

Becoming a Vampire Without Being Bitten: The Narrative Collective-Assimilation Hypothesis

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Abstract

We propose the *narrative collective-assimilation hypothesis*—that experiencing a narrative leads one to psychologically become a part of the collective described within the narrative. In a test of this hypothesis, participants read passages from either a book about wizards (from the Harry Potter series) or a book about vampires (from the Twilight series). Both implicit and explicit measures revealed that participants who read about wizards psychologically became wizards, whereas those who read about vampires psychologically became vampires. The results also suggested that narrative collective assimilation is psychologically meaningful and relates to the basic human need for connection. Specifically, the tendency to fulfill belongingness needs through group affiliation moderated the extent to which narrative collective assimilation occurred, and narrative collective assimilation led to increases in life satisfaction and positive mood, two primary outcomes of belonging. The implications for the importance of narratives, the need to belong to groups, and social surrogacy are discussed.

Keywords

need to belong, collective identity, reading, social identity

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We read to know we are not alone.
 —C. S. Lewis in *Shadowlands* (Attenborough, 1993)

Humans are driven by a need for social connection (Baumeister & Leary, 1995; Maslow, 1968), which propels them to affiliate with collectives (i.e., groups).¹ Purportedly, the survival value of collective life for humans' evolutionary ancestors (Caporael & Brewer, 1995; Wilson, 1978) led to the evolution of internal mechanisms that propel modern humans to form and join collectives (Stevens & Fiske, 1995). These mechanisms predispose people to experience pleasure, such as increased life satisfaction and positive affect, from collective affiliations (Baumeister & Leary, 1995; Myers, 1992). The potency of the desire for collective bonds leads people to easily assimilate collective identities, even on the basis of the most minimal criteria (Tajfel, 1970). People may even assimilate a collective to which they do not belong, adopting its behaviors, attitudes, and traits (DeMarree, Wheeler, & Petty, 2005; Kawakami, Young, & Dovidio, 2002). Here, we propose that narratives provide the positive experience of connection to a collective. Specifically, we propose and examine the *narrative collective-assimilation hypothesis*, the hypothesis that experiencing a narrative leads to psychological assimilation of the collective described within the narrative.

Narratives have previously been linked to fulfillment of belongingness needs, albeit in a less direct manner. For example, correlational data suggest that narratives increase social skills by enabling people to learn the rules of human interaction and empathy (Mar & Oatley, 2008; Mar, Oatley, Hirsch, dela Paz, & Peterson, 2006; Oatley, 1999). In addition, identifying with characters while reading a narrative leads to a merging of self with the characters (Sestir & Green, 2010). Further, narratives play a role in alleviating loneliness, such that people are drawn to familiar narratives when they feel lonely, feel less lonely after engaging in familiar narratives, and engage in narratives to decrease the detrimental effects of social rejection (Derrick, Gabriel, & Hugenberg, 2009). Finally, many of the neural regions that are activated when people read about activities overlap substantially with the regions that are activated when people imagine and actually engage in the activities (Speer, Reynolds, Swallow, & Zacks, 2009).

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In summary, previous research demonstrates that there is a strong human desire to belong to collectives and that people easily assimilate collective identities. Further, people are drawn to narratives when they feel lonely, and the brain regions activated during reading of narratives are highly similar to the regions involved in actual behavior. Thus, disparate branches of research imply the narrative collective-assimilation hypothesis. In the experiment reported here, we tested this hypothesis by examining whether reading a passage from *Harry Potter and the Sorcerer's Stone* (Rowling, 1999) would lead participants to “become” wizards, and reading a passage from *Twilight* (Meyer, 2005) would lead participants to “become” vampires. We also tested the hypothesis that narrative collective assimilation would be moderated by level of collective self-construal; that is, we expected that the more participants tended to fulfill their social needs through identification with collectives, the more they would exhibit narrative collective assimilation. Finally, we reasoned that narrative collective assimilation would lead to the same effects as satiated belongingness needs—life satisfaction and positive mood—and we tested this hypothesis as well.

Method

Participants were 140 undergraduates (72 men, 68 women; 79% White; mean age = 19 years) at the University at Buffalo, State University of New York. They had completed the Collective and Relational Self-Construal Scales (Cross, Bacon, & Morris, 2000; Gabriel & Gardner, 1999), measures of the tendency to fulfill the need to belong through collective and relational bonds, during a mass-testing session earlier in the semester. An example item from the Collective Self-Construal Scale is, “When I join a group, I usually develop a strong sense of identification with that group.”

