (2012). A likely
candidate for this could be the Inclusion of Other in Self (IOS) scale (Aron, Aron, & Smollan, 1992). This scale asks the reader to choose which set of two overlapping circles best represents their relationship with the character. The more the circles overlap, the more the other is included in the self, which could possibly be indicative of greater experience-taking with the character.

Although previous research (Kaufman & Libby, 2012) has shown that there can be behavioral ramifications to engaging in experience-taking, the present research suggests that these behavioral outcomes can occur in performance related domains as well. This supports previously proposed theories (Green, 2005) which state that reading a narrative with a character who has a clear goal and outlines the steps taken to achieve that goal can lead to increases in motivation.

In turn, the present research also has applied significance. These studies suggest that readers who engage in experience-taking with a successful character also increase their own confidence that they can excel similarly. This same process has the potential to be used to encourage children to perform better in an educational setting. It is similar to the idea of using a prosocial model to decrease aggression and encourage cooperation (Bandura, 1971), except it extends this idea to the area of evaluative performance. This research suggests that it may be wise to encourage children to read stories in which the main character is successful at intellectual tasks, thereby encouraging the student to excel herself in that domain. This research also suggests that if an individual is about to take a test or engage in some other type of evaluative activity, it would be a good idea to read a
narrative about a character who excels at a similar task. By engaging in experience-taking, readers can be motivated to work harder and achieve their full potential.
REFERENCES


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doi:10.1207/S1532785XMEP0403_04


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doi:10.1207/s15326950dp3802_5


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### Table 3

*Descriptive Statistics for All Variables of Interest by Condition (Study 2)*

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<tr>
<th>Variables</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Person</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; Person</th>
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<td></td>
<td>Success</td>
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<td>Failure</td>
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<td></td>
<td>(1.19)</td>
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<tr>
<td>Inspiration</td>
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<td>4.91</td>
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<tr>
<td></td>
<td>(1.03)</td>
<td>(1.48)</td>
<td>(1.41)</td>
</tr>
<tr>
<td>Similarity</td>
<td>5.23</td>
<td>5.13</td>
<td>5.13</td>
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<tr>
<td></td>
<td>(1.31)</td>
<td>(1.42)</td>
<td>(1.39)</td>
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<tr>
<td>Performance&lt;sub&gt;1&lt;/sub&gt;</td>
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<td>13.09</td>
<td>15.52</td>
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<tr>
<td></td>
<td>(3.14)</td>
<td>(4.02)</td>
<td>(3.12)</td>
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<tr>
<td>Performance&lt;sub&gt;2&lt;/sub&gt;</td>
<td>11.04</td>
<td>10.91</td>
<td>12.09</td>
</tr>
<tr>
<td></td>
<td>(3.38)</td>
<td>(2.81)</td>
<td>(4.03)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.34</td>
<td>3.49</td>
<td>3.24</td>
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<tr>
<td></td>
<td>(.48)</td>
<td>(.51)</td>
<td>(.65)</td>
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<td>Self-efficacy</td>
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<td></td>
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<td>(.65)</td>
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<tr>
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<tr>
<td></td>
<td>(1.23)</td>
<td>(.99)</td>
<td>(1.44)</td>
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<tr>
<td></td>
<td>(.94)</td>
<td>(.79)</td>
<td>(.96)</td>
</tr>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 1</td>
</tr>
<tr>
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<td>--------</td>
<td>--------</td>
<td>--------</td>
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<td></td>
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<td>(.72)</td>
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<td>Expectation</td>
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<tr>
<td></td>
<td>(.10)</td>
<td>(1.31)</td>
<td>(.90)</td>
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</tbody>
</table>

Note: 1st person success, N = 26, 3rd person success, N = 23, 1st person failure, N = 23, 3rd person failure, N = 26, and Overall, N = 98.
Experience-taking, inspiration and confidence are on a scale of 1 to 9, both time 1 and time 2 performance are the unstandardized scores with time 1 ranging from 0 to 26 and time 2 from 0 to 25, self-esteem and self-efficacy are on a scale of 1 to 5, similarity, likeability, difficulty, expectation, and intelligence are on a scale of 1 to 7.
### Table 4

Zero-Order Correlations Between all Variables of Interest (Study 2)

