

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

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MEMBER RETENTION AND DONATIONS IN NONPROFIT SERVICE ORGANIZATIONS:
THE BALANCE BETWEEN PEER AND ORGANIZATIONAL IDENTITY

Abstract

Prior research has established 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 demonstrates how peer identification influences member retention and donations -- distinguishing identification with the organization from identification with peers. The theory-based model shows that the effects of peer and organizational identification are complex. The effect of a member's peer and organizational identification on the likelihood of he/she will remain a member depends on the stage of the member's relationship. Organizational identification has a larger effect on member retention in the earlier periods of membership. However, after eight years, 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 study demonstrates the need for nonprofit service organizations to 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.

Nonprofit service organizations, such as museums, zoos, universities, arts, and professional associations, face unique challenges in managing relationships with members. They create, maintain, and enhance relationships with their key constituents but, in contrast with for-profit service organizations, purchase behavior is not their primary focus. Instead, many nonprofit service organizations recruit members who share their values to create a community to accomplish their missions. For example, the YMCA develops relationships with members who value its organizational mission of supporting youth development, healthy living, and social responsibility in communities across the USA. Although researchers have long recognized the distinctive nature of nonprofits (Powell and Steinberg 2006), 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 in their roles as parents and community members – as well as because they support its mission. Furthermore, little, if any, service research in nonprofit settings has taken into account how members actively cocreate value together, where their behavior differs depending on the stage or length of the member–nonprofit relationship.

Nonprofit research has typically focused on organizational actions that help service organizations build relationships with their members (e.g., Bhattacharya, Rao, and Glynn 1995). Many studies have shown that strong identification with a service organization has a positive effect on desirable 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; Kreiner and Ashforth 2004) and positively influences loyalty and citizenship behaviors (Dukerich, Golden, and Shortell 2002; Mael and Ashforth 1992). More recently, research has

shown that peer identification, or the “extent of an individual’s identification with other individuals in the organization” (Fombelle et al. 2012, p. 590), can have a positive impact on organizational identification. In a nonprofit service organization, a member often interacts with other members, in addition to interacting with the organization itself. However, there is limited research examining the antecedents of a strong identification with peers in a service setting or its direct impact on future member behaviors (Helkkula, Kelleher, and Pihlström 2012, p. 62). Further, relationships with an organization are different depending on the members’ prior experience with an organization. A key contribution of the current research is highlighting how the strength of the effects of peer identification and organizational identification on the duration of the member’s relationship with a nonprofit differ depending on his/her relationship stage with the nonprofit.

Our findings contribute to the growing literature on relationship formation between nonprofit service organizations and their members in several ways. First, they reveal that the impact of a member’s peer and organizational identification on his/her decision to remain a member of a nonprofit differs depending on how long he or she has been a member (i.e., a moderating effect of membership length). In line with prior research, we argue that peer identification requires social interactions to form, whereas the categorical impact of organizational identification does not (Gioia et al. 2013). While organizational identity may be impacted by interacting with the organization and employees, traditional organizational identity focuses on organizational and product characteristics that don’t require social interaction (i.e. perceived organizational prestige, prior satisfaction) impacting the formation of organization identity (Bhattacharya et al. 1995). Our findings demonstrate that in the first four years of the member–nonprofit relationship, the effect of a member’s identification with other peers on the

duration of the member's relationship with the organization is small, whereas organizational identification has a larger effect. However, for members who remain more than eight years, the favorable effect of peer identification becomes stronger than the effect of organizational identification. The large positive influence of organizational identification is smaller for longtime members, while peer identification becomes more important for them, thus explaining membership durations at later stages in the member–nonprofit relationship.

Prior research has emphasized the positive relationship between organizational identification and key organizational outcomes (Bhattacharya, Rao, and Glynn 1995), suggesting that nonprofit service organizations should focus on enhancing organizational identification at every stage of the relationship. However, a key implication of our findings is 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 and a greater payoff in terms of donations for longtime members. Peer identification is complementary, in that its positive impact on the duration of the member's relationship is larger for longtime members. Thus, as the positive impact of organizational identity diminishes for longtime members, the impact of peer identification becomes the prominent driver of their membership durations.

Second, this article contributes to the literature on nonprofit services by introducing the construct of peer identity overlap. We define peer identity overlap as the simultaneous enactment of one or more other salient identities within a single context or organization. Every person has multiple salient identities as part of who he or she is as an individual (Stryker 1980). Each identity has the potential to be enacted individually in unique contexts. For example, a person might have two highly salient identities: parent and animal lover. He or she can individually enact each of 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, his or her peer identity overlap will be higher than when he or she participates in other activities.

Moreover, we propose a novel method for measuring peer identity overlap. In our data, we ask people to identify multiple salient identities in the context of the focal organization and then measure the perceived degree of overlap of each relevant identity. In this way, we can accurately measure the degree of peer identity overlap between the focal organizational identification and multiple other relevant identities.

Third, we show that two parallel identification processes operate to influence member–nonprofit relationships and member behavior. Prior research has shown that organizational support, value congruence, and affirmation are antecedents of organizational identification (Fombelle et al. 2012). In nonprofit service organizations, 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 organization. A nature conservancy might hand out water bottles to people who are participating in the hike (organizational support), provide recycling bins for the bottles (shared value for sustainability with organization), and facilitate the participation of a volunteer leader with expertise on local flora and fauna (organizational affirmation), creating organizational identification. In this study, our third key contribution is testing the parallel impact of peer support, peer value congruence, and peer affirmation on the formation of peer identification. Extending this example, we argue that 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. Specifically, we define peer support as a person’s perception of the degree to which an organization’s peers value his or her 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. In line with past research (Vargo and Lusch 2016), this article offers rich insights into how service provision and resource integration among multiple actors creates value through meaningful, holistic experiences within a service ecosystem.

Fourth, in contrast with prior studies, we aim to understand how peer identification influences two key member *behaviors* –the duration of the member’s relationship with the nonprofit and his/her donations– distinguishing identification with the nonprofit service organization from identification with fellow members (i.e., peers). 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). Our model shows that the effects of peer and organizational identification are more complex than previously recognized. 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 his/her relationship with the organization and the amount of their donations, after controlling for traditional relationship constructs (e.g., service quality). Our model has four components: two equations estimated with two-stage least squares (2SLS) that explain the formation of peer and organizational identification, a non-parametric proportional hazards regression (PHR) model of membership duration times that takes into account the censoring of lapsed members, and a Tobit model of member donations to a nonprofit in dollars.

We tested our hypotheses by partnering with a large membership based nonprofit zoo. We combine survey data with behavioral secondary data from the organization. Membership-based non-profits have been recognized as 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 organizational identification relies on surveys of people's self-reported membership length to date and donations, whereas we have access to members' behavior (observed duration times and donations) from the nonprofit organization's internal records. Thus, our cross-sectional model is able to show how the effects of peer and organizational identification on membership durations are moderated by the stage of the member-nonprofit 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 relationships between a member and a nonprofit service organization. Table 1 summarizes key research regarding peer and organizational identification, including studies of antecedents and behavioral outcomes. The table distinguishes between studies of both peer and organizational identification, studies of organizational identification, and studies of constructs similar to peer identification. While organizational identification research has a long and rich history, very little has studied behavioral outcomes. Further, as peer identification is a much newer construct, very little work has examined the antecedents of peer identification or its behavioral outcomes. Hence, we also include studies of related identity constructs in the table. Figure 1 depicts the relationships established in prior research (organizational identification) and our proposed relationships (peer identification and overlap).

**** Table 1 and Figure 1 about here ****

Research has long recognized the theoretical importance of organizational identification, or a person's perception of oneness with an organization (Mael and Ashforth 1992). Past research has also established that members can form separate and unique identities with other members of a nonprofit service organization, thereby creating a separate and unique peer identification (Fombelle et al. 2012). Nonprofit service organizations can foster successful relationships when members identify with the organization (e.g., a museum) and also with other members (e.g., those who share a love of history).

