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CHAPTER FOUR

Social Surrogates, Social Motivations, and Everyday Activities: The Case for a Strong, Subtle, and Sneaky Social Self

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Contents

Abstract

Although the idea of human beings being primarily and inextricably social has strong support in the psychological literature, an examination of how human beings actually choose to spend much of their time suggests a species more interested in solitude than social connection. In this chapter, we propose that a careful examination of seemingly nonsocial activities actually strongly supports a view of humans as primarily and inextricably social beings. We argue that the social self can be seen as *strong*, *subtle, and sneaky*. Specifically, because social motivations are so strong, they can be filled in unexpected ways that people may not even recognize. In other words, social motives sometimes work below the surface of consciousness in subtle and seemingly sneaky (i.e., unconscious and indirect) ways. For example, although we know we are being social when we call a friend on the phone or go to a party, our research suggests that

we may also be socially motivated when we turn on the television, read a book, watch a football game, or go to a movie. We present evidence that supports a conception of a social self that propels us to actions that may not seem social to those around us, or even to ourselves, but that are actually fulfilling our very human and highly pervasive needs for social connection. We begin by discussing the seemingly nonsocial means people use to fulfill the need to belong. We then move on to reviewing evidence of ways in which people can be unaware of the strength of their social needs and of the social nature of their behavior. Finally, we conclude by discussing what this work suggests about human nature, modern behavior, and the social self.

How do you think one gets to be a Nobel laureate? Wanting love, that's how. Wanting it so bad one works all the time and ends up a Nobel laureate. It's a consolation prize. What matters is love.

**Nobel Prize winning Harvard biologist Dr. George Wald**

In their seminal paper, Baumeister and Leary (1995) persuasively and methodically argued for a basic and fundamental need to belong. The idea that humans are an essentially social species whose behavior can be understood through a social lens has gained a great deal of traction in social and personality psychology, as evidenced not only by the careful evidence Baumeister and Leary reviewed and summarized but also by the over 9000 times their original paper has been cited. As illustrated again and again, the need to belong is pervasive, potent, and comprehensive. Humans require the experience of inclusion and connectedness with others much the same way they require food and drink, sleep, shelter, and safety (Baumeister & Leary, 1995; Williams, 2007). In addition, the same affective system that serves other basic needs also serves the need to belong. When we feel connected to others, we feel good. When our needs are thwarted, we feel bad (Frijda, 1988). We therefore strive to maintain a sense of connection in order to fulfill this basic need.

Although the psychological literature seems to strongly support a view of humans as fundamentally social, one might wonder whether a careful examination of actual human day-to-day lives tells the same story. If we look at what people do with their leisure time and how they choose to spend those precious hours of free time in their day, do we see a species that is driven by social connection or one that is not? Certainly, people spend time at parties, dates, and social gatherings. However, on average, only 13% of adults' leisure time is devoted to socializing (United States Department of Labor & Bureau of Labor Statistics, 2003–2014). The remaining time is primarily spent watching television and movies (56%), reading books (7%), and being on

the internet (9%). People also devote their limited free time catching up on the lives of favorite celebrities, listening to music, praying, and cooking and eating a favorite meal by oneself. Even some activities that are done in the presence of others, like going to sporting events, concerts, and movies, are actually done with very little to no actual social interaction. How can we rectify a view of humans as fundamentally social species with the knowledge that humans themselves spend most of their free time engaged in solitary activities? Does the preponderance of so many solitary behaviors challenge the notion of a fundamentally social species?

In this chapter, we argue that a closer examination of seemingly nonsocial activities strongly supports a view of humans as unquestionably social beings. Although these activities are very broad, diverse, and often solitary, we propose that they can easily be understood as manifestations of the social self. Thus, in this chapter, we argue for a strong, subtle, and sometimes sneaky social self. We present evidence that supports a conception of a social self that propels us to actions that may not seem social to those around us, or even to ourselves, but that are actually fulfilling our very human and highly pervasive needs for social connection. Further, we suggest that the need to belong is so strong and omnipresent that we are often not aware of the influence it has on our thoughts, feelings, and behavior. In this chapter, we review research we have conducted which supports this view of a strong, subtle, and sneaky social self—one that fills its needs without our necessarily knowing it and through activities which appear solitary and often even asocial at a glance.

We begin by discussing the seemingly nonsocial means people use to fulfill the need to belong. We then move on to reviewing evidence of ways in which people can be unaware of the strength of their social needs and of the social nature of their behavior. Finally, we conclude by discussing what this work suggests about human nature, modern behavior, and the social self.
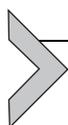
1. SOCIAL SURROGATES

For the last decade, research in our lab has been focused on examining social surrogates or symbolic social connections (i.e., ones that occur mostly in the mind) that fulfill social functions. Our research suggests that humans are flexible enough in how they fulfill their social needs that they can even utilize symbolic, nonhuman targets to fill these needs. Illustrations of ways in which humans are flexible in filling other nonsocial basic needs abound. For

example, historically, humans have relied upon naturally occurring sub-stances (e.g., coca leaves) or meditation to suppress the appetite when food was scarce. More recently, humans have turned to technologies, such as diet drugs, or more drastically, gastric bypass surgery, to experience satiety with-out eating. Modern humans are also quite flexible in filling their need for sleep, using caffeine to provide energy when rest is scarce. In our work, we have argued that commonplace leisure activities, such as reading narra-tive fiction, watching television, eating comforting foods, and surfing the Web for information about favored celebrities, can also provide the expe-rience of social need fulfillment. Our research suggests that facsimiles of social interactions presented in many leisure activities may actually be satis-fying the fulfillment of belongingness needs. Just as Harlow's (1958) infant monkeys experienced comfort from cloth surrogates, so too may beloved books, television shows, movies, foods, and celebrities potentially serve as "social surrogates," leading to an experience of belongingness even when no real, bona fide belongingness has been experienced.

We classify social surrogates as falling under three basic categories: *social worlds* are narratives in which people immerse themselves, like favorite books, movies, and TV shows; *reminders of others* are nonhuman entities which serve to remind one of real social relationships, such as pictures of friends, comfort foods from one's childhood, and Facebook status updates; and *parasocial relationships* are specific media figures with whom people have one-sided psychological bonds, such as favorite celebrities or fictional characters.
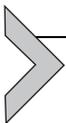
2. SOCIAL WORLDS

A major source of leisure time activity in the modern (and not-so-modern) worlds involves engaging with narratives. Whether one is listening to stories on the radio, snuggling up with a favorite book, being engrossed in a movie at the theater, or vegging out on the couch with a Netflix marathon, stories are all around us and we engage with them on a regular basis. There are obviously times when engagement has a social component, such as when we watch a movie with others, go to a book club to discuss a novel, or log online to chat about a favorite TV show. However, at their core, reading, watching, or listening to a story are solitary activities; one's focus is on the story itself, not on other people. Our work has examined whether this seem-ingly solitary activity serves a social function.

A number of different lines of research suggest an important role for narratives in development of social skills. For example, correlational data suggests that narratives increase social skills by enabling people to learn the rules of human interaction and empathy (Mar & Oatley, 2008; Mar, Oatley, Hirsh, dela Paz, & Peterson, 2006; Oatley, 1999). Furthermore, engaging in narratives leads to an increase in thoughts and emotions congruent with the ones presented in the narrative (Oatley, 1999) and results in more sophisticated social skills and abilities (Mar et al., 2006). Indeed, Mar and Oatley (2008) argue that one core function of narratives is to mentally simulate social interactions, potentially facilitating subsequent social behavior. In addition, identifying with characters while reading a narrative leads to a merging of self with characters (Sestir & Green, 2010; Shedlosky-Shoemaker, Costabile, & Arkin, 2014), which has the potential to provide social benefits. The most common themes in narratives are social (Hogan, 2003), and strong initial research demonstrates that narratives engage people in social processing (Mar & Oatley, 2008). For example, narratives can lead to empathizing with the characters, much as we empathize with real-world targets (Galinsky & Moskowitz, 2000) and to experiencing similar thoughts and emotions than we would in real-life social interactions (Gerrig, 1993; Oatley, 1999). Finally, many of the neural regions activated while reading about activities mirror the same regions activated when people actually engage in the activities, suggesting that merely reading about social relationships may lead to fulfillment of social needs (Speer, Reynolds, Swallow, & Zacks, 2009). In summary, there is compelling evidence that engaging with narratives can improve social skills and serve long-term interests of fulfillment of the need to belong.

Research has suggested that narratives can also serve more immediate demands of the need to belong by filling belongingness needs and protecting against the harmful effects of rejection, social isolation, and loneliness. Because belonging is not unconditional, rejection, social isolation, and loneliness are all too common parts of the human experience. Among our evolutionary ancestors, rejection and exclusion may have meant death, or at the very least, deprivation. Today, the consequences are not as severe. Yet rejection still hurts. After rejection, people experience shame (Gruenewald, Kemeny, Aziz, & Fahey, 2004), depression (Hagerty & Williams, 1999), the belief that life is meaningless (Twenge, Catanese, & Baumeister, 2003; Zadro, Williams, & Richardson, 2004), and pain similar to physical pain (DeWall & Baumeister, 2006; Eisenberger, Lieberman, & Williams, 2003; MacDonald & Leary, 2005). Thus, it is highly important for people

to be able to recognize potential threats against a sense of belonging and have varied and potent means to protect against them.

After rejection, people become more socially sensitive. People will pay more attention to social cues (Gardner, Pickett, & Brewer, 2000; Gardner, Pickett, Jefferis, & Knowles, 2005; Pickett, Gardner, & Knowles, 2004), seeking a chance to reconnect or an indication that reconnection is not possible. After rejection, people often seek reconnection and, potentially, will go to great lengths to receive acceptance. For example, experiencing rejection elicits greater unconscious mimicry of others' behavior (Lakin, 2004; Lakin & Chartrand, 2003), which is likely to increase rapport (Chartrand & Bargh, 1999), potentially facilitating reconnection. Rejection also causes individuals to become more attitudinally flexible, changing their opinions to agree with others (Williams, Cheung, & Choi, 2000). As attitudinal similarity also elicits liking and rapport, this can function as a means to reconnect or repair problematic relationships. More generally, after rejection, people become more interested in interacting with others, view others as more sociable, and become more generous toward others (Maner, DeWall, Baumeister, & Schaller, 2007). Essentially, rejection can lead to a host of behavioral and attitudinal outcomes, many of which can act in the service of relationship repair.

Social connections or interactions, or even thinking about valued others, can buffer against rejection or threats to relationships. Threats to relationships (e.g., fights with close others), social exclusion, and rejection can lead to a number of harmful effects, including reduced state self-esteem, negative mood states, aggression (Twenge, Baumeister, Tice, & Stucke, 2001), and even physical and emotional numbness (DeWall & Baumeister, 2006). Recent research, however, suggests that even brief social reconnections can buffer against such negative effects. For example, Twenge and colleagues (2007) find that the tendency to aggress after social exclusion is reduced among individuals who have a brief positive social exchange. More provocatively, the ability for social reconnection to buffer against the negative effects of exclusion appears to occur even when individuals merely think about a valued friend. Depending on real relationship partners is tricky not only because they are not always available but also due to the inherent risk of rejection. Thus, although individuals who have been rejected may want to form new social connections, the act of attempting to form new relationships is risky. The inherent riskiness of real relationships suggests that social surrogates can play a key role in fulfilling belongingness needs. In other words, social surrogates can potentially fill belongingness needs without risk of rejection.

