

Changing Beliefs and Behavior Through Experience-Taking

Geoff F. Kaufman
Dartmouth College

Lisa K. Libby
Ohio State University

The present research introduces the concept of experience-taking—the imaginative process of spontaneously assuming the identity of a character in a narrative and simulating that character’s thoughts, emotions, behaviors, goals, and traits as if they were one’s own. Six studies investigated the degree to which particular psychological states and features of narratives cause individuals, without instruction, to engage in experience-taking and investigated how the merger between self and other that occurs during experience-taking produces changes in self-judgments, attitudes, and behavior that align with the character’s. Results from Studies 1–3 showed that being in a reduced state of self-concept accessibility while reading a brief fictional work increased—and being in a heightened state of self-concept accessibility decreased—participants’ levels of experience-taking and subsequent incorporation of a character’s personality trait into their self-concepts. Study 4 revealed that a first-person narrative depicting an ingroup character elicited the highest levels of experience-taking and produced the greatest change in participants’ behavior, compared with versions of the narrative written in 3rd-person voice and/or depicting an outgroup protagonist. The final 2 studies demonstrated that whereas revealing a character’s outgroup membership as a homosexual or African American early in a narrative inhibited experience-taking, delaying the revelation of the character’s outgroup identity until later in the story produced higher levels of experience-taking, lower levels of stereotype application in participants’ evaluation of the character, and more favorable attitudes toward the character’s group. The implications of these findings in relation to perspective-taking, self–other overlap, and prime-to-behavior effects are discussed.

Keywords: mental simulation, fictional narratives, self–other overlap, persuasion, stereotypes and prejudice

In a very real sense, people who have read good literature have lived more than people who cannot or will not read. It is not true that we have only one life to lead; if we can read, we can live as many more lives and as many kinds of lives as we wish. (Hayakawa, 1990, p. 84)

Reflecting on the central role of life experiences in shaping one’s self-concept, attitudes, and behaviors, Hayakawa (1990) suggested that literature has the ability to produce profound changes in individuals by affording them the experience of an almost infinite number of alternative lives and personas. To adapt

a phrase from William James (1890), a reader could essentially have as many social selves as there are characters who inhabit narrative worlds. Does literature really hold such potential? Does exposure to the lives and experiences of protagonists in narratives have the power to transform an individual so dramatically?

Without question, our encounters with characters in fiction present us with a diverse array of personalities, perspectives, events, outcomes, and realizations. In transporting us to another place and time, literature allows us to imagine ourselves as characters who possess personality traits that are distinct from our own (such as the intellectual prowess of Sherlock Holmes or the gregariousness and pluck of the titular heroine in *Anne of Green Gables*) or who engage in actions or hold ideals that we often aspire to achieve (e.g., Tom Sawyer or Atticus Finch in *To Kill a Mockingbird*). Moreover, works of fiction often let us experience the life journeys of people from backgrounds and identity groups quite different from our own, opening our eyes and minds to the unique struggles and triumphs of individuals we may not otherwise have the opportunity or inclination to encounter in our daily lives. For example, *The Color Purple* offered Caucasian readers the chance to see and experience the world through the eyes of its African American characters, and *Brokeback Mountain* allowed many heterosexual readers to step into the shoes—or rather, boots—of a pair of conflicted homosexual cowboys.

This article was published Online First March 26, 2012.

Geoff F. Kaufman, Tiltfactor Laboratory, Department of Film & Media Studies, Dartmouth College; Lisa K. Libby, Department of Psychology, Ohio State University.

This research was facilitated by a National Science Foundation Graduate Research Fellowship provided to Geoff F. Kaufman. We thank members of the Social Cognition Research Group, the Group for Attitudes and Persuasion, and the Narrative Research Group at Ohio State University, as well as Jonathan Cohen, for their valuable feedback on previous presentations of this work.

Correspondence concerning this article should be addressed to Geoff F. Kaufman, Tiltfactor Laboratory, Department of Film & Media Studies, Dartmouth College, HB 6194, 303 North Fairbanks, Hanover, NH 03755. E-mail: geoff.kaufman@dartmouth.edu

This immersive phenomenon of simulating the mindset and persona of a protagonist is what we refer to as experience-taking. Through experience-taking, readers lose themselves and assume the identity of the character, adopting the character's thoughts, emotions, goals, traits, and actions and experiencing the narrative as though they were that character (see also Cohen, 2001; Livingstone, 1998; Mar & Oatley, 2008; and Oatley, 1995). As powerful and transformative as experience-taking might be, however, it is by no means an inevitable occurrence when reading a narrative. To live different lives and to experience novel personas through narratives require that we go beyond positioning ourselves as mere spectators of the events and connect to characters to such an extent that we instead step into their proverbial shoes and experience the story from their perspective, in essence imagining ourselves becoming those characters while we remain immersed in the world of the narrative.

Some narratives and the characters that inhabit them seem to have more potential than others to encourage the process of experience-taking; likewise, readers themselves, depending on their psychological state while reading a story, might be more or less inclined to simulate the subjective experience of a character. In the present research, we take the first steps to explore the factors that either facilitate or impede experience-taking as well as to demonstrate the powerful impact that experience-taking has on readers' self-concepts, goals, and actions. In the process, we aim to distinguish experience-taking from other, related interpersonal processes, such as perspective-taking, self-expansion, and vicarious experience, in terms of both its phenomenology and its implications and consequences for individuals.

Defining Experience-Taking

We propose that when experience-taking occurs, readers simulate the events of a narrative as though they were a particular character in the story world, adopting the character's mindset and perspective as the story progresses rather than orienting themselves as an observer or evaluator of the character (see Oatley, 1999). In the process, readers let go of key components of their own identity—such as their beliefs, memories, personality traits, and ingroup affiliations—and instead assume the identity of a protagonist, accepting the character's decisions, outcomes, and reactions as their own. Consequently, we predict that the greater the ability of a narrative to evoke experience-taking—and the greater the ability of a reader to simulate the subjective experience of a character—the greater the potential that story has to change the reader's self-concept, attitudes, and behavior.

With its focus on how one's exposure to others' actions or experiences can transform the self and, more specifically, how the lines between self and other can become blurred, the concept of experience-taking is related to (but, we argue, distinct from) a number of other social psychological phenomena. For example, prior work has shown that observations of the actions of a target other, particularly an individual with whom one feels an affinity or a sense of shared identity, can lead individuals to change their own beliefs or behaviors. Observing a liked or admired individual (such as member of a valued ingroup) engaging in attitude-inconsistent behaviors can trigger vicarious dissonance and motivate individuals to change their own attitudes to alleviate the resulting unease they experience (Cooper & Hogg, 2007; Norton, Monin, Cooper,

& Hogg, 2003). Likewise, the experience or recognition of a merged identity with another individual can allow for vicarious self-perception, through which observing a target other can lead individuals to infer that they themselves possess traits or tendencies implied by the other's actions (Goldstein & Cialdini, 2007), and *vicarious ego-depletion*, by which observing another person engaging in actions that require a high level of self-control reduces individuals' own subsequent level of willpower (Ackerman, Goldstein, Shapiro, & Bargh, 2009).

Although it shares with these phenomena a focus on the identity merger that can occur between self and other, experience-taking differs from these forms of vicarious experience in at least one crucial respect: Whereas these processes position the relevant target other as an entity that is separate from the self, experience-taking requires that individuals completely transcend self–other boundaries to become the other. To illustrate, vicarious dissonance has been shown to result from witnessing a liked other, such as a member of one's ingroup, behave inconsistently (e.g., listening to ingroup members freely express views that run counter to their beliefs: Norton et al., 2003). Likewise, vicarious self-perception and vicarious ego-depletion have been triggered by manipulations intended to emphasize the similarity between the self and a target other, such as a comparison of one's brain wave patterns and those of another individual (Goldstein & Cialdini, 2007) or explicit instructions to try to imagine what another person is thinking or feeling (Ackerman et al., 2009). In contrast, experience-taking does not rely on orienting the other as a target for scrutiny or comparison but rather entails the spontaneous replacement of self with other.

The notion of self–other merging is important in other phenomena as well. For example, prior research has revealed that increased closeness and connectedness in friendships and romantic relationships often result in a greater degree of self-expansion, or overlap in individuals' mental representation of themselves and their relationship partners (Aron & Aron, 1986; Aron, Aron, & Smollan, 1992; Aron, Aron, Tudor, & Nelson, 1991). The idea that individuals incorporate aspects of others into their own self-concept has also been the crux of work investigating the link between empathy and altruism (e.g., Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Piliavin, Dovidio, Gaertner, & Clark, 1981). However, in these cases, the merger between self and other is additive, such that the merged identity incorporates elements from both the self and the other. In contrast, we propose that experience-taking requires that readers temporarily cast aside their own identities and simulate story events through the identity of the protagonist.

In this sense, experience-taking is also conceptually distinct from perspective-taking, as it has been defined in previous work (e.g., M. H. Davis, Conklin, Smith, & Luce, 1996; Galinsky & Moskowitz, 2000). This work has shown that perspective-taking involves a reliance on one's conceptual knowledge of the self to reason how another person might be responding to or experiencing a particular situation or event. Indeed, previous studies have consistently shown that perspective-taking increases the activation of individuals' self-concept and that this heightened activation of the self mediates the effects of perspective-taking on self–other overlap (e.g., M. H. Davis et al., 1996). Other work has revealed that perspective-taking involves first anchoring on one's own perceptions or judgments and adjusting away from the self to surmise the

other's experience (e.g., Epley, Keysar, Van Boven, & Gilovich, 2004). Thus, the process of perspective-taking utilizes the self-concept as a starting point in estimating the other's point of view. In contrast, we propose that experience-taking depends on the relinquishing of the self-concept, which should facilitate the assumption of the other's thoughts, feelings, and traits. Thus, we predict that experience-taking is fostered by a reduction rather than an increase in the activation of the self-concept.

The present research aims to investigate these unique features of experience-taking as a phenomenological experience and to demonstrate the impact that experience-taking has on readers. To this end, the studies to be reported address two fundamental questions. First, are there particular psychological states of readers and features of a narrative and its characters that are especially likely to foster experience-taking? Specifically, we focus on the key role played by the readers' level of self-concept accessibility (Studies 1–3) and the characters' group membership (Studies 4–6) in determining the readers' level of experience-taking. Second, what are the consequences of simulating the subjective experience of a character for readers' identities, beliefs, and behaviors? Addressing these key issues marks a crucial first step toward validating the conceptualization of experience-taking that is guiding our work and revealing the important, but heretofore untested, implications of experience-taking for changing readers' minds and hearts.

Antecedents of Experience-Taking

Factors related to readers themselves—in particular, their cognitive or emotional state upon entering a narrative world—as well as factors central to the narrative and its characters, should both serve to facilitate or block experience-taking. In the present research, we investigated the role of several such factors related to readers (namely, the level of accessibility of their self-concepts) and the narrative (narrative voice and the group membership of the character) as likely antecedents to experience-taking.

Readers' Self-Concept Accessibility

A central component of experience-taking is the process of “letting go” of one's own identity and imagining oneself having the character's subjective experiences. Thus, it stands to reason that the extent to which one's personal identity is salient when reading a work of fiction would be a crucial determinant of the occurrence of experience-taking: being in a state of reduced self-concept accessibility should promote higher levels of experience-taking by making it easier for readers to “forget” themselves and simulate the experience of a character. Conversely, being in a state of heightened self-concept accessibility should make it more difficult for readers to relinquish their identities and engage in experience-taking. We tested these compatible hypotheses by investigating the relationship between chronic self-consciousness and experience-taking (Study 1) as well as the effect on experience-taking of manipulations that place individuals in a temporarily reduced (Study 2) or heightened (Study 3) state of self-concept accessibility.