Participants were told that the purpose of the study was to examine people's responses to books and movies. First, participants read a passage from either *Twilight* (Meyer, 2005) or *Harry Potter and the Sorcerer's Stone* (Rowling, 1999), with the direction that they should read as they would normally do when reading for their own pleasure. Participants in the *Twilight* condition read chapter 13 (“Confessions”), in which Edward (a vampire) describes what it is like to be a vampire to his romantic interest, Bella. Participants in the *Harry Potter* condition read chapters 7 (“The Sorting Hat”) and 8 (“The Potions Master”), in which Harry and his friends (all wizards) are sorted into “houses” and Harry first encounters Severus Snape. Participants advanced to the next part of the experiment when they finished the assigned passage or when 30 min had elapsed. Participants read for an average of 25.5 min.

After participants finished reading, they completed an identity Implicit Association Test (identity IAT; Gabriel, Kawakami, Bartak, Kang, & Mann, 2010; Nosek, Banaji, & Greenwald, 2002), the scores from which were our main dependent variable. This response latency task assessed participants' implicit

identification with vampires relative to wizards. Participants completed two critical blocks, each consisting of 40 trials. In one critical block, participants were instructed to categorize “me” words (*myself, mine*) and “wizard” words (*wand, broomstick, spells, potions*) using the same response key and to categorize “not me” words (*they, theirs*) and “vampire” words (*blood, undead, fangs, bitten*) using another response key. In the other critical block, these pairings were reversed. Participants were instructed to respond as quickly and accurately as possible. The underlying rationale for the IAT is that the speed with which participants respond to two stimuli using the same key is an indication of implicit associations between the two categories. In identity IATs, it is assumed that people are quicker to respond to trials in which the self is indicated with the same key as the assimilated collective than to trials in which the self is indicated with the same key as some other group (Gabriel et al., 2010). Thus, we predicted that participants who read the *Harry Potter* chapters would respond more quickly when “me” words and “wizard” words were categorized using the same key rather than different keys, whereas those who read the *Twilight* chapter would respond more quickly when “me” words and “vampire” words were categorized using the same key rather than different keys.

We next administered an explicit (albeit somewhat indirect) measure of collective assimilation, which we call the *Twilight/Harry Potter Narrative Collective-Assimilation Scale*. Embedded among filler questions were three items designed to measure collective assimilation of *Twilight* vampires (“Compared to the average person, how high do you think you could jump?” “How long could you go without sleep?” and “How sharp are your teeth?”) and three items designed to measure collective assimilation of *Harry Potter* wizards (“How British do you feel?” “Do you think, if you tried really hard, you might be able to make an object move just using the power of your mind?” and “Do you think you might ever be able to make yourself disappear and reappear somewhere else?”).

Participants then completed the Transportation Scale, a measure of level of absorption into a story (Green & Brock, 2000); a five-item version of the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), a measure of mood; a single-item life-satisfaction measure (“Right now, in most ways my life is close to my ideal”; Schimmack & Oishi, 2005); and questions about the books and participants' reading habits.

Results

IAT scores were calculated by subtracting the mean response latencies for trials that paired “me” words with “vampire” words and “not me” words with “wizard” words from the mean response latencies for trials that paired “me” words with “wizard” words and “not me” words with “vampire” words. Thus, higher (positive) IAT scores indicated stronger associations between the self and vampires, whereas lower (negative)

IAT scores reflected stronger associations between the self and wizards. Five participants were excluded from analysis because more than 10% of their response latencies were less than 300 ms.² Scores on the explicit measure, the Twilight/Harry Potter Narrative Collective-Assimilation Scale, were computed by averaging responses to the wizard items ($\alpha = .43$) and responses to the vampire items ($\alpha = .60$) separately, converting these averages to *z* scores, and then subtracting the *z* score for wizard items from the *z* score for vampire items. Mood was calculated by reverse-scoring the negative-mood items and averaging these scores with the scores for positive items ($\alpha = .61$).

Scores on the identity IAT were examined using multiple regression analyses recommended by Aiken and West (1991). The predictor variables were collective self-construal, book read (represented as a dichotomous variable: 0 = Harry Potter; 1 = Twilight), and the interaction of collective self-construal and book read. All predictors were centered at their means (as were all predictors in subsequent analyses). All regression terms were entered into the model and interpreted simultaneously. The overall regression was significant, $F(3, 128) = 20.04, p < .001$. The narrative collective-assimilation hypothesis was confirmed: Participants who read the Harry Potter chapters self-identified as wizards ($M = -0.27$), whereas participants who read the Twilight chapter self-identified as vampires ($M = 0.30$), $t(131) = 7.54, p < .001$; semipartial $r^2 = .30$.

