Member Retention and Donations in Nonprofit Service Organizations: The Balance Between Peer and Organizational Identification

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Abstract
Prior research has established that it is valuable for members to have strong organizational identification with nonprofit service organizations. However, research has not examined whether and how members are influenced by other members of a nonprofit. This paper analyzes how peer identification influences member retention and donations using survey data and actual member behavior. It distinguishes identification with the organization from identification with peers. The theory-based econometric model shows that the effect of a member’s peer and organizational identification on the likelihood of he/she will remain a member depends on the member’s relationship stage. Organizational identification has a large effect on member retention in the earlier periods of membership. However, for members of eight years or more, the favorable effect of peer identification becomes larger. Results also show that peer identification has a negative impact on donations whereas organizational identification has a positive effect regardless of stage of the member-nonprofit relationship. This paper also introduces a new construct, peer identity overlap, which influences peer identification. The article discusses how nonprofit service organizations can foster support and affirmation among members, value alignment among members, peer identity overlap, and organizational identification, as well as manage different stages of the relationship.

Keywords
organizational identification, peer identification, peers, memberships, nonprofits, relationships, customer retention, donations, social identity theory, engagement, loyalty

Nonprofit service organizations, such as museums, universities, arts, and professional associations, face unique challenges in managing relationships with members. They develop relationships with stakeholders, but, unlike for-profit organizations, purchase behavior is not their primary focus. Instead, nonprofit service organizations recruit members to create a community to accomplish their missions. For example, the Young Men’s Christian Association (YMCA) develops relationships with members who value its mission of supporting youth development, healthy living, and social responsibility in communities. Researchers recognize the distinctive nature of nonprofits (Powell and Steinberg 2006), but there are many unanswered questions about the antecedents of membership behaviors. To extend the example, perhaps people renew their YMCA memberships because they are actively cocreating value with other members as parents and community members as well as supporting its mission. Little service research considers how nonprofit members cocreate value together—and none considers the stage of the member-nonprofit relationship.

Nonprofit research has typically focused on actions that help service organizations build relationships with their members (e.g., Bhattacharya, Rao, and Glynn 1995). Studies have shown that members’ strong identification with a service organization has favorable effects on nonprofit outcomes. Organizational identification, defined as a person’s perception of oneness with or belongingness to an organization (Mael and Ashforth 1992), satisfies members’ needs for social identity and self-definition (Ashforth, Harrison, and Corley 2008) and positively influences loyalty and citizenship behaviors (Dukerich, Golden, and Shortell 2002; Mael and Ashforth 1992). Peer identification, or the “extent of an individual’s identification with other

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individuals in the organization” (Fombelle et al. 2012, p. 590), has a positive influence on organizational identification. Members interact with other members, as well as with the nonprofit, but there is limited research examining the antecedents of peer identification or its influence on member behaviors in service settings (Helkkula, Kelleher, and Pihlström 2012, p. 62). Further, members’ relationships with an organization differ depending on their prior experiences with it. A key contribution of our research is showing how the effects of peer and organizational identification on the duration of the member-nonprofit relationship differ depending on the relationship stage.

Our findings contribute to the literature on relationship formation between nonprofit service organizations and their members. First, they reveal that the impact of a member’s peer and organizational identification on their decision to remain a member of a nonprofit differs depending on how long they have been a member (i.e., a moderating effect of membership length). Consistent with prior research, we argue that peer identification requires social interactions to form whereas the categorical effect of organizational identification does not (Gioia et al. 2013). Organizational identification may be influenced by interactions between an organization and employees, but prior research has mostly focused on how organizational and product characteristics that don’t require social interaction (e.g., perceived organizational prestige, prior satisfaction) influence organizational identification (Bhattacharya, Rao, and Glynn 1995). In contrast, our findings show that in the first 4 years of the member-nonprofit relationship, the effect of a member’s identification with other members on the duration of the member’s relationship with the organization is small, whereas organizational identification has a larger effect. When members remain more than 8 years, the favorable effect of peer identification becomes stronger than the effect of organizational identification. The large favorable influence of organizational identification is smaller for longtime members, whereas peer identification becomes more important—explaining durations at later relationship stages.

Research has emphasized the positive relationship between organizational identification and organizational outcomes (Bhattacharya, Rao, and Glynn 1995), suggesting that nonprofit service organizations should enhance organizational identification at every relationship stage. However, our findings show that efforts made to strengthen organizational identification will have a greater payoff in terms of the duration of the member’s relationship with the nonprofit early in the relationship—plus a payoff in terms of donations. Peer identification is complementary; its positive effect on the duration of the member’s relationship is larger for longtime members. Since the positive effect of organizational identity is smaller for longtime members, peer identification becomes the prominent driver of their membership durations.

Second, this article introduces the construct of peer identity overlap. We define peer identity overlap as the simultaneous enactment of multiple salient identities within a single context or organization. Every person has multiple salient identities as part of who they are as an individual (Stryker 1980). Each identity has the potential to be enacted in separate contexts. For example, a person might have two highly salient identities: parent and animal lover. They can enact these identities by joining a children’s playgroup and a separate dog-walking group. However, if the individual joins a single group that expresses both identities, their peer identity overlap will be higher than when they participate in other activities. We propose a novel method for measuring peer identity overlap. We ask people to identify multiple salient identities in the context of the focal organization and then measure the extent of peer identity overlap between the focal organizational identity and other relevant identities.

Third, we show that two parallel identification processes influence member-nonprofit relationships and member behavior. Research has shown that organizational support, value congruence, and affirmation are antecedents of organizational identification (Fombelle et al. 2012). Peer-to-peer social interactions typically take place within the context of the member-nonprofit relationship, such as a hike sponsored by a nonprofit nature conservancy. The conservancy might hand out water bottles to the hiking members (organizational support), provide recycling bins for the bottles (shared value for sustainability with organization), and facilitate the participation of an expert on local flora and fauna (organizational affirmation), creating organizational identification. Our third key contribution is testing the parallel effects of peer support, peer value congruence, and peer affirmation on the formation of peer identification. Extending this example, peers might share snacks during the sponsored hike (peer support), carpool to the start of the hike (shared value for sustainability), and exchange information on environmental issues (peer affirmation), creating peer identification. We define peer support as a person’s perception of the extent to which an organization’s peers value their contributions and care about their well-being. Peer affirmation is the positive feedback from other peers that an individual has reached or is reaching an identity goal. Finally, peer value congruence is defined as the perception that two (or more) peers share similar values. This article offers rich insights into how service provision and resource integration among multiple actors create value through meaningful, holistic experiences within a service ecosystem (Vargo and Lusch 2016).

Fourth, in contrast with prior studies, we aim to understand how peer and organizational identification influence two key member behaviors: the duration of the member’s relationship with the nonprofit and their donations. Most prior research has studied member intentions rather than member behavior, although it is well known that the drivers of intentions and behavior are different (Seiders et al. 2005; Sun and Morwitz 2010). This study develops a comprehensive, theory-based model of a nonprofit member’s identification with other members and the service organization as well as the duration of their relationship with the organization and the amount of their donations after controlling for traditional relationship constructs (e.g., service quality). It estimates two equations with two-stage least squares (2SLS) that explain the formation of
peer and organizational identification, a nonparametric proportional hazards regression (PHR) model of membership duration times that takes into account the censoring of lapsed members, and a Tobit model of the dollar amount of member donations to the nonprofit.

We tested our hypotheses by partnering with a large membership-based nonprofit zoo. We combine survey and behavioral data from the organization. Membership-based nonprofits are a desirable environment for testing identification issues due to their diverse membership base and variety of social causes (Bhattacharya, Rao, and Glynn 1995). Most research on this topic relies on people’s self-reports of membership length to date and donations, whereas we observed members’ behavior (duration times and donations) from the zoo’s internal records. Our cross-sectional model shows how the effects of peer and organizational identification on membership durations are moderated by the stage of the member-zoo relationship. We also show that peer identification has a negative impact on donations, while organizational identification has a positive effect regardless of how long the person has been a member.

**Conceptual Framework**

This section describes our focal constructs, emphasizing how they apply to nonprofit service contexts. Very little research has studied behavioral outcomes. This section distinguishes between studies of both peer and organizational identification, studies of organizational identification, and studies of constructs similar to peer identification. Peer identification is a relatively new construct. Very little work has studied its antecedents or outcomes, so we also distinguish it from related identity. Figure 1 depicts the relationships established in prior research (organizational identification) and our proposed relationships (peer identification and overlap). In addition, Table A1 of the Web Appendices summarizes key research regarding peer and organizational identification, including studies of antecedents and behavioral outcomes.