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
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<th>10.</th>
<th>11.</th>
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<td>1. Perspective</td>
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<td>2. Outcome</td>
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<td>3. Experience-Taking</td>
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<td>-.07</td>
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<td>4. Inspiration</td>
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<td></td>
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<td>5. Similarity</td>
<td>-.02</td>
<td>.02</td>
<td>.55‡</td>
<td>.21*</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
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<td>6. Performance</td>
<td>.05</td>
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<td>.21*</td>
<td>.30‡</td>
<td>.28‡</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Self-esteem</td>
<td>.07</td>
<td>.13</td>
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<td>-.08</td>
<td>1.0</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>8. Self-efficacy</td>
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<td>.26‡</td>
<td>-.06</td>
<td>.17</td>
<td>.04</td>
<td>.05</td>
<td>.65‡</td>
<td>1.0</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Likeability</td>
<td>.19</td>
<td>.21*</td>
<td>.44‡</td>
<td>.29‡</td>
<td>.31‡</td>
<td>.12</td>
<td>.14</td>
<td>.16</td>
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<td></td>
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</tr>
<tr>
<td>10. Difficulty</td>
<td>-.28‡</td>
<td>-.03</td>
<td>.02</td>
<td>-.08</td>
<td>-.05</td>
<td>-.43‡</td>
<td>-.03</td>
<td>.02</td>
<td>.06</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>11. Intelligence</td>
<td>.04</td>
<td>.68‡</td>
<td>.11</td>
<td>.42‡</td>
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<td>.21*</td>
<td>.09</td>
<td>.31‡</td>
<td>.41‡</td>
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<td>12. Expectation</td>
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<td>.05</td>
<td>.22*</td>
<td>.03</td>
<td>.08</td>
<td>.44‡</td>
<td>.40‡</td>
<td>.20*</td>
<td>-.06</td>
<td>.15</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>13. Confidence</td>
<td>( .14 )</td>
<td>( .18 )</td>
<td>( .12 )</td>
<td>( .46^\dagger )</td>
<td>( .10 )</td>
<td>( .27^\dagger )</td>
<td>( .14 )</td>
<td>( .20 )</td>
<td>( .14 )</td>
<td>( -.19 )</td>
<td>( .20^* )</td>
<td>( .12 )</td>
<td>( 1.0 )</td>
</tr>
</tbody>
</table>

* \( p < .05 \)
† \( p < .01 \)
‡ \( p < .001 \)
### APPENDIX A: ANAGRAM TASK

#### Time 1

<table>
<thead>
<tr>
<th>Anagrams</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ilesm</td>
<td>Smile</td>
</tr>
<tr>
<td>anetlm</td>
<td>mental</td>
</tr>
<tr>
<td>hespa</td>
<td>shape</td>
</tr>
<tr>
<td>hrbot</td>
<td>throb</td>
</tr>
<tr>
<td>idfel</td>
<td>field</td>
</tr>
<tr>
<td>veerl</td>
<td>revel</td>
</tr>
<tr>
<td>deriw</td>
<td>weird</td>
</tr>
<tr>
<td>otsh</td>
<td>host</td>
</tr>
<tr>
<td>ailsn</td>
<td>slain</td>
</tr>
<tr>
<td>gwins</td>
<td>swing</td>
</tr>
</tbody>
</table>

#### Time 2

<table>
<thead>
<tr>
<th>Anagrams</th>
<th>Possible Solutions</th>
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</thead>
<tbody>
<tr>
<td>olspo</td>
<td>pools</td>
</tr>
<tr>
<td>leestc</td>
<td>select</td>
</tr>
<tr>
<td>niedm</td>
<td>denim</td>
</tr>
<tr>
<td>sdetre</td>
<td>deters</td>
</tr>
<tr>
<td>hubrs</td>
<td>brush</td>
</tr>
<tr>
<td>erluc</td>
<td>cruel</td>
</tr>
<tr>
<td>rifde</td>
<td>fired</td>
</tr>
<tr>
<td>teslp</td>
<td>slept</td>
</tr>
<tr>
<td>pseur</td>
<td>super</td>
</tr>
<tr>
<td>ipsil</td>
<td>spill</td>
</tr>
</tbody>
</table>
APPENDIX B: ANAGRAM NARRATIVE

A very important test that could have significant consequences for my college career was only minutes away, so I was understandably nervous. I was just starting my journey at Ohio University and did not want to fail at something already. I was about to take a test that would determine whether or not I was eligible for the Smith Foundation Scholarship that would help pay for the rest of my education at the university. Receiving the scholarship would be a huge load off mine (and my parent’s) shoulders; I wouldn’t have to worry about student loans and I could instead, focus all of my attention on succeeding at school so that I could get the best job possible after graduation. Not only that, but I wanted to know that I could pass this test and succeed at something so important.