Our second hypothesis was that narrative collective assimilation would be moderated by level of collective self-construal. Indeed, analysis of the identity IAT scores revealed that the Collective Self-Construal \times Book Read interaction was significant, $\beta = -0.17, t(128) = 2.34, p = .02$, semipartial $r^2 = .03$ (see Fig. 1). Although participants low in collective self-construal (1 *SD* below the mean) became members of the

salient in-group, $\beta = 0.38, t(128) = 3.67, p < .001$, semipartial $r^2 = .07$, participants high in collective self-construal (1 *SD* above the mean) identified even more strongly with that group, $\beta = 0.72, t(128) = 6.83, p < .001$, semipartial $r^2 = .25$. In other words, the more participants tended to fulfill their social needs through collective identification, the more narrative collective assimilation they exhibited.³

Next, we examined the explicit measure, scores on the Twilight/Harry Potter Narrative Collective-Assimilation Scale. The overall regression was significant, $F(3, 132) = 3.43, p = .02$. The narrative collective-assimilation hypothesis was again confirmed: Participants who read the Harry Potter chapters self-identified as wizards ($M = -0.14$), whereas participants who read the Twilight chapter self-identified as vampires ($M = 0.15$), $t(132) = 2.17, p = .03$, semipartial $r^2 = .07$. The hypothesis that collective assimilation would be moderated by collective self-construal was again supported, $\beta = 0.27, t(132) = 2.17, p = .002$, semipartial $r^2 = .03$ (see Fig. 2). Participants who were high in collective self-construal exhibited narrative collective assimilation, $\beta = 0.033, t(132) = 2.75, p = .007$, semipartial $r^2 = .05$, whereas those low in collective self-construal did not, $p = .75$.⁴

To test the third hypothesis, that narrative collective assimilation leads to the same effects as satiating the need to belong (i.e., increased life satisfaction and improved mood), we computed overall narrative collective assimilation by reversing the IAT scores for participants in the Harry Potter condition. Thus, for people in both conditions, higher, positive collective-assimilation scores meant greater collective assimilation. As expected, greater narrative collective assimilation predicted both increased life satisfaction ($\beta = 0.215, p = .012$) and increased mood ($\beta = 0.18, p = .04$). Increased life satisfaction also predicted increased mood ($\beta = 0.275, p = .001$). To test for

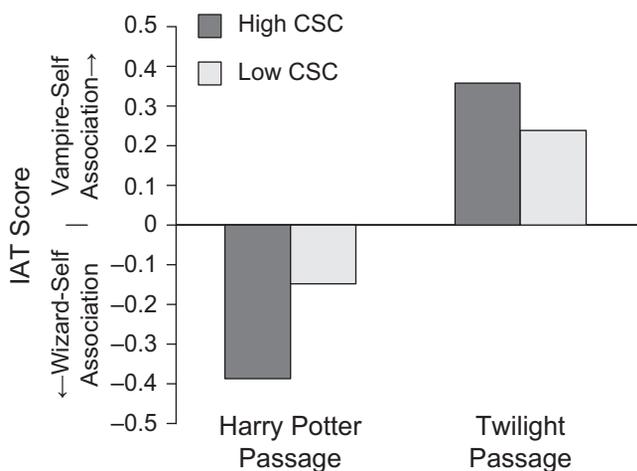


Fig. 1. Score on the implicit measure of narrative collective assimilation (the identity Implicit Association Test, or IAT) as a function of book read and level of collective self-construal (CSC). Positive values indicate identification with vampires, whereas negative values indicate identification with wizards. “High” CSC was defined as 1 standard deviation above the mean, and “low” CSC was defined as 1 standard deviation below the mean.

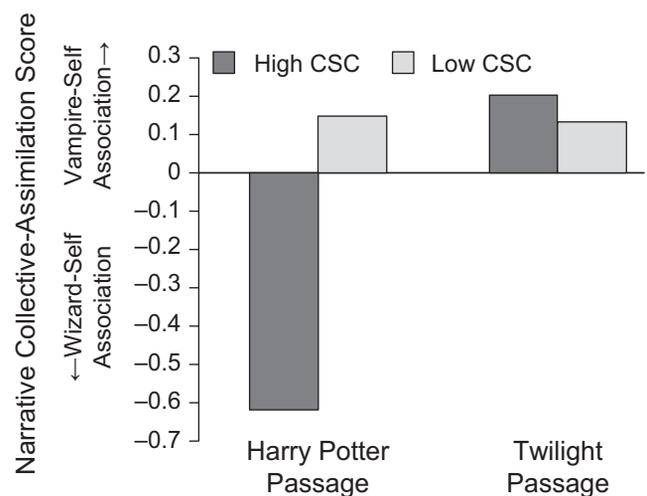


Fig. 2. Score on the explicit measure of narrative collective assimilation (the Twilight/Harry Potter Narrative Collective-Assimilation Scale) as a function of book read and level of collective self-construal (CSC). Higher values indicate identification with vampires, whereas lower values indicate identification with wizards. “High” CSC was defined as 1 standard deviation above the mean, and “low” CSC was defined as 1 standard deviation below the mean.