The theoretical importance of organizational identification, a person’s perception of oneness with an organization (Mael and Ashforth 1992), is well established. Empirical work has shown that organizational identification has a strong positive effect on some organizational outcomes (e.g., Mael and Ashforth 1992). Conceptual work has proposed that organizational identification has multiple favorable outcomes for nonprofits, such as increased loyalty behavior (Bhattacharya and Sen 2003), but these links have yet to be established empirically. Empirical work in for-profit settings has shown that organizational identification increases product utilization, extra-role behaviors (e.g., likelihood to recommend; Ahearne, Bhattacharya, and Gruen 2005), and increased willingness to pay (Homburg, Wieseke, and Hoyer 2009).

Members also form separate and unique identities with other members of a nonprofit service organization, creating peer identification (Fombelle et al. 2012). Nonprofit service organizations foster successful relationships when members identify with the organization (e.g., a museum) and with other

![Figure 1. Antecedents of peer identification, membership durations, and donations. Note. In the two-stage least squares, Tobit, and proportional hazards regression, we include the following control variables (as appropriate): membership length (main effect), service quality, income, age, membership tier/fees, and past donations.](image-url)
members/peers (e.g., who share a love of history). Thus, examining the behavioral outcomes of both peer and organizational identification in a nonprofit service context should be fruitful. Moreover, research has not investigated whether the effects of peer and organizational identification depend on membership length (a potential moderator).

When a person joins a nonprofit organization, their membership makes them part of a well-defined collective or group (Ashforth, Schinoff, and Rogers 2016). Both organizational and peer identification are forms of group identification. Members form schema pertaining to the nonprofit organization and schema pertaining to other members (i.e., their peers). These schemas could include beliefs about the values of the nonprofit, their peers, and the extent of value congruence with each. Members then identify with this (high-level) group-based schema. Fombelle et al. (2012) show that a member’s peer identification is distinct from their feelings about the organization, but they do not study its antecedents or consequences beyond organizational identification. This distinction is consistent with research on brand community and customer engagement; both research streams recognize that customers may have different engagement or attachment targets (e.g., Mende and Bolton 2011; Muniz and O’Guinn 2001). In this study, we explore the origins of peer identification in social interactions among members and also consider how they both positively and negatively influence the member-nonprofit relationship (either directly or indirectly).

Peer identification is an example of a common bond group (Fombelle et al. 2012), where group identification is formed by the degree to which the individual knows, likes, and feels similar to other individuals of the group. Building on Prentice, Miller, and Lightdale (1994), Fombelle et al. (2012) noted that one of the key features of peer identification is that the context or social network (with formal social roles) within which peer identification forms is not critical. For a customer, peers would be other customers; for an employee, peers would be other employees; for a nonprofit member, it would be other members. In some situations, there may be clear roles within the group which influence the formation of a peer identification, whereas, in other situations, two people connect by affirming or supporting each other. In a nonprofit, formal roles may form among volunteer board members; whereas in other situations, two members may deepen their identification by informally interacting while their children play in the park.

It is useful to briefly anticipate how differences in peer identification levels might arise across members. Although members in a nonprofit may not have well-defined roles, each member’s interactions with their peer members are likely to lead to different perceptions of peer identity overlap, peer value congruence, peer affirmation, and peer support. For example, a new member might have high organizational identification due to value congruence with the nonprofit that led to purchasing a membership—but low levels of peer identification due to few social interactions. Or, a new member might have been recruited by a friend who is a member; so, the friend’s affirmation leads to high peer identification but low organizational identification.

Peer identification has some conceptual overlap with a few related constructs. Sluss and Ashforth (2007) showed the value of relational identification in the formation of organizational identification. They defined relational identification as the extent to which an individual defines oneself in terms of a given role-relationship such as manager-subordinate and coworker-coworker. Employee-customer identification (Korschun, Bhattacharya, and Swain 2014) and customer-employee identification (Netemeyer, Heilman, and Maxham 2012) are two examples of relational identification constructs that require clear role-relationships to form. Peer identification does not necessitate a clearly defined role while relational identity does. Finally, Ashforth, Schinoff, and Rogers (2016) recently defined personal identification as perceived oneness with another individual. Their conceptual work has some overlap with peer identification because both have their theoretical origins in Ashforth and Mael (1989), but the target of the identification is different. In personal identification, an individual identifies with the attributes of a target that make that target who they are—namely, their personal identities. In contrast, Fombelle et al. (2012) conceptualized nonprofit members as forming both peer identification and organizational identification.

Hypotheses

This section develops hypotheses about the behavioral outcomes of organizational and peer identification and how peer identification differs across members. Identification involves cognition, emotion, and behaviors (Ashforth, Harrison, and Corley 2008), whereas behavioral outcomes can be considered enactments of the desired identity (Lam 2012). Hypotheses 1–3 predict how peer and organizational identification influence the duration of a member-nonprofit relationship and donations, and Hypotheses 4–7 predict how peer identification varies across members due to peer identity overlap, value congruence, affirmation, and support.

We begin by discussing the consequences of peer and organizational identification because little is known about how peer-to-peer social interactions influence the duration of members’ relationships and their donations in nonprofit or for-profit service settings (Libai et al. 2010; Van Doorn et al. 2010). Research in social psychology indicates that people who identify with a group are likely to be loyal to the group (e.g., Van Vugt and Hart 2004). Members with many ties to other members are likely to value and identify with the organization itself (Amiot et al. 2007). In brand communities, peers play a crucial role in forming organizational identification (Algesheimer, Dholakia, and Herrmann 2005; Muniz and O’Guinn 2001). Kinship among brand community members fosters commitment to the organization (McAlexander, Schouten, and Koenig 2002). Members who have greater identification with a group are more likely to participate in group activities (Algesheimer, Dholakia, and Herrmann 2005) and to remain members (Gruen, Summers, and Acito 2000).
Influence of Peer and Organizational Identification on Membership Durations

In Hypotheses 1 and 2, we distinguish between the duration of a member-nonprofit relationship and membership length. We define duration as the elapsed time from when the member was acquired until they exited the relationship—where this value is unknown or “right censored” for people who still are members. In contrast, we define membership length as how long the individual has been a member at a point in time. Even though the two constructs seem similar, they are unique for two reasons. First, people with long memberships are overrepresented in most databases because organizations often purge the records of members who have exited. Second, managers sometimes (incorrectly) calculate a censored member’s duration by assuming the current date marks the end of the relationship. The solution to these problems is to conceptualize and model duration as the partial likelihood of a member defecting given that they have not done so yet. (In our empirical work we follow Bolton, 1998, and use a weighting procedure that corrects for censoring.) The distinction between duration and membership length is important because we believe that relationship stage (measured by membership length) moderates the effects of peer and organizational identification on the duration of the member-nonprofit relationship.

Organizational identification can form without social interactions, whereas peer identification requires social interaction. Interactions with an organization’s employees might encourage a member’s organizational identification, but they are not required. For example, every fall, first year students show up on college campuses wearing clothing with university logos signaling that they have quickly formed organizational identification with the university. However, peer identification often does not have an effect on their behavior until students have met and interacted with other students via coursework, clubs, sports, fraternities, sororities, and so on. Hence, we believe that the magnitude of the effects of peer and organizational identification on the duration of the member-nonprofit relationship is different at different relationship stages.

Participation in special interest groups that pursue goals related to the focal organization and helping behaviors, such as volunteering and gift frequency, is positively associated with membership durations in nonprofits with paid memberships (Bhattacharya 1998). We posit that when a member has favorable experiences (e.g., support, affirmation) with fellow members (peers), they will maintain and enhance common bonds and continue to enact their social identities. Hence, we believe that high levels of peer identification will ultimately lead to long-member-nonprofit relationships (i.e., a main effect). Barker and Tompkins (1994) provide indirect empirical evidence for this notion, showing that long-term workers reported stronger identification with both their team and company than did short-term workers.

Moreover, we believe that the length of a member’s experience with the nonprofit will moderate the effect of peer identification on the duration of the member-nonprofit relationship for the following reasons. The services literature has acknowledged that relationships develop in stages (Johnson and Selnes 2004). A new member (outsider) is unlikely to perceive themselves as an insider of a new social group (Joy 2001). Peer identification doesn’t immediately lead to relational behaviors (i.e., conation or actions). For example, many museums hold monthly social mixers for members, but new members may not be motivated to attend these events as they still feel like an outsider. Given two people with the same level of peer identification, a new member is less likely to act on it—that is, the magnitude of the effect on duration is smaller. For this reason, we propose that the effect of peer identification on the duration of the member-nonprofit relationship will be small for relatively new members. For members who have belonged longer and developed relational bonds within the context of organizational activities, the effect of peer identification will be magnified.