The test would consist of only one section, anagrams. I had been given a practice test earlier in the day that was somewhat similar to what the actual test would be like. The committee said it was to familiarize myself with the process of completing anagrams but that the anagrams I would see later would be completely different and that I was not allowed to study or practice in between the first and second testing. Because they did not want me studying, I wasn’t told how well I performed on this practice test. So even though I did get to learn what an anagram is and had some practice at solving them, I still had no idea how good I was at it.

The main purpose of the test, so I was told, was to assess my innate skills, without me studying beforehand, hence the reason for the banning of studying. The scholarship committee told me that the test was designed to measure an applicant’s true potential for
success so that the committee could be sure the person they selected to receive the scholarship would excel at Ohio University and beyond, once they entered the workforce.

Regardless of the practice session, I was still extremely nervous going in to the test. I mean, those anagrams could be anything! So I sit down in my cubicle at the testing station and see that the test is going to be given via a computer. One of the members of the committee enters the room and tells me, “Welcome to the Smith Foundation Scholarship Test. Today you will be taking a test of your general aptitude via the computer in front of you. This test was designed so that your score would reflect your general potential to excel in your education and your career beyond. Please take as long as you would like to work on this test and you may leave when you are finished,” and then she left the room. Hmm, I had all the time I wanted. That was surprising news but definitely welcome! It made me feel a little bit better about the whole process but I was still nervous to learn what the test was actually going to consist of.

I clicked the “Begin” button on the computer and was then presented with this text:

Hello, and welcome to the Smith Foundation Scholarship Test. This test has no time limit and you may take as long as you would like.

The test is going to consist of 10 anagrams that you must solve. All anagrams have between 0 and 4 potential perfect answers, please list as many perfect answers for each anagram as you can find.

“Oh no,” I thought, “How will I know if I have found all of the right answers?!” Right then I thought my chances were blown, I had no idea how I was going to find ALL of the
correct answers, there was no way I was going to do well on this test. I clicked the “Continue” button and saw more instructions:

An anagram is a type of word play, the result of rearranging the letters of a word or phrase to produce a new word or phrase, using all the original letters exactly once; for example page can be rearranged into gape. In a correct solution to an anagram, every letter must be used with exactly the same number of occurrences as in the original word or phrase and no other letters may be added. While anagramming is certainly a recreation first, there are ways in which anagrams are put to use, and these can be more serious.

This particular anagram task has been constructed such that it assess your overall potential to excel in the educational domain, which is also related to how you will perform once you graduate and are in your chosen career field. This task is being used today to assess your merit for obtaining the Smith Foundation Scholarship.

Good luck!

Well, that doesn’t seem so bad. I was definitely reassured since I already knew what an anagram was by taking the practice test but I was still nervous knowing that I hadn’t ever seen these particular anagrams before, and was still pretty unsure how to successfully go about solving one. Now was the moment of truth, time to start the task.

I clicked the “Begin” button and the list of anagrams popped up on the screen. I could feel my heart heavily beating in my chest. I scanned down the list, there were 10 anagrams. Without hesitation, I jumped right in and started solving. To my surprise, I felt
like I was doing pretty well. It seemed as though the answers were just coming to me without me having to try very hard at all. I would simply look at the anagram, and the letters would rearrange themselves in my brain to form a completely new word! My confidence began to build as I continued down the list finding every answer I could. “I could do this!” I thought, “I can beat this test!” Anagram after anagram, I solved. Of course, there were a few that didn’t come to me as easily, but after staring at the word for a while, and rearranging the letters in my head as much as possible, a new word would magically appear to me! As I reached the bottom of the list and hit submit I was convinced that I had found all of the perfect answers, I had just aced that test.