Narrative Voice

The voice of a narrative—that is, the perspective from which the narrative is relayed to readers—is perhaps the most fundamental

feature of a short story or novel, with most narratives utilizing either first-person voice, in which a central character narrates the story from his or her point of view, or third-person voice, in which an observer of the characters and events serves as the narrator. We expected that first-person narratives, by virtue of creating a more immediate sense of closeness and familiarity to the main character, would be more conducive to experience-taking than would third-person narratives, which explicitly position protagonists as separate entities (and, in our view, are more likely to position readers as spectators). However, we predicted that first-person narration would be a necessary but not sufficient factor to increase experience-taking and that additional features of the narrative would be needed to invite readers to simulate the subjective experience of a character.

Shared Group Membership Between Reader and Character

One such factor that we predicted would promote experience-taking when combined with first-person voice is the group membership of the character. We predicted that a story written in first-person voice that depicts a character who shares a relevant group membership with readers would most effectively bridge the psychological gap between the reader and the character by establishing a foundation of immediate familiarity and assumed similarity (e.g., in terms of daily life experiences) that would make it easier for readers to simulate the character's experience. Thus, we hypothesized that a story using first-person narration and featuring a main character who is a member of a salient and relevant ingroup would elicit higher levels of experience-taking in readers than would versions of the same story that fail to satisfy one or both of these essential criteria. We tested this prediction in Study 4 by manipulating both the narrative voice and the university affiliation of the main character (to match or mismatch with readers').

To the extent our prediction is correct, it suggests limits on the ability of narratives to expand readers' scope of experience. In the final two studies, we tested a strategy to overcome this potential limitation. Specifically, we predicted that delaying the revelation of a character's outgroup status in a narrative that otherwise encouraged experience-taking would allow readers to experientially merge with an outgroup member. To test this hypothesis we manipulated the sexual orientation (Study 5) and race (Study 6) of the main character—as well as the timing of that revelation.

Consequences of Experience-Taking

In all of the studies to be reported, we also investigated several key consequences of experience-taking. Part and parcel of our conceptualization of experience-taking is the idea that it entails adopting the character's mindset, goals, and behaviors as if they were one's own, which results in the internalization of those attributes. Thus, we predict that the more readers engage in experience-taking, the more likely they would be to ascribe the protagonist's personality traits to themselves, to share the character's attitudes, beliefs, and goals, and to enact the same behaviors performed by the character.

In the first three studies, we tested the effect of experience-taking on readers' self-concepts, in particular the extent to which they took on a salient personality trait of the character (namely,

introversion versus extroversion). In Study 4, we sought to show that higher levels of experience-taking with a character who voted on Election Day would increase the readers' subsequent voting behavior. In Studies 5 and 6, we explored the possibility that a higher degree of experience-taking with a homosexual or an African American character (by heterosexual and Caucasian participants) would produce lower levels of stereotyping and prejudice toward the character and his group. Taken together, these predicted results would show that experience-taking could be effectively—and sometimes strategically—harnessed to promote changes in readers' goals, attitudes, and behaviors, in order to achieve socially beneficial ends.

Overview of Studies 1–3

As a reader, I find myself only by losing myself.—Paul Ricoeur, *Hermeneutics and the Human Sciences: Essays on Language, Action and Interpretation*

In the first three studies, we sought to demonstrate that the accessibility of the self-concept plays a key role in determining the readers' likelihood of simulating the subjective experience of a fictional character and, as a result, ascribing the character's personality traits to themselves. As an initial test of these predictions, in the first study, we aimed to show that participants with a higher degree of chronic self-focus, whose level of self-concept accessibility should also be more elevated, would be less likely to take on the subjective experience of a character in a short story. In the subsequent two studies, we employed manipulations intended to reduce (Study 2) and increase (Study 3) self-concept accessibility to test the causal role of self-concept accessibility in producing the predicted effects on experience-taking and self-concept in Study 1.

Study 1: Establishing the Relationship Between Private Self-Consciousness and Experience-Taking

As an index of participants' chronic tendency to focus on their own self-concepts, we used a measure of private self-consciousness. Private self-consciousness is defined as a tendency to reflect on and think about the causes and meaning of one's behaviors and reactions—in other words, to focus on one's unique identity and thought processes (see Gibbons, 1990). We predicted that those who chronically tend to focus on their own self-concept, as indexed by high private self-consciousness, should enter a story world with a higher baseline level of self-concept accessibility and, thus, be less likely to simulate the experience of the story's protagonist.

To provide an especially strong test of the proposed relationship between self-concept accessibility and experience-taking, we had participants read a story in which the protagonist displayed the central trait of introversion. Previous research has revealed a positive correlation between self-consciousness and introversion (e.g., Franzoi, 1983; Pilkonis, 1977). However, because we hypothesize that greater self-concept accessibility interferes with identity taking, we predicted a negative association between self-consciousness and self-rated introversion after reading the story about the introverted character. Further, we predicted that this effect would be mediated by lower levels of experience-taking among the more highly self-conscious.

Method

Participants. Thirty-eight undergraduates (19 men and 19 women, with a mean age of 18.9 years) participated individually or in groups of up to five. They received partial course credit for their participation.

Materials and procedure. As part of a mass pretesting questionnaire administered a week prior to the study, participants completed the Private Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975). This scale requires participants to respond to a series of statements regarding their chronic tendency to focus attention on the self, such as, "I reflect about myself a lot," and "I'm always trying to figure myself out."¹ Participants completed each item using a 9-point scale anchored at 1 (*strongly disagree*) and 9 (*strongly agree*).

During the laboratory session, an experimenter directed participants to individual cubicles and distributed booklets containing all of the experiment's materials. Instructions on the first page of the booklet explained that participants would be asked to read a brief work of fiction and to answer a number of questions about the story and other topics. Participants were directed to read the story and to answer the questions carefully.

Pages two through five of the booklet contained the story, which was written in first-person voice and featured as its central character a college freshman (whose gender was unspecified) attending the first party of the academic year. The story provided readers with information about the character's thoughts, feelings, and actions throughout the narrative, many of which implied that the character was somewhat socially reserved and introverted—for example, although willingly attending the party and interacting with others, the character reveals trepidation when chosen to perform a karaoke duet, deliberately seeks out a quiet spot to get a momentary reprieve from the crowd and noise of the party, and surreptitiously leaves the party before it ends.

After reading the narrative, participants completed a measure designed to index their level of experience-taking. Although no validated scale existed prior to this study, we were able to devise a measure following the guidelines suggested by Cohen (2001), who, in his theoretical treatment of identification with characters in narratives (which we propose is compatible with our conceptualization of experience-taking), offered a number of specific recommendations for scale construction. The measure we employed consists of seven items, each using a 9-point scale anchored at 1 (*strongly disagree*) and 9 (*strongly agree*), which required readers to report the extent to which they adopted the psychological perspective of the character (e.g., "I felt like I could put myself in the shoes of the character in the story.") and experienced the same emotions (e.g., "I found myself feeling what the character in the story was feeling.") and thoughts (e.g., "I felt I could get inside the character's head.") as the character while reading. The full set of items is provided in the Appendix.

Participants then completed two measures of their self-ascribed level of introversion. The first measure consisted of 10 statements

¹ These items are from "Public and Private Self-Consciousness: Assessment and Theory," by A. Fenigstein, M. F. Scheier, and A. H. Buss, 1975, *Journal of Consulting and Clinical Psychology*, 43, pp. 522–527. Copyright 1975 by American Psychological Association.

about personal characteristics and behaviors. Seven target items pertained to introversion/extroversion, such as “I am quiet around strangers” and “I am the life of the party.” (reverse scored), and three filler items pertained to traits unrelated to introversion/extroversion (e.g., “I am a hard worker.”). The items were randomly ordered, and participants used a 9-point scale anchored at 1 (*strongly disagree*) and 9 (*strongly agree*) to indicate how well each described them. The second measure of self-ascribed introversion asked participants to imagine arriving at their university’s dining hall alone on the first day of school and to rate the likelihood of six different potential responses, using a 9-point scale anchored at 1 (*not at all likely*) and 9 (*extremely likely*). Three of the responses were more indicative of extroversion (e.g., “I would find a table where others are sitting and ask to join them.”), and three were more indicative of introversion (e.g., “I would find an empty table and wait for others to join me.”). Finally, participants provided their gender and age.

Results and Discussion

We first computed an average score for participants’ level of private self-consciousness ($\alpha = .65$) and experience-taking ($\alpha = .84$).² A significant negative correlation between these two variables emerged ($r = -.37, p < .03$).³ Thus, as predicted, the higher the level of participants’ private self-consciousness, the lower their likelihood of simulating the experience of the story’s main character.

We next computed an average rating of participants’ self-ascribed level of introversion by combining and standardizing their responses on the self-rating and dining hall scenario items ($\alpha = .83$). As predicted, a significant negative correlation between participants’ self-consciousness scores and introversion scores emerged ($r = -.41, p < .05$). At the same time, self-consciousness was not significantly correlated with any of the other nonfocal traits included in the rating scale ($r_s < .15$).

Finally, to test whether the relationship between self-consciousness and trait incorporation would be accounted for by participants’ levels of experience-taking, we conducted a mediational analysis (Baron & Kenny, 1986). Indeed, when both private self-consciousness and experience-taking scores were entered into a regression model as predictors of participants’ self-rated introversion, experience-taking remained a significant predictor ($\beta = .33, p < .05$), but self-consciousness did not ($\beta = -.23, p < .19$; Sobel $z = 1.97, p < .06$). This finding suggests that the lower likelihood of trait incorporating by participants higher in self-consciousness can be explained by their lower levels of experience-taking.

Thus, the results of the study support the predicted relationship between self-consciousness and experience-taking: the higher participants’ chronic level of self-focus, the lower their likelihood of taking on the subjective experience of the story’s protagonist. In the next two studies, we aimed to confirm that this relationship is indeed a causal one by employing experimental manipulations intended to reduce or increase the accessibility of participants’ self-concepts and measuring their subsequent levels of experience-taking and trait incorporation.

Study 2: The Effect of Reducing Self-Concept Accessibility on Experience-Taking

Study 2 tested the effect of self-concept accessibility on experience-taking by using a manipulation of deindividuation to reduce self-concept accessibility in a randomly determined subset of participants. Specifically, before reading the narrative, half the participants were randomly assigned to receive instructions that directed their focus away from their unique, distinguishing characteristics. We predicted that this manipulation would facilitate experience-taking and thus increase the tendency to take on the character’s traits relative to the levels that occurred among control participants who received no manipulation.

Method

Participants. Fifty-three undergraduates (19 men and 34 women, with a mean age of 18.3 years) participated in groups of three to five. They received partial course credit for their participation.

Materials and procedure. The materials and procedure for Study 2 were identical to those used in the laboratory session of Study 1, with one important exception: The half of the participants randomly assigned to the low self-concept accessibility condition read the following paragraph, which was included on the first page of the experiment booklet:

For this study, we are not interested in you as a member of the college student population. We are running this study in order to assess the attitudes and perceptions of students in general. For the purposes of today’s study you represent an average student no matter what your background or major is. Thus, we will not ask you for any personal identifying information. Instead, we have assigned you an arbitrary code number for this session: SLREP51.

We adapted these instructions from ones that have been previously shown to place individuals in a temporary state of deindividuation (Brewer, Manzi, & Shaw, 1993).⁴ The other half of the sample, those participants assigned to the baseline self-concept accessibility condition, did not receive these instructions. All participants then read the narrative and completed the same measures of experience-taking and self-rated introversion from Study 1.

² In all six studies, the items in the experience-taking measure exhibited a high level of internal reliability (with all Cronbach’s α values greater than .80). In addition, we combined the scores on the experience-taking items for all six studies and subjected them to a principal components analysis using a varimax rotation. As expected for their high level of intercorrelation, all seven items loaded highly (between .65 and .81) on a first factor that accounted for 58.1% of the total variance.

³ Scores on both of the subscales of the Private Self-Consciousness Scale, which measure internal state awareness and self-reflectiveness (e.g., E. M. Anderson, Bohon, & Berrigan, 1996), were significantly (negatively) correlated with experience-taking ($r_s = -.40$ and $-.36$, respectively).

⁴ In a pilot test ($n = 52$), we had participants complete the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) immediately after receiving this deindividuation induction and showed there was no difference in their reported levels of positive or negative affect, compared with participants who did not receive the induction ($F < 1$).