In summary, rejection, isolation, and loneliness all threaten people's feelings of social connection. Because of the strength of the need to belong, people strive to find means of social connection when isolated. Some research has suggested that narratives can serve a social function. Research in our lab has examined the hypothesis that thinking about valued narratives leads to feelings of belonging and protects against the negative consequences of rejection, isolation, and loneliness (i.e., the Social Surrogacy Hypothesis), which we discuss in the next section.

2.1 Television

There's something deeply comforting about turning on a show you already know and love and letting hour after hour of its familiar glow wash over you. Yeah, you already know how the season finale turns out, but that's part of the pleasure; like a bedtime story you've heard over and over again, the joy is in the repetition.

Laura Hudson, writing on Wired.com

Although there are numerous possible means by which to engage in narratives, one ubiquitous source of narratives is television. In the United States, people report spending an average of 3 h per day watching television (US Department of Labor, 2006). This represents over half the total leisure time and is substantially more time than is actually spent with friends. Indeed, the rise in consumption of televised programming has strongly covaried with a drop off in time spent in traditional social interactions (Putnam, 2000). Television provides a rich visual and auditory environment, mirroring almost completely our daily experience, and requiring few of the cognitive resources necessary to simulate lexically mediated parasocial relationships (Green, 2004). Television programming, particularly reliably followed favorite programs, allows viewers the opportunity, week after week (or even day after day), to regularly immerse themselves in a narrative about a recognizable "social" world in which familiar people, situations, landscapes, and events become intimate and comfortable (Cohen, 2006). In summary, television viewing is ubiquitous, copious, and provides multisensory stimulation, making it a potent facsimile of social interaction.

It is precisely this immersive quality of narratives which we argue leads to fulfillment of belongingness needs. When we watch a narrative on television, the sounds of the stories fill our ears, the sights fill our eyes, and the stories capture our hearts. Episode after episode, we learn about the families, friends, love interests, schools, and work places of the characters. We cry when they cry, worry when they worry, and feel relief and joy when their fictional worlds are filled with happiness. Some theorists have argued that

much of the neural architecture of humans is ill-evolved to distinguish between "real" and "fake" people (Kanazawa, 2002; Reeves & Nass, 1996), making this immersion in televisions social worlds powerful and potent. Thus, as a means of deceiving the brain into an experience of belongingness, television's ability to provide multisensory stimulation of a broad social world likely makes it a potent ruse. Based on the power of television as a medium for narratives, we utilized television in our first examination of the *Social Surrogacy Hypothesis*—that thinking about valued narratives leads to feelings of belonging and protects against the negative consequences of rejection, social isolation, and loneliness (Derrick, Gabriel, & Tippin, 2008).

We first found evidence for the social surrogacy hypothesis in a correlational study examining television usage and loneliness (Derrick et al., 2008). In this study, we examined a large sample of people to determine whether they report preferring to watch a favorite television program relative to enacting other nonsocial activities when feeling lonely, and, if so, if they report that this favored television program reduces the need for social interaction and acceptance. Importantly, to differentiate between true social surrogacy and mere escapism, we compared favored television programs to watching whatever is on television (a nonfavored show), hypothesizing that favored television programs would be more likely to include social worlds that viewers tend to immerse themselves in and, thus, would be more likely to alleviate the belongingness need. Supporting our hypothesis, we found that people reported turning to favored television programs when feeling lonely, and feeling less lonely when viewing those programs. The same was not true for watching whatever was on television.

We also wondered whether these effects could be found in a laboratory, where the regular social context of watching TV shows could be removed. When people are all alone in the laboratory, does writing about their favorite TV shows have positive effects? To test this, we brought people into the lab and activated thoughts of social isolation by having them recall and write about a time when they had a conflict with a relationship partner. Then we had half of them write about their favorite television show and half write about watching whatever is on TV (control). Thus, we experimentally investigated whether the social world afforded by favored television programs could address belongingness needs aroused by threats to a real relationship. Not surprisingly, when people thought about threats to their relationships, they showed increased feelings of rejection, lower self-esteem, and stronger negative mood. However, when they also wrote about their

favorite television show, those effects disappeared. Thus, thinking about favored (but not nonfavored) television programs buffered against the drops in self-esteem and mood and increases in feelings of rejection commonly elicited by threats to close relationships. In other words, social worlds were able to completely eliminate the negative psychological consequences of social isolation in our participants. In summary, we found that when individuals' needs for belongingness were aroused, they could turn to television programs as one means to address those needs; when belongingness was threatened by experiencing or recalling a rejection experience, thinking about a favored television program buffered against the negative effects of that belongingness threat.

   In another study, we investigated the cognitive associations behind these effects. We hypothesized that calling to mind a favorite television program would reduce the accessibility of chronically activated exclusion–related concepts. As psychologists have long known, unfulfilled goal states are accompanied by the increased accessibility of goal–related concepts (Zeigarnik, 1927). Indeed, one of the signature effects of having a need or goal unfulfilled is sustained activation of need– or goal–relevant concepts (Förster, Liberman, & Higgins, 2005; see Förster, Liberman, & Friedman, 2007). Moreover, a certain chronic level of anxiety about social rejection or lack of acceptance is common among most people (Leary & Kowalski, 1995). Drawing on this logic, we hypothesized that if thinking of favored television programs fulfills chronically activated belongingness needs, the accessibility of exclusion–related concepts would be reduced. Insofar as both nonfavored television programs and recalling a positive (but nonsocial) life event do not fulfill such needs, neither of those should affect the accessibility of chronically activated exclusion–related concepts. That is, chronic belongingness needs would be unquenched in the nonfavored television and the positive control conditions, so participants in those conditions would show greater accessibility of exclusion–related concepts than participants in the favored television condition. To test this hypothesis, after participants finished the manipulation, we employed a word–completion task designed to measure the accessibility of words related to loneliness or exclusion (e.g., Bassili & Smith, 1986; Gilbert & Hixon, 1991; Sinclair & Kunda, 1999; Spencer, Fein, Wolfe, Fong, & Dunn, 1998). The exclusion–related words were exclude, reject, and hate. They were presented to participants as exc___, rej___, and ha__. Examples of other ways the items could be completed are excite, rejoin, and hard. As predicted, participants who were primed to think about favored television programs had reduced activation
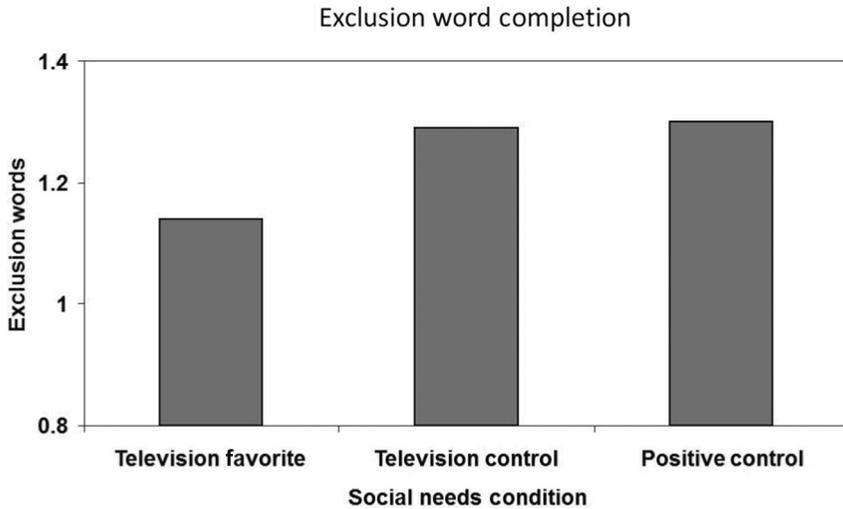
Exclusion word completion

Figure 1 The effects of condition on exclusion word completion.

of chronically accessible rejection–related words in a word–completion task compared to those in the other conditions (see Figure 1).

In summary, the results of these and other studies yielded provocative evidence for the Social Surrogacy Hypothesis: Thinking about valued television programs appears to provide the experience of belongingness and protect against the negative consequences of social isolation and exclusion. This work is consistent with a view of a strong, subtle, and sneaky social self; an isolated and seemingly nonsocial activity, watching television, actually serves a highly social function: it reduces the accessibility of exclusion and reduces the negative effects of social rejection, isolation, and exclusion.

2.2 Novels

I don't believe in the kind of magic in my books. But I do believe something very magical can happen when you read a good book.

J.K. Rowling

Although watching television can sometimes be a social experience, where two or more people watch a show together, reading a book is much more commonly solitary. Therefore, we turned our investigation to whether a completely solitary activity such as reading a novel can serve a social function, expanding our work to examine narratives in novels to see if they had similar effects to valued television programs. Examining novels also allowed

us to further examine our hypothesis that narratives function by activating social worlds to which people feel like they belong.

Specifically, we hypothesized that novels would pull people into the social worlds described within. Although not a multisensory experience, novels engage the imagination. The rich mental stimulation they can activate is precisely the kind of process that should lead the described social world to feel vibrant, real, and highly personal. Our work on novels examined the *Narrative Collective-Assimilation Hypothesis*—that experiencing narratives leads one to psychologically become a part of the collective described within the narrative (Gabriel & Young, 2011). In other words, we argued that when people become engaged with a narrative, they psychologically become a member of the group described within the narrative. Thus, it is not so much that Harry Potter or Hermione Granger become our actual friends when we read a Harry Potter novel; instead, we get pulled into their world and feel, perhaps unconsciously, that we are a part of their group.

Not only are novels, at their best, engaging and engrossing, but there is reason to believe that our highly social nature propels us to readily assimilate collectives. Much research suggests that we are driven to belong to groups; the need for social connection (Baumeister & Leary, 1995; Maslow, 1968) leads humans to affiliate with collectives (i.e., groups). Purportedly, the survival value of collective life for our evolutionary ancestors (Caporael & Brewer, 1995; Wilson, 1978) led to the evolution of internal mechanisms that impel modern humans to collectives (Stevens & Fiske, 1995). These mechanisms predispose people to experience pleasure from collective affiliations, such as increased life satisfaction and positive affect (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 also assimilate collectives to which they do not belong, adopting their behaviors, attitudes, and traits (DeMarree, Wheeler, & Petty, 2005; Kawakami, Young, & Dovidio, 2002). In summary, the need to belong leads people to readily and automatically assimilate groups to their identity, even when they know little about the group and are consciously aware that they are not actually members of that group. Because of this propensity to assimilate group identity, we predicted that when people engage with narratives, they psychologically become a member of the group presented in the narrative, which will then lead to a feeling of belonging and well-being.

To examine our hypothesis, we had participants read passages from either the Harry Potter or Twilight books. Each passage provided a vivid

depiction of the social world and collective within the narrative. After participants finished reading (~25 min), 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 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. 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). We also 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 (e.g., "How sharp are your teeth?") and Harry Potter wizards (e.g., "How British do you feel?"). We then measured life satisfaction and mood.

Both implicit and explicit measures revealed that participants who read Harry Potter psychologically became wizards, whereas those who read Twilight psychologically became vampires. Specifically, participants who read a passage from Harry Potter identified as wizards on both the IAT and the more explicit measure. Conversely, participants who read a passage from Twilight identified as vampires on both the IAT and a more explicit measure. In addition, the higher participants were in trait collective interdependence (e.g., "When I am in a group, it often feels to me like that group is an important part of who I am" and "The groups I belong to are an important reflection of who I am"; Gabriel & Gardner, 1999), the stronger the assimilation. In other words, the more participants tended to fill their social needs by affiliating with groups, the more they assimilated the group membership of the narrative. Finally, narrative collective assimilation had important consequences for psychological well-being. The degree to which the participants assimilated the social world, as reflected in their IAT scores, predicted increased life satisfaction and mood, two primary outcomes of belonging. Thus, our work supported the hypothesis that narratives lead

to immersion in social worlds and bolster feelings of social connection, suggesting that narratives may have the power to protect people against the negative effects of rejection and social isolation. In support of a strong, subtle, and sneaky social self, we found that a highly solitary activity has a strong social function.

