

**EXAMINING MEMBERSHIP BENEFIT PREFERENCES AND  
DONATION PROGRAM ATTITUDES IN AN URBAN ZOO SETTING**

by

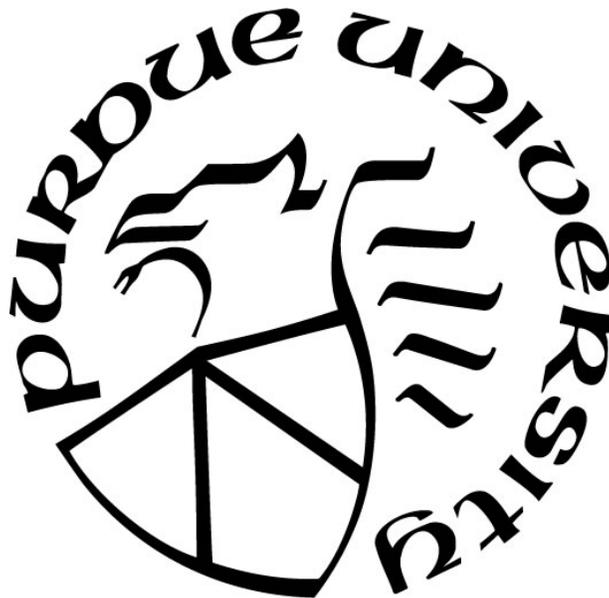
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*To my parents, Zhang Shuzhai and Ding Zhenye, who loved, supported, and encouraged me throughout my life, but did not live to celebrate this with me. You will always be in my heart. I will use my eyes to see the world for you; I will use my heart to feel happiness for you; I will use my life to live your life.*

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## ABSTRACT

The primary goal of this dissertation was to gain a better understanding of individuals' membership benefits preferences and attitudes toward donation programs in the context of urban zoo settings. The first objective of this dissertation was to provide a background on membership and donation related research in the context of zoos and other relevant organizations. Based on the review of literature, the second objective was to empirically examine, through two independent studies, zoo membership benefit preferences and attitudes toward a donation program.

Despite a wealth of knowledge in the literature with respect to zoo visitors, animals, exhibits, and related programs, little research has been conducted on individuals' preferences for zoo membership benefit packages and attitudes toward donation programs. To fill the gaps in these areas, the first empirical study examined factors that influence current and prospective members' decision-making when choosing a membership package at an urban zoo. More specifically, the study explored preferences for selected membership program benefits and benefit levels, as well as how these preferences varied among visitors grouped by key segmentation variables. The study findings suggested that price of membership package was the most important factor, followed by the discount on food and beverage and the proportion of membership fees devoted to animal conservation. As expected, the visitors who scored high on place attachment to the zoo were more supportive of the zoo and less sensitive to variations in the specific options included in the zoo's membership package.

In the second study, attitudes toward a donation program at an urban zoo were examined. In particular, this study investigated subgroups' differences segmented by their membership status, place attachment levels, and attitudinal positions. A two-dimensional/bivariate attitude approach was employed to explore potential differences among attitudinal position groups. The study findings indicated while most respondents held positive attitudes toward the donation program, zoo members and nonmembers did not differ significantly. The likelihood of joining the donation program was significantly higher for those in the positive dominant attitude group compared to those in the negative dominant and equally ambivalent groups. Additionally, a qualitative analysis revealed that many respondents were concerned about the cost or affordability of the donation program; and perceived the benefits of the program as a poor value.

Collectively, the two empirical studies provide useful insight for managers and professionals charged with developing membership and donation programs in zoological parks and other relevant organizations. The study results also suggest a number of potentially productive directions for future research in these areas.

# CHAPTER 1. INTRODUCTION

## 1.1 Overview

Membership and donation programs are the major funding sources for many not-for-profit organizations (NPOs) in the United States (Brady, Noble, Utter, & Smith, 2002). Although almost all NPOs provide different membership and donation programs to their customers, limited studies have been conducted in the context of zoological parks. Efforts to better understand these two commonly used sources of financial support would help zoological professionals to make informed decisions on developing more effective marketing strategies.

Generally, zoological parks are a form of museum that “contains a collection of labeled animals to be protected and studied while incidentally providing enlightenment and enjoyment for the public” (Alexander & Alexander, 2007, p. 140). Since the first American zoos were established in Cincinnati and Philadelphia in the 1870s (Jamieson, 1985), modern zoological parks in US have served as tourist attractions for enjoyment and entertainment, while providing conservation, research, and educational programs. By engaging 180 million visitors annually (AZA, 2015), zoos provide memorable experiences that connect people with nature and inspire them to protect animals in their own backyards and around the world.

To date, most zoo studies have focused on zoo visitors, zoo animals, zoo exhibits, and zoo programs. For example, research has identified several motives to visit a zoo, such as having fun and spending time with family and friends (Fraser & Sickler, 2009; Klenosky & Saunders, 2007; Turley, 2001). Other studies examined zoo visitors’ overall experience and satisfaction (Lee, 2015; Therkelsen & Lottrup, 2015), visitors’ behaviors (Davey, 2006; Smith, 2009), visitors’ knowledge and attitudes toward animals and environment (Clayton, Fraser, & Saunders, 2009; Luebke & Matiasek, 2013), and physical design of exhibits (Fabregas, Guillen-Salazar, & Garces-Narro, 2012; Kutska, 2009). A few studies also have explored other topics related to zoos, including research programs (Lawson, Ogden, & Snyder, 2008), volunteerism (Fraser, Clayton, Sickler, & Taylor, 2009), and educational camps (Bexell, Jarrett, & Ping, 2013). However, very little is currently known about how membership and donation programs influence zoo operation and funding.

In response to decreased government funding, zoo managers have been looking for innovative ways to fund their organizations. As modern zoos transition from publicly to privately-run organizations, it is imperative that zoo professionals initiate key elements of a successfully managed business (Beattie, 1994; Knowles, 2003). Nowadays, zoos rely on entrance fees, membership dues, and donations as sources of income to balance their operational costs, which include professional salaries, animal care, and costs of special exhibitions (Carr & Cohen, 2011; Davey, 2007; Hosey, 2008; Paswan & Troy, 2004; Sargeant, 2008). Membership and donation programs are a potential solution for zoos to become financially independent. Because the greater sources of financial support would likely come from private foundations and donors, zoo managers are interested in more efficient ways to recruit new members/donors and to increase the level of dues/donations for existing ones (Kleiman, Thompson, & Baer, 2010).

As Hutchins and Smith (2003) state, “in the world-class zoo or aquarium, research will not be focused exclusively on the animal collection or on wildlife-conservation topics but rather integrated into all aspects of the zoological business” (p. 135). They further stress the importance of conducting quantitative research to evaluate the success of zoo marketing programs and to assess customer satisfaction. Considering the important roles of zoo members and donors, there is a need for research to better understand zoo membership and donation programs, so zoo managers can employ appropriate strategies to retain current and attract new members and donors vital to the operation and support of zoological parks. Thus, to provide zoo managers with informed knowledge of their membership and donation programs and to help zoo professionals improve their management practices, this dissertation includes two studies that examine membership and donation programs respectively in zoo settings. The two studies have significant implications for better understanding how membership and donation programs develop, which provide a thorough knowledge of the financial structure of zoological parks.

## **1.2 Dissertation Objectives**

While there exists a wealth knowledge about zoos, there is little research concerning individuals’ preferences for zoo membership benefits programs and attitudes toward zoo donation programs. Thus, the purposes of this dissertation are: (1). To examine preferences for zoo membership benefit packages, and (2). To examine attitudes toward a donation program held by zoo members and nonmembers. The primary objective of this dissertation is to contribute to the

base of zoo literature in the area of membership and donation programs. The findings help zoo management professionals make informed decisions on membership and donation programs development. In particular, the preferences for zoo membership benefit packages were examined and attitudes toward zoo donation programs were assessed. Thus, this dissertation consists of two empirical studies.

### **1.2.1 Study I**

Purpose of study: The purpose of this study is to examine the preferences for membership benefit packages in an urban zoo setting.

More specifically, this study intends to address the following research questions:

1. What specific membership program benefits and benefit levels (including current and new benefit options) are valued most?
2. How much are members willing to pay for specific benefit options?
3. How do current members and potential members differ regarding preferences for membership benefit options?
4. How do preferences for membership benefit options vary among visitors grouped by key segmentation variables (i.e., demographics, family composition, level of place attachment)?

The results of this study are intended to provide zoo managers with a better understanding of membership program preferences from a marketing perspective.

### **1.2.2 Study II**

Purpose of study: The overall goal of this study is to examine attitudes toward the Reid Park Zoo (RPZ) Zoo FriendZ program held by zoo members and nonmembers.

More specifically, this study addresses the following research questions:

- (1) What are people's attitudes held by people toward supporting the RPZ by joining the Zoo FriendZ program? Do zoo members differ from nonmembers regarding their overall attitudes toward the RPZ Zoo FriendZ program?

(2) Do zoo members differ from nonmembers regarding their demographic characteristics, zoo visitation behaviors, awareness of the Zoo FriendZ program, and beliefs and attitudes toward the Zoo FriendZ program?

(3) Do zoo members differ from nonmembers regarding the variability in attitudinal positions? That is, are there differences in demographic characteristics, behaviors, and Zoo FriendZ awareness and beliefs across subgroups that may hold positive versus negative attitudes toward Zoo FriendZ program, as well as those that hold indifferent versus ambivalent attitudes?

The results of this study help zoo managers better understand the range of attitudes that individuals hold toward donating to zoos, and it also informs policymakers and practitioners in developing marketing strategies to attract and retain donors.

### **1.3 Organization of the Dissertation**

The remainder of this dissertation is structured as follows. Chapter 2 provides an overview of previous research on zoos or other relevant organizations and briefly establishes the background of two proposed studies. Chapter 3, entitled, A Conjoint Investigation of Membership Program Preferences at an Urban Zoo, examines the relative importance of the benefits provided in a zoo membership program. Chapter 4, entitled, An Examination of Attitudes Toward a Donation Program in an Urban Zoo Setting, assesses attitudes toward a donation program in the context of zoos.