Results and Discussion

Experience-taking. We computed an average score for participants' level of experience-taking ($\alpha = .80$) and submitted these scores to a one-way analysis of variance (ANOVA) to assess the effect of the self-concept accessibility manipulation. Results confirmed our prediction: participants in the low self-concept accessibility condition reported a significantly higher level of experience-taking ($M = 5.76$, $SD = 1.23$) than did participants in the baseline self-concept accessibility condition ($M = 5.01$, $SD = 0.95$), $F(1, 53) = 6.77$, $p < .02$. Thus, as expected, lowering the accessibility of readers' self-concepts increased their ability to simulate the subjective experience of the character in the story.

Self-rated introversion. We next computed an average score for participants' level of self-rated introversion ($\alpha = .73$) and submitted these scores to a one-way ANOVA. As expected, participants in the low self-concept accessibility condition rated themselves significantly higher in introversion ($M = 5.87$, $SD = 1.21$) than did participants in the baseline self-concept accessibility condition ($M = 4.91$, $SD = 1.33$), $F(1, 53) = 7.51$, $p < .01$. As in Study 1, no differences between conditions emerged for any of the nonfocal traits included in the rating scale ($r_s < .11$).

Mediational analysis. As predicted, a mediational analysis (Baron & Kenny, 1986) revealed that participants' experience-taking scores accounted for the effect of self-concept accessibility condition on self-rated introversion. When both the deindividuation condition and experience-taking scores were entered as predictors of the participants' introversion ratings, experience-taking was a significant predictor ($\beta = .43$), $t(50) = 3.40$, $p < .01$, while deindividuation condition was not ($\beta = .21$), $t(50) = 1.67$, $p < .10$; Sobel $z = 2.08$, $p < .04$.

These results support our interpretation of the results from Study 1 by demonstrating a causal relationship between self-concept accessibility and experience-taking: reducing participants' level of self-concept accessibility increased their level of experience-taking and, consequently, their level of internalization of the character's focal personality trait. In the next study, we sought converging evidence for the causal role of self-concept accessibility by experimentally increasing rather than decreasing it—and testing for a reduction rather than an increase in experience-taking and trait incorporation.

Study 3: The Effect of Heightening Self-Concept Accessibility on Experience-Taking

Study 3 tested the effect of self-concept accessibility on experience-taking by using a manipulation of self-awareness to increase the accessibility of the self (e.g., Carver & Scheier, 1978, 1981; D. Davis & Brock, 1975). Specifically, a randomly determined subset of participants read the narrative in front of a mirror with the reflective side showing. We predicted that this induction would interfere with experience-taking and thus decrease the tendency to take on the character's traits, relative to the levels that would occur among control participants, who read the narrative in front of a mirror with the nonreflective side showing.

As a further test of our hypothesized effect of self-concept accessibility on experience-taking and its downstream impact on the self-concept, we crossed the manipulation of self-focus

with a manipulation of narrative content. Participants read either the narrative featuring the introverted character from Studies 1 and 2, a modified version in which the character was extroverted, or a narrative featuring a character whose behavior did not pertain to the introverted–extroverted dimension. If self-concept accessibility influences the likelihood of experience-taking as we propose, then reading the story in front of the reflective side of the mirror should decrease experience-taking, regardless of the content of the story or the nature of its protagonist. However, the consequences for participants' self-ratings should vary depending on the story. If the character in the story were introverted, decreased experience-taking should decrease self-perceptions of introversion. Likewise, if the character in the story were extroverted, decreased experience-taking should decrease self-perceptions of extroversion. When the behavior of the character in the story was not relevant to the introversion–extroversion dimension, experience-taking should be unrelated to self-perceptions of extroversion. This pattern of results would bolster our claim that experience-taking leads readers to take on the character's traits rather than necessarily leading readers to perceive themselves as more introverted.

Method

Participants. One hundred twenty-three undergraduates (58 men and 65 women, with a mean age of 18.1 years) participated individually or in groups of up to five. They received partial course credit for their participation.

Procedure. An experimenter directed participants to individual cubicles and distributed booklets containing all of the experiment's materials. The cubicle contained a 16 in. \times 52 in. (40.64 cm \times 132.08 cm) rectangular mirror propped against the wall facing the participant. Depending on condition, the mirror had the reflective side facing either toward the participant (high self-concept accessibility) or away from the participant (baseline self-concept accessibility). Regardless of condition, there was a note on the mirror reading, "For Experiment SMQ10: Do Not Remove!" which was intended to prevent participants from believing it was a part of the procedure of the study. The experiment booklet participants received was similar to the one used in Studies 1 and 2, save for the fact that it contained one of three narratives, depending on the condition to which participants had been assigned: (a) the narrative featuring an introverted main character used in the first two studies, (b) a new version of this narrative in which the character's actions and responses were altered to suggest that he was extroverted (e.g., the character approached the karaoke stage with eagerness and thrived in the noise and throng of the party), or (c) a control narrative depicting a character completing various morning routine tasks, which did not contain any explicit references or direct information about the character's level of introversion–extroversion, before ultimately agreeing to assist in a campus beautification project and cleaning up a designated part of the school grounds. For the sake of simplicity, from this point, on we refer to these three stories as the introversion, extroversion, and control narratives. Following the narrative, participants again completed the measures of experience-taking and self-ascribed introversion–extroversion utilized in the first two studies.

In addition, immediately after the trait rating measure, participants completed two measures to allow us to test whether the

manipulations may have inadvertently influenced absorption into the narrative as a whole or attention to its details. The first measure was the transportation scale (Green & Brock, 2000), which assesses readers' level of immersion in a narrative. This scale consists of 11 items (e.g., "I was mentally involved in the story while reading it," "While I was reading the story, activity around the room around me was on my mind" [reverse scored], and "The story affected me emotionally")⁵ that participants responded to using a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). The second measure involved participants' answering five multiple-choice questions about various details from the narrative (e.g., "On what day did the story take place?"); for each item, participants were instructed to select the correct response among three options. Participants were asked not to refer back to the story to answer these questions and to provide their best guess if they were unsure of the correct response.

Results and Discussion

Experience-taking. We computed an average score for participants' level of experience-taking ($\alpha = .89$) and submitted the scores to a 3 (narrative condition: introversion, extroversion, control) \times 2 (self-concept accessibility condition: baseline, high) ANOVA. As predicted, there was a significant main effect of self-concept accessibility, $F(2, 122) = 14.95, p < .01$, which did not depend on narrative condition, $F(2, 122) < 1$ (see Figure 1). On average, participants in the high self-concept accessibility condition reported a lower level of experience-taking ($M = 5.52, SD = 1.56$) than did participants in the baseline self-concept accessibility condition ($M = 6.47, SD = 1.43$).

There was also a main effect of narrative condition, $F(2, 122) = 11.08, p < .01$. On average, participants in the extroversion narrative condition reported the highest level of experience-taking ($M = 6.64, SD = 1.24$), participants in the control narrative condition reported the next highest level ($M = 6.06, SD = 1.62$), and participants in the introversion narrative reported the lowest level ($M = 5.22, SD = 1.51$). This pattern of means could reflect the fact that both extroversion and the interest in volunteerism exhibited by the protagonist in the control narrative are characteristics that are valued more than is introversion and that participants may have been more inclined, on average, to simulate the experi-

ence of a character exhibiting those comparatively more desirable tendencies.

Nevertheless, planned contrasts confirmed that the self-focus manipulation decreased experience-taking significantly in each of the three conditions: introversion narrative, $t(117) = 2.73, p < .01$; extroversion narrative, $t(117) = 2.11, p < .04$; and control narrative, $t(117) = 2.30, p < .03$. Thus, as predicted, regardless of the narrative participants read or the trait exhibited by the character, heightening participants' self-concept accessibility reduced their likelihood of engaging in experience-taking. In line with our reasoning, having one's self-concept more highly activated upon entering the narrative world reduced participants' ability to make the imaginative leap into the mindset and identity of the character in all three stories.

Self-rated introversion. We computed an average score for participants' level of self-rated introversion based on their responses to the rating scale and the dining hall scenario ($\alpha = .77$) and submitted the scores to a 3 (narrative condition: introversion, extroversion, control) \times 2 (self-concept accessibility condition: baseline, high) ANOVA. Results revealed a significant effect of narrative condition, $F(2, 122) = 11.08, p < .01$.

However, this main effect was qualified by the predicted Narrative Condition \times Self-Concept Accessibility condition interaction: $F(2, 122) = 9.77, p < .01$ (see Figure 2). Planned contrasts revealed that the pattern of this interaction was as hypothesized. Within the introversion narrative condition, high self-concept accessibility participants rated themselves lower in introversion ($M = 3.44, SD = 0.98$) than did baseline self-concept accessibility participants ($M = 4.70, SD = 0.99$), $t(117) = 3.82, p < .001$. Within the extroversion narrative condition, the opposite pattern emerged: high self-concept accessibility participants reported a higher level of self-rated introversion ($M = 3.66, SD = 1.19$) than did baseline self-concept accessibility participants ($M = 2.93, SD = 0.93$), $t(117) = 2.18, p < .04$. Thus, in the two narrative conditions in which introversion-extroversion was a relevant trait dimension, heightened self-concept accessibility reduced the extent to which participants rated themselves as possessing the trait exhibited by the character. Within the control narrative condition, in comparison, there was no difference in the mean introversion rating reported by high self-concept accessibility participants ($M = 2.77, SD = 1.22$) and baseline self-concept accessibility participants ($M = 3.03, SD = 1.07$), $t(117) = 0.74, p > .40$.

Mediational analysis. Because the control narrative did not indicate the character's level of introversion or extroversion, we did not expect to observe a significant relationship between participants' experience-taking scores and introversion scores in this condition; as predicted, the correlation between these two variables was not significant ($r = -.09, p > .30$). However, in the introversion and extroversion narrative conditions, we predicted that the lower likelihood of character-specific trait incorporation exhibited by high self-concept accessibility participants would be accounted for by these participants' lower level of experience-taking. To test the predicted mediation, we first recoded partici-

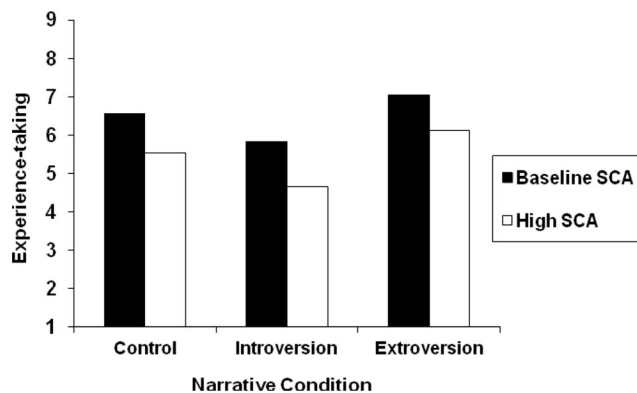


Figure 1. The effect of narrative condition and manipulated self-concept accessibility (SCA) on experience-taking in Study 3.

⁵ These items are from "The Role of Transportation in the Persuasiveness of Public Narratives," by M. C. Green and T. C. Brock, 2000, *Journal of Personality and Social Psychology*, 79, pp. 701–721. Copyright 2000 by American Psychological Association.