In contrast, organizational identification represents a categorical membership (Gioia et al. 2013), which does not require any social interaction for an individual to feel part of the group (i.e., nonprofit). In psychology, researchers have created group identities by arbitrarily assigning individuals to groups such as red team and blue team (Nesdale and Fless 2001)—sometimes without any social interaction (Turner et al. 1987). Research has shown that organizational identification is influenced by perceived value congruence, affirmation, and support from the organization and arises from the members’ perceptions of organizational attributes. (See Table A1 in Web Appendix). Organizational identification has a favorable main effect on relationship outcomes (Bhattacharya 1998). For example, the decision to buy or renew a membership fulfills individuals’ categorical identity needs by immediately allowing them to classify themselves as members. Consequently, we believe that membership length moderates the effect of organizational identification on duration. We predict that organizational identification has a large positive effect on membership durations when members are relatively new—that is, in the early stages of the member-nonprofit relationship. This prediction is the opposite of our prediction for peer identification.

Hypothesis 1: For longtime members (vs. relatively new members), high peer identification has a large (small) positive effect on the duration of the member-nonprofit relationship.

Hypothesis 2: For relatively new members (vs. longtime members), strong organizational identification has a large (small) positive effect on the duration of the member-nonprofit relationship.

These predictions hold regardless of whether organizational identification and peer identification levels are high or low at a specific relationship stage. Since these two hypotheses concern moderating effects, our empirical work controls for the main effect of membership length as described in the methodology.
section. This issue is technically complex, so we discuss it in the estimation section.

Peer Identification and Donations

Social exchanges in a nonprofit (e.g., participation, satisfaction) can increase the importance of a particular identity for members so that they strive to perform the behaviors associated with that identity (Arnett, German, and Hunt 2003; Marinova and Singh 2014) and support the organization (Ashforth and Mael 1989). Since donors are a small percentage of members, we develop hypotheses regarding all monetary donations, rather than distinguishing among categories. For example, gifts to a zoo might fund local programs such as support for animals and wildlife, science/arts education programs, outreach programs to special or underserved populations (e.g., schools), and long-term projects supporting innovation. We do not consider membership fees to be monetary donations.

When people form strong organizational identification, and adopt the values of the nonprofit, they make choices that benefit the organization (Simon 2013). The psychology of organizational identification is powerful; it implies that members may change their behavior merely by thinking differently about an organization. Organizational identification is necessarily tied to the goals that an organization embodies (Bhattacharya, Rao, and Glynn 1995). Past research has found a positive relationship between organizational identification and donations. Identification with a company influences customers’ donations to company-supported nonprofits (Lichtenstein, Drumwright, and Braig 2004). Alumni who strongly identify with their alma mater are more likely to donate to it (e.g., Arnett, German, and Hunt 2003; Mael and Ashforth 1992). Reed, Aquino, and Levy (2007) note that a nonprofit donor and organization need never, and often do not, interact. Thus, donations can be viewed as a direct way for members to confirm their (categorical) organizational identification—without prior formal interactions.

The behavioral outcomes of peer identification have not been studied. We believe that enactments of peer identification will be different from enactments of organizational identification for two reasons. First, peer and organizational identification pertain to different targets (peers vs. the organization) for which members have different schema in memory (e.g., regarding values). Thus, they will enact different identity-congruent behaviors. Second, Bhattacharya and Sen (2003) classify identity-congruent behaviors along a continuum from low-level behaviors, such as loyalty, to high-level behaviors, such as promotion. Extending this notion, Lam, Ahearne, and Schillewaert (2012) distinguish between identity-sustaining behaviors, defined as individual consumer behaviors that maintain an identity, such as renewing a membership, and identity-promoting behaviors, defined as consumer social behaviors that deepen and advance the identity, such as engaging in word of mouth. A donation is a direct action that confirms the member’s organizational identification, so it promotes their organizational identification. In contrast, a donation is not a social behavior that promotes the member’s peer identification. A donation doesn’t help a member’s understanding of their peers or advance the identity to others. Indeed, it might be considered to detract from it. The process of donating is likely to occur outside member-to-member social interactions through the organization’s promotional campaign (White and Peloza 2009). Nonprofit members with a high peer identification are unlikely to view donations as identity promoting. Money doesn’t reflect the social nature of a relationship driven by peer identification (Cheat 1987), which requires peer-to-peer interactions. Interestingly, past studies are consistent with the notion of identity-promoting behaviors, but researchers have not drawn upon identity theory as an explanation. Specifically, nonprofit members view tax-efficient donations as not reflective of the strong relationship with peers (Reed, Aquino, and Levy 2007). Giving money leads to negative attributions (Morales 2005; Webley and Wilson 1989). In the presence of a strong social relationship, money was an unacceptable gift (Webley and Wilson 1989). Thus, we believe that a strong peer identification has a negative effect on donation behaviors.

Hypothesis 3: The effect of peer identification on donations will be negative after controlling for organizational identification.

Antecedents of Peer Identification

Peer identity overlap. Every individual is made up of a variety of social identities and is motivated to behave in ways that are congruent with their salient or important identities. Cialdini et al. (1997) note that an individual’s perception of their degree of overlap with another individual is cued by feelings of kinship, friendship, similarity, and familiarity. In the same way, an individual’s various identities can overlap with other peers based on a perceived degree of similarity or familiarity. In people’s busy lives, contexts that allow multiple salient identities to be enacted simultaneously are valued. When a member can simultaneously enact more than one salient identity with other members of an organization, they are likely to perceive greater peer identity overlap. For example, a person may simultaneously think of themself as a friend and an art lover. They can enjoy a coffee with a friend and separately attend an art exhibition alone—enacting each identity in isolation. By becoming a member of an art museum, this person can simultaneously enact both their “art lover” and “friend” identities by attending member-only events with friends. They can efficiently invest in several identities at the same time (Thoits 1983). Depending on the extent of overlap, many identities can be simultaneously enacted and reinforced within the context of a single organization. Members perceive high peer identity overlap as their multiple identities become intertwined with other members with similar identities. They are likely to value service organizations that facilitate overlapping identities.
When peer identity overlap is high, a member’s self-concept has incorporated shared values into their own personal identification (Dutton, Dukerich, and Harquail 1994). The simultaneous pursuit of different values can lead to role overload, but perceived value congruency reduces role overload (Carlson and Kacmar 2000). People tend to dislike role overload, so members are likely to value activities in which they can enact and enhance multiple identities at once. When members believe that their peers (other members) share similar important identities (e.g., parent), they are likely to perceive their identities as overlapping. Enacting and integrating multiple social identities add value to those identities and cause members to value their peers/members more highly and to work to meet their own goals.

Hypothesis 4: A person who perceives more (less) peer identity overlap with peers will report higher (lower) levels of peer identification.

Perceptions of peer support. Following the conceptualization of organizational support (Eisenberger et al. 1986), we define perceived peer support as a person’s perception of the degree to which an organization’s peers value their contributions and care about their well-being. Researchers have typically studied perceived support from the organization (Coyle-Shapiro and Conway 2005; Eisenberger et al. 1986). For example, Fombelle et al. (2012) demonstrate that perceived support from a nonprofit is positively associated with organizational identification. Support of an individual’s particular identity from other members of a nonprofit (or other group) can increase their likelihood of enacting that identity with other members. For instance, a member of an aquarium who views themself as an avid environmentalist might appreciate another member who recognizes their advocacy for reducing single-use plastics at the aquarium’s snack shop. The caring, approval, and respect connoted by support strengthen the person’s belief that the peers’ behavior can strengthen and reinforce a member’s identity. We predict that members who perceive high support from social peers (other members) in the nonprofit will have high levels of peer identification by fostering the enactment of a member’s social identification in a group setting.

Hypothesis 5: A member who perceives more (less) support for their important social identities from peers will report higher (lower) levels of peer identification.

Peer value congruency. Values are a person’s convictions that a specific mode of conduct or end state of existence is personally or socially preferable (Rokeach 1973). Values motivate action and are the basis from which people define their identities, integrate personality, and regulate behavior (Carlson and Kacmar 2000). Following Meglino and Ravlin (1998), peer value congruence is defined as the perception that two (or more) peers share similar values and perceive external stimuli in similar ways. Past work has focused on the perception of value congruence within a firm or firm employees. We focus on the perception of value of members of a nonprofit. If a member believes that the values associated with an important identity are not consistent with the values of peers, they will reduce the frequency of enacting the conflicting identity within that organization (Katz and Kahn 1978). People who share similar values experience greater satisfaction in their interpersonal relationships (Fisher and Giteelson 1983) which allow them to connect with one another (Meglino and Ravlin 1998). Voss, Cable, and Voss (2000) argue that value congruence is critical to successful relationships with external constituents. We posit that the explanatory theoretical mechanism is peer identification.