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## CHAPTER 2. BACKGROUND

The purpose of this chapter is to briefly set up the background of two proposed studies. Specifically, it provides an overview of previous research on zoos or other relevant organizations. This chapter also outlines the importance and rationale for conducting the proposed studies.

Due to rapid population growth and increased urbanization worldwide, wildlife habitats will likely continue to decrease. While the biosphere has evolved over time, the roles, the characteristics, and the operations of zoological parks have also changed. From the menagerie to the conservation center, modern zoos provide people with direct access to and experience of wild animals and the natural world that are rarely available otherwise and usually seen in books, magazines, or televisions (Figure 2.1, Rabb & Saunders, 2005). Zoos generally could be regarded as a form of a museum that exhibits living animals (Alexander & Alexander, 2007). Thus, like other museums, the primary purposes of zoos are to serve as both entertainment and an educational tool for adults and children through the tangible objects that are exhibited. Depending on the animals presented, zoos can also provide an essential environment for scientific research examining animals as well as conserving and preserving endangered species.

Zoological parks play vital roles in entertaining visitors, educating the public, conserving wild creatures and their habitats, and conducting scientific research. For many people, zoos are places where they can experience unique joy and entertainment by themselves or quality time with family members or friends (Clayton, Fraser, & Saunders, 2009). Especially, zoos in urban areas are the ideal places to educate the public about local and global conservation issues and to enhance public appreciation of and respect for the dignity and intrinsic value of wildlife and their habitats (Hutchins, 2003). Over the last couple of decades, there has been growing involvement of zoos in wildlife conservation and research. Undoubtedly, modern zoos have the potential to become one of the most powerful and effective conservation organizations in the world (Hutchins, 2003).

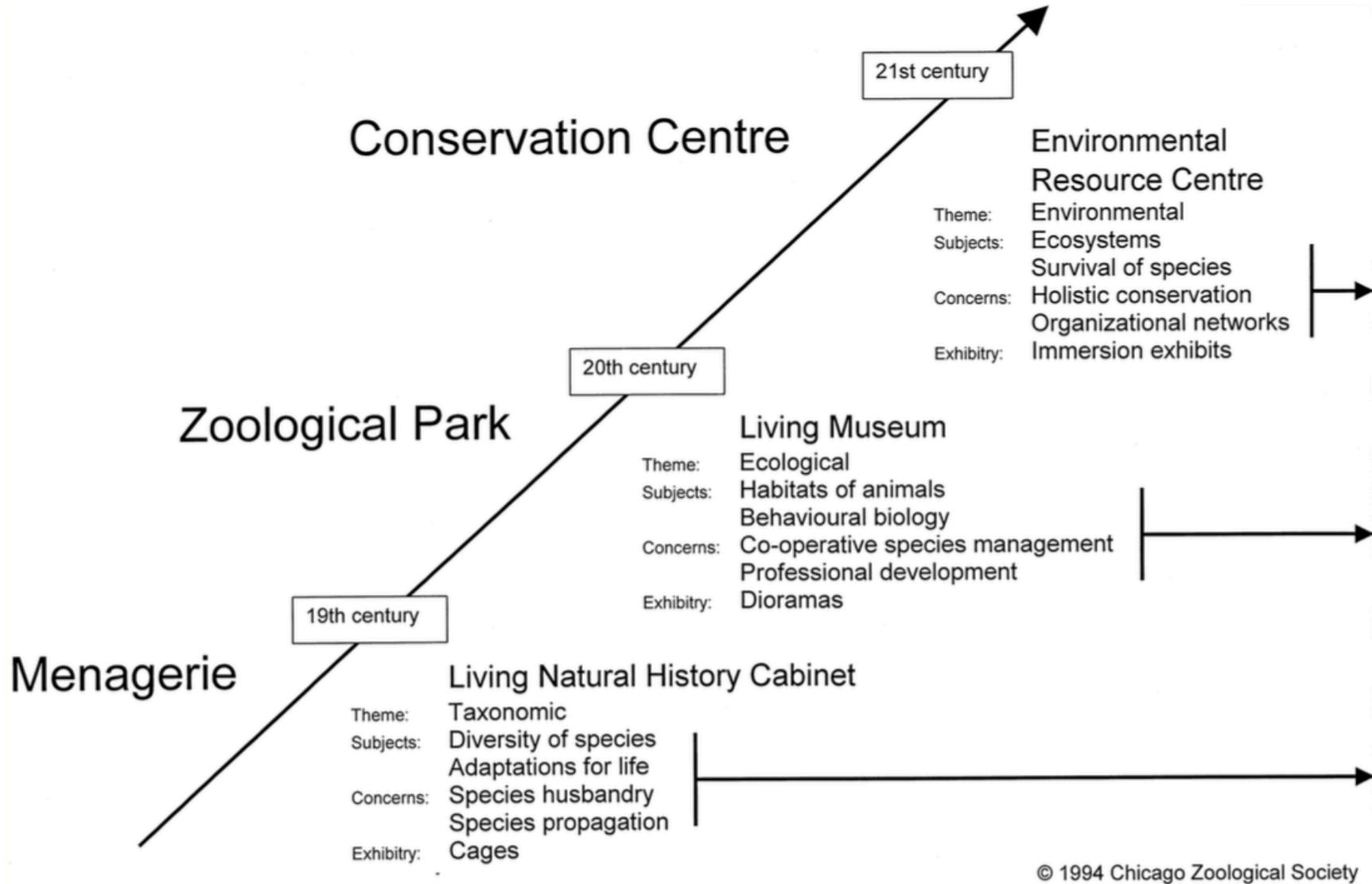


Figure 2.1 Evolution of zoos and aquariums (Rabb & Saunders, 2005, p. 2)

Given the important roles that zoos play, an increasing number of studies have been conducted to help zoos fulfill their obligations to society and to better understand the relationship and interaction between zoos and their visitors. In line with zoos' entertainment purpose, the general motives for visiting zoos are for people to have fun and enjoy themselves (Andereck & Caldwell, 1994; Carr & Cohen, 2011; Clayton, Fraser, & Saunders, 2009; Klenosky & Saunders, 2008; Lee, 2015; Tomas, Crompton, & Scott, 2003; Sickler & Fraser, 2009). Besides the entertainment and enjoyment that zoos provide, education about animals and wildlife habitat conservation practices is also an important function of zoos (Andersen, 2003; Bexell, Jarrett, and Ping, 2013; Bostock, 2003; Clayton et al., 2009; Lindemann-Matthies & Kamer, 2006; Rabb & Saunders, 2005).

Zoo exhibition styles have evolved from the dull, concrete enclosures that characterized first-generation zoo exhibits, through semi-natural settings in second-generation exhibits, to the more naturalistic environments designed to mimic natural habitats that characterize current third-generation exhibits (Ross, Melber, Gillespie, & Lukas, 2012). Recent research has shown that more naturalistic exhibits were associated with visitors' increased interest in animals, viewing times and duration, better behavior, social interaction, animal-related conservation, and positive attitudes (Johnston, 1998; Ross et al., 2012; Tofield, Coll, Vyle, & Bolstad, 2003).

As modern zoos strive to simultaneously entertain and educate the public, contribute to the survival of the species they display, and promote the conservation of wildlife and their habitats, Hutchins and Smith (2003) emphasized that zoos must address a number of additional and key administrative issues. These issues include creating an appropriate organization structure and philosophy; cooperating across inter-institutions, managing employee recruitment, training and retention; and conducting effective marketing and development programs. The core purpose and mission of a zoo will not be attainable if other critical factors are neglected or left unresolved. Among these factors, the funding issue is one of the importance, probably, the most important factor for the survival and success of a modern zoo (Hutchins & Smith, 2003).

Traditionally, zoos in the U.S. were publically funded through government agencies at the city, state or national level, in the same way as other cultural resources, such as museums and art galleries (Knowles, 2003). However, the growth of the commercial leisure industry and competition for limited government funding opportunities have created a bigger challenge for contemporary zoo managers tasked with fulfill their goals and maintaining day to day operations

(Mason, 2000). In response to the funding issue, some modern zoos have evolved and grown up as non-governmental foundation owned institutions (Knowles, 2003). To be more businesslike in their operations and to take advantage of corporate and personal charitable giving, many zoos have employed multiple ways to finance their operations, including the use of admission fees, membership programs, and charitable donation (Camarero & Garrido, 2011; Hutchins & Smith, 2003; Olsson, 2010). While the present dissertation does not examine issues related to zoo admission fees, it explores issues related to zoo membership and donation programs. More specifically, the first aim of this dissertation, and the focus of the study one is to examine current and prospective zoo members' preferences for the benefits of a zoo membership program. The second aim, and focus of study two is to understand and assess people's attitudes toward zoo donation programs and to differentiate donor groups based on their distinct attitudinal positions.

Membership is a typical business model for many not-for-profit organizations, such as leisure services (e.g., Marriot Leisure Club), fitness clubs (e.g., LA Fitness), wholesale centers (e.g., Costco), and issue-focused organizations (e.g., the Chicago Zoological Society) (Marinova & Singh, 2014). Almost all zoos offer annually renewable memberships with benefits at different levels and corresponding fee structures (Olsson, 2010). While membership programs have been examined in past studies, most research has focused on the motives and constraints to join in or purchase a membership (Armstrong & Slater, 2011; Caldwell & Andereck, 1994; Holmes & Slater, 2012). In contrast, very little has been done to understand preferences for the membership benefit options and packages and the factors influencing consumers' membership purchase decisions (Marinova & Singh, 2014; Klenosky, Oh, Panek, & Luebke, 2009).

To address this gap in the literature, the first study in this dissertation aims to examine membership benefit package preferences for an urban zoo setting. This study compares the responses of zoo members and nonmembers, and explores other factors that could influence membership benefit preferences. The findings from this study could help zoo management professionals make more informed decisions and effective strategies regarding the design of their membership programs.

While membership programs could bring in unrestricted revenue for a zoo, it can also establish a base or core group of supporters that attend and promote zoo programs, events, and exhibitions (Camarero & Garrido, 2011; Fraser, Clayton, Sickler, & Taylor, 2009; Olsson, 2010; Paswan & Troy, 2004). Many of these supporters have the potential to become donors as well.