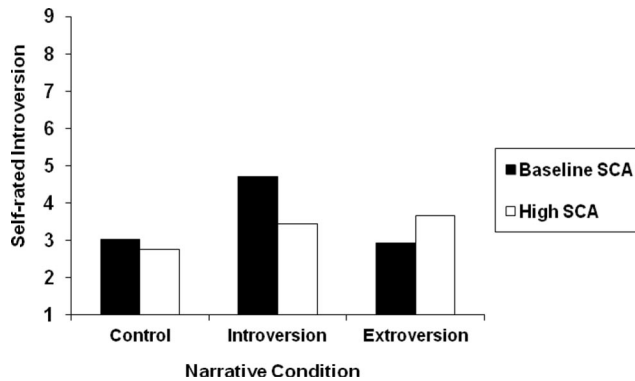


Figure 2. The effect of narrative condition and manipulated level of self-concept accessibility (SCA) on self-rated introversion in Study 3.

participants' responses to the introversion–extroversion measures to reflect greater incorporation of the trait exhibited by the character in each condition (i.e., higher scores corresponding to higher introversion ratings in the introversion narrative condition and to higher extroversion ratings in the extroversion narrative condition) and entered these scores as the dependent variable into a linear regression, with the self-concept accessibility condition as the independent variable and experience-taking scores as the mediator. The results of a mediational analysis supported our prediction that participants' experience-taking scores in the introversion and extroversion narrative conditions would account for the relationship between the self-concept accessibility condition and self-rated introversion–extroversion. When both the self-concept accessibility condition and experience-taking scores were entered as predictors of participants' trait ratings, experience-taking emerged a significant predictor of participants' self-ratings ($\beta = .29$), $t(77) = 2.46$, $p < .02$, whereas self-concept accessibility condition did not ($\beta = .15$), $t(77) = 1.32$, $p < .20$; Sobel $z = 1.98$, $p < .05$. Thus, these results suggest that the reduced likelihood of high self-concept accessibility participants' incorporation of the protagonist's trait in the introversion–extroversion narrative conditions can be explained by these participants' reduced level of experience-taking.

Transportation and memory for story events. The measures of transportation and story memory allowed us to test whether the manipulations may have inadvertently influenced participants' absorption into the narrative as a whole or their attention to its details. Results for the transportation scale ($\alpha = .54$) confirmed that neither the main effects of the narrative condition and the self-concept accessibility condition nor their interaction was significant (means ranged from 4.47 to 4.86, $F_s < 1$).⁶ In addition, we calculated an average score for participants' memory for story events ($\alpha = .85$ in the introversion–extroversion narrative conditions; $\alpha = .79$ in the control narrative condition) and submitted these scores to an ANOVA. Again, neither the main effects nor the interaction was significant ($F_s < 1$). Thus, it does not appear that high self-concept accessibility participants were any more distracted or less absorbed while reading their assigned narrative than were their baseline self-concept accessibility counterparts, which helps rule out the possibility that their lower levels of experience-taking and trait incorporation resulted from higher levels of distraction.

The results from these first three studies offer strong support for the hypothesized effect of self-concept accessibility on experience-taking. Heightening the accessibility of participants' self-concepts while reading reduced—and lowering the accessibility of participants' self-concepts increased—the likelihood of experience-taking. Further, the predicted downstream consequences on readers' self-concepts also emerged: Greater experience-taking accounted for readers' greater incorporation of the character's central traits under conditions of lower self-concept accessibility. Thus, it does indeed appear that setting aside one's personal identity promotes experiential merging with the protagonist and adoption of that character's mindset, whereas approaching a fictional world with one's own personal identity salient makes it more difficult to abandon the self and “become” the character. In sum, these studies reveal that the accessibility of the self-concept represents one primary characteristic of the reader that has a dramatic impact on experience-taking. In Studies 4–6, we shifted our focus to investigate the effect of several variables related to the narrative itself as well as the characteristics of the protagonist.

Study 4: The Effect of Narrative Voice and the Protagonist's Group Membership on Experience-Taking

The Catcher in the Rye (Salinger, 1951) has become a fixture on many high schools' required reading lists, and its protagonist and first-person narrator, Holden Caulfield, remains a veritable icon among adolescent readers, who, over a half century since he came to life, still connect to Holden and his existential angst, his intolerance for “phonies,” and his search for direction and meaning in life. However, adults reading Salinger's classic novel may have quite a different experience; no longer can they so easily relate to Holden's youthful innocence or naïve cynicism, being more distant from such qualities themselves. More generally, we predict that a first-person narrative depicting a character who shares a relevant group membership with readers will invite particularly high levels of experience-taking, whereas a narrative depicting an outgroup character, regardless of voice, would more likely block experience-taking.

To provide an initial test of this prediction, Study 4 manipulated two key variables: the use of first-person versus third-person narrative voice and the ingroup versus outgroup membership of a character. It is important to note that the narratives in the first three studies were all written in first-person voice and depicted a day (or night) in the life of a college student (whose specific university affiliation was unspecified); as such, the reason why these narratives might have invited particularly high experience-taking levels is because participants found it easy to step into the shoes of a character who shared their general “college student” group iden-

⁶ In addition, the correlation between participants' experience-taking and transportation scores was not significant ($r = .14$, $p > .25$). This result aligns with our view that a high degree of absorption into a narrative world is likely a necessary but not sufficient factor for experience-taking to occur. Indeed, we argue that two readers could be equally immersed in a story but at the same time take quite different stances vis-à-vis the protagonist (e.g., one reader experiencing the narrative as a fully engaged spectator of the protagonist and the other reader experiencing the narrative as the protagonist via experience-taking).

tity. Thus, in the present study, we directly manipulated both the voice of the narrative (first-person versus third-person) as well as the university affiliation of the character (ingroup affiliation versus outgroup affiliation).

The other key aim of Study 4 was to show that higher levels of experience-taking would translate to changes in readers' intentions and behaviors. To this end, we had participants read a story that depicted a character voting on Election Day, and then we measured participants' subsequent intentions to vote and their actual voting behavior. Because the study was run the week before a major election (specifically, the 2008 presidential primary election in Ohio), we sought to determine whether the behavioral effects of experience-taking were powerful enough to emerge days after the initial laboratory session when readers first encountered the character.

Method

Participants. Eighty-two undergraduates (58 men and 24 women, with a mean age of 19.1 years) participated individually or in groups of up to five. For this study, only participants who reported on a prestudy questionnaire that they were registered and eligible to vote in the county in which the study took place and had not requested or completed an absentee ballot prior to the study were invited to participate. They received partial course credit for their participation.

Materials and procedure. The experimenter directed participants to individual cubicles and distributed booklets containing the experiment's materials. Instructions on the first page of the booklet explained that participants would be asked to read a brief work of fiction and to answer a number of questions about the story and other topics.

Pages 2–5 of the booklet contained the narrative; Participants were randomly assigned to read one of four versions of a short story that resulted from varying both the voice of the narrative (first-person versus third-person⁷) and the university affiliation of the story's protagonist, who was identified in the first sentence as a student at either Ohio State University (the same university that all participants attended) or Denison University (another university in the same state) when he was described as reading a voter's guide provided by his particular university. The narrative depicted the character enduring several obstacles on the morning of Election Day (e.g., car problems, rainy skies, and long lines at the polling location) before ultimately entering the booth to cast a vote.

After reading the version of the story they were assigned, participants completed the measure of experience-taking used in Studies 1–3. They then responded to a single item measuring their intention to vote the following week. This item, which used a 9-point scale anchored at 1 (*not at all likely*) and 9 (*very likely*) read, "How likely is it that you will vote on Election Day next week?" Finally, participants provided their gender and age.

A week after this initial session, participants completed an online questionnaire in which they were asked to report whether they had voted on Election Day.⁸ Specifically, participants were asked to respond either yes or no to the following question: "In talking to people about elections, I often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. How about you—did you vote on Election Day, Tuesday, March 4, 2008?" This question was

modeled on an item used to assess voting behavior in the U.S. Census Bureau's Current Population Survey and the American National Election Studies.⁹ After submitting their responses, participants were thanked and debriefed on a subsequent screen.

Results and Discussion

Experience-taking. We submitted participants' average scores on the experience-taking measure ($\alpha = .90$) to a 2 (narrative voice: first-person versus third-person) \times 2 (character group membership: ingroup versus outgroup) ANOVA. Results revealed that neither the main effect of narrative voice, $F(1, 78) = 2.29, p < .14$, nor the main effect of character university affiliation, $F(1, 78) = 0.06, p > .80$, was significant. However, the Voice \times Character University Affiliation interaction was significant, $F(1, 78) = 5.84, p < .02$. Because we predicted that the first-person version of the narrative that featured a protagonist who shared an ingroup membership with participants would elicit a higher level of experience-taking than all other versions of the narrative, a pattern that indeed emerged (see Figure 3), we conducted a planned contrast to compare the level of experience-taking reported by participants in the first-person–ingroup condition with the average level reported by participants in the other three conditions. The results confirmed our prediction: The level of experience-taking experienced by readers of the first-person–ingroup narrative ($M = 6.86, SD = 1.39$) was significantly higher than the average level experienced by readers of the other three narratives ($M = 6.11, SD = 1.32$), $t(80) = 2.39, p < .02$. As expected, the combination of first-person narration and the use of a character who shared a relevant group membership with readers greatly facilitated the process of simulating the character's subjective experience.

Intention to vote. We submitted participants' scores on the single-item measure of their intention to vote to a 2 (narrative voice: first-person versus third-person) \times 2 (character group membership: ingroup versus outgroup) ANOVA. Results revealed that neither the main effect of narrative voice, $F(1, 78) = 0.44, p > .50$, nor the main effect of character university affiliation, $F(1, 78) = 0.03, p > .80$, was significant. Although the Voice \times Character University Affiliation interaction was not significant, $F(1, 78) = 2.20, p < .14$, the pattern of means was similar to the pattern obtained for experience-taking, with readers of the first-person–ingroup narrative reporting the highest level of intention to vote ($M = 7.95, SD = 2.48$). However, the results for the planned contrast revealed that this mean was not significantly different from the average level of intention reported by participants in the other three conditions ($M = 7.39, SD = 2.67$), $t(80) = 1.12, p > .20$. It is possible that responses to this item were susceptible to a ceiling effect: Participants might have been particularly motivated

⁷ In this study, the character was identified as male in all narratives: In both the first-person and third-person versions of the story, the character referred to himself by name (Paul) in the first paragraph.

⁸ Although participants were informed they would complete a follow-up questionnaire a week after the laboratory session, they were not specifically told they would be asked about their voting behavior.

⁹ Furthermore, self-administered surveys (e.g., Internet questionnaires), compared with human interviews, have been shown to reduce social-desirability pressures on behavioral self-reports (e.g., Holbrook, Green, & Krosnick, 2003).

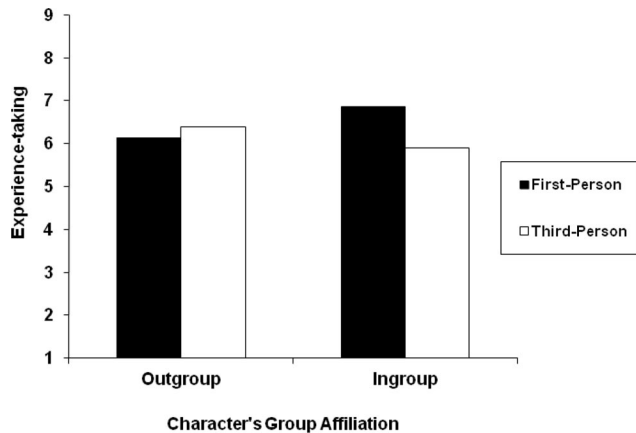


Figure 3. The effect of narrative voice and the character's university affiliation on experience-taking in Study 4.

to report an intention, genuine or otherwise, to vote in the election, due to the fact that that particular election (the 2008 primary in Ohio, participants' state of residence) was well-publicized and considered by most pundits to be vital in determining the eventual Democratic presidential nominee (e.g., Harwood, 2008).

Voting behavior. An arguably more sensitive measure of our predicted effect involves the measure that indexed participants' actual voting behavior, and a chi-square analysis of this measure provided strong support for our prediction. A full 65% of participants in the first-person–ingroup narrative condition reported voting on Election Day, compared with 29% of the participants in the first-person–outgroup condition, 25% of the participants in the third-person–ingroup condition, and 43% of the participants in the third-person–outgroup condition, $\chi^2(3, N = 82) = 8.28, p < .04$. This pattern of voting rates mirrors the pattern observed for the mean levels of experience-taking reported by participants in each condition.