Hypothesis 6: A member who perceives a high (low) degree of value congruency with peers in a nonprofit organization will report a high (low) level of peer identification.

Peer affirmation. Identity theorists posit that people seek social contexts that offer opportunities for verification of their views of the self (e.g., Swann et al. 2004). People typically seek positive self-views, so an attractive form of identity verification is partner affirmation (Dritogas et al. 1999). Fombelle et al. (2012) demonstrated that identity affirmation from the organization positively influences organizational identification. Extending the early definition of partner affirmation, we define peer identification affirmation as positive feedback from another peer that a person has reached or is reaching an identification goal (e.g., being a good parent). People selectively expose themselves to particular information, tasks, and other people who enable the maintenance and strengthening of desired identities (Bhattacharya and Elsbach 2002). Affirmation is often implicit; a person perceives it from others’ behavior: when others treat them with respect, appreciate their viewpoint on matters related to the ideal identity, or acknowledge their capacity to perform in the role of the identity. We believe that the peers’ behavior can strengthen and reinforce a person’s important identities. For example, members can affirm each other as being valuable political activists or connoisseurs of fine art. Thus, if peers affirm members’ important identities and help them feel they are successfully enhancing those identities, peer identification will be high.

Hypothesis 7: A member who perceives greater (lesser) identity affirmation from peers in an organization will report higher (lower) levels of peer identification.

Hypotheses 5–7 predict that support, value congruency, and affirmation from peers will have a positive effect on peer identification. They parallel Fombelle et al.’s (2012) finding that support, value congruency, and identity affirmation from an organization have a positive effect on organizational identification.
Model Specification

We can write the following equations describing the duration of the members’ relationships with the nonprofit (\(\text{Duration}_t\)), donations (\(\text{Donations}_t\)), and peer identification (\(\text{Peer Identification}_t\)). In these equations, the member’s identification processes at time \(t - 1\) precede their decisions about membership renewal and donations at time \(t\). Equations 1 and 2 summarize Hypotheses 1–3:

\[
\text{Duration}_t = f(\text{peer identification}_{t-1}, \text{peer identification}_{t-1} \times \text{membership length}_{t-1}, \text{organizational identification}_{t-1}, \\
\text{organizational identification}_{t-1} \times \text{membership length}_{t-1}, \text{covariates}_{t-1}).
\]  

(1)

\[
\text{Donations}_t = g(\text{peer identification}_{t-1}, \text{organizational identification}_{t-1}, \text{covariates}_{t-1}).
\]  

(2)

Equation 3 summarizes Hypotheses 4–7:

\[
\text{Peer identification}_{t-1} = h(\text{peer identity overlap}_{t-1}, \\
\text{peer support}_{t-1}, \text{peer value congruence}_{t-1}, \text{peer affirmation}_{t-1}, \text{covariates}_{t-1}).
\]  

(3)

We include numerous covariates, including membership length, as described in the next section. Peer identity overlap, peer support, peer value congruence, and peer affirmation have indirect effects on membership durations and donations through peer identification, so we conduct mediation tests in our empirical work. Last, for completeness, we estimate Equation 4 that replicates prior models of organizational identification (e.g., Fombelle et al. 2012).

\[
\text{Organizational identification}_{t-1} = h(\text{organizational support}_{t-1}, \text{organizational value congruence}_{t-1}, \\
\text{organizational affirmation}_{t-1}, \text{covariates}_{t-1}).
\]  

(4)

Study Context and Methodology

Our study context is a major metropolitan zoo with a large and active membership. Our data are cross-sectional not panel data. The study took place over a 1-year period (depicted in Figure A1 of Web Appendix). We drew a random sample from the member database at the beginning of the year (time \(t - 1\)). These members received emails asking them to respond to an online survey. After two waves of emails, 33% of the sample had completed the survey, yielding 2,547 observations. This response rate is consistent with prior research with this type of organization (Mael and Ashforth 1992). After a year (time \(t\)), we observed which surveyed members had renewed their annual memberships and which members had left. We used the zoo’s archival membership records to learn when the member was acquired and thus measured the duration of each surveyed member’s relationship with the zoo. The average member of the zoo has a membership length of almost 6 years. These data are left truncated and right censored. We also used the zoo’s records to obtain membership characteristics such as membership tier. Last, we used the membership records at time \(t\) to observe how much each surveyed member donated during the year of the study.

We compared descriptive statistics for the sample with statistics for the entire membership (from the archival data) and found no differences in terms of average age, income, and participation in each membership tier. Table 1 shows constructs, measures, and their sources. In order to test nomological validity of our constructs, we estimated a structural equation model (SEM) that places organizational and peer identification within a nomological net of selected antecedents and consequences (See Web Appendix 1 and Table A2 for full results). The remainder of this section describes how each construct is measured and preliminary analyses, including descriptive statistics, assessments of reliability, convergent validity, and discriminant validity. It completes the operationalization of Equations 1–4 by describing covariates.

Measurement of Dependent Variables

Membership duration. To obtain a measure of the duration of the member-zoo relationship, we calculate how long an individual has been a member, in weeks, from archival records. If the individual is still a member when our study ends (at time \(t\)), then this value is right censored (i.e., not observed). We use these durations to estimate a nonparametric hazard model that maximizes the partial likelihood of an individual remaining a member given that they have not yet defected (Cox 1972; Schmittein and Helsen 1993, p. 5).

An alternative approach to modeling the duration of the member-nonprofit relationship would be to develop and estimate a logistic regression model of membership renewal decisions. This approach would model whether or not the individual renewed or defected during the study period, where the decision is not conditional on prior behavior. We do not use this approach, but it is interesting to compare member renewal decisions (yes/no) at time \(t\) with member renewal intentions at time \(t - 1\). From the survey, we have self-reported intentions on a 7-point scale. From observation in the year after the survey, we observe that the member renewed or did not (a dichotomous variable). The correlation between the two is .239 (\(p < .001\)). We estimated a linear probability model with a dichotomous measure of renewal/defection as the dependent variable and intentions as the predictor. The \(R^2\) is 5.7%, and coefficient is .113 (\(p < .001\)). A logit model produced a very similar coefficient. Thus, member intentions and renewal behavior are not very similar. This result is consistent with research showing that the drivers of customer purchase intentions and behavior are quite different (Seiders et al. 2005).

We measure donations in dollars from archival records. Donations do not include membership fees; 3.26% of members...
Table 1. Constructs and Measures.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Original Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of the</td>
<td>The hazard rate is the probability of an individual exiting from zoo</td>
<td>Archival data (hazard rate model follows Bhattacharya 1998)</td>
</tr>
<tr>
<td>member-nonprofit</td>
<td>relationship given a certain length of membership. It is derived from our</td>
<td></td>
</tr>
<tr>
<td>relationship</td>
<td>knowledge of the duration of the member-nonprofit relationship. If an</td>
<td></td>
</tr>
<tr>
<td></td>
<td>individual has ceased to be a member, the duration of the relationship (in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>weeks) is calculated by subtracting their start date from the end date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>However, if an individual is still a member, their duration is unknown (i.e.,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>right censored) because they will continue to be a member after the end of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the study period. The only information available is the duration of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>membership at the time of the study.</td>
<td></td>
</tr>
<tr>
<td>Donations</td>
<td>Dollars donated over the past year.</td>
<td>Archival data</td>
</tr>
<tr>
<td></td>
<td>personal insult. I am very interested in what others think about peers of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X. When I talk about members of X, I usually say we rather than they.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Members’ successes are my successes. When someone praises members of X it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>feels like a personal compliment.”</td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>Five-item scale: “When someone criticizes X, it feels like a personal</td>
<td>Mael and Ashforth (1992)</td>
</tr>
<tr>
<td>identification</td>
<td>insult. I am very interested in what others think about X. When I talk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>about X I usually say we rather than they. X’s successes are my successes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>When someone praises X it feels like a personal compliment.”</td>
<td></td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership length</td>
<td>How long the person has been a member at the start of the study (time t -</td>
<td>Bolton (1998)</td>
</tr>
<tr>
<td></td>
<td>1), measured in weeks, calculated from the zoo’s archival data.</td>
<td></td>
</tr>
<tr>
<td>Peer identity overlap</td>
<td>“Please choose the answer that best illustrates the degree of overlap</td>
<td>New</td>
</tr>
<tr>
<td></td>
<td>between your role as an [identity] and peers of X.” Response format is a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>selection of eight Venn diagram options ranging from no overlap to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>complete overlap. Repeated for three relevant identities.</td>
<td></td>
</tr>
</tbody>
</table>

![Venn Diagram](image)

- **Peer support**
  - Four-item Likert scale: “Peers of X care about my well-being as an [identity] . . . care about my opinions as an [identity] . . . are willing to help me in my role as [identity] . . . consider my goals and values as an [identity].”