One week later, I received an email telling me that I had scored the highest on the anagram test out of any of the applicants and was chosen as the recipient of the Smith Foundation Scholarship at Ohio University. I was so excited! I had done it!
APPENDIX C: EXPERIENCE-TAKING SCALE

Rate the extent to which you agree with the following statements about how you felt while reading the story. Circle the number that corresponds to your response for each item.

1. I felt like I could put myself in the shoes of the character in the story.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

2. I found myself thinking what the character in the story was thinking.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

3. I found myself feeling what the character in the story was feeling.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

4. I could empathize with the situation of the character in the story.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

5. I understood the events of the story as though I were the character in the story.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

6. I was not able to get inside the character’s head.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree

7. At key moments in the story, I felt I knew what the character was going through.
   1 2 3 4 5 6 7 8 9
   Strongly Disagree
   Strongly Agree
APPENDIX D: TRANSPORTATION SCALE

1. While I was reading the narrative, I could easily picture the events in it taking place.
   
   1 2 3 4 5 6 7
   Not at all     Very much

2. While I was reading the narrative, activity going on in the room around me was on my mind.
   
   1 2 3 4 5 6 7
   Not at all     Very much

3. I could picture myself in the scene of the events described in the narrative.
   
   1 2 3 4 5 6 7
   Not at all     Very much

4. I was mentally involved in the narrative while reading it.
   
   1 2 3 4 5 6 7
   Not at all     Very much

5. After finishing the narrative, I found it easy to put it out of my mind.
   
   1 2 3 4 5 6 7
   Not at all     Very much

6. I wanted to learn how the narrative ended.
   
   1 2 3 4 5 6 7
   Not at all     Very much

7. The narrative affected me emotionally.
   
   1 2 3 4 5 6 7
   Not at all     Very much

8. I found myself thinking of ways the narrative could have turned out differently.
   
   1 2 3 4 5 6 7
   Not at all     Very much

9. I found my mind wandering while reading the narrative.
   
   1 2 3 4 5 6 7
   Not at all     Very much

10. The events in the narrative are relevant to my everyday life.
    
    1 2 3 4 5 6 7
    Not at all     Very much
11. The events in the narrative have changed my life.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>
APPENDIX E: RECALL AND CONFIDENCE (STUDY 1)

1. **What was the name of the university that the character attends?**

2. **How well do you think you will perform on a task similar to the one the character completed (i.e. the anagram task)?**

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<tr>
<th>1</th>
<th>2</th>
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<th>4</th>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

3. **Why was the character taking the test?**

4. **How confident are you that you will perform well at the same task the character completed (i.e. the anagram task)?**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>Very Well</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

5. **What is an anagram?**

6. **How did the character do on the test?**
APPENDIX F: FIRST PERSON SUCCESS NARRATIVE

A very important test that could have significant consequences for my college career was only minutes away, so I was understandably nervous. I was about to take a test that would determine whether I was eligible for the Smith Foundation Scholarship that would help pay for the rest of my education at the university. Receiving the scholarship would be a huge load off mine (and my parent’s) shoulders; I would not have to worry about student loans and I could instead, focus all of my attention on succeeding at school so that I could get the best job possible after graduation. Not only that, but I wanted to know that I could pass this test and succeed at something so important.

The test would consist of only one section that would assess some aspect of my intellectual ability. I had been given a practice test earlier in the day that was somewhat similar to what the actual test would be like. This helped me familiarize myself with the process of answering the questions and type of content that may be covered. I was also informed that the questions I would see later would be completely different and would cover only one area. I was not allowed to study or practice in between the first and second testing. Because they did not want me studying, I was not told how well I performed on this practice test. Therefore, even though I did get to learn what the questions would be like and had some practice at solving them, I still had no idea how good I was at it.

The main purpose of the test, so I was told, was to assess my innate skills, without me studying beforehand, hence the reason for the banning of studying. The scholarship committee told me that the test was designed to measure an applicant’s true potential for
success so that the committee could be sure the person they selected to receive the scholarship would excel at the university and beyond, once they entered the workforce.

Regardless of the practice session, I was still extremely nervous going in to the test. I mean, those questions could be anything! The time arrives. I sit down in my cubicle at the testing station and see that the test is going to be given via a computer. One of the members of the committee enters the room and tells me, “Welcome to the Smith Foundation Scholarship Test. Today you will be taking a test of your general aptitude via the computer in front of you. This test was designed so that your score would reflect your general potential to excel in your education and your career beyond. Please take as long as you would like to work on this test and you may leave when you are finished,” and then she left the room. Hmm, I had all the time I wanted. That was surprising news but definitely welcome! It made me feel a little bit better about the whole process but I was still nervous to learn what the test was actually going to consist of.