To determine whether participants' reported levels of experience-taking could explain the differential rate of voter turnout in the four conditions, we conducted a mediational analysis, using the technique recommended by Mackinnon and Dwyer (1993) for dichotomous dependent variables. Specifically, we conducted a logistic regression with the Narrative Voice \times Character University Affiliation interaction term (along with both main effect terms) as the independent variable, experience-taking scores as the mediator, and voting behavior (coded one and zero for voting and not voting, respectively) as the dependent variable. The results showed that the Voice \times University Affiliation interaction was a significant predictor of voting behavior ($\beta = .34$), $w(78) = 6.31, p < .02$, and as reported earlier, of experience-taking ($\beta = .29$), $w(78) = 2.37, p < .02$. However, when both the interaction term and experience-taking scores were entered into the regression as predictors of voting behavior (along with narrative voice and character university affiliation), experience-taking was a significant predictor ($\beta = .31$), $w(77) = 5.00, p < .03$, whereas the interaction term was not ($\beta = .17$), $w(77) = 0.72, p > .30$. Results from a Sobel test, conducted using the equations offered by Mackinnon and Dwyer (1993), indicated that the mediation was significant ($z = 2.06, p < .04$), suggesting that partici-

pants' levels of experience-taking accounted for the rates of voter turnout reported by participants in the different narrative conditions.

Thus, sharing a group membership with a character from a story told in first-person voice promoted an enhanced level of experience-taking, and the impact was still evident in participants' behavior several days afterward. These findings strikingly demonstrate that through their choices in crafting the language and the content of their stories, writers can heighten the likelihood of readers' taking the character's subjective experiences as their own and, thus, emerging from the story with their identities, mindsets, and actions transformed.

At the same time, the pattern of results from Study 4 revealed that one potential barrier to experience-taking is encountering a character who is a member of a salient outgroup. Even when the story was written in first-person voice, readers were less inclined to simulate the experience of a character with a university affiliation that differed from their own. This finding suggests a potential limitation on the ability of literature to expand the life experiences of readers. In the final two studies, we aimed to determine whether we could overcome this limitation and encourage higher levels of experience-taking with characters who belong to readers' outgroups by employing a specific strategy: delaying the revelation of the character's group membership until later in the narrative, after participants had begun to engage in experience-taking.

Overview of Studies 5 and 6

The 1975 Broadway musical *A Chorus Line* was groundbreaking not only in its structure—presenting 17 Broadway dancers auditioning for a director on a mostly bare stage, revealing their personalities and relaying their life experiences in monologues and intermittent musical numbers—but also in its depiction of central characters who were homosexual, something of a rarity at the time. In the words of several of the original cast members, “The idea of a character coming out and acknowledging he was gay—‘admitting’ is the way they termed it then—was astonishing” (Viagas, Lee, & Walsh, 1990, p. 16). Anticipating the potential for resistance to one of the show's gay characters, the creators of the show chose to wait to have the character reveal his sexuality until partway through the show, after audiences had gotten to know and like him, so that when he eventually disclosed his identity, audience members would be more likely to accept it—and him. Their decision was apparently an astute one: *A Chorus Line* ran for over 6,000 performances, and its success was based in no small part on audiences' responses to its compelling, diverse characters (Mandelbaum, 1989).

In the final two studies, we sought to determine whether we could apply the same strategy employed by the writers of *A Chorus Line*—the delayed revelation of a character's stigmatized group membership—to encourage higher levels of experience-taking with such a character. Furthermore, as a result of experiencing greater experience-taking with a stigmatized character, we expected that readers of such a “late revelation” narrative would exhibit greater reductions in prejudice toward the character's group than would readers of an “early revelation” narrative. In Study 5, we tested these predictions with a narrative in which we varied the timing of the disclosure

of a male character's sexual orientation; in Study 6, we varied the timing of the revelation of the main character's outgroup racial identity.

Study 5: The Impact of Delayed Revelation of a Character's Sexual Orientation on Experience-Taking

Method

Participants. Seventy-eight male undergraduates (with a mean age of 18.8 years) participated individually or in groups of up to five. For this study, only participants who identified their sexual orientation as heterosexual, in an item on a mass pretesting questionnaire completed a month prior to the study, were invited to participate. They received partial course credit for their participation.

Materials and procedure. For this study, we used a first-person narrative that depicted a day in the life of a college student (whose university affiliation was not specified) who completed his morning rituals (e.g., eating breakfast, showering, and packing his bag) before ultimately volunteering in a campus clean-up project (this story was also used as the "control" story in Study 3). We created three new versions of this story: one in which the character was identified as homosexual in the first paragraph of the story (specifically, the character, who refers to himself as John, receives a call from his boyfriend, Mike), a second in which the character was identified as homosexual about two-thirds of the way through the narrative (the character receives the call from his boyfriend, Mike, before participating in the clean-up project), and a third in which the character was identified as heterosexual about two-thirds of the way through the narrative (the character receives a call from his girlfriend, Michelle, before participating in the clean-up project). For the sake of simplicity, from this point on we refer to these three versions of the story, respectively, as the gay-early, gay-late, and straight narratives.

The basic procedure for this study was similar to that of Study 4 in most respects, with the following exceptions. First, as part of a mass pretesting questionnaire, all participants had completed the eight-item Attitudes Toward Homosexuals Scale (Herek & Capitanio, 1999), to provide a baseline attitude score for each participant. This measure requires participants to rate their agreement with such statements as, "A man who is a homosexual is just as likely to be a good person as anyone else," and "I think male homosexuals are disgusting"¹⁰ (reverse scored), using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). We also included this scale in the study booklet, immediately following the experience-taking measure, to assess participants' attitudes after reading the narrative that they were assigned.

In addition, to assess the extent to which readers believed that the character possessed traits associated with common stereotypes of male homosexuals, we added two character evaluation items to the study booklet. These two items both utilized a 9-point semantic-differential scale; the first item was anchored with the endpoints *feminine* and *masculine*, the second was anchored with the endpoints *calm* and *emotional*. Because none of the character's behaviors or responses in the story were, at least ostensibly, indicative of either dimension, we believed participants' responses to these items would represent the application of stereotypes to the

character in the absence of any "evidence" in the traits implied by the character's actions or responses to story events.

Finally, as a check on the manipulation of the character's sexual orientation, we included the following item at the end of the booklet: "Without looking back, what was the sexual orientation of the character?" This item presented participants with three response options—gay, straight, and don't know.

Results and Discussion

Eight participants who failed to identify the sexual orientation of the character as intended (three participants in the gay-early narrative condition and four participants in the gay-late narrative condition who identified the character's orientation as straight, and one participant in the straight narrative condition who identified the character's orientation as gay) were omitted from the data set,¹¹ leaving 70 in the final sample for analysis.

Experience-taking. We submitted participants' average scores on the experience-taking measure ($\alpha = .85$) to a one-way ANOVA. The results revealed a significant effect of narrative, $F(2, 67) = 5.78, p < .01$. We conducted planned contrasts to compare the mean level of experience-taking reported by participants in the gay-late narrative condition with the level reported by participants in both the gay-early and straight narrative conditions. The contrasts confirmed that readers of the gay-late narrative experienced a significantly higher level of experience-taking with the protagonist than did readers of the gay-early narrative, $t(68) = 2.45, p < .02$, and that there was no difference in the level of experience-taking reported by readers of the gay-late narrative and straight narrative, $t(68) = 0.79, p > .40$ (see Table 1). Thus, as expected, delaying the revelation of the character's sexual orientation prevented his stigmatized group membership from being an obstacle to experience-taking; participants were equally inclined to simulate the subjective experience of a gay or straight character when they learned of his orientation late in the story.

Attitudes toward homosexuals. There were no differences between conditions on the pretest measure of participants' attitudes toward homosexuals, $F(2, 66) = 1.05, p < .36$. However, we expected differences to emerge in the attitudes participants expressed after reading the story, as a function of narrative condition. To test this hypothesis, we submitted participants' scores on the Attitudes Toward Homosexuals Scale ($\alpha = .78$) to a one-way analysis of covariance (ANCOVA), using their pretest attitudes as a covariate. Results revealed a significant effect of narrative, $F(2, 66) = 18.76, p < .001$. The planned contrasts showed that readers of the gay-late narrative reported a significantly more favorable attitude toward homosexuals than did readers of both the gay-early narrative, $t(67) = 5.50, p < .01$, and the straight narrative, $t(67) = 3.96, p < .01$ (see Table 1).

We did not expect to observe a significant relationship between participants' experience-taking scores and their favorability toward homosexuals in the straight narrative condition; as predicted,

¹⁰ The items are from "Sex Differences in How Heterosexuals Think About Lesbians and Gay Men: Evidence From Survey Context Effects," by G. M. Herek and P. Capitanio, 1999, *Journal of Sex Research*, 36, pp. 348–360. Copyright 1999 by Taylor & Francis.

¹¹ Retaining these participants does not significantly alter any of the analyses reported.

Table 1
Mean Scores for Experience-Taking, Favorability of Attitudes Toward Homosexuals, Character Femininity Rating, and Character Emotionality Rating as a Function of Narrative Condition in Study 5

Dependent measure	Narrative condition		
	Gay-early	Gay-late	Straight
Experience-taking	5.57 _a (1.18)	6.41 _b (1.29)	6.68 _b (1.47)
Favorability of attitudes toward homosexuals	3.29 _a (0.66)	4.25 _b (0.50)	3.55 _a (1.02)
Character femininity rating	5.13 _a (1.16)	4.17 _b (1.37)	2.95 _c (1.29)
Character emotionality rating	5.71 _a (0.99)	4.13 _b (1.33)	4.61 _b (1.62)

Note. $N = 139$. Standard deviations are provided in parentheses. Experience-taking was measured on a 9-point scale, favorability of attitudes toward homosexuals was measured on a 5-point scale, and character femininity and emotionality ratings were measured on a 7-point scale, with greater values representing higher levels of the variables on all scales. For each variable, means that do not share a subscript differ at $p < .05$.

the correlation between these two variables was not significant ($r = .03, p > .80$). However, in the gay-late and gay-early narrative conditions, we predicted that the higher degree of favorability toward homosexuals reported by participants in the gay-late condition would be accounted for by these participants' higher level of experience-taking. The results of a mediational analysis supported this prediction: When both narrative condition (effect-coded, -1 for gay-early and $+1$ for gay-late) and experience-taking scores were entered into a regression model as predictors of participants' scores on the Attitudes Toward Homosexuals Scale, experience-taking remained a significant predictor ($\beta = .29, p < .05$), but narrative condition did not ($\beta = -.15, p > .20$; Sobel $z = 1.99, p < .05$).

Stereotyping of the character. We predicted that as a result of being more likely to simulate the experience of the homosexual protagonist, participants in the gay-late condition would be less likely to show signs of stereotyping in their perceptions of the character than those in the gay-early condition. Because scores on the two items measuring the extent to which participants perceived the character to possess the stereotypical traits feminine and emotional were not significantly correlated ($r = .09, p > .40$), we analyzed each item separately. We again included participants' pretest scores on the Attitudes Toward Homosexuals Scale as a covariate for both analyses.

First, for the ratings of femininity, results from the ANCOVA revealed a significant effect of narrative, $F(2, 66) = 16.67, p < .001$. The planned contrasts showed that readers of the gay-late narrative rated the character as lower in femininity than did readers of the gay-early narrative, $t(67) = 2.56, p < .02$, but higher in femininity than did readers of the straight narrative, $t(67) = 3.21, p < .01$ (see Table 1). In other words, on this dimension, readers of the gay-late narrative showed a significantly lower tendency, compared with readers of the gay-early narrative, to apply a well-known stereotype of male homosexuals to the character.

As expected, we did not observe a significant relationship between participants' experience-taking scores and their ratings of the character's femininity in the straight narrative condition ($r = .26, p > .20$). However, in the gay-late and gay-early narrative conditions, we predicted that the lower femininity ratings reported by participants in the gay-late condition would be accounted for by these participants' higher level of experience-taking. The re-

sults of a mediational analysis supported this prediction: When both narrative condition (coded -1 for gay-early and $+1$ for gay-late) and experience-taking scores were entered into a regression model as predictors of participants' ratings of the character's femininity, experience-taking remained a significant predictor ($\beta = -.35, p < .01$), but narrative condition did not ($\beta = -.22, p > .20$; Sobel $z = 2.38, p < .02$).