2.3 Shared Social Worlds

Promise me you're not watching Mad Men without me…that when I get out of here, we're going to binge watch it, together, in bed, with take out.

Piper, Orange Is the New Black

In the studies previously described on watching TV shows and reading books, we were careful to make sure that our participants engaged with the narrative in a situation in which they were completely alone—when they were in our laboratory. That was important for our research program because we wanted to be sure that the effects of narratives were due to the narrative itself and not to the sharing of the narrative with other relationship partners. However, narratives, in particular television programs, often are shared with close friends, family, or romantic partners. Indeed, people may get together with friends once a week to watch a favorite show or binge watch a series with their romantic partner. Although in much of our research we worked hard to isolate the narrative from the social context, we were also interested in how the shared social world of TV and movies would affect a real close relationship. Thus, we examined how fictional narratives and the shared social worlds that come with them affect real relationship quality (Gomillion, Gabriel, Kawakami, & Young, under review).

Sharing a social network with close others (either romantic partners or close friends) is highly beneficial to relationship quality and stability, but maintaining an integrated social network may not always be feasible. As close relationships grow increasingly interdependent, partners incorporate aspects of the other into the self and view themselves as part of a pluralistic self–and–partner collective (Agnew, Van Lange, Rusbult, & Langston, 1998; Aron, Aron, Tudor, & Nelson, 1991; Aron, Paris, & Aron, 1995). An important part of this process involves merging each partner's social networks (Milardo, 1982). As relationships progress, partners share an increasing number of their social contacts (Kalmijn, 2003). For example, on average, married and cohabiting individuals report sharing nearly 60% of their friends with their partners (Kalmijn, 2003). Because sharing a social world is so important to relationship maintenance, we argue that *lacking* a

shared social network with a partner may threaten relationship stability. In other words, people may perceive that they lack a shared social reality with their partners when they share few mutual bonds with friends and family, which may ultimately undermine their interdependence and sense of connection. People are strongly motivated to promote their relationships in response to such threats. When lacking a shared social network threatens to undermine relationship quality, people may buffer their relationships from this threat by sharing media with their partners. When shared social networks are not available in the real world, we propose that sharing media such as television shows or movies with a partner may provide an alternate pathway to fostering a shared social world.

We hypothesized that the psychologically rich experience of being drawn into a narrative through a book, movie, or TV show is a perfect vehicle to lead to a psychological expansion of one's social world to include the groups contained within the narrative (e.g., Derrick et al., 2008). In this way, social surrogates like television shows and movies may allow partners in close relationships to compensate for a lack of shared "real-world" social connections and promote their relationship. Because sharing a social world with a relationship partner is highly important to relational maintenance, sharing media like television and movies with close others can allow partners to foster this sense of sharing connections to a social world. Through sharing media, partners can maintain their relationships in the face of potential threats to closeness and stability posed by lacking a shared social network. In three studies (Gomillion et al., under review), we used correlational, daily diary, and experimental methods to examine the influence of sharing real and fictional social worlds on relationship outcomes. The first study tested, and found support, for the hypothesis that lacking a shared social network of friends and family members with a romantic partner would predict decreased relationship quality, but only when partners did not frequently share media with one another. We were also able to rule out the possibility that sharing media buffers against the threat of lacking a shared social world simply because it allows couples to spend more time together. Another study utilized daily diary methodology and extended these findings by showing that people who shared media with their best friends were buffered from reduced daily closeness associated with experiencing fewer shared social experiences with the friend. These findings suggest that in their day-to-day lives, entering fictional social worlds with partners may allow couples and close friends to compensate for deficits in their shared real-life social worlds.

A final study experimentally manipulated perceptions of shared social connections with romantic partners to see if a lack of perceived shared social connections would motivate participants to share media with their partners, which in turn allowed participants to promote their relationships. When people experience a threat to a relationship, they increase their positive illusions about their relationships to bolster conviction and commitment (Murray, 1999). Thus, we predicted that leading people to believe that their social worlds did not overlap with their partner's social worlds would lead them to boost their feelings of closeness and commitment. We also predicted that it would increase their desire to share media. To test these hypotheses, we led participants to either think about the friends they did share (high social network overlap) or did not share (low social network overlap) with their partners, and then measured their desire to share media with their partners and tendency to engage in relationship promotion by increasing their positive feelings toward their relationship (e.g., closeness, commitment, etc.). We found that participants who thought about the friends they did not share with their partners reported a greater desire to share media with their partners than those who thought about shared friends. We also found that participants in the low social network overlap condition engaged in compensatory relationship promotion processes by reporting greater feelings of closeness and commitment. Finally, we found that motivation to share media with partners mediated the effects of the social network overlap manipulation on relationship promotion. Specifically, people in the low overlap condition perceived their relationships more positively *because* they increased their motivation to share media with partners. This strongly supports our contention that sharing media can allow partners to restore relationship quality when their shared social worlds are undermined. Our studies are the first to show that shared media serves an important and beneficial function for close relationships. Thus, shared social worlds not only provide individual benefits by providing people with the feeling that they belong to social group; they also can increase the quality of real relationships.

Interestingly, there has never been any indication in any of our studies on social world narratives that participants are generally aware of the social nature of their behaviors. Although our work strongly suggests that watching TV or movies or reading books serves a real social function, people report engaging in those activities for other reasons: because they are bored, because the narratives are interesting, etc. Indeed, unpublished questionnaire data from our lab suggest that people are highly skeptical of the

possibility that social motivation plays a role in their media consumption. Indeed, even in situations in which we, as researchers, are quite confident (because we manipulated only social needs) that social needs are influencing people's interests in narratives, we get no indications from participants that social needs at all impact their decisions. Thus, we see that very common activities such as watching TV, reading books, and going to movies not only serve a social function, but do so without people's knowledge. This is precisely what we are referring to when we discuss a *strong*, *subtle, and sneaky social self*. We are a species with strong social motivations. The strength of these motives leads to flexibility in the way we fill social needs. Specifically, social motives sometimes work below the surface of consciousness in subtle and seemingly sneaky (i.e., unconscious and indirect) ways. We know we are being social when we call a friend on the phone or go to a party, but our research suggests that we may also be socially motivated when we turn on the television, read a book, or watch a movie.
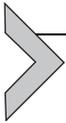
3. REMINDERS OF OTHERS

3.1 Comfort Food

The smell of that buttered toast simply talked to Toad, and with no uncertain voice; talked of warm kitchens, of breakfasts on bright frosty mornings, of cozy parlor firesides on winter evenings.

Kenneth Grahame, The Wind in the Willows

Our research has examined the social power of inanimate objects that remind one of relationship partners. These nonhuman reminders of actual human relationships include photographs and letters (e.g., Gardner, Pickett, & Knowles, 2005), foods that are associated with loved ones (Troisi & Gabriel, 2011), and even looking at one's newsfeed and pictures of others on Facebook or other social media sites (Nadkarnia & Hofmann, 2012). Research suggests that those reminders of close others may reduce feelings of loneliness and isolation (Sherman, 1991).

Our initial work examining reminders of others looked at comfort foods. In 1977, the phrase "comfort food" first appeared in the American vernacular to describe foods that satiate not only physical but also emotional needs (Comfort food, 2010). Although the terminology was new, the idea was certainly not; for centuries, countless sick children and adults have found comfort in the unadorned taste of food previously prepared by caregivers.

Some research suggests that comfort food may go beyond filling physical needs and also serve the psychological. For example, research suggests that

people often consume comfort food when they experience negative emotions (e.g., Dube, Lebel, & Lu, 2005; Evers, Stok, & de Ridder, 2010) and attempt to achieve a more positive emotional state (Wansink, Cheney, & Chan, 2003). Work in our lab examined whether comfort foods function as social surrogates that derive their emotional power from their connections to existing relationships and whether they are able to diminish the negative effects of social rejection and isolation (Troisi & Gabriel, 2011). Specifically, in two experiments, we tested whether comfort foods are associated with relationships and if they can reduce feelings of loneliness. In our first study, participants who either strongly identified chicken noodle soup as a comfort food or did not identify it as a comfort food were brought into the lab. Half of the participants ate chicken soup in what they thought was a taste test and the other half did not. Thus, participants sat alone in our laboratory and ate soup served to them by a research assistant whom they had never met before. Therefore, we were able to completely remove them from the social context in which they typically consume food. We then tested cognitive accessibility of relationship-related words. We predicted that if comfort foods are associated with close others (e.g., parents who cooked the foods for us), then participants who had just eaten a comfort food should have increased accessibility of relationship-related words. As predicted, participants who considered chicken noodle soup a comfort food and had just eaten chicken soup showed greater accessibility of relationship-related constructs (see Figure 2). Thus, even when they were by themselves, in an artificial situation, eating canned soup given to them by a research assistant, the associations with the food were strong enough to activate relationship-related words.

A second experiment following a similar paradigm to our previous work on television (Derrick, Gabriel, & Hugenberg, 2009; see also Ong, IJzerman, & Leung, 2015) directly examined the protective effects of comfort food on feelings of rejection and isolation. Half of the participants were primed with relationship conflict and half were not. Next, half of the participants wrote about a comfort food (the other half wrote about eating a new food). We predicted that writing about a relationship conflict would threaten one's sense of belonging and lead participants to feel lonely. However, we also predicted that comfort food would only protect some participants against the threat. In the first study, comfort food activated relationship-related constructs for all participants, regardless of attachment style. However, attachment style strongly predicts the kinds of reactions that people have to relationship partners. Thus, we predicted that only people with secure attachment styles, who have strong, reliable bonds with their
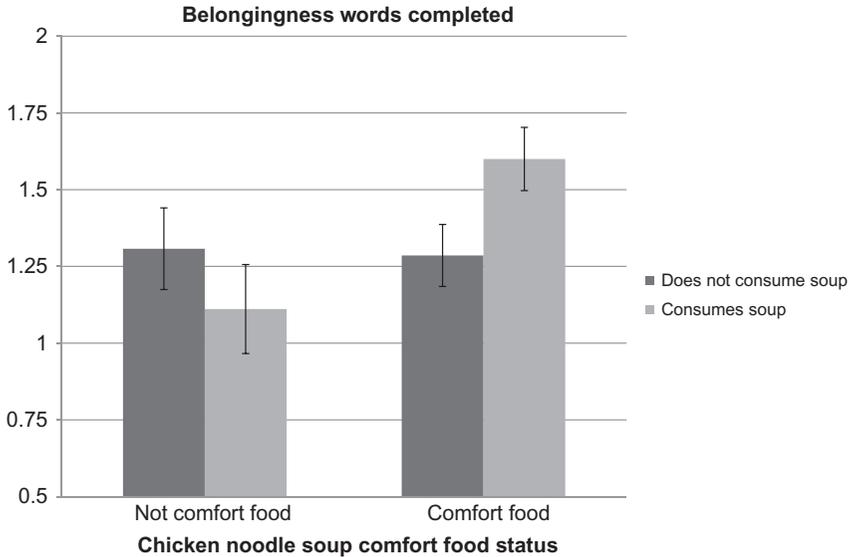
Figure 2 The effects of consumption of chicken noodle soup on belongingness word completion.

relationship partners, would be protected against the belongingness threat by the comfort food. As predicted, participants who were securely attached were able to use comfort food to reduce the effects of the belongingness threat on feelings of loneliness. In other words, securely attached participants who thought about comfort foods were unaffected by relationship threats.