Generally speaking, zoos and other types of museums heavily depend on donations to sustain their operations or to enhance their program offerings (Brady, Noble, Utter, & Smith, 2002; Sargeant, Ford, & Hudson, 2008). Donations to zoos provide significant support for a variety of needs, ranging from building exhibits and improving habitats to assisting with animal care and educational outreach.

Previous studies have explored the motives and mechanisms associated with donation behavior (Bekkers & Wiepking, 2010, 2011; Clary & Snyder, 1995). Donation behavior is partly rooted in consumption motives and can be characterized as an exchange activity, commonly employed in not-for-profit organizations, such as universities, museums, and zoos (Bekkers & Wiepking, 2010). Rather than segmenting potential donors in terms of their demographic and/or socioeconomic characteristics, Webb and colleagues (Webb, Green, & Brashear, 2000) suggested that segmenting potential donors based on their attitudes was a more effective and efficient marketing strategy. Very little research has been conducted on how to understand attitudes toward donating in a zoo context.

Thus, the objective of the second study is to extend the literature by examining individuals' attitudes toward a donation program in an urban zoo setting. The study two segments individuals into four distinct groups based on their attitudes toward the zoo donation program, including people with positive attitudes, people with negative attitudes, people with co-existing positive and negative evaluation (i.e., ambivalent attitudes), and people with no feeling/evaluation (i.e., indifferent attitudes). The findings of study two contribute to zoo literature both conceptually and methodologically, and should hold important implications for zoo administrators and marketers.

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## **CHAPTER 3. A CONJOINT INVESTIGATION OF MEMBERSHIP PROGRAM PREFERENCES AT AN URBAN ZOO**

### **3.1 Chapter Abstract**

Zoo memberships are essential to promote consumer relationships as well as to provide financial support to zoo operation. To help zoo managers develop more effective membership program packages, the present study used conjoint analysis to examine individuals' preferences for zoo membership package options. The membership benefit package factors examined included the proportion of membership fees used to support animal care and conservation, member-only magazine "Zoo & You" format, member-only discount on zoo day camps for kids, member-only discount on food and beverage, member-only discount on special events, and family membership package price. The impact on benefit preferences of membership status differences, level of place attachment to the zoo, and family composition were also explored. A finding consistent across each analysis was the most importance factor by far was the price of the family membership package. Other than package price, the discount on food and beverage and the proportion of membership fees devoted to animal conservation emerged as the next most important set of factors. Compared to nonmembers, zoo members appeared to place slightly more weight on the family membership package price; and slightly less weight on the food and beverage discount. Further, respondents scoring high on place attachment to the zoo were generally more supportive of the zoo and thus were less sensitive to variations in the specific options included in the zoo's membership package. However, no major differences emerged from the subgroup analysis of whether or not having children less than five years old in the household. Implications of these results for practice and future zoo research are discussed.

### **3.2 Introduction**

Membership programs play a vital role in the success and viability of leisure and tourism visitor attractions, ranging from history and arts-based organizations such as cultural heritage and historical sites, museums, art galleries and theaters, to nature-based organizations such as aquariums, parks, botanical gardens, conservatories and zoos (Klenosky, Oh, Panek, & Luebke, 2008; Olsson, 2010; Slater, 2005). Membership programs allow organizations to develop and

maintain relationship with their customers. Organization membership programs offer members several tangible and intangible benefits, such as free or reduced parking and admission, as well as access or preferential treatment at special event and inclusion in a larger network of like-minded individuals. In addition, members provide financial support for organizations through their membership fees and other donations they might make (Olsson, 2010).

In the context of zoological parks, membership programs provide funds to balance operational costs, including professional salaries, animal care and exhibit expenses, and outlays for special events (Davey, 2007; Lee, 2015). Membership programs can also establish a base or core group of supporters that attend and promote zoo programs and events, and serve as volunteer support staff (Camarero & Garrido, 2011; Fraser, Clayton, Sickler, & Taylor, 2009; Olsson, 2010; Paswan & Troy, 2004).

Considering the important roles that membership programs play in zoo operations, zoo membership departments are constantly striving to find ways to retain existing members and recruit new ones (Kinser & Fall, 2006; Olsson, 2010). Maintaining and growing an organization's membership base is not an easy task. As Camarero and Garrido (2011) noted, individuals would be equally able to enjoy a museum without joining the museum membership program or making a financial contribution. Thus, to augment the pool of their members, organization managers need an understanding of which benefits or incentives should be offered to current or potential museum members (Camarero & Garrido, 2011).

Despite the many studies that have explored zoo-related marketing issues (Fraser, Clayton, Sickler, & Taylor, 2009; Fraser & Sickler, 2009; Klenosky et al., 2008; Klenosky & Saunders, 2007; Morgan & Hodgkinson, 1999; Packer & Ballantyne, 2002; Turley, 2001), little research has explored zoo membership program development. Of the extant research on membership programs in zoo settings, most attention has been focused on the motives for joining a membership program (Caldwell & Andereck, 1994; Olsson, 2010) and efforts to retain existing members (Kinser & Fall, 2005, 2006). Caldwell and Andereck (1994) conducted a mail survey of members (n=371) at North Carolina Zoological society to investigate their motives to join and maintain the membership at the zoo. They found that while contribution to society was the most important reason for joining and continuing membership, incentive or material benefit was the least important reason. Olsson (2010) interviewed active zoo members (n=12) in Sweden to examine the relationship between members' motivations, relations, and roles. She found that compared to their fellow members,

actively committed members filled the roles of supporters, promoted the zoo, and performed volunteering work. Kinser and Fall (2006) employed an online survey of U.S. zoo managers (n=73) to examine how they utilized communication, evaluation, and feedback strategies to retain members. They found that more mass-oriented mechanisms were used to communicate with their members; membership hotlines and comments from websites were the most frequently employed feedback techniques, and zoo managers evaluated their membership programs regularly.

Given that membership programs are crucial to the success of zoological parks to fulfill their entertainment, education, research, and conservation goals, zoo managers are especially interested in understanding how current and prospective members feel about their membership programs. Thus the overarching goal of this study is to help zoo managers make better and more informed decisions about the design of their membership programs and enhance relationship-building efforts. Accordingly, this study addresses the following three research questions: (1). What specific membership program benefits and benefit levels (including current and new benefit options) are valued most? (2). How do current members and nonmembers differ regarding their preferences for membership benefit options? and (3). How do preferences for membership benefit options vary among visitors grouped by key segmentation variables (i.e., family composition, level of place attachment)?

The remainder of this paper is structured as follows. The first section provides an overview of previous research on zoo and organizational membership programs. The key segmentation variables of interest and the theoretical framework of this study are also discussed. The next section presents the details and results of an empirical study conducted to examine preferences for specific benefits of a zoo membership program. The final part of the paper discusses the implications of the study findings for the zoo and non-profit membership programs and future research efforts.

### **3.3 Background**

Even though zoos have a relatively long history and play a significant role in education, conservation, research, and entertainment, zoos are “remarkably under-researched” (Mason, 2000, p. 335). Due to the emergence of new “edu-tainment” tourist destinations from the private sector such as Walt Disney’s Wild Animal Kingdom, the popularity of zoos has declined over the past 20 years (Mason, 2000; Tomas, Crompton, & Scott, 2003). Declining budgets for zoo operations

have aggravated the challenges faced by zoo managers. Thus, conducting site-specific research on membership programs, which provide significant financial resources for zoos, could have important implications for zoo management and operations (Mason, 2000).

To date, most studies conducted in the context of zoos have focused on the relationship and interaction among zoo visitors, zoo animals, and the zoo environment. For example, researchers have studied zoo visitors' motives (Fraser & Sickler, 2009; Klenosky & Saunders, 2007; Morgan & Hodgkinson, 1999; Packer & Ballantyne, 2002; Turley, 2001), visitors' overall experience and satisfaction (Lee, 2015; Ryan & Seward, 2004; Sickler & Fraser, 2009; Therkelsen & Lottrup, 2015; Tomas, Scott, & Crompton, 2002), visitation behavior (Davey, 2006; Davey, 2007; Ridgway, Livingston & Smith, 2005), visitors' knowledge and attitudes toward animals and the environment (Ballantyne, Packer, Hughes, & Dierking, 2007; Clayton, Fraser, & Saunders, 2009; Clayton, Luebke, Saunders, Matiasek, & Grajal, 2014; Luebke & Matiasek, 2013), and visitor perceptions of the physical design of zoo exhibits (Fabregas, Guillen-Salazar, & Garcés-Narro, 2012; Kutska, 2009; Ross, Melber, Gillespie, & Lukas, 2012; Yilmaz, Mumcu, & Ozbilen, 2010). A few studies also have explored other topics in the context of a zoo setting, including research programs (Lawson, Ogden, & Snyder, 2008), volunteerism (Fraser et al., 2009), and educational camps and entertainment (Bexell, Jarrett, & Ping, 2013). Despite the amount of work involving these zoo-related research issues, little has been done to examine zoo members or membership programs.

### **3.3.1 Prior Research on Zoo Members and Membership Programs**

Research exploring issues related to members and membership programs has been conducted in several different settings, including zoological parks (Caldwell & Andereck, 1994; Kinser & Fall, 2006; Klenosky et al., 2008; Olsson, 2010), art museums (Camarero & Garrido, 2011; Paswan & Troy, 2004), UK heritage attractions (Holmes & Slater, 2012; Slater, 2005, 2010), children's museums (Maher, Clark, & Motley, 2011), and land trusts (Klenosky, Perry-Hill, Mullendore, & Prokopy, 2015). See Appendix A for more previous studies examining members and membership programs.

Researchers have examined several issues related to membership programs. In particular, researchers have conducted studies to investigate motives for joining and continuing memberships in zoos and museums. For example, Caldwell and Andereck (1994) sent a mail survey to 371

members of the North Carolina Zoological Society and found that the most important reason for getting and maintaining a zoo membership was to contribute to society, while material incentives or benefits were the least important reason. In a similar study, Paswan and Troy (2004) sent mail questionnaires to 524 art museum members and found that the key factors underlying membership motivation included philanthropy, preservation of art, social recognition, children's benefits, tangible benefits, and hedonic dimensions. While people in higher membership levels looked for social recognition and philanthropy; people in lower membership levels were more motivated by children's program benefits and tangible benefits. Recently, Baumgarth and Kaluza (2012) reviewed the literature regarding member motivations. They identified five primary motives to participate in art museum membership programs: social interaction and belonging, entertainment and experience, self-development, extrinsic benefits, and prestige.