I clicked “Continue” on the screen and then saw this text:

Hello, and welcome to the Smith Foundation Scholarship Test. This test has no time limit and you may take as long as you would like.

The test is going to consist of 10 questions assessing verbal ability that you must answer. All questions have only one right answer; please answer all questions to the best of your ability.

“Oh no,” I thought, “Only one right answer?! Verbal ability?!” Right then I thought my chances were blown, I had no idea how I was going to figure out the correct answers,
there was no way I was going to do well on this test. I clicked the “Continue” button and saw more instructions:

These verbal questions will be similar to those you saw earlier on the practice test but will cover different material. This particular intellectual task has been constructed such that it assess your overall potential to excel in the educational domain, which is also related to how you will perform once you graduate and are in your chosen career field. This task is being used today to assess your merit for obtaining the Smith Foundation Scholarship.

Good luck!

I was starting to think that maybe I could do this. I was definitely reassured since I already knew what the questions sort-of looked like by taking the practice test but I was still nervous knowing that I had not ever seen these particular questions before, and was still pretty unsure how to successfully go about answering them. Now was the decisive moment, time to start the task.

I clicked the “Begin” button and the questions popped up on the screen. I could feel my heart heavily beating in my chest. I scanned down the list of questions and there were 10 of them. Without hesitation, I jumped right in and started answering. It was a little difficult at first but to my surprise, it started seemed as though the answers were just coming to me without me having to try very hard at all. I would simply read the question, and the answer would appear in my brain! I felt like I was doing pretty well. My confidence began to build as I continued down the list coming up with every answer I could. “I can do this!” I thought, “I can beat this test!” Question after question, I
answered. Of course, there were a few that didn’t come to me as easily, but after staring at the question for a while, and thinking hard, the answer would magically appear to me! As I reached the bottom of the list and hit submit I felt very confident that I had answered most of the questions correctly. I gave myself a mental pat on the back and thought, “You did it!”

One week later, I received an email informing me that I had received the highest score out of the applicants and I was chosen as the recipient of the Smith Foundation Scholarship. I was just starting my college career and I did not want to fail at something already. I was very motivated to succeed in everything I did. I was so excited! I had done it!
APPENDIX G: THIRD PERSON SUCCESS NARRATIVE

A very important test that could have significant consequences for Pat’s college career was only minutes away, so she/he was understandably nervous. She/he was just starting her/his college career and did not want to fail at something already. Pat was very motivated to succeed in everything she/he did. She/he was about to take a test that would determine whether she/he was eligible for the Smith Foundation Scholarship that would help pay for the rest of her/his education at the university. Receiving the scholarship would be a huge load off her/his (and her/his parent’s) shoulders; she/he would not have to worry about student loans and could instead, focus all of her/his attention on succeeding at school to be able to get the best job possible after graduation. Not only that, but she/he wanted to know that she/he could pass this test and succeed at something so important.

The test would consist of only one section that would assess some aspect of her/his intellectual ability. She/he had been given a practice test earlier in the day that was somewhat similar to what the actual test would be like. This helped familiarize her/him with the process of answering the questions and the type of content that may be covered. She/he was also informed that the questions she/he would see later would be completely different and would cover only one area. Pat was not allowed to study or practice in between the first and second testing. Because they did not want people to study, Pat was not told how well she/he performed on this practice test. Therefore, even though she/he did get to learn what the questions would be like and had some practice at solving them, she/he still had no idea how good she/he was at it.
The main purpose of the test was to assess innate skills, without studying beforehand, hence the reason for the banning of studying. The scholarship committee said the test was designed to measure an applicant’s true potential for success so that the committee could be sure the person they selected to receive the scholarship would excel at the university and beyond, once they entered the workforce.