In addition, a daily diary study examining real-life comfort food consumption practices suggested that participants were more likely to eat comfort foods following experiences of social rejection (Troisi, Gabriel, Derrick, & Geisler, 2015). Specifically, chronic attachment styles and daily feelings of isolation interacted to predict the tendency to eat comfort food on a daily basis. Given the social utility of comfort food and their cognitive ties to primary relationship partners, it is not surprising that we found that securely attached people were more likely to consume comfort food in response to feelings of isolation. That is, experiencing a threatened sense of belonging increased the likelihood of comfort food consumption, but only for those for whom the food presumably had favorable social utility (i.e., securely attached participants). Furthermore, it is not the case that these individuals were more likely to consume any food; they were only more likely to consume comfort food.

We were also interested in whether activating social motives would make comfort foods taste better. When we are lonely or feeling rejection, does the social utility of comfort food actually affect its taste? To test this hypothesis, we brought participants in the laboratory and sat them by themselves in a room (Troisi et al., 2015). We measured their attachment style and then subjected half of them to a relationship threat manipulation. Afterward, we told all of the participants that they would be participating in a "taste test" and asked them to evaluate some potato chips (we used potato chips because a pretest indicated that many students saw them as a comfort food). As predicted, participants who wrote about a rejection experience and were securely attached liked the comfort food better than any other group (see Figure 3).

In summary, our research on comfort food suggests that although we all have to eat to stay alive, our interest in food is shaped by much more than just survival. Our research suggests that our attraction to at least one kind of food can be explained by its social meaning. Overall, our studies suggest that when we eat, what we eat, and how we enjoy the food can all be predicted by its social utility. Importantly, this social link seems to occur beyond people's conscious knowledge. We have no indications that our participants thought "I feel lonely and this cake reminds me of my mom, who loves me, so I am going to eat it." Instead, the social motive operated largely outside of their awareness—as a subtle and sneaky motivator that took a seemingly independent behavior and utilized it for social purposes.
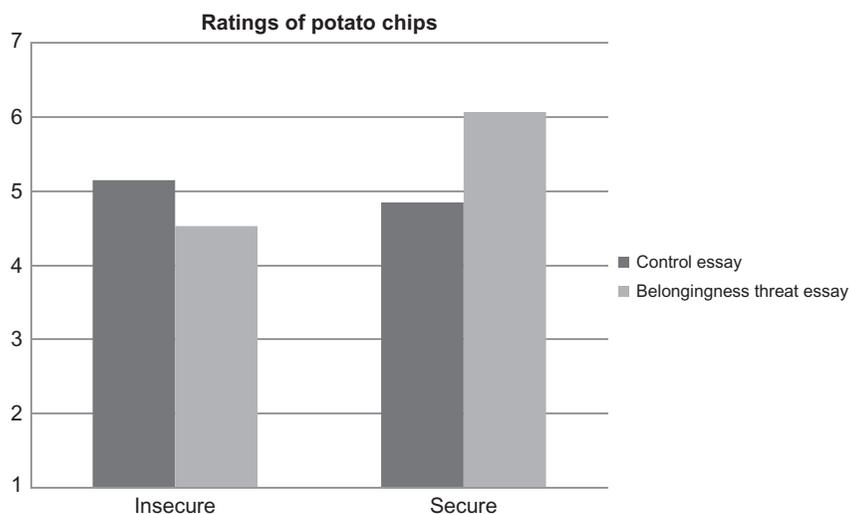

Figure 3 The effects of attachment style and belongingness threat on ratings of potato chips.

3.2 Prayer Objects

The holy rosary is the storehouse of countless blessings.

Alan de la Roche

We have also examined the expediency of prayer objects as reminders of others, specifically of reminders of God. Across many different cultures, times, and religions, human beings have prayed while clutching, holding, and wearing objects seen as central to their faith (Blanton, 2013). The ubiquitous role of these objects (i.e., prayer objects) in so many different religions and across time and place suggests that they can play a key role in establishing and strengthening relationships with God. We argue that people like to hold objects when they pray because these objects can be used as a reminder of God. We suggest that prayer objects take on the qualia of God in the minds of practitioners through a process of psychological "contagion," which states that after objects are in contact, they forever maintain a psychological link. In other words, because religious practitioners commonly report feeling close to God during prayer, objects prayed with will feel as if they take on some God qualia and therefore become more sacred and efficacious to practitioners. Thus, the efficacy of prayer objects comes from their connection with a close other (God), much like comfort food or other reminders of others.

The concept of contagion was introduced by Mauss (1902/1972) and Frazer (1890/1959) as one of their "laws of sympathetic magic," which were proposed to account for seemingly magical beliefs and practices in traditional cultures. Contagion was described by Frazer as the belief that once two objects are in contact, they always remain in contact (even when the actual physical contact has ceased). Specifically, he argued that "things which have once been in contact with each other continue ever afterwards to act on each other" (Frazer, 1959, p. 35). For example, a weapon used by a heroic warrior in a great battle will forever be seen as powerful, due to its past connection to greatness. Contagion is thus thought to occur when a neutral object comes in contact with something either holy or profane. In other words, contagion occurs when an object without a strong valence comes in contact with something that is either seen as very good or very bad. The neutral object then takes on the "essence" of the good or bad object.

Although initially theorized in anthropology (Frazer, 1959; Mauss, 1972), the process of contagion has been examined in psychological experiments. In support of the theory, it has been found that clothing worn by loved ones is often highly valued (Rozin, Millman, & Nemeroff, 1986); people are averse to wearing clothes that have previously been worn by a

disliked other (Rozin et al., 1986); college students do not want to wear a sweater owned by an individual infected with the AIDS virus, even after the sweater has been thoroughly cleaned (Rozin, Markwith, & McCauley, 1994); and objects are seen as more valuable when previously owned by celebrities (Newman, Diesendruck, & Bloom, 2011). Thus, there is a great deal of experimental and correlational evidence from the psychological literature supporting the theory of contagion: Once two objects come into contact, a residual contact continues, at least in the minds of observers.

In our research (Gabriel, Valenti, & Blanton, in press), we hypothesize that the theory of contagion can be used to explain, at least in part, the importance of prayer objects in religious experience. A large part of prayer involves a feeling of connection and presence of God. When a religious individual holds a prayer object (e.g., a crucifix or prayer cloth) while praying, the presence of the qualia of God should spread to the prayer object. Thus, we proposed, based on the theory of contagion, that objects prayed with by the self and by others will come to feel as if they embody the essence of God. The same way that shoes will get dirtier every time they are worn in the mud, a prayer object should become holier every time it is prayed with.

In a lab experiment with religious participants, we tested and found support for the hypothesis that when people pray with an object, that object can come to attain some of the perceived power and presence of God through the process of psychological contagion. Participants were brought into the lab and completed a scale measuring their tendency to believe in psychological contagion (Haidt, McCauley, & Rozin, 1994). The Trait Contagion Sensitivity Scale asks participants to indicate their agreement with a series of statements (e.g., "Even if I were hungry, I would not drink a bowl of my favorite soup if it had been stirred by a used, but thoroughly washed, flyswatter") on 7-point scales (from 1 *Strongly disa*gree to 7 *Strongly agree*). Agreement on these items indicates strong trait contagion sensitivity. Some participants were primed with contagion through contagious versus non-contagious vignettes. For example, one of the vignettes described someone reading a cartoon on a bulletin board and either being the only one who laughed (control) or laughing and then finding all the other people joining in (contagion).

After the prime, participants indicated how attractive various kinds of prayer activities were, using a 7-item scale (from 1 *Not at all appealing* to 7 *Extremely appealing*). The items included praying without a prayer object,

praying with objects that had never been used by anyone else (new), praying with objects that had been used once by another person, and praying with objects that had been used by many other people. We examined our hypothesis that prayer objects gain power via psychological contagion in three ways. In all three ways, the data support our hypothesis that contagion is strongly related to interest in prayer objects. First, overall, participants were more attracted to prayer objects that had been prayed with a lot. In other words, the more opportunities there had been for contagion, the more attractive the prayer objects were. Second, priming contagion increased interest in prayer objects that had been prayed with in the past, but did not affect the attractiveness of objects that had never been used in prayer, or in prayer without objects. That is, contagion was related to valuing objects that had been prayed on but there was no evidence for a relation between contagion and prayer in general. Finally, trait levels of contagion sensitivity predicted interest in used prayer objects. In other words, the more participants believed in the power of contagion, the more they were interested in utilizing previously used prayer objects when they prayed. In summary, objects became more attractive for prayer the more they were prayed with, and contagion sensitivity, both primed and trait levels, predicted an increased interest in prayer objects. Thus, the data were highly supportive of the role of contagion sensitivity in explaining the importance of prayer objects.

Although our work thus far has only examined prayer objects, we suspect that contagion may play a role in the social power of many different kinds of reminders of others. For example, we suspect contagion may explain the great attachment many people have for "comfort" items from their child-hood, or jackets worn by a boyfriend, or dinner plates used by a deceased relative. These objects may take on their psychological importance due to their link to a significant relationship partner, whether that is a girlfriend, parent, or even religious leader or icon. Thus, although on the surface, the attachment is with an inanimate object, the power of the attachment comes from its social utility; it is their psychological link to another person that makes the inanimate object important. In addition, we suspect that this link may not be one of which people are always aware. In other words, people may not know that they love their favorite dishes because of psychological contagion and the link of those dishes to beloved Aunt Kate. Instead, they may simply think they like the dishes. Thus, the sneaky and subtle social self affects liking for inanimate objects; our social needs are met without our even knowing it.
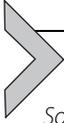
4. PARASOCIAL RELATIONSHIPS

So, I first met Bette Midler, in my head, when I watched the film The Rose. And since then, [she] and I have been best friends—in my head. In my head, she and I have traveled together. We have cut an album, and we pranked George Clooney. She's the godmother to the children of mine that she has never met. And once, Bette turned to me in a dream and said, 'Amy, you are the most talented person I have ever met. I hate to say, this kills me, but you're more talented than me. I bless you, and I release you to god.' And then she turned into a million doves, and flew away.

Amy Poehler

We live in an age of the superstar, in which every celebrity's whim, action, and interaction can be monitored via celebrity "news" programs, gossip magazines, and Web sites. This high level of contact can lead to the development of parasocial relationships (Horton & Wohl, 1956), in which people experience one-sided psychological bonds and feelings of intimacy with favorite media figures—either real celebrities or fictional characters. Parasocial relationships develop from consistent and repeated exposure over time, such that individuals come to believe they understand and "know" a particular media figure (Giles, 2002; Isotalus, 1995; Perse & Rubin, 1989; Rubin & McHugh, 1987). Although people generally understand that parasocial relationships are not "real" relationships, they are nevertheless experienced as real. Indeed, parasocial relationships often elicit cognitive, affective, and behavioral responses that are similar to those of real relationships. For example, exposure to parasocial relationships leads to social facilitation effects (Gardner & Knowles, 2008) and reduces prejudice toward out-group members (Schiappa, Gregg, & Hewes, 2005, 2006). People demonstrate high levels of commitment to their parasocial relationships (Branch, Wilson, & Agnew, 2013; Eyal & Dailey, 2012) and engage in various efforts to maintain their relationship (e.g., expressing gratitude and assuring loyalty; Sanderson, 2009); parasocial breakups (e.g., a favorite television show getting canceled) may even lead to emotional distress (Cohen, 2003, 2004; Eyal & Cohen, 2006; Lather & Moyer-Guse, 2011).