Almost all research on organizational identification highlights a highly positive effect when individuals strongly identify with an organization (e.g., Mael and Ashforth 1992). However, none of this work tests whether this strong positive effect depends on membership length. Conceptual work has proposed that organizational identification has multiple favorable outcomes in nonprofit service organizations, such as increased loyalty behavior (Bhattacharya and Sen 2003), but many of these links have yet to be established empirically. Empirical work in *for-profit settings* has shown that this positive effect also increases product utilization, extra-role behaviors (e.g., likelihood to recommend the company to friends; Ahearne, Bhattacharya, and Gruen 2005), and increased willingness to pay (Homburg, Wieseke, and Hoyer 2009). Thus, examining the behavioral outcomes of both peer and organizational identification in a nonprofit service organization setting should be fruitful.

When a person joins a nonprofit organization, his/her membership makes him/her part of a well-defined collective or group (Ashforth, Schinoff, 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 schema could include beliefs about the values of the nonprofit and about 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 his or her feelings about the organization, but they do not assess the formation of peer identification or its 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., Brodie et al. 2013; Mende and Bolton 2011; Muniz and O'Guinn 2001). In this study, we first explore the origins of peer identification in social interactions among members and then 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). In common-bond groups, the formation of a group identification is influenced by the degree to which the individual knows, likes, and feels similar to other individuals of the group. Prentice et al. (1994) set the groundwork from which Fombelle et al. (2012) built peer identification. One of the key features of peer identification, as defined by Fombelle et al. (2012), 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 that influence the formation of a peer identification. Whereas, in other situations two people in the same group, organization, firm, or non-profit 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 kids played in the children's park at the zoo.

Although we develop hypotheses later in this paper, it is useful to briefly anticipate how differences in peer identification levels might arise across members. Although members in a non-profit may have no clear or defined roles, each member's interactions with other peers are likely to lead to different beliefs about their perceptions of peer identity overlap, peer value congruence, peer affirmation, and support from other peers. For example, a new member might have high levels of organizational identification arising from value congruence with the nonprofit that led to purchasing a membership but low levels of peer identification due to a lack of social interactions. Alternatively, a new member might have been recruited by a friend who is a member; where the friend's affirmation leads to high levels of peer identification but low levels of organizational identification.

Peer identification has some conceptual overlap with a few related constructs in the literature. First, 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 one defines oneself in terms of a given role-relationship, such as manager-subordinate and coworker-coworker. Employee-customer identification (Korschun et al. 2014) and customer-employee identification (Netemeyer et al. 2012) are two examples of relational identification constructs that require clear role-relationships to form. Peer identification does not necessitate the clearly defined role while relational identity does. Third, Ashforth, Schinoff and Rogers (2016) recently defined personal identification as perceived oneness with another individual. Their conceptual work does have some overlap with peer identification because both have their theoretical origins in Ashforth and Mael (1989). However, the target of the identification is different. In personal identification, an individual identifies with the attributes of a target that make that target who he or she is—namely, his or her personal identities. In contrast, Fombelle at

al. (2012) adapted their peer identification scale from organizational identification. Thus, a member of a nonprofit can form identities with both the core organization and with other members.

HYPOTHESES

This section develops hypotheses about the behavioral outcomes of organizational and peer identification, as well as about how peer identification differs across members. Identification involves cognition, emotion and behaviors (Ashforth, Harrison and Corley 2008), where behavioral outcomes can be considered enactments of the desired identity (Lam 2012; Press and Arnould 2012). H₁-H₃ offer predictions about the behavioral outcomes associated with peer and organizational identification and H₄-H₇ offer predictions about how peer identification varies across members. They focus on how peer identity overlap, peer value congruence, peer affirmation, and support from other peers impact the formation of peer identification.

Research in social psychology indicates that people who identify with a group are likely to be more loyal to that group (e.g., Van Vugt and Hart 2004). Members with more ties to other members are more likely to value and identify with the organization itself (Amiot et al. 2007). In brand communities, peers play a crucial role in the formation of organizational identification (Algesheimer, Dholakia, and Herrmann 2005; Muniz and O'Guinn 2001). Kinship among brand community members has been shown to foster commitment to the organization (McAlexander, Schouten, and Koenig 2002). Members who have greater identification with a group are more likely to be engaged and participate in group activities (Algesheimer, Dholakia, and Herrmann 2005; Vivek, Beatty, and Morgan 2012) and to remain members (Gruen, Summers, and Acito 2000). However, research on how peer-to-peer social interactions influence the duration of

members' relationships with the organization and their donations in nonprofit or for-profit service settings is limited (Libai et al. 2010; Van Doorn et al. 2010).

Influence of Peer and Organizational Identification on Membership Durations

We seek to extend past research that has shown peer identification to be positively associated with organizational identification (Fombelle et al 2012). Prior research has shown that organizational identification can form without social interactions, whereas peer identification requires social interaction. This is not to say that interacting with organizational employees and management wouldn't help build one's organizational identity, simply that social interaction is not required to form organizational identity. Depending on their experiences, members will have different levels of organizational and peer identification. One can easily see this play out on college campuses every fall as freshman show up for the first time. Decked out in University clothing, the freshman have quickly formed an identification with the University (organizational identity). However, peer identity does not begin to build until they have had time to meet and interact with other students via coursework, clubs, sports, Greek organizations, etc. In this section, we argue that the *magnitude* of the effects of peer and organizational identification on the duration of the member-nonprofit relationship are different at different relationship stages. To clarify, we define duration as the elapsed time from when the member was acquired until he/she exited the relationship (for members who exited the relationship); this measure is unobserved or "censored" for people who still are members. We operationalize membership relationship stage as how long the individual has been a member at the beginning of the study. Even though the two constructs seem closely related; there are some key differences. The strength of the relationship between duration times and retention (renew) depends on membership length. Customers who have maintained longer membership with the organization

weigh renewing with the organization more heavily. On the other hand, the effects of perceived losses arising from membership termination (non-renewal) on duration times are directly weighed by prior membership length. Since duration is censored while prior membership length is directly observed, we follow Bolton (1998) to use a weighting procedure to take into account this complicated data structure. In other words, we are creating a new, weighted, dataset of duration based on membership length.

Participation in special interest groups with goals related to the focal organization and helping behaviors, such as volunteering and gift frequency, are positively associated with membership durations in non-profits with paid memberships (Bhattacharya 1998). We posit that when a member receives favorable outcomes (e.g., support, affirmation) from fellow members (peers), he or she will try to maintain and enhance common bonds, thereby continuing to enact his or her social identities. Consequently, on a broader level, we believe that higher levels of peer identification will lead to longer 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, 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. In other words, given two people with the same level of peer identification, the newer member is less likely to act on it – that is, the magnitude of the effect on duration is smaller. The services literature has acknowledged that business relationships develop in stages (Gummeson 1987; Johnson and Selnes 2004). From a consumer research perspective, a new member (outsider) is unlikely to perceive him- or herself as an insider of a new social group (Joy 2001). Many museums hold

monthly happy hour events and social mixers for members but new members may not be motivated to attend these events as they still feel like an outsider. Peer identification doesn't immediately lead to relational behaviors (i.e., conation or actions). 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. In contrast, for members who have belonged longer and developed relational bonds within the context of organizational activities, the effect of peer identification will be magnified.