Results for participants' ratings of the character's level of emotionality also revealed a significant effect of narrative, $F(2, 66) = 11.12, p < .001$. The planned contrasts showed that as predicted, readers of the gay-late narrative reported a significantly lower rating of the character's emotionality than did readers of the gay-early narrative, $t(67) = 4.59, p < .001$. There was no difference in the emotionality ratings provided by readers of the gay-late narrative and readers of the straight narrative, $t(67) = 1.31, p > .20$ (see Table 1).

We did not predict, nor did we observe, a significant relationship between participants' experience-taking scores and their ratings of the character's emotionality in the straight narrative condition ($r = .20, p > .30$). However, in the gay-late and gay-early narrative conditions, we predicted that the lower emotionality ratings reported by participants in the gay-late condition would be accounted for by these participants' higher level of experience-taking. The results of a mediational analysis supported this prediction: When both narrative condition (coded -1 for gay-early and $+1$ for gay-late) and experience-taking scores were entered into a regression model as predictors of participants' ratings of the character's emotionality, experience-taking remained a significant predictor ($\beta = -.53, p < .001$), but narrative condition did not ($\beta = -.22, p > .20$; Sobel $z = 2.75, p < .01$).

Thus, in addition to showing more favorable evaluations of homosexuals, readers of the gay-late narrative, who had reported higher levels of experience-taking with the gay character than did readers of the gay-early narrative, also showed less reliance on stereotypes in the impression they formed of the character than did their gay-early counterparts. In all, these results build on those obtained in Study 4 by suggesting that readers are not inevitably less likely to simulate the experience of a character who does not share a relevant ingroup membership; if given the opportunity to engage in experience-taking with a character before his outgroup status is disclosed, readers appear more willing to remain in the

character's shoes. As shown, when participants found out that the protagonist in the narrative was homosexual later, versus earlier, in the story, they reported higher levels of experience-taking with the character and, as a result, were more likely to express favorable attitudes toward homosexuals and less likely to perceive the character as embodying traits stereotypical to homosexuals. Indeed, the fact that readers of the gay-late narrative were no less likely to simulate the experience of the character than were readers who believed the character to be heterosexual suggests that waiting to disclose a character's outgroup membership until after experience-taking has assumedly been triggered dramatically increases readers' openness to experiencing the narrative through the identity of that stigmatized outgroup member.

In the final study, we aimed to extend the findings of Study 5, both by investigating the power of the technique of delayed revelation with a new stereotyped group and by subjecting this technique to what we believed would be an even stronger test by having the protagonist behave in an ambiguously stereotypical fashion following the revelation of his group membership.

Study 6: The Impact of Delayed Revelation of a Character's Race on Experience-Taking

In the narrative for Study 6, we varied whether the protagonist was identified as Caucasian or African American and, in the latter case, varied the timing of the revelation to occur earlier or later in the story. In addition, in the final section of the story, the character was depicted behaving in a manner that could be construed as unfriendly and hostile, which is a trait stereotypical of African Americans (e.g., Devine, 1989). We predicted that if Caucasian readers discovered that a character was African American later rather than earlier in the story, they would be less likely to interpret the character's behavior as hostile and, furthermore, would show more positive attitudes toward African Americans, as a result of experiencing a higher level of experience-taking with the racial outgroup character.

Method

Participants. One hundred thirty-nine undergraduates (82 men, 57 women, with a mean age of 19.2 years) participated individually or in groups of up to five. For this study, only participants who identified their race as Caucasian, in an item on a mass pretesting questionnaire completed 3 weeks prior to the study, were invited to participate. They received partial course credit for their participation.

Materials and procedure. As in Study 5, we utilized a narrative written in first-person voice that described a day in the life of the central protagonist. We again created three versions of the story: one in which the character's race is revealed to be African American in the first paragraph of the story when the character refers to himself as Jamal, a name more common among African Americans than among other races (Lieberson & Mikelson, 1995), a second in which the reference to the character's name revealing him as African American occurs about halfway through the narrative, and a third in which the character's race is implied to be Caucasian about halfway through the narrative (the character refers to himself as Jeremy). For simplicity, from this point on we refer to these three versions of the story, respectively, as the Black-early, Black-late, and White narratives.

The content of the opening section of the narrative, describing the character attending to various morning routines before leaving his dorm for the day, was similar to the content of the campus volunteering narrative used in the previous studies, save for the revelation of the character's race. For this study, however, we rewrote the last section of the narrative (which came after the revelation of race in all conditions) to depict the character engaging in a series of behaviors that were intentionally ambiguous with regard to the level of unfriendliness or hostility they implied (these behaviors were adapted from the ones used by Srull & Wyer, 1979). For instance, the character takes his car to a second mechanic when told by the first that the repairs cannot be finished immediately, avoids a petitioner on the sidewalk, demands his money back from a store clerk without obvious reason, and claims to have diabetes to workers at a blood drive in order to avoid having to donate. Previous evidence demonstrated that applying the African American stereotype to interpret these behaviors led to perceptions of greater hostility relative to when the stereotype was not applied (Devine, 1989).

In addition, we added a single item to assess the extent to which readers believed the character to be hostile. This item utilized a 9-point semantic-differential scale, anchored with the endpoints *not hostile* and *hostile*, and the item was embedded among six other items assessing traits not implied by the actions of the character (boring, studious, adventurous, creative, logical, and punctual).

As part of the mass pretest questionnaire, all participants had completed the eight-item Modern Racism Scale (McConahay, 1986), providing a baseline score for each participant. We also included this scale in the study booklet, immediately following the character evaluation items, to measure participants' attitudes toward African Americans after reading the narrative they were assigned.

Finally, as a check on the manipulation of the character's race, the following item was included at the end of the booklet: "Without looking back, what was the race of the character?" This item presented participants with three response options—African American, Caucasian, and don't know/can't remember.

Results and Discussion

Ten participants who failed to identify the race of the character as intended (two participants in both the Black-early and Black-late narrative conditions who identified the race as Caucasian, and six participants in the White narrative condition who identified the character's race as African American) were omitted,¹² leaving 129 participants in the final sample for analysis.

Experience-taking. We submitted participants' average scores on the experience-taking measure ($\alpha = .92$) to one-way ANOVA. The results revealed a significant effect of narrative, $F(2, 127) = 4.54, p < .02$. We conducted planned contrasts to compare the mean level of experience-taking reported by participants in the Black-late narrative condition with the level reported by participants in both the Black-early and White narrative conditions. The contrasts confirmed that readers of the Black-late narrative expe-

¹² Retaining these participants does not significantly alter any of the analyses reported.

rienced a significantly higher level of experience-taking with the protagonist than did readers of the Black–early narrative, $t(127) = 2.98, p < .01$, and that there was no difference in the level of experience-taking reported by readers of the Black–late narrative and White narrative, $t(127) = 1.11, p > .20$ (see Table 2). These findings mirror those obtained in Study 5: delaying the disclosure of the character’s race, as with sexual orientation, prevented the character’s outgroup membership from reducing the readers’ likelihood of simulating his subjective experience.

Hostility ratings. We submitted participants’ scores on the single item evaluating their perception of the character’s hostility to a one-way ANOVA. Results revealed a marginally significant effect of narrative, $F(2, 127) = 2.47, p < .09$. The planned contrasts showed that as predicted, readers of the Black–late narrative rated the character as less hostile than did readers of the Black–early narrative, $t(128) = 2.01, p < .05$. There was no difference in the hostility ratings reported by readers of the Black–late narrative and readers of the White narrative, $t(127) = 0.17, p > .80$ (see Table 2). Thus, as in Study 5, readers of the late disclosure narrative were significantly less likely to apply a common stereotype to the character than were their early revelation counterparts, despite the fact that in the present study the character’s behaviors were amenable to a stereotype-consistent construal.

Also as expected, we did not observe a significant relationship between participants’ experience-taking scores and their ratings of the character’s hostility in the White narrative condition ($r = .21, p > .20$). However, in the Black–late and Black–early narrative conditions, we predicted that the lower hostility ratings reported by participants in the Black–late condition would be accounted for by these participants’ higher level of experience-taking. The results of a mediational analysis supported this prediction: When both narrative condition (coded, -1 for Black–early and $+1$ for Black–late) and experience-taking scores were entered into a regression model as predictors of participants’ ratings of the character’s hostility, experience-taking remained a significant predictor ($\beta = -.39, p < .01$), but narrative condition did not ($\beta = -.20, p > .20, Sobel z = 2.03, p < .05$).

Modern racism. There was no significant difference in the mean pretest Modern Racism scores ($\alpha = .71$) reported by participants in the three conditions, $F(2, 127) = 0.89, p > .70$. However, we expected differences to emerge in the attitudes participants

expressed after reading the story, as a function of narrative condition. To test this hypothesis, we submitted participants’ postnarrative Modern Racism scores ($\alpha = .75$) to a one-way ANCOVA, using their pretest attitudes as a covariate. Results revealed a significant effect of narrative, $F(2, 126) = 5.63, p < .01$. The planned contrasts showed that readers of the Black–late narrative reported a significantly lower mean Modern Racism score than did readers of the Black–early narrative, $t(128) = 3.19, p < .01$. There was no difference in the mean scores for readers of the Black–late narrative and readers of the White narrative, $t(128) = 0.68, p > .40$ (see Table 2).

As expected, we did not observe a significant relationship between participants’ experience-taking scores and their Modern Racism scores in the White narrative condition ($r = .14, p > .40$). However, in the Black–late and Black–early narrative conditions, we predicted that the lower Modern Racism scores reported by participants in the Black–late condition would be accounted for by these participants’ higher level of experience-taking. The results of a mediational analysis supported this prediction: When both narrative condition (coded -1 for Black–early and $+1$ for Black–late) and experience-taking scores were entered into a regression model as predictors of participants’ Modern Racism scores, experience-taking remained a significant predictor ($\beta = -.39, p < .01$), but narrative condition did not ($\beta = -.18, p > .20; Sobel z = 2.16, p < .03$).

Thus, the Black–early narrative impeded experience-taking, leaving readers prone to apply stereotypes to interpret the character’s behavior and form a relatively negative evaluation about his racial group as a whole. In contrast, the Black–late narrative allowed experience-taking to occur just as if the character had been an ingroup member. As a result, Black–late readers avoided offering a stereotyped interpretation of the character’s behavior, judging him no differently than if he had been White, and their attitude toward his racial group was not harmed.

On the whole, this final study provides additional evidence for the power of the delayed revelation narrative technique introduced in Study 5. Results demonstrate how experience-taking, once triggered, can be effectively directed to encourage and sustain readers’ experience-taking with a character whose perspective and identity they might not typically be likely to assume and, furthermore, show how experience-taking can be strategically triggered and directed to support nonprejudiced attitudes.

General Discussion

The present studies provide insight into the phenomenology of experience-taking and its fundamental antecedents and consequences. The first three studies demonstrated the role played by the readers’ level of self-concept accessibility in determining their likelihood of simulating the subjective experience of a character and thereby incorporating that character’s traits into their self-concept. Specifically, the findings revealed that chronically or temporarily higher levels of self-concept accessibility reduced the likelihood of the readers’ engaging in experience-taking and internalizing a character’s trait and that lower levels of self-concept accessibility increased the readers’ levels of experience-taking and trait internalization.

Study 4 demonstrated the impact that elementary features of the narrative and its protagonist have on experience-taking.

Table 2

Mean Scores for Experience-Taking, Character Hostility Rating, and Modern Racism as a Function of Narrative Condition in Study 6

Dependent measure	Narrative condition		
	Black–early	Black–late	White
Experience-taking	5.07 _a (1.60)	6.09 _b (1.41)	5.71 _b (1.77)
Character hostility rating	3.25 _a (1.95)	2.45 _b (1.45)	2.52 _b (1.87)
Modern Racism	4.25 _a (1.73)	3.19 _b (1.26)	3.41 _b (1.64)

Note. $N = 120$. Standard deviations are provided in parentheses. Experience-taking was measured on a 9-point scale, character hostility ratings were measured on a 7-point scale, and Modern Racism was measured on a 9-point scale. For each variable, means that do not share a subscript differ at $p < .05$.