Besides the motives associated with becoming a member of an organization, researchers have also identified the constraints to getting a membership (Armstrong & Slater, 2011) and the barriers to participation among members (Holmes & Slater, 2012). Armstrong and Slater (2011) explored nonmembers' (n=33) perspectives and identified four motivational constraints impacting the ability to get a membership at the Southbank Center, a regional art and entertainment complex in London, UK. These barriers included: 1) structural: poor value for money and program limitations; 2) attitudinal: perceived membership schemes are viewed as elitist and gentrified; 3) lack of awareness: confusing and unclear marketing communications for membership; and 4) emotional and aesthetic: lack of connection with the buildings and brand identity. Their results revealed that motivational constraints were complex and multidimensional. Holmes and Slater (2012) examined patterns of participation among the UK heritage supporter groups and found the major barriers to participation were the distance to the heritage site, aging, work and family commitments, and participation in other membership or voluntary associations. They also found that members' levels of involvement in the same organization varied over time.

Other studies have examined the relationship between non-profit organizations and their members, as well as beliefs and attitudes toward organization by members and nonmember. Olsson (2010) interviewed 12 active members of Zoo Nordens Ark, located in Sweden, to explore their perspectives on the concept of active membership by focusing on member motivations, relations, and roles. She found member motivations and relations were reflected through different membership roles, and active members were the main supporters giving both their time and money.

Camarero and Garrido (2011) sent a mail survey to 236 members in Spanish museums of fine art, to explore the relationship between museums and their members by assessing the relative importance of the benefits provided, members' organizational identification with the museum, and their perceptions of relationship quality. They found significantly positive correlations between the benefits provided and the degree of identification with the museum among members. Higher levels of organizational identification were associated with higher levels of members' satisfaction, trust, and future commitment. Along with this line of research, Kinser and Fall (2006) conducted an online survey of 73 zoo managers to determine how zoo managers employ relationship-building communication, evaluation, and feedback strategies to retain their members. They found that zoo managers employed more mass-oriented communications with their members than interpersonal communication techniques; tended to rely on the number of membership renewals as a way to evaluate the success of their programs, and used membership hotlines and website comments as their most frequently employed feedback techniques. In other research looking at the beliefs and attitudes toward land trusts, Klenosky and colleagues (2015) applied a two-dimensional/bivariate model to investigate members and nonmembers attitudinal positions and distinguish between two forms of neutral attitudes—ambivalence (equal positive and negative feelings) and indifference (lack of any feelings). In their survey of 348 land trusts members and 755 nonmembers in Indiana, the results showed that while members tended to have primarily positive attitudes toward land trusts, nonmember attitudes were more varied. While most nonmembers were positive toward land trusts, other nonmembers held attitudes that were classified as indifferent, ambivalent, or negative.

Only three studies have examined perceptions and preferences associated with membership benefits included in zoo or museum membership programs (Camarero & Garrido, 2011; Klenosky et al., 2008; Maher et al., 2011). In the context of Spanish museums of fine arts, Camarero and Garrido (2011) summarized two kinds of benefits offered in membership programs: material benefits and non-material benefits. Material benefits refer to something tangible and usually financial, including free admission, invitations to special events, discounts in gift shops or restaurants, private visits, tax breaks, etc. Non-material benefits refer to the perception of advanced symbolic, social, personal, or emotional aspects, including recognition and social status, links with others, feelings of altruism, and a sense of social responsibility. Both kinds of the benefits had significantly positive relationship with members' organizational identification, which

was also positively related to members' satisfaction, trust, and intention to commit to the organization through donations, recommendations, and positive word of mouth. Maher, Clark, and Motley (2011) measured museum service quality in relationship to visitor membership by surveying 192 adult visitors to a children's museum. They found staff empathy was a significant predictor of museum membership purchase. Klenosky and his colleagues (2008) collected data from both members (n=1,204) and nonmembers (n=304) of the Brookfield Zoo, IL, to assess visitors' preferences for the different benefits available through a zoo membership program. They found that zoo members and nonmembers differed in the value they attached to several membership program benefits. The present study sought to build on these previous studies by exploring preferences for the benefits included in a zoo membership program at the Reid Park Zoo (RPZ) in Tucson, Arizona; and explore the impact of key segmentation variables on those benefit preferences.

### **3.3.2 Segmentation Variables Impacting Zoo Visitation and Membership Behavior**

Research has identified several demographic and socioeconomic variables that are associated with visitation behavior in the context of zoos, museums, charitable, and other non-profit organizations (Bekkers & Wiepking, 2011; Paswan & Troy, 2004; Wiepking & Bekkers, 2012). Wiepking and Bekkers (2012) reviewed the literature on predictors of charitable giving and focused on seven characteristics including religion, education, age, socialization, gender, family composition, and income. They found that typical donors are those who are a higher age, a higher level of education, income, wealth and have children. The focus of the present study will examine the impact of having children and the emotional bonds attached to a zoo on membership program benefits preferences.

As in charitable organizations, family composition has been studied extensively in the context of zoological parks. A number of researchers have found that having children was a significant factor for zoo visitation and participation. For example, Yilmaz and colleagues (Yilmaz et al., 2010) found that the primary reason to visit a zoo was to learn about animals and introduce them to their children. Teaching children about animals was also one of the reasons to visit a zoo among the participants in Morgan and Hodgkinson's (1999) study. Similarly, Lee (2015) surveyed six zoo visitors in Korea and found children were a particularly significant motivator for zoo visitation. Turley (2001) explored the role of children as a determinant of demand to visit zoos in

the UK. The author found that the presence of children had a significant influence on the demand for recreational experience and family life stage was an important determinant of attraction choice and visiting status. Therkelsen and Lottrup (2015) surveyed both parents and children in regard to their zoo experiences at Aalborg Zoo, located in Denmark. They found that the experiences children and parents gained from visiting a zoo differed but were mutually supportive. However, the impact of having children on membership purchase decision-making and membership benefits preferences has not been studied in the literature. The present study will address this gap.

The construct of place attachment has also been used to help researchers and managers understand leisure behavior through a variety of disciplinary lenses (Kyle, Graefe, & Manning, 2004). Place attachment refers to an emotional or affective bond between a person and a specific place. Place attachment studies have generally focused on two dimensions, place identity and place dependence (Hammit, Kyle, & Oh, 2009; Williams & Roggenbuck, 1989). Place identity (an emotional attachment) describes, “the symbolic importance of a place as a repository for emotions and relationships that give meaning and purpose to life” (Williams & Vaske, 2003, p. 831). Place identity captures an individual’s emotional and affective bonds with a setting. On the other hand, place dependence refers to the degree to which an individual perceives himself/herself to be functionally dependent on a specific place (Oh, Lyu, & Hammit, 2012). In this sense, place dependence represents the value that an individual ascribes to a place because of the specific attributes at the place that facilitate desired leisure experiences. Since people’s level and type of attachment have been noted to affect their setting preferences and behavior (Kyle et al., 2003; Kyle et al., 2004), this study also examines whether visitors’ place attachment influences preferences for membership package options. In addition, prior research has found that highly attached residents tended to be more supportive of tourism development (Williams, McDonald, Riden, & Uysal, 1995). Kyle, Graefe, Manning and Bacon (2004) indicated that Appalachian Trail hikers, whose attachment to the setting was high, would be more accommodating and less sensitive to adverse conditions. Therefore, it was expected that respondents scoring high on place attachment to a zoo would be generally more supportive of the zoo and thus less sensitive to variations in the specific options included in the zoo’s membership package.

### **3.3.3 Conjoint Analysis Framework**

Conjoint analysis is a method of analyzing preferences which has been initially employed by marketers seeking to better understand consumer preferences for new products and services (Green & Rao, 1971). This method is now widely used in many fields, including public health, transportation, tourism, recreation, education, environmental valuation, and sport management (Alriksson & Oberg, 2008; Basala & Klenosky, 2001, Cahill, Marion, & Lawson, 2008; Daniels & Hensher, 2000; Hanley, Mourato, & Wright, 2001; Klenosky & Brey, 2010; Louviere & Timmermans, 1990).

In conjoint analysis, rather than directly asking research participants what variables they value most in a product or service, a set of conjoint stimulus profiles that consist of levels of the product or service variables are provided for participants to evaluate simultaneously. These variables are referred to as attributes, and the specific values of these attributes are referred to as attribute levels (Louviere & Timmermans, 1990). Unlike the traditional approach that utilizes a single-dimensional model, the conjoint analysis assumes individuals integrate and tradeoff information about attributes and attribute levels in order to differentiate choice alternatives and make decisions (Oh, Ditton, & Riechers, 2007). As such, this technique employs a multidimensional model to examine the relative importance of the different attributes and attribute levels used to describe a particular product or service.

This multi-attribute perspective effectively simulates real-life decision-making behavior, because everyday choice situations rarely, if ever, involve only a single attribute (Oh, 2010). Rather everyday choice typically involves making tradeoffs between products, or more specifically product attributes. Conjoint analysis is an appropriate tool for examining these tradeoffs (Oh et al., 2007).

Another advantage of conjoint analysis is that it allows researchers to examine preferences for hypothetical product/service offerings that are not yet available in the market place. In the present study we will examine the impact of benefit levels in the membership benefit packages that are not currently available at RPZ.

While conjoint analysis may be a more complex method to use, it provides a better understanding of individual choice behavior, in this case, people's preference for membership benefit packages at the zoo. In the present study, conjoint analysis was used to examine individuals' preferences for membership package options, thus providing insights into the relative importance

and utility of each benefit and benefit level. This information will provide zoo managers with a better foundation to make decisions and develop more effective membership program packages.