Organizational identification, on the other hand, represents a categorical membership (Gioia et al. 2013), which does not require any social interaction for an individual to feel part of the group (e.g., nonprofit membership). Prior research has shown that organizational identification is influenced by perceived value congruence, affirmation, and support from the organization (See Table 1). Thus, it arises from the attributes associated with that organization, where these perceptions can be evoked and deepened when a member joins. Prior research has shown that organizational identification has a favorable main effect on relationship outcomes (Bhattacharya 1998). However, we posit that membership length moderates the effect of organizational identification on duration with the opposite pattern of influence for peer identification. In the psychology literature, studies have created group identities by arbitrarily assigning individuals to a team (red versus blue team) or group (Nesdale and Flessner 2001). Indeed, early group experiments in social identity theory precluded social interaction (Turner et al. 1987). The decision to buy or renew a membership fulfills individuals' categorical identity needs by immediately allowing them to classify themselves as members.

Thus, 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, when compared with members in the later stages. In contrast, we propose that peer identification has a large positive effect on the duration of the relationships for longtime members when compared with relatively new members. In summary, we predict that membership length moderates the effect of peer identification and organizational identification on the duration of the member-nonprofit relationship.

H₁: For longtime members (versus relatively new members), high peer identification has a large (small) positive effect on the duration of the member-nonprofit relationship (ceteris paribus).

H₂: For relatively new members (versus longtime members), strong organizational identification has a large (small) positive effect on the duration of the member-nonprofit relationship (ceteris paribus).

These predictions hold regardless of whether organizational and peer identification levels are high or low at a specific stage in the relationship. Note that these two hypotheses concern moderating effects, so our empirical work must control 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

Previous research has shown that social exchanges in a nonprofit (e.g., participation, satisfaction) can increase the importance of a particular identity for members, such that they will 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). Because donors are a small percentage of members, we develop hypotheses regarding all monetary donations, rather than distinguishing among types of monetary donations. 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 model monetary donations by members after excluding membership fees (which we treat as control variables).

When people form strong organizational identification, and thus adopt the values of the nonprofit, they make choices that benefit the well-being of the organization (Simon 2013). The psychology of organizational identification is powerful because it implies that members may change their behavior merely by thinking differently about the organization. Organizational identification is necessarily tied to the goals that an organization embodies (Bhattacharya, Rao, and Glynn 1995). Studies have shown that alumni who have a strong organizational identification with their alma mater are more likely to donate to the school (e.g., Arnett, German, and Hunt 2003; Mael and Ashforth 1992). Prior research on corporate social responsibility has also shown that organizational identification influences donations to corporate-supported nonprofits (Lichtenstein, Drumwright, and Braig 2004). Donations may be viewed as a direct way for members to confirm their (categorical) organizational identification. Reed et al. (2007) point out that the nonprofit donor and organization need never, and often do not, interact. As it may involve no formal interaction to form an organizational identification, this notion is consistent past research that has found a positive relationship between organizational identification and donation behaviors.

Unlike organizational identification, 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 versus the organization) for which members have different schema in memory (e.g., regarding values) so 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 et al. (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. As noted above, a donation is a direct individual action that confirms the member's organizational identification, so it promotes the members' organizational identification. In contrast, a donation is not a social behavior that promotes a member's peer identification. A donation isn't a behavior associated with peer identity; it doesn't help a member's understanding of his/her peers or advance the identity to others. Indeed, it might be considered to detract from it. Prior work that has reported that the process of donating is likely to occur *outside* member-to-member social interactions, such as through the organization's promotional campaign (White and Peloza 2009). Nonprofit members with a relatively high peer identification are unlikely to view donations as identity promoting. Money doesn't reflect the social nature of a relationship driving the peer identification (Cheal 1987), which requires peer-to-peer relationships or connections to be present. Interestingly, past studies are consistent with these notions – but researchers have not drawn upon identity theory as an explanation. Research has shown that a nonprofit member may view tax-efficient donations as not reflective of the strong relationship with peers (Reed, Aquino, and Levy 2007); and giving money leads to negative attributions (Morales 2005; Webley and Wilson 1989). In addition, 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.

H₃: The effect of peer identification on donations will be negative, after we control for organizational identification.

Antecedents of Peer Identification

Peer Identity Overlap. It has long been accepted that every individual is made up of a variety of important social identities (James 1890). Further, every individual is motivated to behave in ways that are congruent with their salient or important identities. Cialdini et al. (1997) point out that an individual's perception of his 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 the busy lives of many people, contexts that allow multiple salient identities to be enacted simultaneously become valued. When a member can simultaneously enact more than one salient identity with other members of the organization, he or she is likely to perceive greater *peer identity overlap*. For example, a person may simultaneously think of him- or herself as a friend and an art lover. One can enjoy a coffee with a friend and separately attend an art exhibit alone, thus enacting each identity in isolation. However, becoming a member of an art museum may allow this person to simultaneously enact an "art lover" identity and a "friend" identity by attending member-only events at the museum with close friends. Depending on the degree of perceived overlap, any of these identities can be simultaneously enacted and reinforced within the context of participation in a single organization. With peer identity overlap, people can efficiently invest in several identities simultaneously (Thoits 1983). Members perceive more peer identity overlap as their multiple identities become intertwined with other members with similar identities. They are likely to value service organizations that facilitate these overlapping identities more.

When peer identity overlap is high, a member's self-concept has incorporated shared values into his or her own personal identification (Dutton, Dukerich, and Harquail 1994). Prior

research has shown that the simultaneous pursuit of different values can lead to role overload but that 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., their identity of a parent), they are more likely to perceive their identities as overlapping. Enacting and integrating multiple social identities not only adds value to those identities but also causes members to value their peer group of members more highly and to work to meet their own goals. Thus:

H4: A person who perceives more (less) peer identity overlap with peers will report higher (lower) levels of peer identification.

Perceptions of Peer Support. Based on the earlier construct 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 his or her contributions and care about their well-being. Extant research has traditionally examined this construct from the perspective of perceived support *from the organization* (Coyle-Shapiro and Conway 2005; Eisenberger et al. 1986). Fombelle et al. (2012) demonstrate that perceived support from a nonprofit is positively associated with organizational identification. The support an individual receives for a particular identity from other customers of a firm or members of a non-profit can increase the individual's tendency to continue enacting that identity with other members. For instance, a member of a local aquarium who views themselves as an avid environmentalist might appreciate another member who recognizes their efforts to push for the reduction of single use plastics at the aquarium's snack shop. The caring, approval, and respect connoted by support strengthens the person's belief that the organization recognizes and sometimes rewards valued behaviors (Rhoades and Eisenberger 2002). Similarly, we predict that members who perceive high support

from *social peers (other members)* in the nonprofit will have higher levels of peer identification by fostering the enactment of a member's social identification in a group setting.

H₅: A member who perceives more (less) support for his or her important social identities from peers will report higher (lower) levels of peer identification.

Peer Value Congruency. Values are a person's basic 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). Building off the earlier work of 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. While past work has focused on the perception of value congruence with the firm, or firm employees, we focus on the perception of value of other peers of the organization. If a member believes that the values associated with an important identity are not consistent with the values of peers, he or she will stop or limit 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 Gitelson 1983) which allows them to connect with one another (Meglino and Ravlin 1998). Voss, Cable, and Voss (2000) argue that value congruence is critical to establishing successful relationships with external constituents. Similar to Fombelle et al. (2012), we posit that the underlying mechanism that explains this relationship is peer identification. Thus:

H₆: 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 self-verifying opportunity structures or social contexts that create the opportunity for verification of their views of the self

(e.g., Swann et al. 2004). As people typically seek positive self-views, a powerful and attractive form of identity verification is partner affirmation (Drigotas et al. 1999). Fombelle et al. (2012) demonstrated that identity affirmation from the organization positively impacts the formation of 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). Often affirmation is implicit; a person perceives being affirmed from the behavior of others. Examples of this process include when others treat him or her with respect, appreciate his or her viewpoint on matters related to the ideal identity, or acknowledge his or her potential capacity to perform in the role of the identity. We believe that the actions and words of peers can function to strengthen and reinforce the person's important identities. For example, members can affirm each other as being valuable political activists or knowledgeable 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 higher.