- **Peer value congruence**
  - Three-item Likert scale: “Peers of X have the same values as I do with regard to [identity]. In general, my values and the values of members of X are very similar. I believe in the same values held and promoted by peers of X.”

- **Peer affirmation**
  - Three-item Likert scale: “Peers of X see me as a good [identity] . . . think I have the same traits and dispositions of a good [identity] . . . treat me like I am a good [identity].”

(continued)
donate during a 1-year period. Some members give as much as US$10,000. For this reason, membership length and donation are not highly correlated (.065), though this correlation is statistically significant ($p < .001$). We used an adaptation of Mael and Ashforth’s (1992) well-established scale to measure organizational identification and measured peer identification on the basis of Fombelle et al.’s (2012) study. Average peer identification is at the midpoint of a 7-point scale (3.3), while organizational identification is slightly higher (4.1). Table 2 shows descriptive statistics for all variables.

Table 1. (continued)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Original Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational support</td>
<td>Four-item Likert scale: “The organization X cares about my well-being as an [identity]... cares about my opinions as an [identity]... are willing to help me in my role as [identity]... consider my goals and values as an [identity].”</td>
<td>Adapted from Eisenberger, Fasolo, and Davis-LaMastro (1990)</td>
</tr>
<tr>
<td>Organizational value congruence</td>
<td>Three-item Likert scale: “The organization X has the same values as I do with regard to [identity].”</td>
<td>Maxham and Netemeyer (2003)</td>
</tr>
<tr>
<td>Organizational affirmation</td>
<td>Three-item Likert scale: “The organization X see me as a good [identity]... think I have the same traits and dispositions of a good [identity]... treat me like I am a good [identity].”</td>
<td>Adapted from Drigotas et al. (1999)</td>
</tr>
</tbody>
</table>

Covariates

<table>
<thead>
<tr>
<th>Perceived service quality</th>
<th>Four-item Likert scale measuring reliability, responsiveness, assurance, and empathy.</th>
<th>Self-report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual membership fees</td>
<td>Measured by membership fees in the past year (in US dollars), where more dollars indicate a higher membership level.</td>
<td>Self-report</td>
</tr>
<tr>
<td>Age</td>
<td>Represented by five dichotomous variables indicating age by decile: 20–29, 30–39, 40–49, 50–59, and over 60.</td>
<td>Self-report</td>
</tr>
<tr>
<td>Income</td>
<td>Thousands of dollars</td>
<td>Self-report</td>
</tr>
<tr>
<td>Donation others</td>
<td>Total dollars donated to other nonprofits.</td>
<td>Self-report</td>
</tr>
<tr>
<td>Donation #</td>
<td>Self-report of number of nonprofits to which respondent donated in the past year.</td>
<td>Self-report</td>
</tr>
</tbody>
</table>

Note. All scales have 7 points anchored by strongly disagree (1) and strongly agree (7). The respondent’s salient identity (e.g., parent) was substituted for [identity] in the places indicated.

Table 2. Descriptive Statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donations (US$)</td>
<td>7.586</td>
<td>203.497</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>Peer identification</td>
<td>3.306</td>
<td>1.627</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Organizational identification</td>
<td>4.118</td>
<td>1.480</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Membership length (weeks)</td>
<td>359.195</td>
<td>315.635</td>
<td>52.143</td>
<td>2,517.286</td>
</tr>
<tr>
<td>Peer identity overlap</td>
<td>3.751</td>
<td>1.782</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Peer support</td>
<td>3.849</td>
<td>1.650</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Peer value congruence</td>
<td>4.606</td>
<td>1.308</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Peer affirmation</td>
<td>4.103</td>
<td>1.669</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Organizational support</td>
<td>5.168</td>
<td>1.262</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Organizational value congruence</td>
<td>5.240</td>
<td>1.238</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Organizational affirmation</td>
<td>4.704</td>
<td>1.442</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Perceived service quality</td>
<td>5.843</td>
<td>0.971</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Income (US$1,000s)</td>
<td>118.349</td>
<td>52.887</td>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>Age 20–29</td>
<td>0.135</td>
<td>0.342</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age 30–39</td>
<td>0.422</td>
<td>0.494</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age 40–49</td>
<td>0.232</td>
<td>0.422</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age 50–59</td>
<td>0.118</td>
<td>0.322</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age 60 or older</td>
<td>0.066</td>
<td>0.248</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Annual membership fees (US$)</td>
<td>111.078</td>
<td>224.551</td>
<td>0</td>
<td>10,050</td>
</tr>
<tr>
<td>Donations to other nonprofits (US$)</td>
<td>0.216</td>
<td>5.955</td>
<td>0</td>
<td>285</td>
</tr>
<tr>
<td>Donation number of nonprofits</td>
<td>2.893</td>
<td>1.580</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. Number of observations = 2,547. Self-report items are typically measured on a 7-point scale as described in Table 1.

*aMembership durations are derived from the (censored) values of membership length, transformed, and reweighted for use in the proportional hazards regression model. See Web Appendix.
Measurement of Hypothesized Predictors, Reliability, and Validity

**Measures.** We measured peer identity overlap by eliciting each respondent’s three most salient identities in the context of the nonprofit (e.g., parent, conservationist). Respondents could choose personal identities from a list of 16 identities relevant to the context or a fill-in-the-blank option. The 16 identities were as follows: parent, animal lover, spouse, outdoor person, exerciser/walker, conservationist, grandparent, family member, teacher/academic, friend, community member, religious person, social person, volunteer, shopper, employee/boss, or (fill in blank). Then, we asked the respondent to think about a specific identity (piped in from first set of answers) and their perceived overlap between it and those of peers belonging to the zoo. We measured peer identity overlap by asking respondents to choose the Venn diagram that best illustrated the degree of overlap between their important identity and those of peers, where the response alternatives were eight Venn diagrams ranging from no overlap to complete overlap. We repeated this 3 times for each identity that was salient in our study context.

We measured peer support, peer value congruence, and peer affirmation by adapting well-established scales to fit our study context. Research has shown that the scales for affirmation (Drigotas et al. 1999) and perceived support (Eisenberger, Fasolo, and Davis-LaMastro 1990) have good psychometric properties. We adopted peer affirmation using the same fundamental scale as Fombelle et al. (2012) and measured value congruence with a single item created by Maxham and Netemeyer (2003) and frequently used by others. We measured value congruence, perceived service quality, and member renewal intentions with single items because prior research has employed single-item measures and found them to have equal predictive validity to multiple-item measures (e.g., Bergkvist and Rossiter 2007; Drolet and Morrison 2001). In addition, the cooperating nonprofit was sensitive to survey length.

**Convergent and discriminant validity.** We conducted a confirmatory factor analysis (using maximum likelihood estimation) to assess the measurement properties of the scales used to measure each construct (Farrell 2010; Fornell and Larcker 1981). For each construct measured by multiple items, Table 3 shows the average variance extracted (AVE) on the diagonal with reliabilities below the diagonal and shared variance (i.e., the square of the correlations among the constructs) above the diagonal. The AVE estimate is the average amount of variation that a latent construct is able to explain in the measures to which it is theoretically related. Table 3 shows high AVE values, which indicates that the measures of all constructs have good convergent validity. This result is expected for scales established in prior research. Table 3 also provides evidence of discriminant validity because each AVE value is larger than the shared variance between it and other constructs. The average AVE is .84, and the average shared variance is .31.

Similar to Fombelle et al. (2012), we found a relatively high correlation (.755) between organizational and peer identification. However, correlation measures the relationship at the mean, so this value doesn’t necessarily mean that the two constructs are the same. To investigate further, we first tested the null hypothesis that the correlation equals one; it is rejected ($p < .01$). Second, we conducted a stronger test and regressed peer identification on organizational identification and tested the null hypothesis that the coefficient of organizational identification (.831) equals one. Again, the null is strongly rejected ($p < .01$), meaning that peer and organizational identification cannot completely replace each other. Third, in our duration model, we also conducted a joint $F$ test of the null hypothesis that the interactions of peer and organizational identification with membership length are equal to zero. The null hypothesis is strongly rejected ($p < .001$). Fourth, following Chenmanen et al. (2016), we calculated a collinearity index ($C^2$) between peer identification and its interaction with membership length ($C^2 = -0.297$), organizational identification and its interaction with membership length ($C^2 = 0.322$) and between the two interaction terms ($C^2 = -1.219$). The authors state that a $C^2$ of zero or negative indicates no collinearity. Our $C^2$ value for the two interaction terms is moderate but not significant.