mediation, we regressed positive mood on overall narrative collective assimilation and life satisfaction simultaneously. Increased life satisfaction still predicted mood ($\beta = 0.275, p = .001$), but the relationship between narrative collective assimilation and mood was no longer significant ($\beta = 0.121, p = .153$; see Fig. 3). A Sobel test confirmed that the mediation was significant ($z = 1.95, p = .05$).⁵ In other words, narrative collective assimilation put participants in a good mood because it made them feel better about their lives.

Discussion

The proposed narrative collective-assimilation hypothesis was supported by results for both explicit and implicit measures; participants who read the Harry Potter chapters associated themselves with wizards, whereas those who read the Twilight chapter associated themselves with vampires. Furthermore, for both measures, the effects were moderated by the degree to which participants tended to fulfill their belongingness needs through collectives. This finding supports our argument that narrative collective assimilation is related to the desire to belong to groups. Also supportive of the link between narrative collective assimilation and belongingness needs is our finding that greater narrative collective assimilation predicted increased life satisfaction and positive affect, two common outcomes of a satiated need to belong.

This research complements and extends previous research on narratives and fulfillment of social needs (e.g., Mar & Oatley, 2008). For example, although previous research found that narratives alleviate loneliness (Derrick et al., 2009), no specific mechanism for that action was identified. The current research suggests that narratives alleviate loneliness by providing a collective identity that is easily assumed and psychologically rewarding.

This research also increases understanding of how social surrogates, or symbolic means of fulfilling relationships, function. Previous research demonstrated that social surrogates can provide symbolic relationship partners (i.e., affiliation with

celebrities; Derrick, Gabriel, & Tippin, 2008) and remind one of existing relationships (i.e., foods can have cognitive associations with primary relationship partners; Troisi & Gabriel, 2011). The current research suggests another mechanism for social surrogacy: affiliation with symbolic groups.

Finally, the current research increases what is known about the ability of collective connections to fulfill belongingness needs. Although connections to groups have long been identified as a means of social connection, most research on the need to belong has tended to focus on relational bonds (Baumeister & Leary, 1995). This is surprising given the prevalence of group identifications in society (e.g., team fandom, family groups, ethnic-group affiliation). The present research adds to what is known about the utility and availability of collective identities by demonstrating the ease and consequences of collective assimilation.

The pleasure of immersing oneself in narratives is not surprising or novel to anyone who has ever been lucky enough to get lost in a good book. However, the current research suggests that books give readers more than an opportunity to tune out and submerge themselves in fantasy worlds. Books provide the opportunity for social connection and the blissful calm that comes from becoming a part of something larger than oneself for a precious, fleeting moment.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Notes

1. The other component of the need to belong is the need to have intimate relationships (Brewer & Gardner, 1996).
2. Seven participants indicated suspicion when probed about the experiment (i.e., they thought the study was examining whether reading a book would change one's personality). Analyses excluding these participants yielded results indistinguishable from those obtained when these participants were included, so they were not removed from the sample.
3. Liking of the book, transportation, relational self-construal, and previous exposure to the book also interacted with book read. However, when all of the interactions and main effects were entered into the model concurrently, only the two-way interactions of book read with collective self-construal and liking of the book remained. The more participants liked the book, the stronger the collective assimilation. More details on this and other analyses are available upon request from the first author.
4. No other variables, including relational self-construal, were significant moderators of the effect of book read on the explicit measure.
5. The alternate mediation model, with mood as a mediator of the relationship between narrative collective assimilation and life



Fig. 3. Results of the analysis of increased life satisfaction as a mediator of the relationship between narrative collective assimilation and positive mood. The figure shows standardized regression coefficients; values outside parentheses were obtained when each predictor was entered into the model separately, and values inside parentheses were obtained when the predictors were entered simultaneously. Asterisks indicate significant coefficients ($*p \leq .05$; $**p \leq .01$).

satisfaction, was not supported. The relationship between narrative collective assimilation and life satisfaction remained significant when mood was entered into the model, and the Sobel test was not significant.

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