### **3.4 Methods**

#### **3.4.1 Study Site**

The study was conducted at the Reid Park Zoo (RPZ), which is located in Tucson, Arizona. The RPZ is accredited by the AZA (Association of Zoos & Aquariums) and displays a collection of more than 500 animals on 24 acres, serving a resident population base of approximately one million people. RPZ consists of four zones that are organized by the types of habitats and animals housed, including the Adaptation Zone, the South America Zone, the Asian Zone, and the African Animals Zone. A seven-acre expansion of Expedition Tanzania was opened to the public in 2012, in which six African elephants reside. On August 20th, 2014, a female calf (Nandi) was born, the first ever elephant born in the State of Arizona. A new attendance record was set at the end of 2014, with 618,482 visitors walking through the gates.

#### **3.4.2 Study Approach**

A questionnaire was administered to a sample of zoo members and nonmembers (see Appendix B). The survey questions were organized into four sections: zoo membership program experience, zoo membership package preferences (the conjoint task), zoo visitation behavior, and respondent demographics.

The first section consisted of questions about the Reid Park Zoo membership program, which included present/past member status, interest in joining/renewing, type of membership, and reasons for and against renewing their membership.

The second section of the survey consisted of an introduction and instructions for completing the conjoint task. Participants were instructed to imagine that they were considering purchasing a membership to the Zoo or renewing their current Zoo membership because it was about to expire. The respondents were instructed that both packages included the following benefits, such as unlimited free zoo admission for two adults and up to four children or grandchildren under age of 18; member-only discount in zoo gift shop; free subscription to monthly online newsletter; and, discounts to more than 160 other zoos and aquariums. Each choice

set represented two packages: Package A and Package B, and a No Choice option (i.e. “I would not choose either package”). Each package was comprised of the six chosen factors: four factors described by two levels, one factor described by three levels, and one factor described by five levels. Following the instructions, six choice pairs were presented. Prior to the distribution of the surveys, several Reid Park Zoo staff and visitors pilot tested the survey instrument. After the testing, minor changes were made to improve the survey’s language. An example of the choice-based question is shown in Figure 3.1 and a copy of the surveys can be seen in Appendix B.

**Section B. Now some questions about Zoo membership options.**

In this section of the survey, we'd like you to imagine that you were thinking about purchasing a membership to the Zoo or renewing your current Zoo membership because it was about to expire. In the following six questions, you will be presented a series of choices involving two alternative membership packages that might be available to you. These membership packages will be described as "Package A" and "Package B."

After reading the descriptions of the two packages, your task will be to indicate whether you would choose "Package A" or "Package B." If neither package appeals to you, you have the option of selecting "I would not choose either package."

**Note that the following benefits will be included in ALL the membership packages presented:**

- ***Unlimited free Zoo admission for two adults and up to four children or grandchildren under age of 18 (all who live in the same household)***
- ***Member-only discount in zoo gift shop***
- ***Free subscription to monthly online newsletter***
- ***Discounts to more than 160 other zoos and aquariums***

**In contrast, the following benefits will VARY across the membership packages presented:**

- ***Portion of Membership Fees Supporting Animal Care and Conservation – the portion of your membership fees used to support animal care and conservation at the Zoo***
- ***Member-only Magazine “Zoo & You” Format – whether you will receive the magazine “Zoo & You” as a hard copy sent via mail or as a digital copy sent via email***
- ***Member-only Discount on Zoo Day Camps for Kids – discounts on Zoo day camps for kids***
- ***Member-only Discount on Food and Beverage – discounts on food and beverage purchases at the Zoo***
- ***Member-only Discount on Special Events – discounts on tickets to special zoo events (e.g. Howl-O-Ween, Zoo Lights, etc.)***
- ***Membership Package Price – total annual cost of the Zoo membership package***

If other benefits/features are not listed, please assume they would be the same across all membership packages. Thus, consider only the differences between the packages and benefit options presented.

Figure 3.1 Survey Instructions for the Conjoint Task.

The third section of the survey consisted of questions about experience visiting the zoo, which included zoo visitation behavior, exhibit/attraction use, likelihood to support the zoo, and place attachment. Place attachment was assessed using an eight-item scale adapted from Williams and Vaske (2003), with four items used to measure place identity and four used to measure place dependence.

The last section of the survey presented demographic questions, including family composition, ethnicity, zip code, education, age, and gender.

### **3.4.3 Benefits and Benefit Levels Examined**

Six benefit categories from the zoo's main Family Membership Package were included in the conjoint task questions: the proportion of membership fees used to support animal care and conservation; member-only magazine "Zoo & You" format; member-only discount on zoo day camps for kids; member-only discount on food and beverage; member-only discount on special events (e.g., Howl-O-Ween, Zoo Lights, etc.) and family membership package price (per family for two adults and their children under 18 years old). Each benefit category has two to five levels. A detailed description of each benefit category and its levels is shown in Table 3.1.

Table 3.1. Study Factors and Factor Levels.

Proportion of membership fees used to support animal care and conservation 1. 10% of membership fees 2. 5% of membership fees 3. 1% of membership fees
Member-only magazine “Zoo & You” format 1. Hard copy sent via mail 2. Digital copy sent via email *
Member-only discount on zoo day camps for kids 1. 10% off discount * 2. No discount
Member-only discount on food and beverage 1. 10% off discount on all purchases * 2. No discount
Member-only discount on special events (e.g. Howl-O-Ween, Zoo Lights, etc.) 1. 20% off discount * 2. 10% off discount
Family membership package price 1. 100 2. 95 3. 90 4. 85 5. 80*

\* Current Membership Package Levels

### 3.4.4 Study Design

The study used paired choice sets to elicit respondents’ preferences (Louviere 1988, Louviere, Hensher, & Swait, 2000). Once the attributes and attribute levels were established, choice sets were created using the Discrete Choice Module available in SAS version 9.0. Rather than using a “full-factorial” design, which would have required the use of more than 4,000 paired choice sets, an “efficient experimental design” was employed which required the use of only 36 choice sets (Kuhfeld, 2005). To make the study more manageable, six survey versions were used,

each requiring the respondent to make a choice from among six choice sets (i.e., pairs of membership package options with the options in each pair labeled Package A and Package B). Each paired choice set included a non-choice option (i.e., “I would not choose either package”) in order to mimic actual market choice behavior (Hensher, Rose, & Greene, 2005). An example of a paired choice set used in the study is provided in Figure 3.2.

**B1.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
*(Choice 1 of 6)*

<b>PACKAGE A</b>	<b>MEMBER BENEFITS INCLUDED</b>	<b>PACKAGE B</b>
5% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	1% of membership fees
Hard copy sent via mail	“ZOO & YOU” MAGAZINE FORMAT	Hard copy sent via mail
No discount	MEMBER DISCOUNT ON DAY CAMPS	10% off discount
No discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	No discount
10% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	10% off discount
\$90	MEMBER PACKAGE PRICE	\$100

**PACKAGE A**

**I WOULD NOT CHOOSE  
EITHER PACKAGE**

**PACKAGE B**

Figure 3.2 Example of a Paired Choice Set for the Zoo Membership Package Choice Task.

### 3.4.5 Survey Administration

The surveys were distributed to the Reid Park Zoo visitors from August to November 2017. Zoo visitors were randomly intercepted and asked to complete a self-administered paper-and-pencil survey at various locations, including the cafeteria, Conservation Learning Center, the rest area, and the zoo exit gate. The primary author distributed the survey to zoo visitors and those who agreed to participate in the study returned the survey to the author upon their completion of the survey. About 350 Reid Park Zoo visitors were invited to participate in the study, and 290 visitors completed the survey, representing an 82.9% response rate. Of the on-site survey respondents, 131 were Reid Park Zoo members and 159 were non-members. Ten out of the 290 respondents did not complete the conjoint task and were excluded, resulting in a total of 280 completed surveys used for the conjoint analysis.

### **3.4.6 Analytical Model**

The data from the surveys were first entered into a Microsoft Excel spreadsheet; and then imported into STATA 11.2. Once the data set was imported, measures of the respondent-specific findings were tabulated. The choice-based data was created in Microsoft Excel then analyzed in STATA (using the conditional logistic regression module) to evaluate the impact of the factors in respondents' membership benefit preferences.

Data analysis used the Stated Preference Choice Model, an analytical model based on two well-grounded theories: utility maximization and random utility (Louviere et al. 2000). Utility maximization theory indicates that individuals choose the option with the highest utility. According to random utility theory, utility involves a deterministic component (i.e., a measurable component of utility as estimated using the attributes included in the study) and a random error component (i.e., the effect of unobserved influences by attributes not included in the study) (Louviere et al. 2000). Because of this random error component, utility cannot be observed directly but it can only be estimated using an indirect utility function. The deterministic component can be estimated to represent the vector of coefficients of attribute levels. The indirect utility function of a representative individual choosing membership package  $j$  can be represented as:  $U_j = V_j(A) + \epsilon_j = A + \epsilon_j$ , where  $U_j$  is the utility of an alternative membership package  $j$ ,  $V_j$  is the deterministic component of utility to be estimated, and  $\epsilon_j$  is the unobservable error component of utility. Further,  $\beta$  is the coefficient vector (or vector of parameter estimates) to be estimated and  $A$  is the vector of relevant attributes that can be used to determine the utility derived from each alternative. Since one cannot observe a respondent's utility directly, the probability of choice is used instead. The use of choice probabilities, along with the assumption that the error terms are independently and identically distributed with a type I extreme-value distribution, allows one to use the conditional logit model (Ben-Akiva & Lerman, 1985; McFadden, 1974) to derive the estimates.

## **3.5 Results**

### **3.5.1 Zoo Visitor Profile**

An overall profile of survey participants is presented in Table 3.2. Of the 290 participants, most were female (66.2%), between the ages of 30 and 45 (50.7%), and Caucasian (61.3%). Most participants completed a Bachelor degree (29.7%) or were a high school graduates (23.6%).

Thirty-one percent of the participants have lived in Tucson for more than 20 years and 51% for more than 11 years. Most of the participants (55.2%) have children 5 years old or younger in their household, 23% and 19% of the participants have children between 6 to 11 years old and between 12 to 17 years old respectively.

Table 3.2 Profile of Survey Participants (n=290).