H₇: A member who perceives greater (lesser) identity affirmation from peers in an organization will report higher (lower) levels of peer identification.

H₅, H₆ and H₇ predict that peer support, peer value congruency and peer affirmation will have a positive effect on peer identification. These hypotheses parallel Fombelle et al.'s (2012) theoretical and empirical work showing that support, value congruency and identity affirmation from an organization will have a positive effect on organizational identification.

Model Specification

In summary, we can write the following equations describing the duration of the members' relationships with the nonprofit ($Duration_t$), donations ($Donations_t$), and peer identification ($Peer\ Identification_{t-1}$). In these equations, the member's identification processes at time t-1 precede his/her decisions about membership renewal and donations at time t. Equations 1 and 2 summarize H₁–H₃:

- (1) $Duration_t = f(\text{peer identification}_{t-1}, \text{peer identification}_{t-1} \times \text{membership length}_{t-1}, \text{organizational identification}_{t-1}, \text{organizational identification}_{t-1} \times \text{membership length}_{t-1}, \text{covariates}_{t-1})$.
- (2) $Donations_t = g(\text{peer identification}_{t-1}, \text{organizational identification}_{t-1}, \text{covariates}_{t-1})$.

Equation 3 summarizes H₄–H₇:

- (3) $Peer\ identification_{t-1} = h(\text{peer identity overlap}_{t-1}, \text{peer support}_{t-1}, \text{peer value congruence}_{t-1}, \text{peer affirmation}_{t-1}, \text{covariates}_{t-1})$.

We include numerous covariates, including membership length, as described in the next section. Note that peer identity overlap, peer support, peer value congruence, and peer affirmation have indirect effects on membership durations and donations through peer identification. We conduct mediation tests in our empirical work.

Last, for completeness, we estimate Equation 4 which replicates prior research modeling the antecedents of organizational identification (e.g., Fombelle et al 2012).

- (4) $Organizational\ identification_{t-1} = h(\text{organizational support}_{t-1}, \text{organizational value congruence}_{t-1}, \text{organizational affirmation}_{t-1}, \text{covariates}_{t-1})$.

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 one year period. See Figure 2. We drew a random sample from the member data base 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 as described subsequently. 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.

**** Figure 2, Tables 2, 3a and 3b about here ****

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 2 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 Appendix 2 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, 2, 3 and 4 by describing covariates. Model estimation and hypotheses tests are discussed in the next section.

Measurement of Dependent Variables

Membership Duration. To obtain a measure of the duration of the member-nonprofit relationship, we begin by calculating how long an individual has been a member of the nonprofit, 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 data to estimate a non-parametric hazard model that maximizes the partial likelihood of an individual remaining a member given that he/she has not yet defected (Cox 1972, 1975; Peto 1972; Schmittlein 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 0.239 ($p < .001$). We estimated a linear probability model (LPM) 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 0.113 ($p < .001$). A logit model produced a very similar coefficient. Thus, member intentions and renewal behavior are not very similar. This finding is consistent with prior research that has shown that the drivers of customer purchase intentions and behavior are quite different (Seiders et al 2005; Sun and Morwitz 2010).

In addition, we measure donations in dollars from archival records. Donations do not include membership fees. 3.26% of members donate during a one year period. Some members

give as much as \$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 seven-point scale (3.3), while organizational identification is slightly higher (4.1). Table 3a shows descriptive statistics for all variables.

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 sixteen identities relevant to the context or a fill in the blank option. The sixteen identities were: 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 three times, for each identity that was salient in our study context.

We measured peer support, peer value congruence, and peer identification affirmation by adapting well-established scales to fit the context of our study. Previous studies have shown that the scales for identity affirmation (Drigotas et al. 1999) and perceived support (Eisenberger, Fasolo, and Davis-LaMastro 1990) have good psychometric properties. We adopted identity

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). Given the challenges of surveying consumers in the field, 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 3b 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 3b 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 3b 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 (0.755) 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 ($p < 0.01$). Second, we conducted a stronger test and regressed peer identification on organizational

identification and tested the null hypothesis that the coefficient of organizational identification (0.831) equals one. Again, the null is strongly rejected ($p < 0.01$), 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 Chennamaneni et al (2016), we calculated a collinearity index (C2) between peer identification and its interaction with membership length ($C2 = -0.297$), organizational identification and its interaction with membership length ($C2 = 0.322$) and between the two interaction terms ($C2 = -1.219$). The authors state that a C2 of zero or negative indicates no collinearity. Our C2 value for the two interaction terms is moderate but not significant 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. Prior 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 Verhoef 2004). 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). Therefore, we test for the inclusion of service quality, age, annual membership fees (or tier), and income in all three equations.

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 five 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 measured by calculating 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 seven-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 \$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 rate (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 two stage least squares (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 the other equation errors were small: .023 for peer identification and duration ($p = .233$), .022 for peer identification and donation ($p = .260$), and $-.291$ for duration and donation ($p < .01$). Table 4 displays the results. Finally, 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 described by Zhao, Lynch, and Chen (2010). See Appendix 2 and Table A2 for full results.

**** Table 4 about here ****

Estimation Procedure

Membership Duration Equation. We can calculate the duration of the member's relationship with the zoo by comparing his/her acquisition date (from the archives with his/her defection date

if it occurred during our one-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 have left during the study and some have not – they are still members. For people who are still members, we cannot use their membership length to date. If we use duration to date (a continuous variable) and estimate the model with 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 proportional hazards regression (PHR). It models the partial likelihood of a member defecting given that he/she has 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 non-parametric PHR model (Cox 1972, 1975).

The zoo has records of membership duration (to date) for all people who were members at the start of the study ($t-1$). However, the zoo purged its archival records of customers who terminated service before the start of the study. Thus, in our data, 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 under-represented 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 Appendix 1 for full details of the reweighting method. Note that the re-weighting 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 *coxph* function in R, as described by Therneau and Lumley (2015). PHR is

superior to regression, logit, and probit in terms of stability, validity, and predictive accuracy for typical customer data.

As shown in Table 4, the data support the duration model as indicated by the log-likelihood ratio, Wald test, and Score test ($p < .01$). H_1 and H_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* \times *Membership Length* (corresponding to H_1) is 0.0002 and the coefficient of the interaction term for *Organizational Identification* \times *Membership Length* (corresponding to H_2) is -0.0002 (both $p < .01$). The results confirm both H_1 and H_2 . Later in the relationship, high peer identification has a larger effect on the membership durations, while early on, organizational identification has a larger effect.

Donation Equation. Our data base consists of members only and the majority of members do not donate during a one-year period. Hence, for more than 95% of the observations, the donation amount is zero. Membership registration dues 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 – which also takes on zero values. Therefore, 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 model results provide support for H_3 , which predicts 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 (given the predictors) equals zero.

The 2SLS equations for peer and organizational identification are well supported by the data (F-statistic = 460.45, $p < 0.01$). The equation for peer identification has good explanatory power ($R^2 = .55$). See column 3 in table 4. Peer identification depends on peer overlap (0.101), peer support (0.291), peer value congruence (0.220), and peer affirmation (0.188). Thus, we find empirical support ($p < .01$) for H₄, H₅, H₆, and H₇. The equation for organizational identification is also well-supported ($R^2=0.67, p<.01$); it replicates prior research by showing favorable effects for peer identification, organizational support, value congruence, and organizational affirmation on organizational identification, after controlling for variables identified in prior research (Fombelle et al. 2012).