Consistent with our research on social worlds and reminders of others, parasocial relationships have also been shown to fulfill belongingness needs (Derrick et al., 2009; Knowles, 2013; Knowles & Gardner, 2012). In a series of studies (Knowles & Gardner, 2012), participants were led to recall a time they were rejected or accepted. Participants then wrote about their favorite TV character or a control construct. Results revealed that thinking

about parasocial relationships buffered against drops in self-esteem and mood for participants who relived a rejection experience. Thus, despite being one-sided relationships with media figures, parasocial relationships have the power to make a person feel socially connected and fulfill belongingness needs.

In our lab, we have found that these psychological bonds with media figures play a very important role in filling belongingness needs because they can provide some of the benefits of real relationships with very little risk of rejection. Sometimes the fear of social rejection can be enough to keep people from fulfilling their connectedness needs through actual relationships. Ironically, the times when one needs friends most can also be the times when friends are hardest to find, toughest to reach out to, and most likely to disappoint (e.g., Banou, Hobfoll, & Trochelman, 2009; Downey, Freitas, Michaelis, & Khouri, 1998; Murray, Holmes, MacDonald, & Ellsworth, 1998). Research on close relationships has found that people who need the benefits of close relationships the most—those who are psychologically vulnerable and at risk of the negative effects of isolation and rejection—are often the least able to obtain the benefits of social support and interaction (e.g., Murray, Holmes, Griffin, Bellavia, & Rose, 2001; Murray et al., 1998). At those times, social surrogates may be especially helpful because they offer the social benefits of real relationships with much lower risks of rejection. After all, if Jennifer Aniston does not know you exist, she cannot reject you.

The relative safety of parasocial relationships in comparison to real interpersonal relationships has led some researchers to suggest that people who experience dispositional social deficits should be more likely than people who do not experience those deficits to engage in parasocial relationships in an attempt to establish "safe" social connections (Horton & Wohl, 1956; Putnam, 2000). Despite the intuitive appeal of such theorizing, however, research linking social deficits with parasocial interaction has failed to provide consistent empirical support (Cohen, 2006). Chronic loneliness (Ashe & McCutcheon, 2001; Perse & Rubin, 1990; Rubin, Perse, & Powell, 1985), neuroticism, and low self-esteem (Tsao, 1996) do not reliably predict parasocial interaction.

The fact that people with low self-esteem are not especially likely to form parasocial relationships is perhaps the most surprising finding, because the fear of rejection plays a particularly large role in the social deficits experienced by low self-esteem individuals. Specifically, low self-esteem people's devaluation of themselves makes them especially concerned about the threat

of rejection from others, leads them to distance themselves from relationship partners, and keeps them from getting many relationship benefits (e.g., Murray, Derrick, Leder, & Holmes, 2008; Murray, Holmes, & Griffin, 2000; Murray et al., 1998; Murray, Rose, Bellavia, Holmes, & Kusche, 2002). Thus, one might suspect that low self-esteem people would be particularly attracted to parasocial relationships because of the low risk of rejection.

Work in our lab addressed this quandary by examining the consequences of social surrogate use rather than its antecedents. After all, our society offers a seemingly unlimited level of opportunity to engage with social surrogates (e.g., Giles, 2002; Klimmt, Hartmann, & Schramm, 2006), for a wide variety of reasons (e.g., Derrick et al., 2008; Knowles, 2007). Thus, we hypothesized that, although both low and high self-esteem people would form parasocial relationships, only low self-esteem people would use those parasocial relationships to derive benefits for the self. To protect themselves from the negative effects of rejection real relationships can bring, low self-esteem people will rely on parasocial bonds to bolster themselves.

One benefit of interpersonal relationships is the reduction of self-discrepancies. According to self-discrepancy theory, most people have some level of discrepancy between who they are and who they wish to be (Higgins, 1987; see also Markus & Nurius, 1986). However, relationships can help reduce the discrepancy. Friends can psychologically bring people closer to their ideal self, particularly for people who are comfortable being close to others (Gabriel, Carvallo, Jaremka, & Tippin, 2008). This arises through "basking in the reflected glory" of a relationship partner (Cialdini et al., 1976). In other words, people assimilate the attributes of a relationship partner that are similar to one's ideals for the self, leading to a reduction in self-discrepancies. Romantic partners can facilitate a similar growth toward one's ideal self (Drigotas, Rusbult, Wieselquist, & Whitton, 1999). Indeed, romantically involved people report being significantly closer to their ideal self than romantically uninvolved people (Campbell, Sedikides, & Bosson, 1994).

People with lower self-esteem are more likely than people with higher self-esteem to be attracted to a person who is similar to their ideal selves (Mathes & Moore, 2001). Additionally, people with low self-esteem are especially likely to have large actual-ideal discrepancies (Higgins, 1987). Thus, it would seem that low self-esteem people would be in an ideal situation to utilize relationship partners to reduce self-discrepancies. Unfortunately, the very nature of low self-esteem makes that process difficult for people with low self-esteem.

Deriving benefits for the self from a relationship partner requires that people risk the rejection that is always a possibility when we feel close to another person. Indeed, assimilating the positive characteristics of another person, rather than making a threatening upward social comparison (e.g., Tesser, Millar, & Moore, 1988; Wood, 1989), is dependent on closeness to the relationship partner (Gardner, Gabriel, & Hochschild, 2002; Lockwood, Dolderman, Sadler, & Gerchak, 2004). Similarly, people only experience self-growth in friendships and romantic relationships when they are comfortable with closeness (Gabriel, Renaud, & Tippin, 2007), and when they experience affirmation and positive regard from their relationship partner (Drigotas et al., 1999; Murray, Holmes, & Griffin, 1996). Unfortunately, people with low self-esteem, who need these benefits the most, are often unwilling to risk closeness due to the prospect of rejection (Murray et al., 1998, 2000, 2002).

Parasocial relationships, on the other hand, present little threat of rejection. Thus, parasocial relationships should provide a context in which low self-esteem people can feel safely connected to others and garner the same benefits high self-esteem individuals can get from real relationships. We examined that hypothesis in our laboratory (Derrick et al., 2008). In one study, we utilized questionnaire data to assess the relations between self-esteem, parasocial relationship closeness, and self-discrepancies. We found that low self-esteem people (but not high self-esteem people) perceived similarity between their favorite celebrities and their ideal selves. We also found that for low self-esteem people (but not for high self-esteem people), perceived similarity of the favorite celebrity to their ideal selves predicted empathy and liking for the celebrity. Thus, low self-esteem people (but not high self-esteem people) had favorite celebrities who were similar to their ideals for themselves and liked them because of that similarity.

In another study, we primed high and low self-esteem participants to think about their favorite celebrities or a control celebrity. Participants wrote an essay about their favorite celebrity or about Regis Philbin (who was very well known at the time, but not a favorite celebrity of any of our participants). We then measured how similar participants felt to their ideals for themselves. As predicted, we found that thinking about their favorite celebrities significantly reduced the self-discrepancies of low (but not high) self-esteem individuals (see Figure 4).

Finally, in a third study, we found that the effects were unique to parasocial bonds. In this study, all participants had low self-esteem. We primed participants with either their favorite celebrity, a close relationship partner,
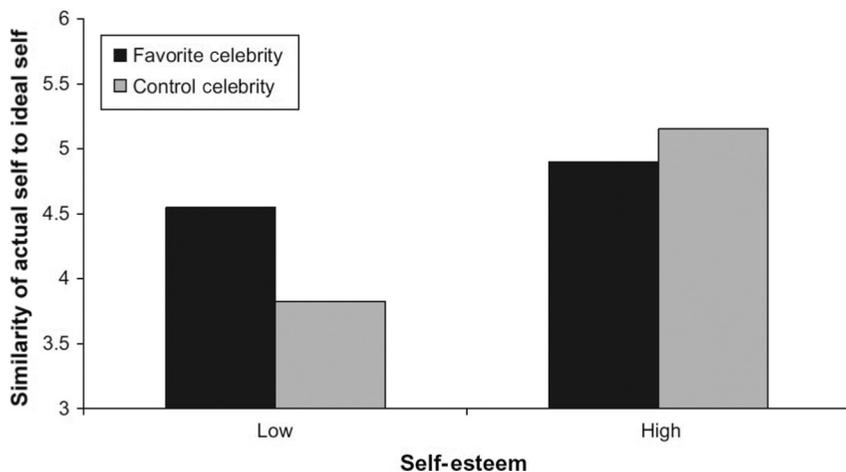
Figure 4 The effects of self-esteem and celebrities on self-discrepancy.

or a control celebrity and measured perceived similarity to the ideal self and perceived similarity of the celebrity to the actual self. We found that low self-esteem people were unable to garner benefits from their actual close friends, but they were able to garner them from parasocial bonds. In addition, the effects were mediated by actual–self/celebrity similarity. In other words, when low self-esteem individuals thought about their favorite celebrities they changed to feel more similar to those celebrities. That change to be more similar to the celebrities made them feel more similar to their ideal selves. In summary, parasocial bonds provide a means to bolster the self for people who are unable to garner that benefit from real relationships due to fears of rejection. In addition, we have no reason to think that participants had any awareness of the effects of the celebrities on the self; suspicion checks revealed no indication of such awareness. Thus, unbeknownst to them, participants were able to feel better about themselves by assimilating the positive traits of a liked celebrity into their own self–concepts.

   The ability of celebrities to reduce self-discrepancy was limited to circumstances in which our participants had parasocial bonds with the celebrities. In other words, favorite celebrities were assimilated to the self, but nonfavored likable celebrities (e.g., Regis Philbin) were not assimilated to the self. This led us to propose and test the *Parasocial Relationship-Moderation Hypothesis* (Young, Gabriel, & Sechrist, 2012), which suggests that when a parasocial relationship exists, people will assimilate the characteristics of a media figure; conversely, when a parasocial relationship does not exist,

assimilation will not occur (and contrast will occur instead). We examined this hypothesis within the well-studied area examining the effects of exposure to very thin models, actresses, and celebrities on young women's body image. It is often assumed, in existing research and popular belief, that thin media ideals inevitably have negative effects on women's body image. Indeed, one of the most robust, highly replicated, and frequently cited findings in body image research is that exposure to thin media figures has negative and sometimes severe consequences for women (see Grabe, Ward, & Hyde, 2008 for a meta-analytic review). An abundance of research, both correlational and experimental, demonstrates that exposure to thin media ideals leads to body dissatisfaction and the development of disordered eating habits (Birkeland, Thompson, & Herbozo, 2005; Bissell & Zhou, 2004; Halliwell & Dittmar, 2004; Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Strahan, Spencer, & Zanna, 2007). Thus, the dominant narrative on the effects of thin media figures on body image is a bleak one. However, according to the Parasocial Relationship-Moderation Hypothesis, Parasocial Relationship status with a thin celebrity should moderate their effects on women's body image, such that exposure to a thin media figure with whom one has a parasocial relationship no longer has negative effects on body image.

To test that hypothesis, we ran a study in which participants wrote an essay about their favorite female celebrity or a control celebrity (Young et al., 2012). Following, we measured their perceptions of the celebrity's body size and then assessed their current body satisfaction. Consistent with previous research demonstrating the detrimental effects of thin media figures on body esteem (Grabe et al., 2008), we found that exposure to a control celebrity who was perceived as thin led women to feel bad about their bodies. However, as predicted by the Parasocial Relationship-Moderation Hypothesis, having a parasocial relationship significantly attenuated and even reversed the effect; women exposed to a thin media figure felt better about their bodies than women exposed to an average sized media figure. A follow-up study revealed that exposure to a thin parasocial relationship celebrity led participants to feel more satisfied with their bodies *because* they assimilated the celebrity's body size and shape. Indeed, women felt thinner by association with their thin parasocial relationship partner.