<b>Variable</b>	<b>Category</b>	<b>Percentage</b>
Gender	Male	33.8
	Female	66.2
Age	Under 30	25.0
	30-45	50.7
	46-60	15.7
	Over 60	8.6
Ethnicity/Race	Caucasian	61.3
	African-American	4.4
	Asian/Pacific Islander	6.2
	Hispanic/Latino	20.1
	Mixed ethnic heritage (please specify):	6.6
	Other (please specify):	1.5
Highest level of education	Less than high school	3.6
	High school graduate or GED	23.6
	Associates or trade-school degree	17.8
	Bachelors degree (4-year)	29.7
	Masters degree	14.1
	Professional or doctoral degree	11.2
Years lived in Tucson	Not applicable (Tourist)	16.6
	Less than 2 years	11.9
	Between 2-5 years	11.6
	Between 6-10 years	9.0
	Between 11-20 years	19.9
	More than 20 years	31.1
Children in the household	No children	23.5
	5 years old or younger	55.2
	Between 6-11 years old	23.4
	Between 12-17 years old	18.8

About forty-five percent of the participants were currently zoo members and 55% were not (Table 3.3). Among the zoo members, 79% had the Family membership and about 20% of the membership types consisted of Gold (9.2%), Individual (7.5%), and Senior (1.7%); and 2.5% were not sure what type of membership they had). Most of them have been members for less than one year (33.4%). When asked about the likelihood of renewing their membership, about 77% of participants agreed that they are somewhat likely or very likely to renew, with a mean of 4.12 (coded 1 as very unlikely to 5 as very likely) and standard deviation of 1.29.

Table 3.3 Membership Status.

<b>Variable</b>	<b>Category</b>	<b>Percentage</b>
Membership status	Members	45.2
	Nonmember	54.8
Membership type	Family	79.2
	Gold	9.2
	Individual	7.5
	Not Sure	2.5
	Senior	1.7
Years of member	Less than 1 year	33.4
	2 years	21.3
	3 years	14.8
	4 years	8.3
	5 years	7.4
	6 years	6.5
	7 years	1.9
	8 years	1.9
	9 years	0.9
	10 years	3.7

### 3.5.2 Zoo Visitor Experience and Behavior

The most popular activities visitors enjoyed while visiting RPZ were the giraffe feeding (73.1%), followed by the gift shop/café (50.0%), wildlife carousel (49.6%) and the Conservation Learning Center (42.8%) (Table 3.4).

Table 3.4 Activity Participation while at RPZ.

	Giraffe feeding	Conservation Learning Center	Camel rides	Train rides	Wildlife carousel	Purchasing at the gift shop or café
Participated	73.1	42.8	26.5	31.1	49.6	50.0
Not participated	26.9	57.2	73.5	68.9	50.3	50.0

Analysis of zoo visitation behavior indicated that 12.4% were the first-time visitors (Table 3.5). Almost half (49.7%) visited within the last 6 months and 38% visited the zoo more than 6 months ago. In regard to the pattern of visiting RPZ, 40% of the participants visit the zoo three or more times a year, 28% of them visit the zoo about one or two times a year.

Table 3.5 Zoo Visitation Behavior.

		Percentage
Last time visited Reid Park Zoo	First time at RPZ	12.4
	Within the last 6 months	49.7
	Between 6 months and 1 year ago	14.5
	Between 1-2 years ago	13.5
	Between 2-5 years ago	5.3
	More than 5 years ago	4.6
Pattern of visiting Reid Park Zoo	I usually visit the zoo 3 or more times a year	40.2
	I usually visit the zoo about 1 or 2 times a year	27.9
	I usually visit the zoo every couple of years	9.1
	I have only visited the zoo once or twice in the last 5 years	10.1
	I have not visited the zoo in the last 5 years	12.7

The likelihood of taking different actions in support of the RPZ was measured in a 5-point Likert scale, with 1 being “Very unlikely” and 5 being “Very likely” (Table 3.6). “Sign a petition” had the highest mean of 3.52 and standard deviation of 1.48, followed by “Post to Facebook or other social media” with a mean of 3.25 and standard deviation of 1.58. “Write a letter” and “Attend a meeting” had a mean of 2.59 and standard deviation of 1.34 and a mean of 2.25 and standard deviation of 1.27 respectively.

Table 3.6 Likelihood of Taking Actions in Support of the RPZ.

	Mean	Std. Dev.
Sign a petition	3.52	1.48
Post to Facebook or other social media	3.25	1.58
Write a letter	2.59	1.34
Attend a meeting	2.25	1.27

5-point Likert scale with 1 being “Very unlikely” and 5 being “Very likely”

### 3.5.3 Place Attachment Measure

The eight-item place attachment scale, adapted from Williams and Roggenbuck (1989), consisted of subscales for place identity and place dependence. The Cronbach’s alphas of .86 for place identity and .86 for place dependence (Table 3.7) demonstrated adequate internal consistency. Further, Pearson correlation analysis showed a significant correlation between place identity and place dependence ( $r=.65, p< .001$ ). These findings provide further evidence of construct validity for the two-dimensional conceptualization of place attachment (Kyle, Graefe, & Manning, 2004; Williams & Roggenbuck, 1989). In the subsequent analyses, the scores of two subscales were combined and averaged to represent an overall place attachment score.

Table 3.7 Place Attachment Scale (adapted from William and Vaske, 2003).

Items	$\alpha$	M	SD
Place Identity	.86		
RPZ means a lot to me.		3.71	.92
I am very attached to RPZ.		3.36	.95
I identify strongly with RPZ.		3.31	.93
I feel no commitment to RPZ. *		3.46	1.05
Place Dependence	.86		
RPZ is the best place for what I like to do.		3.60	.82
I get more satisfaction out of visiting RPZ than any other.		3.25	.83
Doing what I do at RPZ is more important to me than doing it in any other place.		3.05	.89
I wouldn’t substitute any other area for doing the types of things I do at RPZ.		3.12	.91

\* Reverse coded

As shown in Table 3.8, a significant relationship was found between age and attachment level. The visitors most highly attached to the RPZ were significantly older than those with low attachment levels ( $F=5.87, p < .001$ ). A t test was performed to compare the mean score of place attachment between zoo members and nonmembers. Zoo members were more attached to the RPZ than nonmembers in general ( $p < .001$ ). No significant differences were observed among groups with regard to gender, ethnicity, and education.

Table 3.8 Statistical Tests of Place Attachment among Subgroups.

Variable	Mean	Std. Dev.	Test
Age			
Under 30 years old	3.07	0.77	$F=5.87, p < .001$
30-45 years old	3.48	0.64	
46-60 years old	3.32	0.60	
Over 60 years old	3.55	0.70	
Membership status			
RPZ members	3.54	0.66	$t=-4.25, p < .001$
Non-members	3.18	0.68	

5-point Likert scale with 1 being “Strongly Disagree” and 5 being “Strongly Agree”

### 3.5.4 Conjoint Results

Conditional logistic regression was used to analyze the responses from the choice-based conjoint survey questions – i.e., whether the respondent chose Package A, Package B, or neither one. Based on these responses and the levels of the factors representing the two options in each choice set, the coefficients generated represent the impact of the factor levels on respondents’ choice decisions. Conditional logit models were estimated for the entire sample and for selected subgroups based on membership status, place attachment levels, and whether or not the household had a child younger than 5 years old. The models were run using STATA 11.2. Dummy variables were assigned to the levels of each study attribute. An alternative specific constant (Constant) was used to capture the effects on utility of any attributes not included in the choice sets. For each factor, a base or reference level was established, which generally corresponded to the lowest level of each study factor. The explanatory power of each model ran is given by McFadden  $\rho^2$ , which is

analogous to the  $R^2$  in a conventional model. The McFadden's  $\rho^2$  of all models ranged from .127 to .225; indicating an adequate fit to the data. The estimated importance of a given factor is indicated by the coefficients for the factor levels, which are evaluated for their significance at the  $p < 0.05$  level – meaning the coefficient was significantly different than the base level.

Table 3.9. Conditional Logit Models for Zoo Visitors by Membership Status.

Attribute	Attribute Level	All		
		visitors	Zoo Member	Nonmember
		Coefficient	Coefficient	Coefficient
Constant <sup>a</sup>		0.63 **	1.127 **	0.26
PropMembFee1	1% of memb fees <sup>^</sup>	0	0	0
PropMembFee2	5% of memb fees	0.461 **	0.541 **	0.407 **
PropMembFee3	10% of memb fees	0.949 **	1.014 **	0.904 **
"Zoo & You" Format1	Digital copy via email <sup>^</sup>	0	0	0
"Zoo & You" Format2	Hard copy via mail	-0.331 **	-0.385 **	-0.291 **
DayCampDiscount1	No discount <sup>^</sup>	0	0	0
DayCampDiscount2	10% off discount	0.389 **	0.399 **	0.382 **
F+BDiscout1	No discount <sup>^</sup>	0	0	0
F+BDiscout2	10% off discount	1.044 **	1.072 **	1.028 **
SpecEvDiscount1	10% off discount <sup>^</sup>		0	0
SpecEvDiscount2	20% off discount	0.382 **	0.436 **	0.343 **
FMP-Price 1	\$80 <sup>^</sup>	0	0	0
FMP-Price 2	\$85	-0.201	-0.25	-0.159
FMP-Price 3	\$90	-0.552 **	-0.716 **	-0.42 **
FMP-Price 4	\$95	-0.919 **	-1.003 **	-0.852 **
FMP-Price 5	\$100	-1.404 **	-1.714 **	-1.152 **
Model Statistics				
Number choice sets		4983	2286	2697
Log L		-2267.42	-966.95	-1283.77
McFadden $\rho$ 2		0.166	0.225	0.127

\*\* indicates statistical significance at 0.01.

<sup>a</sup> Constant is an alternative specific constant.

<sup>^</sup> indicates the base level for that attribute.

The estimated coefficients for all respondents (n=280) can be found in Table 3.9 and are represented graphically in Figure 3.3. All estimated coefficients, except the family membership package price 2 (\$85) were significant ( $p<0.01$ ) with the signs in the expected direction. Factors regarding proportion of membership fees for animal conservation, discounts on zoo day camps, special events, and food and beverage had positive coefficients, reflecting a preference for level two and three over level one, the base level. Factors related to the membership package price and the magazine “Zoo & You” format had negative coefficients, with the latter reflecting a preference for the base level (the digital copy over the mailed hard copy).