Effects of Covariates. We find a positive main effect of membership length in the organizational identification equation ($p < 0.01$) and the donation equation ($p < 0.05$), 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. Frequently, prior research hasn't found a relationship between service quality and customer retention for a variety of reason; the most

likely explanation is contingency factors associated with the particular service sector that are beyond the scope of this paper (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.

DISCUSSION

The Effects of Identification Differ Across Relationship Stages

Membership Duration. Prior research has typically emphasized the favorable effects of identity salience on member loyalty (Arnett, German, and Hunt 2003; Boenigk and Helmig 2013; Marinova and Singh 2014). In this study, we find that organizational identification has favorable effects on duration for members in the early stages of the relationship (fewer than eight years). 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 people who have been members for fewer than four years and positive effects in the later stages (greater than four years). These findings are consistent with H₁ and H₂.

We extend prior research by finding 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 H₃. 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, donations to the zoo do not sustain or promote peer identification 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. Prior research has emphasized that the relationship between organizational identification and member behavior is critical, and thus nonprofit service organizations should focus on the formation of organizational identification at every stage of the relationship. However, our research shows that strengthening organizational identification will lead to longer membership durations early in the member–nonprofit relationship and higher donations later in the relationship. 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, it is clear that a nonprofit must qualitatively change how it develops and affirms organizational identification. If a member views his or her organizational identification as categorical membership (Gioia et al. 2013), he or she 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 in other contexts. Further, the effect of membership length needs to be calibrated for each unique nonprofit context.

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 their experiments, Winterich, Mittal, and Aquino (2013) find that social reinforcement (e.g., a thank-you card, recognition on a list of donors) increases charitable behavior among those characterized by 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 H₅, H₆, and H₇. 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 may be able to communicate a strong brand identity, thereby increasing peer value congruence. However, the facilitation of peer-to-peer support and affirmation is likely to require the creation of 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 (Baker et al. 2014; 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 in that people are likely to seek employment with 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), so that they in turn 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). Therefore, nonprofit service organizations

may want to consider systems that support 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 proposed measures for peer identity overlap 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 thereby 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. Thus, grandparents or parents who initially visited the zoo with their children (and perhaps other families) 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 losing members (later in the relationship) 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). As potential donors often belong to multiple nonprofits, managers must deepen members' engagement and transform their understanding of the nonprofit mission and its

relevance. 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 paper is a study of member behavior only, focusing on the duration of their membership and the amount they donate. We don't have any information about member acquisition or donations (if any) by non-members. Future research might examine non-member behaviors relevant to the non-profit, especially purchases or donations from non-members. 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 service researchers' and managers' 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., Brodie et al. 2013; 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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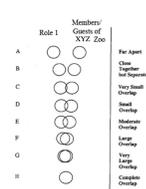
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Table 1
Peer and Organizational Identification Literature Review

Citation	Context	Data	Consequences of Org. Id.		Consequences of Peer Id		Antecedents of Org. ID	Antecedents of Peer. ID	Summary of Findings
			Behavioral	Self-Report	Behavioral	Self-Report			
Past Literature that Examines Both Peer and Organizational Identification									
This Research	Nonprofit	Behavioral & Survey	✓	✓	✓	✓	✓	✓	This paper demonstrates how peer ID influences membership durations and donations -- distinguishing ID with the org. from ID with fellow peers
Fombelle et al. 2012	Nonprofit	Survey		✓		✓ (only Org. Id)	✓		Peer Id. positively impacts org. ID Finds ID synergy as a mediator between antecedents (organizational support, value congruence, and affirmation) and org. ID
Past Literature that Examines Only Organizational Identification									
Mael and Ashforth 1992	Nonprofit	Survey		✓			✓		Org. ID was associated with of org. distinctiveness, org. prestige, and intraorg. competition. Org. ID was positively related to the self-reported financial contributions, WOM, and future activities
Silke and Helmig 2013	Nonprofit	Survey		✓			✓		Org. ID and ID salience are distinct constructs and that both have direct positive effects on loyalty, but not that much on donations
Bhattacharya et al. 1995	Nonprofit	Survey					✓		Org. ID. is positively related to perceived org. prestige, donating activity, tenure of

									membership, and visiting frequency
Ahearne et al. 2005	B2C	Survey		✓				✓	Customers do identify with organizations and org. ID positively impacts both product utilization behavior and extra-role behavior
O'Reilly and Chatman 1986	Academic Sample	Survey		✓					Org. ID. and internalization are positively related to prosocial behaviors and negatively related to turnover
Dukerich, et al. 2002	Employee	Survey		✓				✓	Attractiveness of perceived ID and construed external image were positively related to ID with the system, which in turn was positively related to cooperative behavior
Korschun, Bhattacharya, and Swain 2014	Employee	Survey & Objective Supervisor Ratings		✓				✓	Employee's org. ID and employee-customer ID is a function of how much the employees perceive management and customers support the company's CSR activities
Past Literature that Examines Construct Similar to Peer Identification									
Ashforth, et al. 2016	Employee	Conceptual							Defines personal identification as perceived oneness with another individual, where one defines oneself in terms of the other
Sluss and Ashforth (2007)	Employee	Conceptual							Show the value of relational ID in the formation of org. ID
Sluss et al. 2012	Employee	Survey					✓	✓	Show relational ID generalizes to org. ID

Table 2
Constructs and Measures

Construct	Measure*	Original Source
Dependent Variables		
Duration of the member-nonprofit relationship	The hazard rate is the probability of an individual exiting from zoo membership given a certain length of membership. It is derived from our knowledge of the duration of the member-nonprofit relationship. If an individual has ceased to be a member, the duration of the relationship (in weeks) is calculated by subtracting his/her start date from the end date. However, if an individual is still a member, his/her duration is unknown (i.e., right censored) because he/she will continue to be a member after the end of the study period. The only information available is the duration of the membership at the time of the study.	Archival Data (Hazard rate model follows Bhattacharya 1998).
Donations	Dollars donated over the past year.	Archival Data
Peer identification	Five-item scale. "When someone criticizes peers of X, it feels like a personal insult. I am very interested in what others think about peers of X. When I talk about members of X, I usually say we rather than they. Members' successes are my successes. When someone praises members of X it feels like a personal compliment."	Fombelle et al. (2012) adapted from Mael and Ashforth (1992)
Organizational identification	Five-item scale: "When someone criticizes X, it feels like a personal insult. I am very interested in what others think about X. When I talk about X I usually say we rather than they. X's successes are my successes. When someone praises X it feels like a personal compliment."	Mael and Ashforth (1992)
Independent Variables		
Membership Length	How long the person has been a member at the start of the study (time t-1), measured in weeks, calculated from the zoo's archival data.	Bolton (1998)
Peer identity overlap	<p>"Please choose the answer that best illustrates the degree of overlap between your role as an [identity] and peers of X." Response format is a selection of eight Venn diagram options ranging from no overlap to complete overlap. Repeated for three relevant identities.</p> 	New
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]."	Adapted from Eisenberger et al. (1990)

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.”	Maxham and Netemeyer (2003)
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].”	Adapted from Drigotas et al. (1999)
Organizational support	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].”	Adapted from Eisenberger et al. (1990)
Organizational value congruence	Three-item Likert scale: “The organization X has the same values as I do with regard to [identity].”	Maxham and Netemeyer (2003)
Organizational affirmation	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].”	Adapted from Drigotas et al. (1999)
Covariates		
Perceived Service Quality	Four-item Likert scale measuring reliability, responsiveness, assurance and empathy.	Self-report
Annual membership fees	Measured by membership fees in the past year (in dollars), where more dollars indicate a higher membership level.	Self-report
Age	Represented by five dichotomous variables indicating age by decile: 20-29, 30-39, 40-49, 50-59, and over 60.	Self-report
Income	Thousands of dollars	Self-report
Donation others	Total dollars donated to other nonprofits.	Self-report
Donation #	Self-report of number of nonprofits to which respondent donated in the past year.	Self-report