In another study, we experimentally manipulated perceived similarity (simulating a parasocial relationship partner) in order to maximize experimental control and reduce potential confounds associated with preexisting parasocial relationship status (Young et al., 2012). Specifically, we told

participants they had the same or a different birthday as a thin media figure prior to reporting their own body satisfaction. This birthday manipulation subtly increases perceptions of overall similarity to a target (Burger, Messian, Patel, del Prado, & Anderson, 2004). As predicted, women exposed to a thin model with whom they shared a birthday felt better about their bodies than those exposed to a thin model with whom they did not share a birthday. In addition, the alternative explanation that our results could be attributed to mood was not supported. Finally, in support of the view of the social self as subtle and sneaky, this research suggests that people are not consciously aware that subtle manipulations of similarity (such as shared birthdays) have any effect on their feelings of closeness to a target (Burger et al., 2004).

Next, we wondered if parasocial bonds would have the same effects for the body image of men. At first, we were unsure if we could (or even should) test whether parallel effects occurred for men due to how hard it was for us to find celebrities with whom our male college students had parasocial bonds. Initial surveys in our lab suggested that our male students were less interested in celebrities than our female students, which made us worry about our ability to replicate our findings with men. Thankfully and perhaps predictably, superheroes came to the rescue. From childhood to adulthood, superheroes play an important part in men's lives. Boys grow up watching superhero cartoons, reading comic books, and playing with superhero action figures. In some cases, boys even pretend to be superheroes (Parsons & Howe, 2006). As adults, men reconnect with their favorite superheroes through the world of cinema. Films featuring superheroes are among the most popular films made, grossing over $10 billion in box office sales worldwide (Box office mojo, 2012). Despite the pervasiveness of superheroes in male lives, very little is known about their psychological effects, especially in the area of body image. Understanding the possible implications is of particular importance because over the last few decades, superheroes' bodies have become extremely muscular with body dimensions that are impossible for most men to attain (Baghurst, Hollander, Nardella, & Haff, 2006; Pope, Olivardia, Gruber, & Borowiecki, 1999).

Body dissatisfaction is a growing problem among men and is associated with a wide array of negative outcomes, including low self-esteem, depression, eating disorders, steroid use, and muscle dysmorphia—a pathological preoccupation with one's muscularity (Cafri, Olivardia, & Thompson, 2008; Olivardia, Pope, Borowiecki, & Cohane, 2004). An abundance of correlational and experimental research demonstrates that exposure to muscular media figures contributes to men's body dissatisfaction (see Barlett,

Vowels, & Saucier, 2008; Blond, 2008 for meta-analytic reviews). Based on the literature on the Parasocial Relationship-Moderation Hypothesis, we predicted that superheroes would harm men's body image unless they had a parasocial bond with the superhero, in which case their body esteem would be bolstered.

In a pretesting session held early in the semester, we assessed whether men in our participant pool had parasocial relationships with either Spiderman or Batman (Young, Gabriel, & Hollar, 2013). Men who did and did not have bonds with the superheroes were invited to participate in the study. We conducted two versions of the study, a Batman version and a Spiderman version, so we could rule out potential confounds associated with a particular superhero (analyses revealed there were no differences between the superheroes). For each version, participants who had versus did not have a parasocial relationship with the superhero were exposed to a muscular versus nonmuscular (i.e., control) image of the superhero. Following, we assessed participants' feelings of muscularity (which would reflect assimilative or contrastive processes) with measures of current body satisfaction and hand grip strength. Consistent with previous work demonstrating the harmful effects of muscular media figures (Barlett et al., 2008; Blond, 2008), we found that exposure to muscular nonparasocial relationship superheroes had a negative impact on body image. However, consistent with previous work on the moderating role of parasocial relationship status (Young et al., 2012), we found that the negative effects of exposure to muscular ideals on feelings of muscularity were eliminated when a parasocial relationship existed. Thus, men who were exposed to muscular superheroes felt bad about their bodies unless they had a parasocial bond with the superhero. Additionally, men who had a parasocial relationship with the superhero actually demonstrated greater physical strength on the hand grip strength task, compared to those exposed to a nonmuscular superhero. In sum, our research suggested that muscular superheroes change men's body image and that the direction of that change is determined by parasocial relationship status. Furthermore, although we did not directly assess knowledge of the superheroes affecting them, our probes for suspicion revealed no evidence that participants were aware that the bond that they had with the superhero affected their feelings about themselves.

If it is the case that exposure to parasocial relationship media ideals makes women and men feel better about their bodies, as research in our lab demonstrates, might people be especially likely to seek out favored celebrities when experiencing poor body image? We proposed that people who feel

bad about their bodies are drawn to media figures with whom they have a parasocial relationship, possibly because those media figures make them feel better about themselves (Young et al., 2012, 2013). To examine this idea, we conducted a 2-week daily diary study (Young et al., in preparation) in which participants indicated their exposure to favored celebrities that day (e.g., "I looked up one of my favorite same-sex celebrities online") and body satisfaction. Results revealed that lower body satisfaction on one day predicted a greater likelihood of exposure to favorite celebrities the following day, suggesting that men and women who felt bad about their bodies were drawn to their favorite celebrities. The same was not true for the reverse relationship: Exposure to favorite celebrities did not predict lower body satisfaction on the following day, implying that parasocial relationships do not negatively contribute to one's body image. Taken together, this research suggests that exposure to very thin favorite celebrities is not necessarily harmful, and may even be beneficial when a parasocial relationship exists.
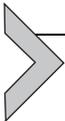
5. SOCIAL SURROGATES: ADDITIONAL IMPLICATIONS AND FINAL THOUGHTS

Across numerous studies utilizing a wide variety of social surrogates, we have found consistent evidence that nonhuman targets have very real social functions. Favorite television shows, books, movies, comfort foods, prayer objects, and beloved media figures are all *symbolic* and provide no genuine human interaction, yet have very real social effects. We reviewed research on three different kinds of social surrogates: social worlds, reminders of others, and parasocial relationships. Although the three different kinds of social surrogates differ in many ways, they also share common, important features. Specifically, they are all symbolic social connections (as opposed to real, tactile relationships), and they have all been linked to the fulfillment of social needs, as well as how one thinks and feels about the self.

Very little research, so far, has directly compared the outcomes of the different kinds of social surrogates. Although the outcomes and antecedents of different social surrogates seem similar across studies, we have yet to do research carefully comparing them to one another. However, recent research in the lab has focused on implications and certain individual differences in uses and need fulfillment. We started this research by focusing on individuals who have an especially difficult time connecting with others: those who have experienced trauma in their lives.

Research on trauma suggests that experiencing traumatic events brings an increased need for social connection and a paradoxical increased difficulty in forming close bonds. The threat of possible social rejection, to someone who is already suffering psychologically, may be too worrisome to allow them to reach out and get the social support they need. Therefore, we hypothesized that social surrogates may provide a safe method of social connection for individuals who have experienced traumatic events (Gabriel, Read, Young, Bachrach, & Troisi, in preparation).

In our laboratory, we examined the unique role social surrogates may play in fulfilling the social needs of people who have experienced trauma. In our first study, we collected correlational data examining experience of traumatic event, social surrogate use when lonely, and posttraumatic stress disorder (PTSD) symptomology. Common traumas reported included loss or threat of loss of loved one, sexual assault, motor vehicle and other accidents, and family violence. We developed and utilized a scale to measure various types of social surrogate use. We found that participants who had experienced trauma were more likely to report being drawn to a wide variety of social surrogates when lonely; the more PTSD symptoms, the more interested they were in social surrogates. This was true even when controlling for other related constructs, including depression, self-esteem, and attachment style. Thus, the first study suggested that people who experience trauma are especially likely to use social surrogates.

In a second study, participants who had experienced traumatic events but had not developed PTSD, participants who had experienced traumatic events and developed PTSD, and participants who had not experienced traumatic events were brought into the lab. Participants were allowed to pick whichever kind of social surrogate was most meaningful to them. Participants were either primed with a meaningful social surrogate or a control and then feelings of social connection were measured. In the control condition, participants listed and described all the items in their bedroom. Participants who had experienced trauma, but did not suffer from PTSD, felt more socially connected after thinking about a social surrogate. Thus, as predicted, those participants were able to use the social surrogates to feel better. However, trauma-exposed participants with significant PTSD symptoms actually felt worse after thinking about the social surrogate, even though Study 1 showed that they were most interested in social surrogates. This suggests that whereas some people, despite a history of trauma, are able to effectively use social surrogates to fill social needs, those with posttraumatic stress face yet another challenge when attempting to seek out

others (King, Taft, King, Hammond, & Stone, 2006; Riggs, Byrne, Weathers, & Litz, 1998; Woodward et al., 2013). Although we were unable within those studies to directly address the mechanism behind the relation, several possibilities presently exist. It could be, for example, that the ability to form meaningful symbolic relationships is what distinguishes those who do and do not develop posttraumatic stress following trauma. Moreover, this risk characteristic may continue to be a barrier to ameliorating this distress through social connection. Alternatively, it may be that the sense of disconnection and emotional numbness that are characteristic in those with PTSD prohibit these individuals from achieving a sense of connectedness even when they seek it. These questions are intriguing and point to several directions for future inquiry.

In summary, across two studies, we found that individuals who have experienced traumatic events report increased interest in using a wide variety of social surrogates. Furthermore, individuals who have experienced trauma without developing PTSD are able to effectively use social surrogates to combat social isolation. However, PTSD sufferers actually feel worse after social surrogate use. There is no shortage of research demonstrating the very serious effects of trauma on the human psyche and the need for people experiencing trauma to feel social connections in order to heal. It now appears that social surrogates may provide some people who have experienced trauma a low-risk means of gaining social connection. This research also expands on what is known about the efficacy of social surrogates for filling belongingness needs and gives the first suggestion, to our knowledge, that social surrogates can play a role in dealing with mental illness. It also suggests that under some conditions, social surrogates can have negative effects. Finally, it suggests that different kinds of social surrogates can have similar effects on the self.

It is interesting that successful use of social surrogates was found for people without PTSD rather than people with PTSD. Early theorizing on social surrogates generally assumed that they were secondary ways to fill social needs that would be used mostly by people who were deficient in their ability to form "real" bonds. However, empirical work has found little, if any, support for that hypothesis (Rubin et al., 1985). Indeed, instead of being related to personality characteristics that make real relationships difficult, parasocial relationships tend to be related to personality characteristics that are helpful for real relationship formation, such as extraversion and empathy (Tsao, 1996). Similarly, some research has found that parasocial relationships are associated with high, not low, self-esteem (Turner, 1993) and are not

predicted by chronic loneliness (Ashe & McCutcheon, 2001; Perse & Rubin, 1989). Thus, rather than demonstrating utilization of symbolic social bonds as social surrogates is deviant or unusual behavior, research seems to suggest that it is a normal part of modern human social need fulfillment.

Furthermore, the bonds formed with social surrogates mirror the bonds with real relationship partners in many important ways. For example, research suggests that parasocial bonds, like real bonds, can be predicted using the investment model of close relationships, which argues that commitment to a current relationship can be predicted by satisfaction from the relationship, quality of alternatives, and the amount invested (Eyal & Dailey, 2012; Rusbult, Agnew, & Arriaga, 2012). Furthermore, attachment style predicts parasocial bonds in much the same way as it predicts regular relationships formation and success (Cohen, 1997; Cole & Leets, 1999). Similar to real relationships, people turn to favorite narratives to restore depleted self-control resources (Derrick, 2013). Finally, contact with social surrogates from outgroups, in the form of watching television shows or reading books featuring members of other groups, can lead to reduced prejudice in much the same way that contact with real members of outgroups can reduce prejudice (Johnson, Huffman, & Jasper, 2014; Schiappa et al., 2005; Vezzali, Stathi, Giovannini, Capozza, & Trifiletti, 2015). Thus, research suggests that social surrogates do not replace real relationships in one's life but instead supplement them and operate using the same mechanisms as those real relationships (Cohen, 2005; Kanazawa, 2002).