**Table 3. AVE and Shared Variance Estimates.**

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Items</th>
<th>Coeff. $\alpha$</th>
<th>Peer ID</th>
<th>Peer Sup</th>
<th>Peer Aff</th>
<th>Peer Val</th>
<th>Org ID</th>
<th>Org Sup</th>
<th>Org Aff</th>
<th>Org Val</th>
<th>Serv Qual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer ID</td>
<td>5</td>
<td>.954</td>
<td>.805</td>
<td>.413</td>
<td>.354</td>
<td>.320</td>
<td>.570</td>
<td>.170</td>
<td>.234</td>
<td>.224</td>
<td>.088</td>
</tr>
<tr>
<td>Peer Sup</td>
<td>4</td>
<td>.985</td>
<td>.643</td>
<td>.941</td>
<td>.516</td>
<td>.373</td>
<td>.306</td>
<td>.356</td>
<td>.264</td>
<td>.364</td>
<td>.088</td>
</tr>
<tr>
<td>Peer Aff</td>
<td>3</td>
<td>.985</td>
<td>.595</td>
<td>.718</td>
<td>.956</td>
<td>.370</td>
<td>.267</td>
<td>.286</td>
<td>.428</td>
<td>.257</td>
<td>.088</td>
</tr>
<tr>
<td>Org. ID</td>
<td>5</td>
<td>.915</td>
<td>.755</td>
<td>.553</td>
<td>.517</td>
<td>.496</td>
<td>.694</td>
<td>.360</td>
<td>.289</td>
<td>.342</td>
<td>.154</td>
</tr>
<tr>
<td>Org Sup</td>
<td>4</td>
<td>.975</td>
<td>.413</td>
<td>.564</td>
<td>.535</td>
<td>.534</td>
<td>.510</td>
<td>.906</td>
<td>.574</td>
<td>.471</td>
<td>.191</td>
</tr>
<tr>
<td>Org Aff</td>
<td>3</td>
<td>.981</td>
<td>.484</td>
<td>.620</td>
<td>.654</td>
<td>.572</td>
<td>.538</td>
<td>.758</td>
<td>.947</td>
<td>.411</td>
<td>.141</td>
</tr>
<tr>
<td>Serv Qual</td>
<td>4</td>
<td>.869</td>
<td>.296</td>
<td>.296</td>
<td>.297</td>
<td>.404</td>
<td>.392</td>
<td>.437</td>
<td>.375</td>
<td>.518</td>
<td>.630</td>
</tr>
</tbody>
</table>

Note. Correlations are below the diagonal, squared correlations are above the diagonal, and AVE estimates are presented on the diagonal. All correlations are significant at $p < .01$. Renewal intentions is measured with a single item, so it is not shown here. AVE $=$ average variance extracted; Peer Sup $=$ peer support; Peer Aff $=$ peer affirmation; Peer Val $=$ peer value congruence; Org Sup $=$ organizational support; Org Aff $=$ organizational affirmation; Org Val $=$ organizational value congruence; Serv Qual $=$ service quality.
enough to cause concern. In sum, our tests indicate that the duration model should include the interactions; the statistical significance of the interactions is not due to collinearity between peer and organizational identification.

**Covariates and Their Measurement**

**Membership duration equation covariates.** Research has identified other antecedents of member or customer retention and donations, which we treat as covariates in our subsequent empirical work. First, studies conducted in for-profit service settings have shown that product/service quality, price, and demographics (e.g., age) influence customer duration times and usage (e.g., Bolton 1998; Bolton, Lemon, and Lemon 1999). Second, studies have shown that membership tier/fees, interest group membership, member satisfaction, and income (Bhattacharya, Rao, and Glynn 1995; Marinova and Singh 2014) influence nonprofit members’ decisions to renew or defect. Respondents with a high income are likely to belong to more nonprofits because memberships are affordable not just because they have an attachment to a particular organization. Third, studies have shown that member satisfaction and income influence nonprofit donations (Arnett, German, and Hunt 2003). Hence, we test for the inclusion of membership length in the donation equation as a covariate representing relationship stage (Arnett, German, and Hunt 2003). Hence, we test for the inclusion of two covariates in the donation equation that are not relevant in the other equations: number of nonprofits to which a member has donated in the past 5 years and self-reported donations (in dollars) to all nonprofits. These two variables control for the member’s overall propensity to donate to the focal organization and to competing nonprofits. In addition, we include membership length in the donation equation as a covariate representing relationship stage (Gruen, Summers, and Acito 2000, p. 40).

**Donation equation covariates.** Prior research has included predictor variables that capture attitudes toward donations in general (e.g., perceived need or opportunity to do good) and the importance of the nonprofit domain (Arnett, German, and Hunt 2003; Lichtenstein, Drumwright, and Braig 2004). Hence, we test for the inclusion of two covariates in the donation equation that are not relevant in the other equations: number of nonprofits to which a member has donated in the past 5 years and self-reported donations (in dollars) to all nonprofits. These two variables control for the member’s overall propensity to donate to the focal organization and to competing nonprofits. In addition, we include membership length in the donation equation as a covariate representing relationship stage (Gruen, Summers, and Acito 2000, p. 40).

**Measures of covariates.** Membership length is calculated from how long the person has been a member at the start of the study \((t - 1)\). Second, we measure perceived service quality and member renewal intentions with a single item on a 7-point scale. Third, since memberships that offer more benefits have higher fees, the effects of membership tier level and fees cannot be separated in our equations. Hence, we test for the inclusion of annual membership fees (in dollars) in our equations. Membership comprises three major tiers with 89% of members falling within the first two tiers. The basic membership fee for an individual is approximately US$69. Third, age was reported by decade (e.g., 20–29 years), and we used a separate dummy variable for each decade. Where applicable \((p < .05)\), we include age dummies for every group and drop the constant from the equation. Income is measured in thousands of dollars. For reasons of parsimony, we drop variables that are not statistically significant \((p < .05)\) from the membership durations model (age, fees).

**Model Estimation and Results**

This section describes the estimation procedure for each equation, the results, and mediation tests. The dependent variables, the duration of the member-nonprofit relationship, donations, and peer identification, come from three separate sources and are measured using different methods. The measures of membership durations and donations are not normally distributed. Hence, we specify the membership duration equation as a proportional hazard regression (PHR) model (using survival analysis) and the donations equation as a Tobit model as described below. Peer and organizational identification meet the assumptions for ordinary least squares regression. Hence, we (jointly) estimate the peer and organizational identification equations with 2SLS because our preliminary analyses showed reciprocal causation and the equation errors are likely to be correlated (see Fombelle et al. 2012). The correlations among other equation errors were small: .023 for peer identification and duration \((p = .233)\), .22 for peer identification and donation \((p = .260)\), and \(−.291\) for duration and donation \((p < .01;\) see Table 4). Last, we use SEM to test whether each of these four variables has a direct effect, as well as an indirect effect, on member renewal intentions. To do so, we follow the mediation test procedure of Zhao, Lynch, and Chen (2010). See Web Appendix 1 and Table A3 for full results.

**Estimation Procedure**

**Membership duration equation.** We can calculate the duration of the member’s relationship with the zoo by comparing their acquisition date (from the archives with their defection date if it occurred during our 1-year window). However, in our study, the duration of the member-nonprofit relationship is right censored because—at the end of the study—we still don’t know when some of the members will leave the relationship. Some members left during the study and some have not—they are still members. For people who are still members, we cannot use their duration to date. If we use duration to date (a continuous variable) and estimate the model with ordinary least squares (OLS), the values are not normally distributed and the estimates will be biased. We must treat duration as unobserved if it extends beyond the end of the study (i.e., it is censored). The correct econometric model for the duration of the member-nonprofit relationship is PHR. It models the partial likelihood of a member defecting given that they have not done so yet. Hence, in a PHR, a main effect for membership length is not estimated because it extends beyond the end of the study. We can use their duration to date. If we use duration to date (a continuous variable) and estimate the model with ordinary least squares (OLS), the values are not normally distributed and the estimates will be biased. We must treat duration as unobserved if it extends beyond the end of the study (i.e., it is censored). The correct econometric model for the duration of the member-nonprofit relationship is PHR. It models the partial likelihood of a member defecting given that they have not done so yet. Hence, in a PHR, a main effect for membership length is not needed. Following Bhattacharya (1998) and Bolton (1998), we specify the duration of the member-nonprofit relationship (Equation 1) as a nonparametric PHR model (Cox 1975).

The zoo has records of membership duration (to date) for all members at the start of the study \((t - 1)\). However, it purged its
archival records of members who terminated service before the start of the study. Thus, our duration times are left truncated because if the member left before the study began, the zoo did not keep a record for them. The remaining members could have any start date. Members who didn’t stay long are underrepresented in the data. We handle the left truncation problem by reweighting the data as part of our PHR estimation using the method developed by Helsen and Schmittlein (1993) and used by Bolton (1998). See the Web Appendix 2 for full details of the reweighting procedure (described below) substantially attenuates the relationship between duration on the left-hand side and membership length on the right-hand side. We estimate our PHR model with the reweighting method. The reweighting procedure (described by Bolton (1998). See the Web Appendix 2 for full details of the reweighting method.