Notes: All scales have seven 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 indicate

Table 3a
Descriptive Statistics

Variables^a	Mean	Standard Deviation	Min.	Max.
Donations (\$)	7.586	203.497	0	10000
Peer identification	3.306	1.627	1	7
Organizational identification	4.118	1.480	1	7
Membership length (weeks)	359.195	315.635	52.143	2,517.286
Peer identity overlap	3.751	1.782	0	8
Peer support	3.849	1.650	1	7
Peer value congruence	4.606	1.308	1	7
Peer affirmation	4.103	1.669	1	7
Organizational support	5.168	1.262	1	7
Organizational value congruence	5.240	1.238	1	7
Organizational affirmation	4.704	1.442	1	7
Perceived Service Quality	5.843	0.971	1	7
Income (\$1000s)	118.349	52.887	10	200
Age 20-29	0.135	0.342	0	1
Age 30-39	0.422	0.494	0	1
Age 40-49	0.232	0.422	0	1
Age 50-59	0.118	0.322	0	1
Age 60 or older	0.066	0.248	0	1
Annual membership fees (\$)	111.078	224.551	0	10050
Donations to other nonprofits (\$)	0.216	5.955	0	285
Donation Number of Nonprofits	2.893	1.580	1	5

^aMembership durations are derived from the (censored) values of membership length, transformed and re-weighted for use in the PHR model. See Appendix. Self-report items are typically measured on a seven-point scale as described in Table 2. Number of observations = 2,547.

Table 3b
AVE and Shared Variance Estimates

Latent Variable	Items	Coeff. alpha	Peer ID	Peer Sup.	Peer Aff.	Peer Val.	Org ID	Org Sup.	Org Affirm.	Org Value	Service Quality
Peer identification	5	0.954	0.805	0.413	0.354	0.320	0.570	0.170	0.234	0.224	0.088
Peer support	4	0.985	0.643	0.941	0.516	0.373	0.306	0.306	0.384	0.264	0.088
Peer affirmation	3	0.985	0.595	0.718	0.956	0.370	0.267	0.286	0.428	0.257	0.088
Peer value congruence	3	0.929	0.566	0.611	0.608	0.828	0.246	0.285	0.327	0.472	0.163
Organizational identification	5	0.915	0.755	0.553	0.517	0.496	0.694	0.260	0.289	0.342	0.154
Organizational support	4	0.975	0.413	0.564	0.535	0.534	0.510	0.906	0.574	0.471	0.191
Organizational affirmation	3	0.981	0.484	0.620	0.654	0.572	0.538	0.758	0.947	0.411	0.141
Organizational value congruence	3	0.929	0.473	0.514	0.507	0.687	0.585	0.686	0.641	0.827	0.268
Perceived Service Quality	4	0.869	0.296	0.296	0.297	0.404	0.392	0.437	0.375	0.518	0.630

Notes: 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.

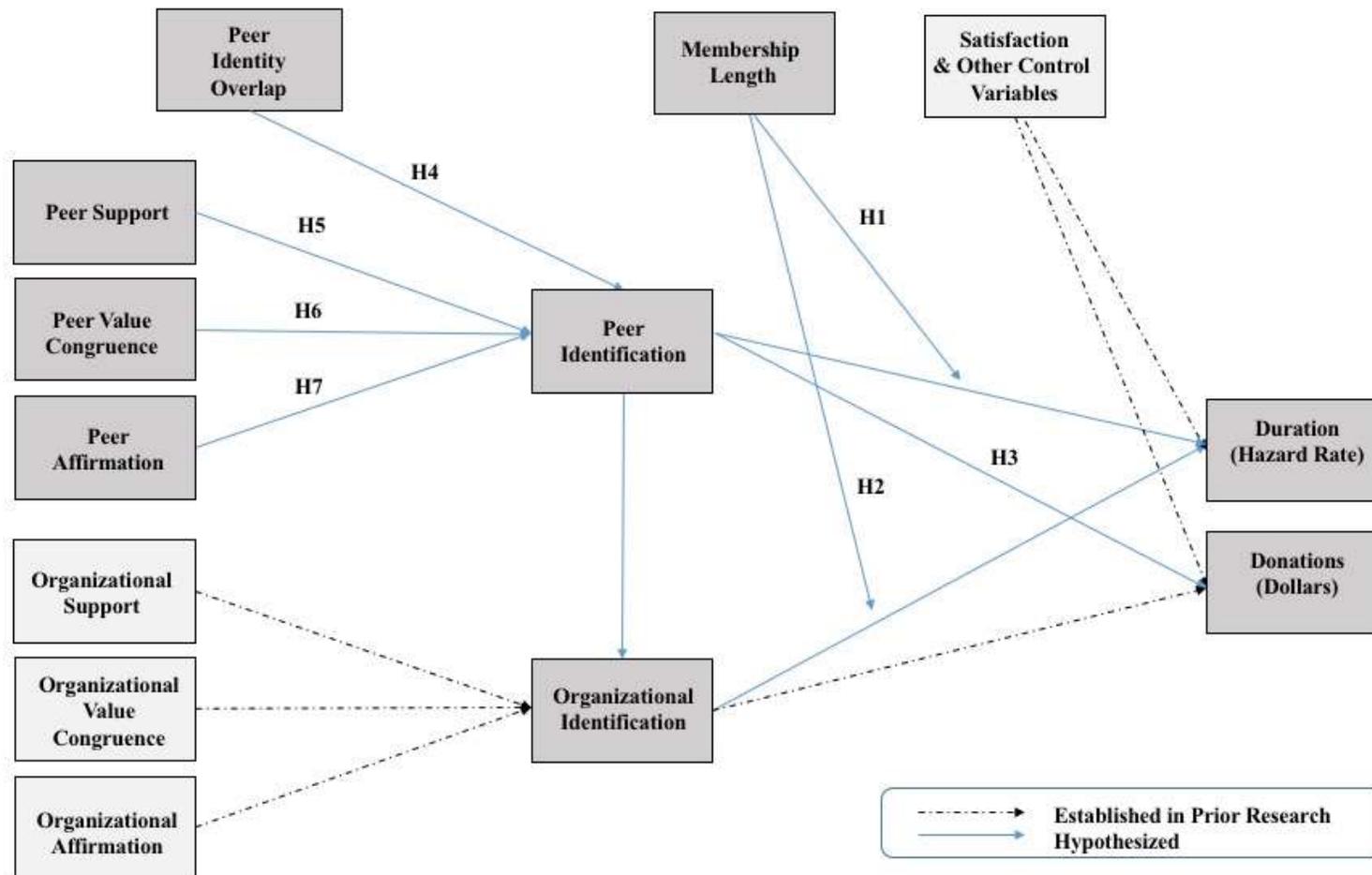
Table 4:
Estimation Results^a

Predictor Variables	Dependent Variables			
	Org. ID (2SLS)	Peer ID (2SLS)	Duration (Hazard Model)	Donation (Tobit)
Peer identification (H ₁ , H ₃)	0.452*** (0.024)	NA	-0.043*** (0.011)	-38.532** (20.286)
Peer ID × Membership length	NA		0.0002*** (0.00003)	NA
Organizational identification (H ₂ , H ₄)		0.070 (0.056)	0.991** (0.012)	62.593** (24.974)
Organization ID × Membership length		NA	-0.0002*** (0.00003)	NA
Peer identity overlap (H ₄)		0.101*** (0.015)	NA	
Peer support (H ₅)		0.291*** (0.025)		
Peer value congruence (H ₆)		0.220*** (0.024)		
Peer affirmation (H ₇)		0.188*** (0.022)		
Organizational Support		0.083*** (0.024)	NA	
Organizational Value Congruence	0.216*** (0.022)			
Organizational Affirmation	0.089*** (0.021)			
Organizational Overlap	0.073*** (0.013)			
Service Quality	NA		-0.010 (0.007)	-11.273 (26.101)
Income	-0.001** (0.0003)	-0.002*** (0.0004)	-0.0001 (0.0001)	-0.665 (0.438)
Age 21-30	-0.352*** (0.083)	-0.612*** (0.109)		-248.716** (111.191)
Age 31-40	-0.293*** (0.072)	-0.625*** (0.093)		-202.721*** (76.047)
Age 41-50	-0.206*** (0.072)	-0.406*** (0.091)		-128.679* (71..872)
Age 51-60	-0.093 (0.077)	-0.202** (0.097)		-26.959 (68.665)
Membership annual fees	0.00003 (0.0001)	0.0002** (0.0001)		0.982*** (0.039)
Membership length	0.0004*** (0.0001)	0.00002 (0.0001)		0.167** (0.067)
Donations to others (\$)	NA			6.942*** (1.398)