Finally, although we utilize the term social surrogate here and in other work, we do so with a growing sense of discomfort. The term surrogate implies a lesser substitute for something real. Although that is certainly one way to interpret social surrogates, accumulating evidence about social worlds, reminders of others, and parasocial relationships makes it more and more difficult to see them as mere secondary stand-ins for something more substantial. Our research and research from other labs do not suggest that surrogates stand as a secondary replacement for real relationships, but instead exist alongside real relationships. Because of this accumulating evidence, in our lab, we occasionally replace the term social surrogate with "symbolic bonds," referencing the fact that these are relationships that exists purely on a symbolic level (i.e., in a person's mind). In other words, the characters in Harry Potter or on the show Friends, and celebrities like Ben Affleck and Jennifer Aniston, are not real people in most people's lives, but they exist in their minds, and the bond between the symbolic partner and the self can feel as cognitively tangible as ones that come from a real

relationship. Although the term symbolic bond comes with its own limitations, we appreciate that it does not imply secondary or weaker benefits. Indeed, the more we know about these symbolic relationships, the less they seem like mere surrogates for something else and the more like powerful agents on their own. We continue to call them social surrogates in this chapter and in much of our other work for lack of a better term and for the sake of consistency, but we do so with growing hesitancy and feel the need to voice our continuing unease with the easy phrase.

6. COLLECTIVE EFFERVESCENCE

Time becomes a stutter-the space between drumbeats… as long as soaring guitar notes that melt into one another, as full as the dark mass of bodies around me…. I am wave: I am pulled into the everything. I am energy and noise and a heartbeat going boom, boom, boom, echoing the drums…. all I can see is a frenzied mass of seething, writhing people, like a many-headed sea snake, grinding, waving their arms, stamping their feet, jumping… so much energy, you could harness it; I bet you could power Portland for a decade. It is more than a wave. It's a tide, an ocean of bodies.

Lauren Oliver, Hana

In addition to continuing these previous lines of research, we have also recently begun a new research program examining *Collective Effervescence*, or the sense of social connection that people feel when in a crowd of people (Gabriel, Valenti, Gainey, & Young, in preparation). These are the moments in life when being a part of a crowd feels intoxicating: a young person at a concert, feeling the music move through her body as thousands of other people around her experience the same thing; a congregant in a church, chanting prayers with hundreds of other devotees; or a sports fan in a stadium, yelling encouragement from within a sea of similarly dressed faithful. These moments of collective behavior are a part of both modern and ancient human life and exist across culture and time.

Based on the work of Durkheim (1912), we refer to these events as experiences of collective effervescence. From his work examining the experiences of people in religious rituals, Durkheim argued that when people are engaged in religious rituals together, they sometimes feel a sense of collective effervescence. Collective effervescence can be described as a psychological experience that occurs when a collective activity provides a feeling of connection to others in the crowd, a sense of engagement with something bigger than the self, and/or a "sensation of sacredness" (Durkheim, 1912/1965).

Although originally used to describe individuals engaged in religious rituals, Durkheim believed that all that was necessary for collective effervescence was "that men are assembled, that sentiments are felt in common and expressed in common acts; but the particular nature of these sentiments and acts is something relatively secondary and contingent" (pp. 431–432). In other words, being together with others and engaged in some kind of common task—praying, watching a football game, listening to a band—can lead to collective effervescence, which is both powerful and psychologically rewarding. Durkheim argued that, as individuals, humans are self-interested and shallow, immoral and depraved. However, when engaged in the social, the individual selfish mind could be quieted and a sense of transcendence, ecstasy, and well-being achieved. It is that sense of transcendence which makes the submersion in the group so enjoyable. Pickering (1984) further expanded Durkheim's arguments and coined the term "effervescent assembly" which describes a group activity in which collective effervescence occurs. More recently, the term collective effervescence has been used by sociologists to explain the phenomenon of raves (Olaveson, 2004).

Most of the research on groups, however, has examined the negative aspects of individual behavior in large groups. This work was highly influenced by Gustave LeBon, who had a decidedly negative view of the individual in a collective and argued that "in a crowd … a man descends several rungs in the ladder of civilization. Isolated, he may be a cultivated individual; in a crowd, he is a barbarian" (Le Bon, 1895). This view of the individual in a large group strongly influenced early psychological theory on individual behavior in large groups. Consistent with LeBon's contentions, Festinger (1952) argued that crowds lead to deindividuation, or a loss of individual identity, which then leads to antisocial behavior. Additionally, Zimbardo (1969) posited that crowds lead to anonymity, lack of social constraints, and sensory overload, which can all then lead to aggressive and antisocial behavior. Finally, Allport (1924) argued that being in a crowd leads to a building of emotion which then leads to a loss of personal identity, overstimulation, and the activation of base survival instincts. Some researchers argued that people with antisocial and violent pathologies are particularly attracted to being in a crowd (Akers & Fox, 1944; Brown, 1954). However, even those who are not antisocial by nature are thought to misbehave when in a crowd due to crowd contagion.

Empirical inquiries into the effects of large groups on individual psychology have not painted as negative a picture as early theorizing would have suggested. For example, some research suggests that crowds do not

necessarily lead to negative behaviors but instead to an amplification of group norms (Johnson & Downing, 1979). The social identity model of deindividuation (SIDE model) argues that deindividuation, reduced self-awareness, and anonymity do not lead to negative behavior per se, but instead lead to an increased accessibility of group norms, which can be good, bad, or neutral valance (Reicher, Spears, & Postmes, 1995). The activated group norms then lead to changes in behavior, meaning that the outcome does not necessarily have to be negative.

More recent research has suggested that being in large groups can actually have positive effects for individuals. For example, some research suggests that crowds tend to be highly supportive, altruistic, friendly, and enjoyable environments (Bond, 2014). Other research suggests feeling a sense of iden-tification with the other members of the crowd leads to positive emotions (Novelli, Drury, Reicher, & Stott, 2013). Thus, social identification with the other people in a large group makes being in that group a positive expe-rience for the self and for others. In summary, although some theorizing on the individual in groups suggested that being in a large group would be likely to lead to negative behaviors, more recent research has moved to a view of engagement with large groups as often positive and rewarding.

In our lab, we have developed a self-report questionnaire called the Collective Effervescence Experiences Scale (CEES; Gabriel, Read, et al., in preparation; Gabriel, Valenti, et al., in preparation) to assess individual differences in the tendency to engage in collective effervescence. The ques-tionnaire contains items such as "I feel very connected to others when in a large group activity I like, like going to a concert, church, or a convention." And "Sometimes it is fun to be in large crowds of people." Although we believe that even negative group acts (e.g., looting, war) could lead to a feel-ing of collective effervescence, we did not include them in the scale because they occur far less often (Bond, 2014), and people may be unlikely to admit to them. In a first study, we created the scale in a sample of college students. In a second study, we validated the scale in a second student sample. In a third study, we found convergent, discriminant, and criterion validity in the two student samples and one general population sample. In a fourth study, we examined measurement invariance and comparisons across groups (gender, race, etc.) in all three samples. In a fifth and final study, we ran an experiment to test whether scores on the scale predicted social reactions to images of others in large crowds. We found that seeing images of other peo-ple in large groups led people high in collective effervescence (but not low) to crave social connection.

Across all of our studies, we found evidence for a reliable and valid 11-item scale that measured the tendency to engage in collective effervescence-type experiences. Furthermore, scores on the measure predicted a sense of social connection and psychological well-being above and beyond the effects of the Big Five and more traditional means of social connection such as relationships and small group interactions. In other words, being a part of large, mostly anonymous group fulfills belongingness needs and contributes to a sense of psychological well-being. Thus, going to big games and large concerts is not just about the music and excitement of a game; instead, these activities, like so many others we have studied, have a social utility. It appears that the strong, subtle, and sneaky social self is finding ways to fill itself wherever it can. Although people are unlikely to think to themselves, "I would like to go to a concert/sporting event because my social needs need to be filled," those events do indeed have important social implications and functions. Thus, even when lacking direct interaction with others, the self is able to still fulfill the need to belong and experience a sense of social connection.
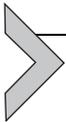
7. PEOPLE ARE NOT ALWAYS AWARE OF THEIR SOCIAL MOTIVATIONS

The previous sections described research in our laboratory that is highly consistent with the hypothesis that the social self can be sneaky and subtle—in other words, that our social motivations can operate in ways we do not recognize and in situations which may not seem social. Across a wide swath of research, we have shown that seemingly nonsocial activities like reading a book or eating a comfort food can actually be understood as highly social activities and that people seem generally unaware that their engagement in those activities can be predicted, in part, by their social needs. In this section, we outline work that more directly examines the assumption of a strong, subtle, and sneaky social self.

Our conceptualization of the social self as sometimes operating outside of conscious awareness is highly consistent with other research and theory suggesting that many motivations occur separately from conscious awareness (for a review, see Bargh, Gollwitzer, & Oettingen, 2010). For decades, social psychological research has found that people are not always aware of the causes of their behaviors (e.g., Nisbett & Wilson, 1977). More recently, researchers have suggested that behavior can be driven by motivations that operate without conscious activation and the knowledge of a conscious self (see Bargh,

2005). Research on goals suggests that temporarily activated unconscious motivations have a powerful influence over cognition and behavior, moving us toward goal pursuit independent of conscious knowledge. The currently activated motivation can even override existing chronic motivations (see Bargh & Chartrand, 1999; Hassin, 2005; Schneider & Shiffrin, 1977). For example, people who unconsciously associate power with sex find themselves being more attracted to a target when power is primed—even though they have no idea that is why they are interested in the person (Bargh, Raymond, Pryor, & Strack, 1995). Thus, they find themselves attracted to another person without realizing that their attraction is motivated by a power prime. Unconscious goals to justify the current political system can even lead people to act against their own self-interest without realizing the cause of their behaviors (Jost, Pietrzak, Liviaton, Mandisodza, & Napier, 2008). In addition, social goals are also sometimes pursued without conscious awareness. For example, in order to facilitate social interaction, people mimic interaction partners taking on their physical postures and gestures, without any conscious realization that they have done so (Chartrand & Bargh, 1999).

This is not to imply that conscious motivations play no role in guiding behavior. Most researchers agree that behaviors are caused by both conscious and unconscious processes (Dijksterhuis, 2010). Ironically, that can lead to times when these conscious and unconscious motives can push people in completely opposite directions, such as when people's addictions push them toward using drugs, or eating uncontrollably, or drinking alcohol, while their conscious desires push them toward abstinence (e.g., Baker, Piper, McCarthy, Majeskie, & Fiore, 2004; Loewenstein, 1996). Consistent with that, findings in cognitive neuroscience suggest that the operation of the goal system and an awareness of that system are located in separate anatomical structures (Frith, Blakemore, & Wolpert, 2000). Therefore, it is structurally possible, and indeed probable, to have a goal in the absence of awareness of pursuing that goal.

In addition, there is reason to believe that we are most likely to have automatic goals without conscious awareness when the goal is toward an end state that is of evolutionary importance (Dennett, 1995). Goals that have evolved are especially likely to influence behavior entirely unconsciously, in other words, outside of conscious awareness or intention (e.g., Haidt, 2001; Huang & Bargh, 2008; Neuberg, Kenrick, Maner, & Schaller, 2004; Schaller, Park, & Faulkner, 2003).