Regardless of the practice session, Pat was still extremely nervous going in to the test. Those questions could be anything! The time arrives. Pat sits down in the cubicle at the testing station and sees that the test is going to be given via a computer. One of the members of the committee enters the room and tells Pat, “Welcome to the Smith Foundation Scholarship Test. Today you will be taking a test of your general aptitude via the computer in front of you. This test was designed so that your score would reflect your general potential to excel in your education and your career beyond. Please take as long as you would like to work on this test and you may leave when you are finished,” and then she left the room. Pat had all the time she/he wanted. That was surprising news but definitely welcome! It made Pat feel a little bit better about the whole process but she/he was still nervous to learn what the test was actually going to consist of.

Pat clicked “Continue” on the screen and then saw this text:

Hello, and welcome to the Smith Foundation Scholarship Test. This test has no time limit and you may take as long as you would like.

The test is going to consist of 10 questions assessing verbal ability that you must answer. All questions have only one right answer; please answer all questions to the best of your ability.
“Oh no,” Pat thought, “Only one right answer?! Verbal ability?!” Right then Pat thought her/his chances were blown, she/he had no idea how to figure out the correct answers, there was no way she/he was going to do well on this test. Pat clicked the “Continue” button and saw more instructions:

*These verbal questions will be similar to those you saw earlier on the practice test but will cover different material. This particular intellectual task has been constructed such that it assess your overall potential to excel in the educational domain, which is also related to how you will perform once you graduate and are in your chosen career field. This task is being used today to assess your merit for obtaining the Smith Foundation Scholarship.*

Good luck!

Pat was definitely reassured since she/he already knew what the questions sort-of looked like by taking the practice test but she/he was still nervous knowing that she/he had not ever seen these particular questions before, and was still pretty unsure how to successfully go about answering them. Now was the decisive moment, time to start the task.

Pat clicked the “Begin” button and the questions popped up on the screen. Pat could feel her/his heart heavily beating in her/his chest. She/he scanned down the list of questions and there were 10 of them. With a little hesitation, Pat jumped right in and started answering. Pat found it to be difficult at first but to her/his surprise, it started seemed as though the answers were just coming to her/him without having to try very hard at all. Pat would simply read the question, and the answer would appear in her/his
brain! She/he felt like she/he was doing pretty well. Pat’s confidence began to build as she/he continued down the list coming up with every answer she/he could. Pat thought she/he could do this. She/he might be able to beat the test. Question after question, Pat answered. Of course, there were a few that didn’t come to her/him as easily, but after staring at the question for a while, and thinking hard, the answer would magically appear! As Pat reached the bottom of the list and hit submit she/he felt very confident that she/he had answered most of the questions correctly. Pat gave her/himself a mental pat on the back felt she/he had done well.

One week later, Pat received an email informing her/him that she/he had received a the highest score and was chosen as the recipient of the Smith Foundation Scholarship. Pat was so excited! She/he had done it!
APPENDIX H: FIRST PERSON FAILURE NARRATIVE

A very important test that could have significant consequences for my college career was only minutes away, so I was understandably nervous. I was about to take a test that would determine whether I was eligible for the Smith Foundation Scholarship that would help pay for the rest of my education at the university. Receiving the scholarship would be a huge load off mine (and my parent’s) shoulders; I would not have to worry about student loans and I could instead, focus all of my attention on succeeding at school so that I could get the best job possible after graduation. Not only that, but I wanted to know that I could pass this test and succeed at something so important.

The test would consist of only one section that would assess some aspect of my intellectual ability. I had been given a practice test earlier in the day that was somewhat similar to what the actual test would be like. This helped me familiarize myself with the process of answering the questions and type of content that may be covered. I was also informed that the questions I would see later would be completely different and would cover only one area. I was not allowed to study or practice in between the first and second testing. Because they did not want me studying, I was not told how well I performed on this practice test. Therefore, even though I did get to learn what the questions would be like and had some practice at solving them, I still had no idea how good I was at it.

The main purpose of the test, so I was told, was to assess my innate skills, without me studying beforehand, hence the reason for the banning of studying. The scholarship committee told me that the test was designed to measure an applicant’s true potential for
success so that the committee could be sure the person they selected to receive the scholarship would excel at the university and beyond, once they entered the workforce.