Donation number (of nonprofits)				-34.623** (13.690)
Constant	0.464*** (0.115)	0.356** (0.168)	NA	-757.985*** (177.779)
R ² (Adjusted R ²)	0.653 (0.651)	0.547 (0.545)	0.530	
Log-likelihood			-265,701.700	-790.851***
Wald test	237.7*** (df=12)	289.2*** (df=12)	29,122.120***	713.678***
Score (log rank) test			24,110.570***	

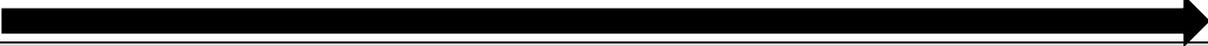
^a The models are estimated with 2547 observations. Coefficients with standard errors are in parentheses. Two tailed tests: * $p < .10$, ** $p < .05$, *** $p < .01$.

Figure 1

Antecedents of Peer Identification, Membership Durations and Donations[†]

[†] In the 2SLS, Tobit and PHR, we include the following control variables (as appropriate): membership length (main effect), service quality, income, age, membership tier/fees and past donations.

Figure 2
Data Collection Over Time



Events Prior to Time t-1	Time t-1	Time t
Data Sources		
Archival Data	Self-Report Measures (Survey)	Behavioral Measures (Observation of Renew/Defect & Donation Decisions)
Exemplar Measures		
Member Acquisition Date Member Descriptors (e.g., Membership Tier)	Organizational Identification & Peer Identification Peer Identity Overlap All Other Self-Report Measures	Decision to Renew or Terminate at t Donations at t

Appendix 1:

Handling Left-Truncated Durations

This study analyzes right-censored duration times using a semi-parametric approach to proportional hazards regression (PHR). It entails a partial likelihood approach that focuses on the effects of the predictor variables (x) and doesn't require estimation of the baseline hazard rate function (Cox and Oakes 1984). This appendix summarizes an estimation procedure developed by Schmittlein and Helsen (1993) for left-truncated durations data—that is, for durations data purged of members with completed duration times (i.e., who are no longer active).

Consider a member i who has a non-censored duration $T_i=t$. At this duration t , there were other members who were at risk of defecting but did not do so – i.e., “the risk set.” The partial likelihood is the likelihood that member i defects out of all those in the associated risk set, given that someone is known to have defected with duration t . In other words, it analyzes the relative odds of members measured *at the same duration time*. The estimation procedure analyzes the relative odds for every member with duration t relative to those in the associated risk set. (Their shared baseline hazard rate drops out in calculating the relative odds.) The vector of parameters of the duration model (β) are computed by maximizing the partial likelihood, obtained by multiplying the partial likelihoods —evaluated within each stratum— across strata. Allowing for tied duration times, the partial likelihood can be approximated:¹

$$L(i|j_1, \dots, j_{n(t)}, d_t) = \exp(\beta'x_i) / [\sum_{k=1}^{n(t)} \exp(\beta'x_{jk})]^{d_t}$$

where: $n(t)$ denotes the number of members at risk t , where they are denoted $j_1, \dots, j_{n(t)}$

¹ Peto, R. (1972), “Contribution to the discussion of paper by Dr. R. Cox, *Journal of the Applied Royal Statistical Society B*, 34, 205-207.

d_t denotes the number of tied durations at time t , and

s denotes the vector of covariates for those d_t individuals having duration t

In a purged data set, left truncated members were not really at risk for their entire duration time. If they defected early enough, their data would have been purged and wouldn't appear in the data set. Since standard PHR software doesn't take this feature into account, estimates will be inconsistent and may be seriously biased – especially for the coefficients of variables that are time dependent (e.g., age and length of membership). Thus, for a member i who has a non-censored duration $T_m=t$, only members who stayed longer than duration t were eligible to defect; they constitute the relevant risk set. Thus, with left-truncated data the partial likelihood ought to be computed as the product of partial likelihoods across strata, where the partial likelihoods are calculated based on a corrected definition of the risk set.

Schmittlein and Helsen (1993) provide a straightforward solution; they suggest creating “pseudo-observations” in the following way. Create a data set called stratum R_1 that consists of all members with duration $t=1$ and members of the relevant risk set (who stayed longer than $t=1$). Then, create and append a second data set called stratum R_2 that consists of all members with duration $t=2$ and members of the relevant risk set (who stayed longer than $t=2$). Continue creating and appending strata in this way and stop creating strata when the highest observed duration is reached. The cumulative stratified data set will be much larger than the original, so it is necessary to adjust the standard errors.

The computation of the partial likelihood for a given stratum involves just one term in the above equation: members with duration t contribute to the numerator and those in the relevant risk set R_t contribute to the denominator. The overall partial likelihood is computed by multiplying partial likelihoods across strata. Note that observations for which no completed

durations were observed will be included in relevant risk sets, but they will not have their own stratum because there is no contribution to the numerator of the equation. This procedure effectively re-weights the data because an observation for one member can contribute to multiple strata. Standard errors are clustered by strata.

Appendix 2:

ASSESSMENT OF NOMOLOGICAL VALIDITY AND MEDIATION TESTS USING
STRUCTURAL EQUATION MODELING WITH RENEWAL INTENTIONS

This appendix assesses the 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. The SEM explains the covariance matrix of organizational and peer identification, as well as selected other variables. First, the SEM represents the relationships described by Equations 1, 3 and 4, except that membership retention has been replaced by member renewal intentions (which has frequently been used as a surrogate for member behavior in prior research). Second, we exclude equation 2 because it has been previously studied and we exclude covariates that are measured with single items.

In these analyses, we use self-reported intentions because the likelihood of remaining a member and donations (in dollars) do not meet the distributional assumptions required for maximum likelihood estimation (as discussed in the main body of the paper). In addition, we used the SEM to conduct mediation tests because our hypotheses predict that peer identity overlap, peer support, peer value congruence, and peer affirmation affect member retention and donations *indirectly* through peer identification. A similar mechanism is postulated for organizational identification. We cannot use actual member behavior, so (again) we conduct these tests using self-reported intentions.

Nomological Validity

We estimated a structural equation model (SEM) that places organizational and peer identification within a nomological net that includes selected antecedents and consequences. The SEM represents the relationships described by Equations 1, 3 and 4, except that membership

retention has been replaced by member renewal intentions. Our reason for using self-reported intentions is that the likelihood of remaining a member and donations (in dollars) do not meet the distributional assumptions required for maximum likelihood estimation. Moreover, one advantage of modeling member renewal intentions –unlike behavior– is that we need not account for the moderating effects of customer, relational, or marketplace characteristics (Seiders et al 2005). Hence, we modeled member renewal intentions (measured on a seven-point scale) as a function of peer identification and organizational identification.