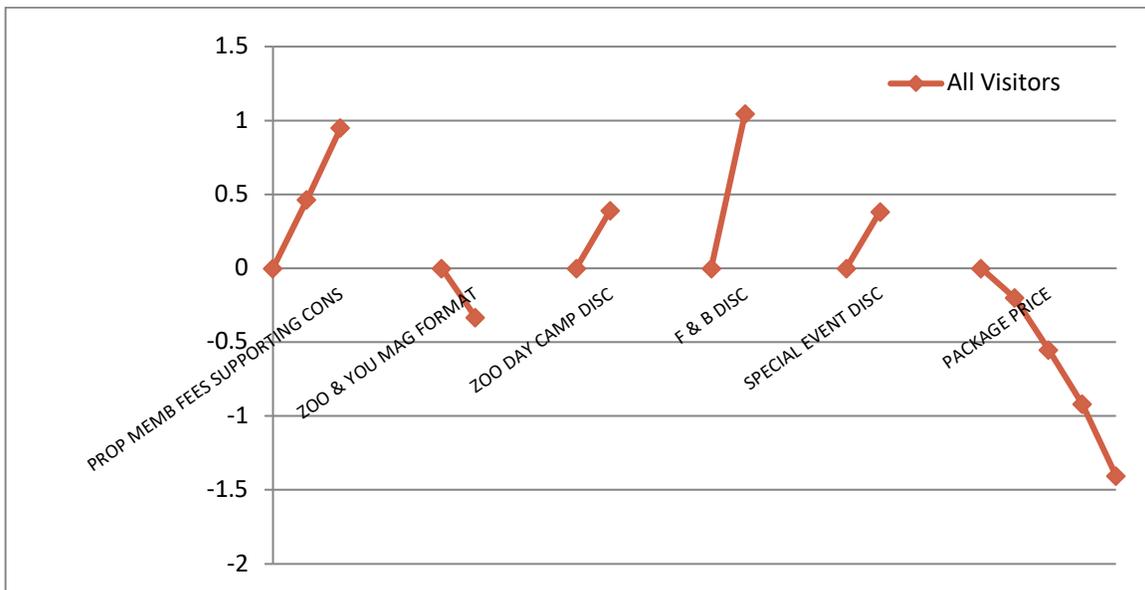


Figure 3.3. Conjoint Utilities for Zoo Visitors.

The relative importance of each factor for all visitors are characterized in Figure 3.4. The relative importance weights reflect the impact of each factor on overall preferences. These weights were computed by dividing the utility range for each factor (i.e., the difference between the best level of a particular factor to the worst level of that factor) by the sum of the utility ranges for all factors. Using this approach, the most important factor in forming preferences across all respondents was the family membership package price (31.2%). The discount on food and beverage (23.2%) had the second highest relative importance and was followed very closely by

the proportion of membership fees for animal conservation (21.1%). The fourth factor was the discount on zoo day camps (8.6%) for kids and followed very closely by discount on special events (8.5%), and the magazine “Zoo & You” format (7.4%).

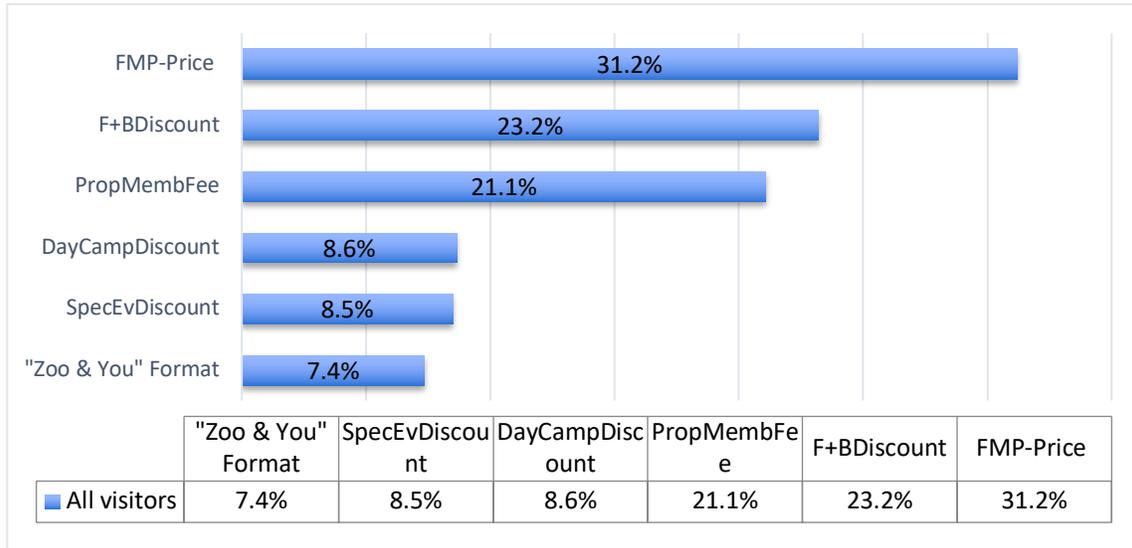


Figure 3.4. Relative Importance of Attributes for All Visitors.

A segmentation of the estimated coefficients for zoo members (n=131) and nonmembers (n=159) can be found in Table 3.9 and are represented graphically in Figure 3.5. For both groups, all coefficients were significant at the  $p < 0.01$  level, except the membership package price 2 (\$85).

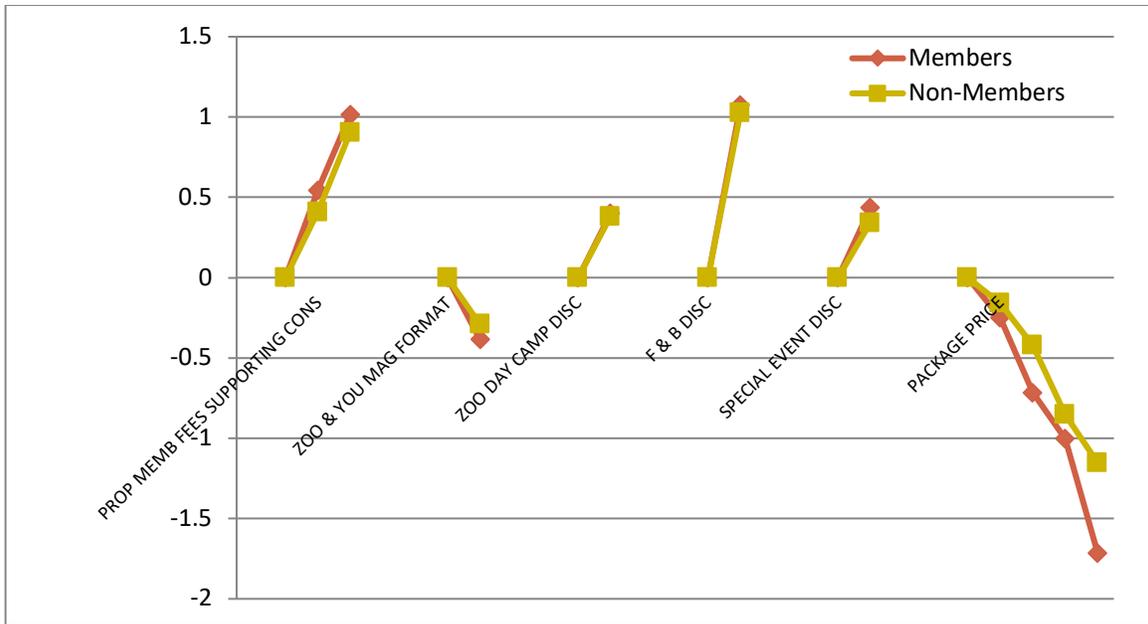


Figure 3.5. Conjoint Utilities for Zoo Visitors by Membership Status.

Figure 3.6 displays the relative importance weights of each factor for zoo members and nonmembers. This analysis shows that both members and non-members had the same ordering of the relative importance weights among the study factors; however, compared to non-members, members appear to place greater weight on the family membership package price (34.1% members versus 28.1% nonmembers); and less weight on the food and beverage discount (21.4% members versus 25.1% nonmembers).

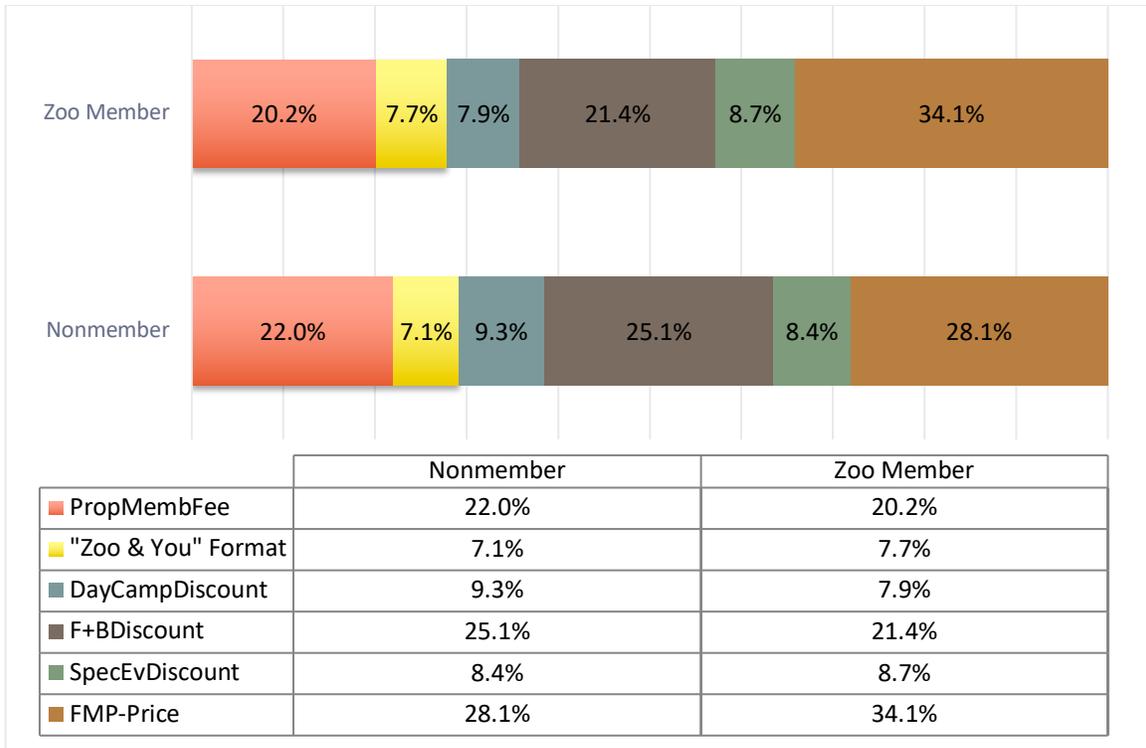


Figure 3.6. Relative Importance of Attributes for Zoo Members and Nonmembers

To examine how preferences for membership benefit options varied among visitors based on their level of place attachment, the place identity and place dependence subscales were summed, and participants were placed into one of the three categories of place attachment low, medium, and high—using 33% and 67% cutoffs (Kyle, Absher, & Graefe, 2003). The coefficient estimates for zoo visitors by level of place attachment can be found in Table 3.10 and represented graphically in Figure 3.7. For all three groups, all coefficients were significant at the  $p < 0.05$  level, except as before the membership package price 2 (\$85).