Thus, other research on goals occurring out of conscious awareness is highly consistent with our argument for a strong, subtle, and sneaky social

self. The compelling arguments that social needs have evolved because they were essential for the survival of our species make it especially likely that social motivations would alter behavior without conscious knowledge. Many behaviors that we can explain as being the result of the unconscious social motivations are motivations that are difficult to explain otherwise. For example, people often report a strong conscious desire to spend less time watching television and eating comfort foods, yet they, somewhat mysteriously, find themselves engaging in those behaviors more and more rather than less and less. Thus, it seems highly probable that there is a strong unconscious motivator leading toward those behaviors. We argue that it is a social motivation. Thus, our contention that strong social motivations push people toward behavior without their awareness of the social nature of their behavior is consistent with what is already known about motivation.

Some evidence from our lab that social motivations occur below the level of conscious processing comes from our work on social surrogates. As previously mentioned, in many of our studies on social surrogacy, participants seemed completely unaware of the social motivations behind their behaviors. For example, in one study, participants wrote about a relationship threat (Derrick et al., 2008, Study 2). Afterward, in what they thought was a completely unrelated task, they were asked to write either about their favorite TV show or about whatever was on television. We predicted and found that participants wrote for longer about their favorite show after thinking about a rejection experience. In other words, increasing participants' need for social connection led to an increased focus on the favorite television shows. Importantly, participants seemed completely unaware that their behavior on the rejection task had influenced their performance on the second task. In a check of suspicion, not one participant expressed suspicion that the amount of time they spent on the television task was affected by the essay they wrote. Thus, the social power of favorite TV shows to soothe social wounds operated in a manner that was completely unknown to participants. Participants thought they were merely reporting on what they viewed as a generally solitary activity, when in fact their behavior was being pushed around by social motivations. Extrapolating to the real world, most Americans spend an average of 3 h a day watching television. Perhaps social motivations play an unknown role in that alarmingly high number. Maybe it is not just laziness and boredom that leads people to the television. Instead, it is the strong, subtle, and sneaky social self that turns on the television on a lonely evening.

Other work in our lab has examined whether some people, in particular, are generally unaware of their social motivations. Specifically, we examined the subset of the population who claim not to care about social relationships: dismissive avoidants. When asked about their interpersonal preferences, dismissive individuals tend to explicitly reject or minimize the importance of emotional attachments, passively avoid close relationships, and strive for self-reliance and independence (Bartholomew, 1990; Collins & Feeney, 2000; Griffin & Bartholomew, 1994). For instance, participants who endorse Bartholomew and Horowitz's (1991) index of dismissing avoidance indicate that: "I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me" (Bartholomew & Horowitz, 1991, p. 244). Moreover, dismissive avoidants display an avoidant behavioral pattern even in the presence of separation and loss from close relationships, two instances in which the attachment system (or the need to feel connected to others) should be more likely to be activated (Ainsworth, Blehar, Waters, & Wall, 1978; Baumeister & Leary, 1995; Fraley, Davis, & Shaver, 1998). In addition, dismissive avoidants appear to be indifferent to what others think of them (Bartholomew & Horowitz, 1991) and are relatively averse to positive feedback from others (Brennan & Bosson, 1998).

In light of these findings, we wondered how dismissive avoidants would react to social acceptance. If they are telling the truth, and genuinely do not care about relationships on any level, then they should not care about being socially accepted. However, if they actually do, at some deep level, care very much about others, but mask their worry about being rejected with an uncaring attitude, then acceptance should be even sweeter, because it will be so unexpected. To test this hypothesis, we ran two studies (Carvallo & Gabriel, 2006) in which we provided positive social feedback to both avoidant and nonavoidant individuals. In one study, we led participants to believe that even though they might or might not currently be socially successful, a series of psychological tests we had administered to them suggested that they would actually be very successful socially in the future. In the other study, we led participants to believe that all of the other participants in the study really liked them and wanted to partner with them on an upcoming task. Of relevance to this discussion, participants who claimed that they did not care about relationships also claimed that they did not care about the feedback. However, when examining their mood, a less direct indicator of how they reacted to the feedback, we saw that the people

who claimed not to care about relationships were actually thrilled when they found out that they would have or did have some social success. Their emotional reactions were stronger than any other group of participants. Thus, although they claimed that they did not care about relationships and that the feedback did not affect them, it appears that they did care and were affected, implying that their social motivations were outside their awareness. Thus, our research suggests that even people who claim not to need close relationships are strongly, positively influenced by social acceptance.

In another line of research in our lab, we examined whether people would alter their individual selves due to social motivations without even being aware of the social motivations—a process called *Self-Synchronization* (Gabriel et al., 2010). Our initial goal was to examine what would happen when social motivations were pitted against other important motives. Therefore, we put participants in a situation in which they thought they would soon be interacting with another person. Before the interaction, we gave them information about the other person. Embedded in that was information about the other participant's current mood or self-esteem. Some participants were led to believe that their interaction partner had low self-esteem or was in a bad mood. We were interested in how participants would react to that information. Specifically, other researchers have found that people will readily alter their mood and selves in order to facilitate a social interaction (Chartrand & Bargh, 1999; Huntsinger & Sinclair, 2010; Sinclair, Huntsinger, Skorinko, & Hardin, 2005; Sinclair, Lowery, Hardin, & Colangelo, 2005). However, we also know that people like to protect themselves from harm to their self-esteem and moods (Murray & Holmes, 2009; Murray, Holmes, & Collins, 2006). Thus we wondered: What will happen when the desire to have a positive social interaction conflicts with the desire to protect the self? We suspected that participants would be willing to temporarily harm their individual selves in service of their social goals on an unconscious level and without awareness.

We predicted that people would only be willing to harm themselves when they believed that there was a significant chance of a positive social interaction. Therefore, we predicted that our effects would be found only with socially skilled participants: those who were either dispositionally or situationally secure in their social attachments. Thus, we both measured secure attachment style and primed secure attachment in some studies. In one experiment, we examined whether people would actively seek to harm their mood when anticipating an interaction with a person in a negative mood. In another experiment, we examined whether socially skilled people

actively sought to lower their self-esteem when anticipating an interaction with a low self-esteem individual. We found that when participants thought they would be interacting with a participant who was in a bad mood (and the participants were confident in their interpersonal skills), they chose to read depressing newspaper articles before the interaction in order to lower their own mood to match the interaction partner. Similarly, participants who were confident with their own interpersonal skills and thought they would be interacting with a person with low self-esteem chose to read negative items about themselves before the interaction to lower their own self-esteem to match the interaction partner. Thus, we found evidence that the motivations for a successful social interaction were strong enough to cause some people to do temporary harm to their individual self. Indeed, some individuals adopted negative moods and self-attitudes, temporarily harming the individual self, in order to facilitate social interaction. Importantly, people had no idea that their behaviors were socially motivated. When we debriefed participants, we asked them about whether their choice in reading material or information sought about the self had been at all influenced by the information they received about their future interaction partner. Not only did not one single participant believe that their behavior had been motivated by the possible partner, but many of them expressed bemused skepticism when we told them that we predicted that it would be. Although social motivations played a clear role in influencing behavior in all of our studies, they appear to have operated completely outside of our participants' awareness. Despite being consciously unaware of their motivations, participants who thought they could have a positive social interaction with a stranger acted to lower their moods and self-esteem in order to increase the likelihood of a positive social connection (Gabriel et al., 2010).
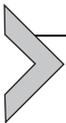
8. CONCLUSION

In this chapter, we have made an argument for a strong, subtle, and sneaky social self. Some of our evidence for this comes from studies that directly indicate that people are not aware of the social motivations behind their behavior. For example, our studies found that participants will turn to their favorite TV shows, seek information about their weaknesses, read sad newspaper articles, and feel happy after positive social feedback, all for social reasons of which they are completely unaware. We argue that this is robust support for a strong, subtle, and sneaky social self.

The rest of the evidence we presented comes from our research on the flexibility with which people fill social needs. Although it is a relatively new area of study within the field of psychology, the accumulating evidence suggest that social surrogates and other nontraditional means of social connection play an important, growing, and useful role in fulfilling social needs and combating the negative effects of rejection and social isolation. Social surrogates in the form of fictional social worlds into which we can enter at will, reminders of others, and parasocial relationships with well-known media figures can all provide an experience of belonging and help protect us from the very serious and grave effects of rejection and social isolation. Similarly, large anonymous crowd activities, like attending music concerts or sporting events, can also fulfill belongingness needs.

Just as the mechanisms for social surrogate relationship formation and maintenance mirror those of real relationship formation and maintenance, research reviewed in this chapter strongly suggests that the social benefits of social surrogates mirror the benefits of real relationships. For example, thoughts of favorite celebrities are as effective as thoughts of family members at alleviating aggressive impulses (Twenge et al., 2007). Similarly, liked media figures have a similar ability to regulate one's mood as real close others (Lakey, Cooper, Cronin, & Whitaker, 2014). The propensity for favorite celebrities to bring individuals closer to their ideal selves (Derrick et al., 2008) mimics that of real relational partners (e.g., Drigotas et al., 1999). Identifying with characters while reading a narrative leads to a merging of self with characters (Sestir & Green, 2010; Shedlosky-Shoemaker et al., 2014), much like identifying with relationship partners leads to a merging of self with partner (Aron et al., 1991). In summary, there is compelling evidence that social surrogates have a similar ability to fulfill belongingness needs as real relationship partners.

In many ways, the power of social surrogates to fulfill social needs is surprising. Obviously, social surrogates cannot help you move out of your apartment or hold you when you cry. They cannot respond to your needs directly. Therefore, their strong proclivity to fulfill the need to belong and guard against rejection may seem somewhat unexpected. To us, the strength of social surrogates is solid and persuasive evidence for voracity, flexibility, and power of the need to belong. Our need for social connection is so strong that we can feel a sense of belonging from a TV show, book, or celebrity we have never met, or a food with a tenuous link to a friend or family member. We are so wired for relationships that we can find social connection even where real humans do not exist. We want so badly to feel a part of something

that we can be drawn into worlds which exist only in the imagination. We are so desirous of care and love that we can be soothed and comforted by a fragile link to a memory of a caregiver. The lesson we take from work on social surrogates and other nontraditional forms of social connection: We humans are social to the very core of our beings, and our social nature brings great joy, great pain, and heartwarming meaning to our lives.

Nonetheless, our arguments in this chapter are new and need a great deal more study before we can be certain of the power and role of unconscious social motivations in explaining much of behavior. Future research should more directly examine the unconscious nature of social motivations and their relations to automatic social behaviors and social surrogates. It would also be interesting to look more at social motivations through a dual process filter and examine if and when conscious versus unconscious social motivators are more important.

Despite the need for more work to bolster our position, we feel that an emphasis on the social self as strong, subtle, and even sneaky is strongly supported by our research program and can increase understanding of the social nature of the self. In addition, one of our favorite things about research in this area is the strong ecological validity of the work. When we study people reading, watching movies and TV, eating their favorite foods, and going to concerts, we are studying the activities that take up much of people's daily lives. We are studying the activities that fill their precious free time and are the source of cherished memories. Therefore, we hope that this program of research will increase understanding of the motivations that drive what people do on a day-to-day basis. Our work suggests that much more of our day-to-day lives is driven by our social motives than most people seem to believe. Our social selves drive all kinds of behaviors—even those that are done all alone. We argue that the *social* part of social psychology is important; that understanding social motivations is essential to understanding all parts of life. Our work supports a view of humans as inextricably, enjoyably, and utterly driven by a strong, subtle, and sneaky social self.

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