Consistent with our hypotheses, peer identification is modeled as a function of peer overlap, support, affirmation, and value congruence. Following prior research (Fombelle et al 2012), organizational identification is modeled as a function of organizational support, affirmation and value congruence. Last, we introduced perceived service quality (PSQ), measured by a four item scale, as an antecedent of organizational identification, peer identification and member renewal intentions. We deliberately chose PSQ because it has been heavily studied in prior research (Spreng and Mackoy 1996), so its conceptualization and relationship to many other constructs are well understood.

As shown in Table A1, the SEM results show strong nomological validity. All hypothesized relationships regarding antecedents of peer identification are supported; all relationships regarding antecedents of organizational identification established in prior research are supported. We tested for, and found, reciprocal causation between peer identification and organizational identification. (We discuss this issue further after presenting our complete results.) We also found that both peer and organizational identification influence member renewal intentions. These results are consistent with our hypotheses regarding membership behavior, but exclude the moderating effect of membership length. Last, we found that PSQ

influences organizational identification and member renewal intentions, but not peer identification. We expected this result because service quality is provided by the organization, not the members.

Mediation Tests

Recall that our hypotheses predict that peer identity overlap, peer support, peer value congruence, and peer affirmation affect member retention and donations *indirectly* through peer identification. We use our 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 described by Zhao, Lynch, and Chen (2010). See Table A2. There are four mediation tests for the four antecedents of peer identification. In addition, to replicate prior research regarding organizational identification, we provide four mediation tests for the antecedents of organizational identification for completeness.

Peer Identification. The SEM tests for mediation show that the four antecedent variables (peer identity overlap, support, value congruence, and affirmation) have statistically significant ($p < .01$) *indirect* effects on retention through peer identification (the mediator). Not surprisingly, these results are similar to our 2SLS equation and proportional hazard model results. We find direct and indirect effects of all four antecedents of peer identification on member renewal intentions

Organizational Identification. The SEM tests for mediation show that the four antecedent variables (organizational identity overlap, support, value congruence, and affirmation) have statistically significant ($p < .01$) *indirect* effects on retention through peer identification (the mediator). Not surprisingly, these results are similar to our 2SLS equation and proportional

hazard model results (described in the next section). We find direct and indirect effects of all three antecedents of organizational identification on member renewal intentions.

Inferences about Mediation in our Equations for Member Retention and Donations. The evidence shows that peer and organizational identification act as mediators in explaining member renewal intentions, but they may (or may not) act as mediators in explaining member retention and donations. Hence, the mediating effects of peer and organizational identification warrant additional study in future research for two reasons.

First, our SEM tests relied on renewal intentions as our focal dependent variables –not member retention and donations. Moreover, our model specification includes a more complex functional form with additional predictor variables. Second, it is possible that peer and organizational identification mediate other variables, such as satisfaction and service quality. For example, Arnett, German, and Hunt's (2003, p. 100) model donation behavior and find that organizational identification mediates the effect of service quality (an indirect effect). In contrast, our model of member renewal intentions shows a direct effect of service quality. The role of service quality is likely to be complex and require a more comprehensive model (Spreng and Mackoy 1996). Further investigation is beyond the scope of this study.

Additional References

Zhao, Xinshu, John G. Lynch Jr., and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Trusts about Mediation Analysis," *Journal of Consumer Research*, 37 (2), 197-206.

Table A1

Assessment of Nomological Validity Using a Structural Equation Model†

Dependent Variable	Organizational Identification		Peer Identification		Renewal Intentions	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Peer Identification	0.498***	0.021	NA	NA	-0.052**	0.020
Organizational Identification	NA		0.207***	0.035	0.093***	0.023
Organizational Support	0.061**	0.021	NA		NA	
Organizational Affirmation	0.081***	0.018				
Organizational Value Congruence	0.265***	0.022				
Peer Support			0.278***	0.018		
Peer Affirmation			0.143***	0.017		
Peer Value Congruence			0.232***	0.024		
Peer Overlap	-0.014	0.008	0.078***	0.010	0.028***	0.009
Service Quality	0.105***	0.020	0.020	0.024	0.487***	0.022
Model Fit	Chi-squared=7537.674***					

*** $p \leq 0.001$, ** $p \leq 0.01$.

†This table shows the structural parameters only. The covariances of the eight exogenous latent variables are unrestricted. All covariances are statistically significant ($p < 0.01$). Descriptions of the measurement model for the unobserved variables is discussed in the text, as well as described by portions of Tables 2, 3a and 3b.

Table A2:

Eight Mediation Tests from Structural Equation Model Estimation

Mediation Test	Type of Effect†	Coefficient t-value
Peer Identification as a Mediator		
Peer Identity Overlap Mediated by Peer Identification for Intention (H4)		
Indirect Effect: Peer Identification → Intention (H)	a*b	0.033 ^{***}
Indirect Effect: Peer Identity Overlap → Peer Identification	a	0.415 ^{***}
Direct Effect: Peer Identity Overlap → Intention	c	0.051 ^{***}
Conclusion: Direct and Indirect Effects.		
Peer Support Mediated by Peer Identification for Intention (H5)		
Indirect Effect: Peer Identification → Intention (H)	a*b	0.032 ^{**}
Indirect Effect: Peer Support → Peer Identification	a	0.628 ^{**}
Direct Effect Peer Support → Intention	c	0.083 ^{***}
Conclusion: Direct and Indirect Effects.		
Peer Value Congruence Mediated by Peer Identification for Intention (H6)		
Indirect Effect: Peer Identification → Intention	a*b	0.024 [*]
Indirect Effect: Peer Value Congruence → Peer Identification	a	0.695 ^{***}
Direct Effect: Effect: Peer Value Congruence → Intention	c	0.154 ^{***}
Conclusion: Direct and Indirect Effects.		
Peer Affirmation Mediated by Peer Identification (H7) for Intention		
Indirect Effect Peer Identification → Intention	a*b	0.036 ^{***}
Indirect Effect: Peer Affirmation → Peer Identification	a	0.589 ^{***}
Direct Effect: Peer Affirmation → Intention	c	0.071 ^{***}
Conclusion: Direct and Indirect Effects.		
Organizational Identification as a Mediator		
Org Identity Overlap Mediated by Org Identification for Intention††		
Indirect Effect: Org Identification → Intention (H)	a*b	0.057 ^{***}
Indirect Effect: Org Identity Overlap → Org Identification	a	0.383 ^{***}
Direct Effect: Org Identity Overlap → Intention	c	0.050 ^{***}
Conclusion: Direct and Indirect Effects.		
Org Support Mediated by Org Identification for Intention††		
Indirect Effect: Org Identification → Intention (H)	a*b	0.084 ^{***}
Indirect Effect: Org Support → Org Identification	a	0.594 ^{***}
Direct Effect Org Support → Intention	c	0.069 ^{***}
Conclusion: Direct and Indirect Effects.		
Org Value Congruence Mediated by Org Identification for Intention††		
Indirect Effect: Org Identification → Intention	a*b	0.059 ^{***}
Indirect Effect: Org Value Congruence → Org Identification	a	0.688 ^{***}
Direct Effect: Effect: Org Value Congruence → Intention	c	0.181 ^{***}
Conclusion: Direct and Indirect Effects.		
Org Affirmation Mediated by Org Identification for Intention††		
Indirect Effect Org Identification → Intention	a*b	0.079 ^{***}

Indirect Effect: Org Affirmation → Org Identification	a	0.545 ^{***}
Direct Effect: Org Affirmation → Intention	c	0.052 ^{**}
Conclusion: Direct and Indirect Effects.		

†The effects (a, b, c) are labeled to follow Zhao, Lynch, and Chen's (2010) decision tree. * $p < .05$, ** $p < .01$, *** $p < .001$ ††We focus on the mediating role of peer identification. However, we provide equivalent tests of the mediating role of organizational identification for completeness