Specifically, this study revealed that the use of first-person narration and the presence of a central character who shares a salient ingroup membership with readers proved to be a potent combination. Readers of a narrative satisfying both criteria were most likely to simulate the experiences of the character and, as the character had done, go to the polls and cast a ballot on Election Day.

The final two studies showed that revealing a character's stigmatized group identity—specifically, his identity as a homosexual or as an African American—later versus earlier in a story was an effective technique for overcoming the barrier to experience-taking that nonshared group membership typically creates. When an outgroup member's identity was revealed later rather than earlier, readers were just as likely to simulate his experience as if he had been an ingroup member. Further, as a result of this experience-taking with the outgroup member, readers of the late-revelation narrative were less likely to judge the character stereotypically, and these readers expressed more favorable attitudes toward the character's group. As a whole, the results from these six studies validate our conceptualization of experience-taking as an immersive, simulative experience with the power to change readers' self-concepts, behaviors, and attitudes. We next consider the theoretical implications of these findings for understanding the mechanisms by which experience-taking impacts judgments and behaviors, particularly in relation to prior work on perspective-taking and behavioral priming, and the practical implications for understanding the role that narratives can play in changing behavior and attitudes.

Distinguishing Experience-Taking From Perspective-Taking

Previous research on perspective-taking has shown that the process of actively attempting to adopt and understand the perspective of others produces greater overlap in individuals' mental representations of the self and the other, one consequence of which is the reduction of stereotypes and prejudice when the target of perspective-taking is a member of a stigmatized group (e.g., M. H. Davis et al., 1996; Galinsky & Moskowitz, 2000). Likewise, we showed that higher levels of experience-taking led to greater incorporation of a character's personality trait into readers' self-concept and the formation of more positive attitudes toward a character's stigmatized group.

However, according to our account, experience-taking differs dramatically from perspective-taking, both in its mechanism and in its consequences for the self-concept. Most notably, studies on perspective-taking have shown that the act of perspective-taking increases the activation of individuals' self-concepts and that heightened self-concept accessibility accounts for the effects of perspective-taking on self–other overlap (e.g., M. H. Davis et al., 1996). Thus, although the self–other merger that results from perspective-taking may result in both “inclusion of self in other” (i.e., projection) and “inclusion of other in self” (i.e., introjection), the balance appears to be tipped toward the former (e.g., Galinsky & Moskowitz, 2000): in essence, the target may become more “selflike” through the ascription of self-descriptive traits. Moreover, other work has shown that in order to infer or intuit another's mental states, individuals must correct for their inherent egocentric biases by adjusting away from their own thoughts, feelings, and

perceptions (e.g., Epley et al., 2004), again revealing the active role played by the self in perspective-taking.

In contrast, the results reported in the first three studies revealed that reducing the activation of individuals' self-concepts increased the likelihood of experience-taking and trait incorporation, which suggests that the cognitive processes that support experience-taking are quite distinct from those that support perspective-taking. Specifically, we argue that experience-taking is an experientially driven process rather than a conceptually driven process; those who engage in experience-taking must relinquish (rather than anchor on) their self-concepts in order to become the temporary recipients of a character's mindset and simulate the character's subjective experiences and outcomes. Further, we argue that the reduced accessibility of the self-concept is what leads those who engage in experience-taking to internalize a character's traits so readily: Simulating the other's thoughts, feelings, behaviors, and motives results in a bottom-up change to individuals' self-concepts to incorporate these experienced attributes. Measures of trait projection and introjection (e.g., Otten & Epstude, 2006) will be useful in future research to distinguish the introjection that we propose underlies experience-taking from the projection that appears to underlie perspective-taking.

In addition, there is at least one key difference between the methods in perspective-taking research and the methods in the present research. Whereas studies on perspective-taking have explicitly instructed participants to imagine themselves in the shoes of target others (e.g., Galinsky & Moskowitz, 2000), in the present studies, participants received no such instructions. This methodological difference reflects a key conceptual distinction between perspective-taking as the conscious, effortful process of attempting to understand another's thoughts, feelings, and experiences versus experience-taking as a relatively natural, spontaneous response that does not rely on the intention to adopt the perspective of the other. In fact, we have shown that giving readers the explicit instruction to take the perspective of a character (versus giving them no instruction) significantly reduced experience-taking, which suggests that the conscious attempt to simulate the other's experience actually interferes with the process (Kaufman & Libby, 2009). This finding provides additional support for our view that experience-taking is a process distinct from perspective-taking in its mechanism and its consequences for the self.

The Role of Experience-Taking in Understanding Priming Effects

The present research can also be situated alongside prior work on behavioral priming, which has shown that the activation of goals, traits, and stereotypes can influence subsequent actions, often without conscious awareness or intention. For example, individuals who had been primed with words related to the elderly walked more slowly down a corridor (Bargh, Chen, & Burrows, 1996), those primed with stereotypes of professors performed better on a test of general knowledge (Dijksterhuis & Van Knippenberg, 1998), and those primed with African American faces exhibited greater hostility in an interpersonal interaction (Chen & Bargh, 1997). Although such prime-to-behavior effects are fairly robust, the precise mechanisms behind them, as well as the variables that might strengthen such effects, remain unclear (see Wheeler & DeMarree, 2009, for a review).

In this regard, the findings from the present studies may be instructive. One could interpret the reported results as evidence that simulating the experience of a target other strengthened the effect of primed constructs on individuals' judgments and behaviors: Although all participants in a given study were primed with the same traits, goals, and behaviors displayed by a character, those who reported higher levels of experience-taking showed larger effects of the primes on their self-ratings and actions. In other words, simulating the subjective experience of engaging in behaviors that represented certain personality traits and motivations led to a greater impact of the primes on individuals than did the mere activation of these constructs. The results of a study by Wheeler, Jarvis, and Petty (2001) provided indirect support for this claim: The authors showed that participants who spontaneously wrote an essay about the day in the life of a target named Tyrone in first-person (versus third-person) voice (which, we argue, is more conducive to experience-taking) subsequently performed worse on a math test, presumably reflecting the greater impact of the primed stereotype on their behavior.

It is also instructive to compare the findings of the present research with prior work investigating the impact of self-awareness, self-consciousness, and prime-to-behavior effects. Several previous studies have found that higher levels of self-awareness or self-consciousness reduce priming effects (e.g., Hull, Slone, Meteyer, & Matthews, 2002; Smeesters, Yzerbyt, Corneille, & Warlop, 2009), whereas others revealed just the opposite (e.g., Dijksterhuis & Van Knippenberg, 2000). In an attempt to reconcile these disparate findings, Wheeler, Morrison, DeMarree, and Petty (2008) suggested that distinct dimensions of private self-consciousness had divergent effects. They found that internal state awareness (awareness of one's internal subjective responses) reduced the impact of behavioral primes (by activating individuals' thoughts about their actual characteristics, which they assumedly contrasted with the primed traits and actions), whereas a second dimension, self-reflectiveness (tendency to ruminate about the self), increased priming effects (by leading individuals to process primed traits and behaviors as self-relevant). In contrast, we found in Study 1 that both dimensions of private self-consciousness were negatively correlated with experience-taking, corroborating our argument that experience-taking depends on reducing the accessibility of both one's internal states and one's beliefs about or reflections on the self in order for individuals to fully adopt the identity and mindset of the target other. Thus, whereas traditional prime-to-behavior effects may reflect the top-down impact of the self-concept in determining the meaning and applicability of a primed behavior, experience-taking depends on the bottom-up experience of simulating behaviors without such reliance on the self-concept.

Additional Measures of Experience-Taking and Its Consequences

In order to evaluate the extent to which participants simulated the experience of the character, in the present research, we utilized self-report measures of experience-taking, in which participants reflected on their levels of simulation of the character's thoughts, feelings, and goals, after emerging from the story world. In future studies, neuroimaging techniques may provide a viable means of measuring experience-taking as it is occurring without requiring

readers to reflect on the experience. Previous work has demonstrated different patterns of brain activation when participants imagined themselves performing a particular motor action versus when participants imagined watching another individual perform the same behavior (Ruby & Decety, 2001) or imagined their own versus another person's emotional reactions to events (Ruby & Decety, 2004). These manipulations map onto our proposed distinction between experience-taking (in which an individual experiences a character's behaviors and emotions as though they were one's own) and spectatorship (in which one observes the actions or infers the internal responses of others). Thus, neuroimaging may be a useful tool in gaining further insight into the phenomenology of experience-taking, as well as distinguishing experience-taking from related phenomena, such as vicarious experience or perspective-taking.

With regard to measuring the consequences of experience-taking, implicit measures such as the identity Implicit Association Test (identity IAT; Nosek, Banaji, & Greenwald, 2002) would provide additional means of determining the extent to which individuals, as a result of experience-taking, incorporate characters' attributes, attitudes, goals, and behaviors into their self-concept (see Dal Cin, Gibson, Zanna, Shumate, & Fong, 2007; Gabriel, Kawakami, Bartak, Kang, & Mann, 2010; and Gabriel & Young, 2011). The use of implicit measures might be particularly beneficial for assessing the self-ascription of traits or motivations that are subject to social desirability biases on explicit self-report measures (such as the measure of voting intention we employed in Study 4).

Implications of Experience-Taking for Changing Traits and Behaviors

The present studies showed that higher levels of experience-taking led readers to be more likely to ascribe to themselves relatively positive characteristics or traits (e.g., extroversion) and to engage in prosocial behaviors (e.g., voting). Furthermore, the fact that the behavioral effects of experience-taking emerged several days after participants were exposed to the narrative (in Study 4) suggests that experience-taking has the potential to create durable changes in behavior. These findings suggest that the knowledge gained from these studies regarding the factors that increase experience-taking could effectively be channeled and harnessed (by authors, psychologists, parents, policymakers, etc.) toward creating desirable long-term changes in individuals' attitudes and behaviors (see also Dal Cin, Zanna, & Fong, 2004).

At the same time, it would be just as important to investigate whether experience-taking might also have the potential to lead individuals to adopt more negative or harmful beliefs, goals, traits, and behaviors. The findings from Study 6 could be suggestive in this regard. Specifically, the results showed that experiencing a high level of experience-taking rendered readers more inclined to construe ambiguously unfriendly and hostile behaviors performed by a character in a more favorable light, which might indicate either a higher perceived level of acceptability of such actions or a tendency to construe them in a more charitable fashion.

What about more objectively harmful actions, such as smoking cigarettes, displaying antisocial or aggressive behaviors, or engaging in unsafe sexual activity, to take three examples whose depiction in the media has been a source of constant concern (e.g.,

Bushman, 1995; Charlesworth & Glantz, 2005; Gunasekera, Chapman, & Campbell, 2005)? Engaging in experience-taking with characters who perform ethically or legally questionable behaviors (such as the charismatic and likable heroin addict Mark Renton in *Trainspotting*, or Patrick Bateman, the suave investment banker–serial killer from *American Psycho*, to cite two recent literary examples) could arguably cause individuals to be more accepting or tolerant of such characters or more willing to deny or trivialize the risk or minimize the perceived immorality inherent in their actions, suggesting a potential “dark side” to the experiential merger that occurs between reader and character. This possibility is consistent with previous work showing that exposure to “first-person shooter” video games (which, by presenting the action the game entirely from the visual perspective of the armed character and giving the player control over the character’s movement and action, are likely to invite high levels of experience-taking) increases aggressive thoughts and behaviors (e.g., C. A. Anderson & Dill, 2000).

Conclusion

The present findings define experience-taking as a mechanism by which narratives can function to expand readers’ scope of experience and, thereby, change beliefs and behaviors. By casting aside one’s own self-concept and mentally simulating the experiences of a story character as if they were one’s own, readers can try out new roles, relationships, personalities, motives, and actions—or, as Hayakawa (1990, p. 144) put it, “live as many more lives and as many kinds of lives” as they wish. The present experiments demonstrate that the effects of experience-taking can be harnessed and directed toward such positive ends as increasing civic engagement and reducing prejudice and stereotyping. Together these findings establish experience-taking as a unique—and uniquely powerful—phenomenon that profoundly changes the way we think about ourselves and others by merging the lives we lead in reality and the lives we lead in the worlds of narratives.