Regardless of the practice session, I was still extremely nervous going in to the test. I mean, those questions could be anything! The time arrives. I sit down in my cubicle at the testing station and see that the test is going to be given via a computer. One of the members of the committee enters the room and tells me, “Welcome to the Smith Foundation Scholarship Test. Today you will be taking a test of your general aptitude via the computer in front of you. This test was designed so that your score would reflect your general potential to excel in your education and your career beyond. Please take as long as you would like to work on this test and you may leave when you are finished,” and then she left the room. Hmm, I had all the time I wanted. That was surprising news but definitely welcome! It made me feel a little bit better about the whole process but I was still nervous to learn what the test was actually going to consist of.

I clicked “Continue” on the screen and then saw this text:

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“Oh no,” I thought, “Only one right answer?! Verbal ability?!” Right then I thought my chances were blown, I had no idea how I was going to figure out the correct answers,
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Good luck!

I was definitely reassured since I already knew what the questions sort-of looked like by taking the practice test but I was still nervous knowing that I had not ever seen these particular questions before, and was still pretty unsure how to successfully go about answering them. Now was the decisive moment, time to start the task.

I clicked the “Begin” button and the questions popped up on the screen. I could feel my heart heavily beating in my chest. I scanned down the list of questions and there were 10 of them. With a little hesitation, I jumped right in and started answering. It was difficult! The answers just would not come to me even though I was trying very hard. I would read the question, and draw a complete blank! I felt like I was doing pretty badly. My confidence began to drop as I continued down the list coming up with only a few answers. “I don’t know if I can do this!” I thought, “I might not beat this test!” Question after question, I tried to answer. Of course, there were a few that didn’t come to me at first, and after staring at the question for a while, and thinking hard, I still could just not
come up with the answer. As I reached the bottom of the list and hit submit I did not feel very confident that I had answered most of the questions correctly. I gave myself a mental pat on the back and thought, “I guess you did the best you could!”

One week later, I received an email informing me that I had received a fairly low score and I was not chosen as the recipient of the Smith Foundation Scholarship. I was just starting my college career and I did not want to fail at something already. I was very motivated to succeed in everything I did. I was so disappointed! I had blown it!
APPENDIX I: THIRD PERSON FAILURE NARRATIVE

A very important test that could have significant consequences for Pat’s college career was only minutes away, so she/he was understandably nervous. She/he was just starting her/his college career and did not want to fail at something already. Pat was very motivated to succeed in everything she/he did. She/he was about to take a test that would determine whether she/he was eligible for the Smith Foundation Scholarship that would help pay for the rest of her/his education at the university. Receiving the scholarship would be a huge load off her/his (and her/his parent’s) shoulders; She/he would not have to worry about student loans and could instead, focus all of her/his attention on succeeding at school to be able to get the best job possible after graduation. Not only that, but she/he wanted to know that she/he could pass this test and succeed at something so important.

The test would consist of only one section that would assess some aspect of her/his intellectual ability. She/he had been given a practice test earlier in the day that was somewhat similar to what the actual test would be like. This helped familiarize her/him with the process of answering the questions and the type of content that may be covered. She/he was also informed that the questions she/he would see later would be completely different and would cover only one area. Pat was not allowed to study or practice in between the first and second testing. Because they did not want people to study, Pat was not told how well she/he performed on this practice test. Therefore, even though she/he did get to learn what the questions would be like and had some practice at solving them, she/he still had no idea how good she/he was at it.
The main purpose of the test was to assess innate skills, without studying beforehand, hence the reason for the banning of studying. The scholarship committee said the test was designed to measure an applicant’s true potential for success so that the committee could be sure the person they selected to receive the scholarship would excel at the university and beyond, once they entered the workforce.

Regardless of the practice session, Pat was still extremely nervous going in to the test. Those questions could be anything! The time arrives. Pat sits down in the cubicle at the testing station and sees that the test is going to be given via a computer. One of the members of the committee enters the room and tells Pat, “Welcome to the Smith Foundation Scholarship Test. Today you will be taking a test of your general aptitude via the computer in front of you. This test was designed so that your score would reflect your general potential to excel in your education and your career beyond. Please take as long as you would like to work on this test and you may leave when you are finished,” and then she left the room. Pat had all the time she/he wanted. That was surprising news but definitely welcome! It made Pat feel a little bit better about the whole process but she/he was still nervous to learn what the test was actually going to consist of.