As shown in Table 4, the data support the duration model as indicated by the log-likelihood ratio, Wald test, and score test (p < .01). Hypotheses 1 and 2 make predictions about the moderating effect of membership length on both variables. The coefficient of the interaction term (Column 4 of Table 4) for Peer Identification × Membership Length (corresponding to Hypothesis 1) is .0002, and the coefficient of the interaction term for Organizational Identification × Membership Length (corresponding to Hypothesis 2) is −.0002 (both p < .01). The results confirm both Hypotheses 1 and 2. In a later relationship stage, high peer identification has a larger effect on the membership durations, while early on, organizational identification has a larger effect.

**Donation equation.** Our database consists of members only, and the majority of members do not donate during a 1-year period. Hence, for more than 95% of the observations, the donation amount is zero. Membership fees are separate; they are not part of donations. Due to the large number of zero values, OLS will not produce unbiased estimates; a Tobit model is appropriate. (Our approach is similar to Bolton and Lemon’s (1999) model of customers’ service usage.) We specify donations (Column 5) as in Amemiya’s (1984) Type I Tobit and estimate it with R as described by Kleiber and Zeileis (2008). The data support the model as indicated by the log-likelihood ratio, Wald test, and score test (p < .01). As shown in Table 4 (Column 5), the signs of all variables are in the expected direction and statistically significant. The results support Hypothesis 3, which predicts

---

**Table 4. Estimation Results.**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Org. ID (2SLS)</th>
<th>Peer ID (2SLS)</th>
<th>Duration (Hazard Model)</th>
<th>Donation (Tobit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer identification (Hypothesis 1, 3)</td>
<td>0.452*** (0.024)</td>
<td>NA</td>
<td>−0.043*** (0.011)</td>
<td>−38.532*** (20.286)</td>
</tr>
<tr>
<td>Peer ID × Membership Length</td>
<td>NA</td>
<td></td>
<td>0.0002*** (0.00003)</td>
<td>NA</td>
</tr>
<tr>
<td>Organizational identification (Hypothesis 2, 4)</td>
<td>0.070 (0.056)</td>
<td>0.991*** (0.012)</td>
<td>62.593*** (24.974)</td>
<td></td>
</tr>
<tr>
<td>Organization ID × Membership Length</td>
<td>NA</td>
<td></td>
<td>−0.0002*** (0.00003)</td>
<td>NA</td>
</tr>
<tr>
<td>Peer identity overlap (Hypothesis 4)</td>
<td>0.101*** (0.015)</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer support (Hypothesis 5)</td>
<td>0.291*** (0.025)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer value congruence (Hypothesis 6)</td>
<td>0.220*** (0.024)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer affirmation (Hypothesis 7)</td>
<td>0.188*** (0.022)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational support</td>
<td>0.083*** (0.024)</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational value congruence</td>
<td>0.216*** (0.022)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational affirmation</td>
<td>0.089*** (0.021)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational overlap</td>
<td>0.073*** (0.013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>NA</td>
<td></td>
<td>−0.010 (0.007)</td>
<td>−11.273 (26.101)</td>
</tr>
<tr>
<td>Income</td>
<td>−0.001*** (0.0003)</td>
<td>−0.002*** (0.0004)</td>
<td>−0.0001 (0.0001)</td>
<td>−0.665 (0.438)</td>
</tr>
<tr>
<td>Age 21–30</td>
<td>−0.352*** (0.083)</td>
<td>−0.612*** (0.109)</td>
<td>−248.716** (111.191)</td>
<td></td>
</tr>
<tr>
<td>Age 31–40</td>
<td>−0.293*** (0.072)</td>
<td>−0.625*** (0.093)</td>
<td>−202.721*** (76.047)</td>
<td></td>
</tr>
<tr>
<td>Age 41–50</td>
<td>−0.206*** (0.072)</td>
<td>−0.406*** (0.091)</td>
<td>−128.679* (71.872)</td>
<td></td>
</tr>
<tr>
<td>Age 51–60</td>
<td>−0.093 (0.077)</td>
<td>−0.202** (0.097)</td>
<td>−26.959 (68.665)</td>
<td></td>
</tr>
<tr>
<td>Membership annual fees</td>
<td>0.00003 (0.0001)</td>
<td>0.0002** (0.0001)</td>
<td>0.982** (0.039)</td>
<td></td>
</tr>
<tr>
<td>Membership length</td>
<td>0.0004*** (0.0001)</td>
<td>0.00002 (0.0001)</td>
<td>0.167** (0.067)</td>
<td></td>
</tr>
<tr>
<td>Donations to others (US$)</td>
<td>NA</td>
<td></td>
<td>6.942*** (1.398)</td>
<td></td>
</tr>
<tr>
<td>Donation number (of nonprofits)</td>
<td></td>
<td></td>
<td>−34.623** (13.690)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.464*** (0.115)</td>
<td>0.356*** (0.168)</td>
<td>NA</td>
<td>−757.985*** (177.779)</td>
</tr>
<tr>
<td>R² (adjusted R²)</td>
<td>0.653 (0.651)</td>
<td>0.547 (0.545)</td>
<td>0.530</td>
<td></td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>−265.701.700</td>
<td>−790.851***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald test</td>
<td>237.7*** (df = 12)</td>
<td>289.2*** (df = 12)</td>
<td>29.122.120***</td>
<td>713.678***</td>
</tr>
<tr>
<td>Score (log-rank) test</td>
<td>24.110.570***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. 2SLS = two-stage least squares; NA = not applicable.

The models are estimated with 2,547 observations. Coefficients with standard errors are in parentheses.

Two-tailed tests: * p < .10. ** p < .05. *** p < .01.
that the effect of peer identification on donations will be negative; the coefficient is $-38.532$ ($p < .05$). We also replicate past research with a positive effect for organizational identification on donations; the coefficient is $62.593$ ($p < .05$).

**Peer identification equation.** We used single-equation estimation methods for the duration and donations equations because there is no software (to our knowledge) that will jointly estimate a PHR (with truncation) and a Tobit model. However, we can use 2SLS to (jointly) estimate equations for peer identification and organizational identification. This procedure takes into account the endogeneity detected in our preliminary analyses. The equation errors met the assumptions of homoscedasticity and that the conditional mean equals zero.

The 2SLS equations for peer and organizational identification are well supported by the data ($R^2 =$ .460.45, $p < .01$). The peer identification equation has good explanatory power ($R^2 =$ .55; see Column 3 in Table 4). Peer identification depends on peer overlap ($R^2 =$ .101), peer support ($R^2 =$ .291), peer value congruence ($R^2 =$ .220), and peer affirmation ($R^2 =$ .188). Thus, we find empirical support ($p < .01$) for Hypotheses 4–7. The organizational identification equation is also well supported ($R^2 =$ .67, $p < .01$); it shows favorable effects for peer identification, organizational support, value congruence, and organizational affirmation on organizational identification after controlling for variables identified in prior research.

**Effects of covariates.** We find a positive main effect of membership length in the organizational identification equation ($p < .01$) and the donation equation ($p < .05$) but not in the peer identification equation. Consistent with prior research, our estimated equations show that age influences the duration of the member-nonprofit relationship (Bhattacharya, Rao, and Glynn 1995) and donations (Arnett, German, and Hunt 2003). Perceived service quality does not influence membership duration or donations. Often, research hasn’t found a relationship between service quality and customer retention for a variety of reasons; the most likely explanation is contingency factors associated with the particular service sector which are beyond the scope of this article (Ranaweera and Neely 2003). Members are more likely to donate if they are older, if they donate to a larger number of nonprofits, and if they have not donated recently to the zoo.

However, the strong positive impact of organizational identification is smaller for longtime members. In addition, we find that peer identification has little impact on the duration of the member-nonprofit relationship for members of fewer than 4 years and positive effects in the later stages (greater than 4 years). These findings are consistent with Hypotheses 1 and 2.

We extend prior research by showing that the effects of peer and organizational identification on membership duration depend on the stage of the relationship. Given that Bolton (1998) finds that the effect of satisfaction on the duration of the customer-firm relationship depends on the stage of the relationship, it is not entirely surprising to find that organizational and peer identification have different effects at different stages. The services and relationship management literature streams both emphasize the importance of relationship stages.