References

- Ackerman, J. M., Goldstein, N. J., Shapiro, J. R., & Bargh, J. A. (2009). You wear me out: The vicarious depletion of self-control. *Psychological Science, 20*, 326–332. doi:10.1111/j.1467-9280.2009.02290.x
- Anderson, C. A., & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology, 78*, 772–790. doi:10.1037/0022-3514.78.4.772
- Anderson, E. M., Bohon, L. M., & Berrigan, L. P. (1996). Factor structure of the Private Self-Consciousness Scale. *Journal of Personality Assessment, 66*, 144–152. doi:10.1207/s15327752jpa6601_11
- Aron, A., & Aron, E. N. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. Washington, DC: Hemisphere.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*, 596–612. doi:10.1037/0022-3514.63.4.596
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology, 60*, 241–253. doi:10.1037/0022-3514.60.2.241
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology, 71*, 230–244. doi:10.1037/0022-3514.71.2.230
- Baron, R. M., & Kenny, A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Brewer, M. B., Manzi, J. M., & Shaw, J. S. (1993). In-group identification as a function of depersonalization, distinctiveness, and status. *Psychological Science, 4*, 88–92. doi:10.1111/j.1467-9280.1993.tb00466.x
- Bushman, B. J. (1995). Moderating role of trait aggressiveness in the effects of violent media on aggression. *Journal of Personality and Social Psychology, 69*, 950–960. doi:10.1037/0022-3514.69.5.950
- Carver, C. S., & Scheier, F. (1978). Self-focusing effects of dispositional self-consciousness, mirror presence, and audience presence. *Journal of Personality and Social Psychology, 36*, 324–332. doi:10.1037/0022-3514.36.3.324
- Carver, C. S., & Scheier, F. (1981). The self-attention-induced feedback loop and social facilitation. *Journal of Experimental Social Psychology, 17*, 545–568. doi:10.1016/0022-1031(81)90039-1
- Charlesworth, A., & Glantz, S. A. (2005). Smoking in the movies increases adolescent smoking: A review. *Pediatrics, 116*, 1516–1528.
- Chen, M., & Bargh, J. A. (1997). Nonconscious behavioral confirmation processes: The self-fulfilling consequences of automatic stereotype activation. *Journal of Experimental Social Psychology, 33*, 541–560. doi:10.1006/jesp.1997.1329
- Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy–altruism relationship: When one into one equals oneness. *Journal of Personality and Social Psychology, 73*, 481–494. doi:10.1037/0022-3514.73.3.481
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society, 4*, 245–264. doi:10.1207/S15327825MCS0403_01
- Cooper, J., & Hogg, M. A. (2007). Feeling the anguish of others: A theory of vicarious dissonance. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 39, pp. 359–403). San Diego, CA: Academic Press.
- Dal Cin, S., Gibson, B., Zanna, M. P., Shumate, R., & Fong, G. T. (2007). Smoking in movies, implicit associations of smoking with the self, and intentions to smoke. *Psychological Science, 18*, 559–563. doi:10.1111/j.1467-9280.2007.01939.x
- Dal Cin, S., Zanna, M. P., & Fong, G. T. (2004). Narrative persuasion and overcoming resistance. In E. S. Knowles & J. A. Linn (Eds.), *Resistance and persuasion* (pp. 175–191). Mahwah, NJ: Erlbaum.
- Davis, D., & Brock, C. (1975). Use of first person pronouns as a function of increased objective self-awareness and performance feedback. *Journal of Experimental Social Psychology, 11*, 381–388. doi:10.1016/0022-1031(75)90017-7
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective-taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology, 70*, 713–726. doi:10.1037/0022-3514.70.4.713
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*, 5–18. doi:10.1037/0022-3514.56.1.5
- Dijksterhuis, A., & Van Knippenberg, A. (1998). The relation between perception and behavior, or how to win a game of Trivial Pursuit. *Journal of Personality and Social Psychology, 74*, 865–877. doi:10.1037/0022-3514.74.4.865
- Dijksterhuis, A., & Van Knippenberg, A. (2000). Behavioral indecision: Effects of self-focus on automatic behavior. *Social Cognition, 18*, 55–74. doi:10.1521/soco.2000.18.1.55
- Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective-taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology, 87*, 327–339. doi:10.1037/0022-3514.87.3.327
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private

- self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43, 522–527. doi:10.1037/h0076760
- Franzoi, S. L. (1983). Self-concept differences as a function of private self-consciousness and social anxiety. *Journal of Research in Personality*, 17, 275–287. doi:10.1016/0092-6566(83)90019-3
- Gabriel, S., Kawakami, K., Bartak, C., Kang, S., & Mann, N. (2010). Negative self-synchronization: Will I change to be like you when it is bad for me? *Journal of Personality and Social Psychology*, 98, 857–871. doi:10.1037/a0019272
- Gabriel, S., & Young, A. F. (2011). Being a vampire without being bitten: The narrative collective-assimilation hypothesis. *Psychological Science*, 22, 990–994. doi:10.1177/0956797611415541
- Galinsky, A. D., & Moskowitz, B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, 78, 708–724. doi:10.1037/0022-3514.78.4.708
- Gibbons, F. X. (1990). Self-attention and behavior: A review and theoretical update. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 249–303). San Diego, CA: Academic Press.
- Goldstein, N. J., & Cialdini, R. B. (2007). The spyglass self: A model of vicarious self-perception. *Journal of Personality and Social Psychology*, 92, 402–417. doi:10.1037/0022-3514.92.3.402
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79, 701–721. doi:10.1037/0022-3514.79.5.701
- Gunasekera, H., Chapman, S., & Campbell, S. (2005). Sex and drugs in popular movies: An analysis of the top 200 films. *Journal of the Royal Society of Medicine*, 98, 464–470. doi:10.1258/jrsm.98.10.464
- Harwood, J. (2008, March 3). Tuesday is the end, or the beginning. *New York Times*. Retrieved from <http://www.nytimes.com>
- Hayakawa, S. I. (1990). *Language in thought and action*. New York, NY: Harcourt Brace.
- Herek, G. M., & Capitano, P. (1999). Sex differences in how heterosexuals think about lesbians and gay men: Evidence from survey context effects. *Journal of Sex Research*, 36, 348–360. doi:10.1080/00224499909552007
- Holbrook, A. L., Green, M. C., & Krosnick, J. A. (2003). Telephone versus face-to-face interviewing of national probability samples with long questionnaires: Comparisons of respondent satisficing and social desirability response bias. *Public Opinion Quarterly*, 67, 79–125. doi:10.1086/346010
- Hull, J. G., Slone, L. B., Meteyer, K. B., & Matthews, A. R. (2002). The nonconsciousness of self-consciousness. *Journal of Personality and Social Psychology*, 83, 406–424. doi:10.1037/0022-3514.83.2.406
- James, W. (1890). *The principles of psychology* (Vol. 1). New York, NY: Holt. doi:10.1037/11059-000
- Kaufman, G. F., & Libby, L. K. (2009). [The impact of perspective-taking instructions on readers' experience-taking levels]. Unpublished raw data.
- Lieberson, S., & Mikelson, K. S. (1995). Distinctive African American names: An experimental, historical, and linguistic analysis of innovation. *American Sociological Review*, 60, 928–946. doi:10.2307/2096433
- Livingstone, S. M. (1998). *Making sense of television: The psychology of audience interpretation*. New York, NY: Routledge.
- Mackinnon, D. P., & Dwyer, H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17, 144–158. doi:10.1177/0193841X9301700202
- Mandelbaum, K. (1989). *A Chorus Line and the musicals of Michael Bennett*. New York, NY: St. Martin's Press.
- Mar, R., & Oatley, K. (2008). The function of fiction is the abstraction and simulation of social experience. *Perspectives on Psychological Science*, 3, 173–192. doi:10.1111/j.1745-6924.2008.00073.x
- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91–125). Orlando, FL: Academic Press.
- Norton, M. I., Monin, B., Cooper, J., & Hogg, M. A. (2003). Vicarious dissonance: Attitude change from the inconsistency of others. *Journal of Personality and Social Psychology*, 85, 47–62. doi:10.1037/0022-3514.85.1.47
- Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). Math = male, me = female, therefore math ≠ me. *Journal of Personality and Social Psychology*, 83, 44–59. doi:10.1037/0022-3514.83.1.44
- Oatley, K. (1995). A taxonomy of the emotions of literary response and a theory of identification in fictional narrative. *Poetics*, 23, 53–74. doi:10.1016/0304-422X(94)P4296-S
- Oatley, K. (1999). Meetings of minds: Dialogue, sympathy, and identification, in reading fiction. *Poetics*, 26, 439–454. doi:10.1016/S0304-422X(99)00011-X
- Otten, S., & Epstude, K. (2006). Overlapping mental representations of self, ingroup, and outgroup: Unraveling self-stereotyping and self-anchoring. *Personality and Social Psychology Bulletin*, 32, 957–969. doi:10.1177/0146167206287254
- Piliavin, J. A., Dovidio, J., Gaertner, S., & Clark, R. D., III. (1981). *Emergency intervention*. New York, NY: Academic Press.
- Pilkonis, P. A. (1977). Shyness, public and private, and its relationship to other measures of social behavior. *Journal of Personality*, 45, 585–595. doi:10.1111/j.1467-6494.1977.tb00173.x
- Ruby, P., & Decety, J. (2001). Effect of subjective perspective-taking during simulation of action: A PET investigation of agency. *Nature Neuroscience*, 4, 546–550.
- Ruby, P., & Decety, J. (2004). How would you feel versus how do you think she would feel? A neuroimaging study of perspective-taking with social emotions. *Journal of Cognitive Neuroscience*, 16, 988–999. doi:10.1162/0898929041502661
- Salinger, J. D. (1951). *The catcher in the rye*. Boston, MA: Little, Brown.
- Smeesters, D., Yzerbyt, V. Y., Corneille, O., & Warlop, L. (2009). When do primes prime? The moderating role of the self-concept in individuals' susceptibility to priming effects on social behavior. *Journal of Experimental Social Psychology*, 45, 211–216. doi:10.1016/j.jesp.2008.09.002
- Srull, T. K., & Wyer, S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology*, 37, 1660–1672. doi:10.1037/0022-3514.37.10.1660
- Viagas, R., Lee, B., & Walsh, T. (1990). *On the line: The creation of A Chorus Line*. Scranton, PA: William Morrow.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. doi:10.1037/0022-3514.54.6.1063
- Wheeler, S. C., & DeMarree, K. G. (2009). Multiple mechanisms of prime-to-behavior effects. *Social & Personality Psychology Compass*, 3, 566–581. doi:10.1111/j.1751-9004.2009.00187.x
- Wheeler, S. C., Jarvis, W. B. G., & Petty, R. E. (2001). Think unto others: The self-destructive impact of negative racial stereotypes. *Journal of Experimental Social Psychology*, 37, 173–180. doi:10.1006/jesp.2000.1448
- Wheeler, S. C., Morrison, K. R., DeMarree, K. G., & Petty, R. E. (2008). Does self-consciousness increase or decrease priming effects? It depends. *Journal of Experimental Social Psychology*, 44, 882–889. doi:10.1016/j.jesp.2007.09.002

Appendix

Experience-Taking Measure

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.
2. I found myself thinking what the character in the story was thinking.
3. I found myself feeling what the character in the story was feeling.
4. I could empathize with the situation of the character in the story.

5. I understood the events of the story as though I were the character in the story.
6. I was not able to get inside the character's head.
7. At key moments in the story, I felt I knew what the character was going through.

Note. Each item had a 9-point scale anchored at 1 (*strongly disagree*) and 9 (*strongly agree*).

Received July 25, 2011

Revision received December 21, 2011

Accepted December 22, 2011 ■