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“Oh no,” Pat thought, “Only one right answer?! Verbal ability?!” Right then Pat thought her/his chances were blown, she/he had no idea how to figure out the correct answers, there was no way she/he was going to do well on this test. Pat clicked the “Continue” button and saw more instructions:

**These verbal questions will be similar to those you saw earlier on the practice test but will cover different material. This particular intellectual task has been constructed such that it assess your overall potential to excel in the educational domain, which is also related to how you will perform once you graduate and are in your chosen career field. This task is being used today to assess your merit for obtaining the Smith Foundation Scholarship.**

*Good luck!*

Pat was definitely reassured since she/he already knew what the questions sort-of looked like by taking the practice test but she/he was still nervous knowing that she/he had not ever seen these particular questions before, and was still pretty unsure how to successfully go about answering them. Now was the decisive moment, time to start the task.

Pat clicked the “Begin” button and the questions popped up on the screen. Pat could feel her/his heart heavily beating in her/his chest. She/he scanned down the list of questions and there were 10 of them. With a little hesitation, Pat jumped right in and started answering. She/he found it to be difficult! The answers just would not come to her/him even though she/he was trying very hard. Pat would read the question, and draw a complete blank! Pat felt like she/he was doing pretty badly. Pat’s confidence began to
drop as she/he continued down the list coming up with only a few answers. Pat didn’t know if she/he could do this. She/he might not be able to beat this test. Question after question, Pat tried to answer. Of course, there were a few that didn’t come to her/him at first, and after staring at the question for a while, and thinking hard, she/he still could just not come up with the answer. As Pat reached the bottom of the list and hit submit she/he did not feel very confident that she/he had answered most of the questions correctly. Pat gave her/himself a mental pat on the back and felt she/he did the best she/he could.

One week later, Pat received an email informing her/him that she/he had received a fairly low score and was not chosen as the recipient of the Smith Foundation Scholarship. Pat was so disappointed! She/he had blown it!
APPENDIX J: RECALL AND ASSORTED QUESTIONS (PROPOSED STUDY 2)

1. I feel that I am similar to the character in the story.
   
   1  2  3  4  5  6  7
   Strongly Disagree  Strongly Agree

2. In the narrative, the character completed a test, what was the test measuring?

3. How well do you think you would perform on a task similar to the one that the character completed?
   
   1  2  3  4  5  6  7
   Not well at all Very well

4. How likeable do you find the character in the narrative?
   
   1  2  3  4  5  6  7
   Not at all Very likeable

5. Why was the character taking the test?

6. How intelligent do you think the character is?
   
   1  2  3  4  5  6  7
   Not at all Very intelligent

7. Reading about the character in the narrative made me feel…
   
   -4 -3 -2 -1 0 +1 +2 +3 +4
   Very uninspired Somewhat uninspired Neither inspired or uninspired Somewhat inspired Very inspired

8. How did the character in the narrative do on the test?

9. Compared to how you performed on the first set of anagrams, how do you think you will perform on the second set of anagrams?
   
   -4 -3 -2 -1 0 +1 +2 +3 +4
   Much worse Somewhat worse The same Somewhat better Much better
APPENDIX K: SELF-EFFICACY SCALE

1. I will be able to achieve most of the goals that I have set for myself.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

2. When facing difficult tasks, I am certain that I will accomplish them.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

3. In general, I think that I can obtain outcomes that are important to me.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

4. I believe I can succeed at most endeavors to which I set my mind.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

5. I will be able to successfully overcome many challenges.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

6. I am confident that I can perform effectively on many different tasks.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

7. Compared to other people, I can do most tasks very well.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree

8. Even when things are tough, I can perform quite well.
   1 2 3 4 5
   Strongly Disagree  Strongly Agree
APPENDIX L: STATE SELF-ESTEEM SCALE

This is a questionnaire designed to measure what you are thinking at this moment. There is, of course, no right answer for any of the statements. The best answer is what you feel is true of yourself at this moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions as they are true for you RIGHT NOW.

1. I feel confident in my abilities.

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

2. I feel frustrated or rattled about my performance. (R)

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

3. I feel that I am having trouble understanding things that I read. (R)

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

4. I feel as smart as others.

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

5. I feel confident that I understand things.

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

6. I feel that I have less scholastic ability right now than others. (R)

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely

7. I feel like I’m not doing well. (R)

   1  2  3  4  5
   Not at all  A little bit  Somewhat  Very much  Extremely