**Donations.** Prior studies on member donations to nonprofit service organizations have emphasized the role of past giving (e.g., Khodakarami, Petersen, and Venkatesan 2015; Lindahl and Winship 1992). Boenigk and Helmig (2013) find in two contexts that organizational identification and identity salience influence self-reports of loyalty but not donations. By contrast, our study shows that members’ social identities can have varying effects on (archival measures of) membership duration and donations. Organizational identification has a favorable (positive) effect on donations, and peer identification has an unfavorable (negative) effect. This finding confirms Hypothesis 3.

Considering the results from Equations 1 and 2 together, the social value of peer identification is associated with longer member-nonprofit relationships. At the same time, peer identification does not sustain or promote donations to the zoo when compared with other activities they might undertake with peers (such as word of mouth).

**A Deeper Conceptualization of Identification Processes**

**Peer and organizational identification as complements.** Research has emphasized that the relationship between organizational identification and member behavior is critical, so nonprofits should focus on the formation of organizational identification at every relationship stage. However, our research shows that strengthening organizational identification will lead to longer membership durations early in the member-nonprofit relationship and higher donations at all stages. Peer identification is complementary; its payoff occurs under the opposite circumstances because its effect is large for longtime members.

**Membership as a social construction.** Given that the positive effects of organizational identification on members fade over time, a nonprofit must qualitatively change how it develops and affirms organizational identification. If a member views their organizational identification as categorical membership (Gioia et al. 2013), they will not necessarily engage in social interactions or social construction. Indeed, Farmer and Fedor (2001) find that the frequency and nature of peer interactions do not significantly influence member behavior. However, the
goal of the zoo (or other nonprofit service organizations) should be to shift members’ perceptions of the organization from a simple categorical membership (e.g., zoo cardholder) to a richer social construction (e.g., member of a community that cares about animals). Since members’ social construction of what it means to be a member differs across relationship stages, peer identification is different, in that longtime members are more likely to stay. Additional research is required such as calibrating the effect of membership length for different nonprofit contexts.

Donations and social reinforcement. Nonprofit service organizations must think beyond simply keeping members. Organizational identification has a favorable effect on donations during any stage of the relationship, so the nonprofit must continue to build a richer construction of organizational identification in its members if it is to stimulate donations. In experiments, Winterich, Mittal, and Aquino (2013) find that social reinforcement (e.g., a thank-you card, recognition on donor list) increases charitable behavior among those with high moral identity symbolization (i.e., linked to action) and low moral identity internalization. Their findings suggest that later in the member-nonprofit relationship, nonprofit service organizations should reinforce organizational identification linked to helping behaviors.

Formation of Peer Identification

Peer support, value congruence, and affirmation. Since peer identification plays an important role in the duration of the member-nonprofit relationship and donations, it is important for nonprofit service organizations to understand how to foster it. Our results for Equation 3 show that peer identification is greater when peer support, value congruence, and affirmation are higher, consistent with Hypotheses5–7. When comparing standardized coefficients, we find that these antecedents mirror the antecedents of organizational identification (Bhattacharya and Sen 2003; Fombelle et al. 2012). Peer support has greater explanatory power than peer value congruence and affirmation. However, these differences are not very large. Members create peer identification through their interactions, so it will be difficult for nonprofit service organizations to directly influence its ingredients. A nonprofit can communicate a strong brand identity to increase peer value congruence. However, facilitating peer-to-peer support and affirmation requires a supportive organizational culture and climate (Bowen and Schneider 2014).

Fostering members’ discretionary behaviors. Peer-to-peer support and affirmation arise from members’ participation in the mission of the nonprofit and especially from their extra-role (i.e., discretionary) citizenship behaviors (Bolton and Saxena-Iyer 2009). Prior research suggests that the primary way to foster customer/member citizenship behaviors is by encouraging employee identification and citizenship behaviors (Bove et al. 2009). This task is more challenging than leveraging communications to create early identification with the service organization. However, nonprofits have an advantage over for-profit service organizations because people like to work for nonprofits that share their values. Thus, nonprofit service organizations can build brand psychological ownership and citizenship behaviors by sharing information with, training, and rewarding employees (Chang, Chian, and Han 2012); it will encourage members to support and affirm each other. In addition, nonprofit service organizations can build platforms that facilitate social and digital media as mechanisms for support and affirmation. Both observational learning and verbal communications can be effective (Libai et al. 2010). Thus, nonprofit service organizations should consider supporting brand-focused communities and show influential members supporting and affirming their peers’ citizenship behaviors.

The Role of Peer Identity Overlap

This article introduced a new construct—peer identity overlap—that influences peer identification. It developed new measures and demonstrated that they show convergent and discriminant validity versus other social identity constructs. Examining standardized coefficients, we find that peer identity overlap is less important than other antecedents of peer identification, but it is statistically significant and theoretically important. As we show in Equations 1 and 2, social identities can have favorable or unfavorable effects on the duration of the member-nonprofit relationship and donations depending on the relationship stage. Thus, peer identity overlap creates a mechanism for reconciling members’ multiple identities and enhances peer identification. Nonprofit service organizations should look for ways to help members be efficient in sustaining and promoting multiple social identities. For example, the zoo has been especially successful in creating peer identity overlap for members who are parents.

Managerial Implications

This study is the first to provide empirical evidence that the effects of identification on behavioral outcomes can be both positive and negative after controlling for service quality. These findings help explain why the nonprofit sector is so competitive. Nonprofit service organizations compete against other nonprofits (through organizational identification), but they also compete with other activities that members can enjoy with their peers. A deeper understanding of peer and organizational identification can guide managers in developing member programs and activities. For this reason, it is important that nonprofit service organizations create a portfolio of programs that can appeal to members who seek closer relationships with the organization, such as supporting science/arts education programs as well as programs with a social (peer-to-peer) component.

First, programs that encourage peer-to-peer interactions can encourage longer member-nonprofit relationships. For example, some zoos encourage members to join other members for
walks on their specially marked trails—combining animal encounters, outdoor activity, fitness, and fun. Grandparents or parents who initially visited the zoo with their children can transition to visiting the zoo with their friends (when children outgrow such activities). Such social activities can provide peer support, value congruence, and affirmation. In this way, nonprofit service organizations can capitalize on peer identification, rather than subsequently losing members to nonprofits that provide better support of peer-to-peer relationships.

Second, most prior work on nonprofit donations has focused on past giving behavior as a key antecedent. This emphasis is not entirely surprising because past giving (to a particular nonprofit or to other nonprofits) is a useful indicator of whether a person is willing and able to give. However, we find that organizational identification has a large and favorable effect on donations, after controlling for service quality and ability to give, at any stage of the relationship. Often, nonprofit service organizations cultivate a potential donor over a lengthy period before soliciting a significant donation. Our study indicates that nonprofit service organizations must use programs and activities to transform members’ perceptions and create richer social constructions of membership (rather than simply creating highly satisfactory service experiences). Potential donors often belong to multiple nonprofits, so managers must deepen members’ engagement and transform their understanding of the nonprofit mission. For example, a development officer might ask a potential donor to serve on an advisory board, take a leadership role in a specific event, or serve as an advocate, thereby fostering feelings of psychological ownership and citizenship behaviors that might ultimately lead to a donation.

**Concluding Remarks**

This article presents a reasonably comprehensive model of the antecedents of the duration of the member-nonprofit relationship and donations as well as peer identification. It extends prior work on the effects of identity salience, and organizational identification, showing that peer identification plays a theoretically and managerially important role. In particular, we discovered that social identities can act as complements or substitutes, thereby influencing membership durations and donations. Since most nonprofit studies rely on self-report data, our study provides rare insights into the drivers of member behavior. However, as we examine a single context (a zoo), further research is necessary to replicate and extend these results in other contexts.

First, this article is a study of member behavior only, focusing on the duration of their membership and their donations. We don’t have any information about member acquisition or donations (if any) by nonmembers. Future research might examine nonmember behaviors relevant to the nonprofit, especially purchases or donations from nonmembers. Second, we expect that the theoretical mechanisms operating in nonprofit service organizations are likely to operate in for-profit service organizations. For example, Harmeling et al. (2017) show that group membership and the creation of group norms lead to group influence on an individual’s purchase behavior. Our study may help explain their findings, but additional research is required to deepen our understanding of the effects of group membership and peer influence.

Third, we might expect the parallel processes of peer and organizational identification to operate in employee-organization settings. More broadly, additional research is needed to further expand our understanding of the nature of value cocreation among multiple actors and how meaningful service experiences emerge. Fourth, research on organizational and peer identification is complementary to prior research on brand community and customer engagement. Both research streams recognize that customers may have different engagement or attachment targets (e.g., Mende and Bolton 2011; Muniz and O’Guinn 2001). Additional research might further integrate these research streams. Last, much more research is needed concerning the dynamics of identification formation and associated behavioral outcomes.

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**Supplemental Material**

The supplemental material for this article is available online.

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