Table 3.10. Conditional Logit Models for Zoo Visitors by Place Attachment Scores.

Attribute	Attribute Level	Low-PA	Med-PA	High-PA
		Coefficient	Coefficient	Coefficient
Constant <sup>a</sup>		0.158	0.313	1.043 **
PropMembFee1	1% of memb fees <sup>^</sup>	0	0	0
PropMembFee2	5% of memb fees	0.531 *	0.535 **	0.448 **
PropMembFee3	10% of memb fees	1.260 **	1.018 **	0.774 **
"Zoo & You" Format1	Digital copy via email <sup>^</sup>	0	0	0
"Zoo & You" Format2	Hard copy via mail	-0.511 **	-0.296 *	-0.235
DayCampDiscount1	No discount <sup>^</sup>	0	0	0
DayCampDiscount2	10% off discount	0.28 *	0.42 **	0.44 **
F+BDiscout1	No discount <sup>^</sup>	0	0	0
F+BDiscout2	10% off discount	1.306 **	1.144 **	0.898 **
SpecEvDiscount1	10% off discount <sup>^</sup>		0	0
SpecEvDiscount2	20% off discount	0.538 **	0.366 **	0.365 **
FMP-Price 1	\$80 <sup>^</sup>	0	0	0
FMP-Price 2	\$85	-0.285	-0.144	-0.359
FMP-Price 3	\$90	-0.589 *	-0.549 **	-0.468 *
FMP-Price 4	\$95	-0.945 **	-1.127 **	-0.785 **
FMP-Price 5	\$100	-1.605 **	-1.809 **	-1.021 **
Model Statistics				
Number choice sets		1068	1854	1650
Log L		-481.782	-850.548	-739.569
McFadden $\rho^2$		0.173	0.160	0.179

\*\* indicates statistical significance at 0.01.

\* indicates statistical significance at 0.05.

<sup>a</sup> Constant is an alternative specific constant.

<sup>^</sup> indicates the base level for that attribute.

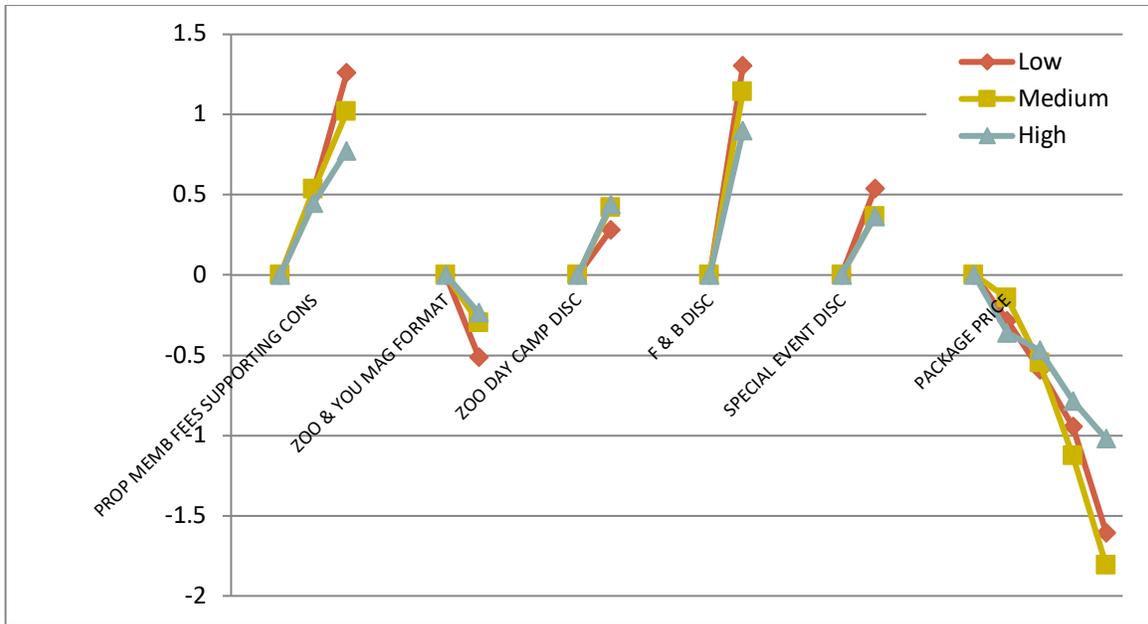


Figure 3.7. Conjoint Utilities for Zoo Visitors by Place Attachment Levels.

As shown in Figure 3.8, the ordering of relative importance weights among the factors for the different Place Attachment groups remained the same as the weights for all visitors, the weighting of each factor did appear to differ slightly. While visitors who were highly attached to the zoo placed relatively even weights on all factors, visitors who expressed low or medium attachment appeared to place greater weight on the membership package price (27.4% for those with High-PA, 35.8% for Medium-PA, and 29.2% for Low-PA). In general, the spread of the relative importance weights for respondents who were highly attached to the zoo was smaller, suggesting that they were less sensitive to the membership price and less sensitive to other package options.

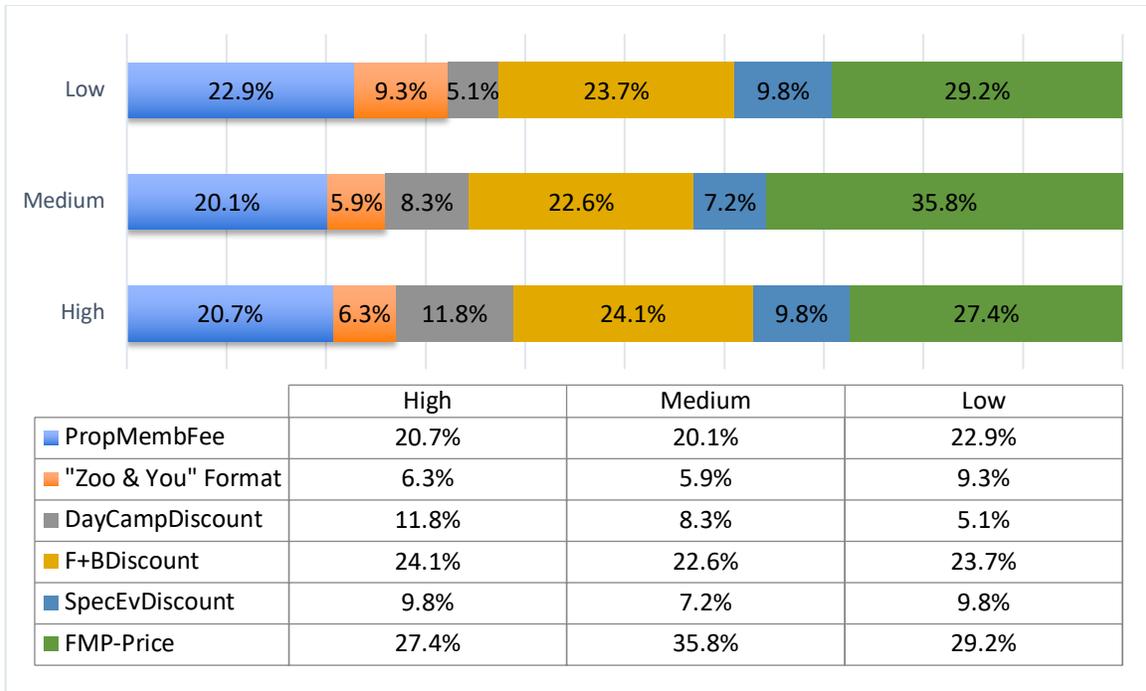


Figure 3.8. Relative Importance of Attributes for Place Attachment Subgroups.

The final subgroup analysis was for visitors having children younger than five years old in their household (n=153) and visitors not having children younger than five years old (n=124). The coefficient estimates for zoo visitors by whether or not they had children younger than 5 years old in their household can be found in Table 3.11 and graphically shown in Figure 3.9. As before, all estimated coefficients, except the family membership package price 2 (\$85), are significant at  $p < 0.05$  level.

Table 3.11. Conditional Logit Models for Zoo Visitors by Whether or not the Household Had a Child Younger than 5 Years Old.

Attribute	Attribute Level	Had a child younger than 5 years old		Did not have a child younger than 5 years old	
		Coefficient		Coefficient	
Constant <sup>a</sup>		0.808	**	0.441	*
PropMembFee1	1% of memb fees <sup>^</sup>	0		0	
PropMembFee2	5% of memb fees	0.590	**	0.422	**
PropMembFee3	10% of memb fees	1.060	**	0.877	**
"Zoo & You" Format1	Digital copy via email <sup>^</sup>	0		0	
"Zoo & You" Format2	Hard copy via mail	-0.344	**	-0.341	**
DayCampDiscount1	No discount <sup>^</sup>	0		0	
DayCampDiscount2	10% off discount	0.485	**	0.341	**
F+BDiscout1	No discount <sup>^</sup>	0		0	
F+BDiscout2	10% off discount	1.137	**	1.008	**
SpecEvDiscount1	10% off discount <sup>^</sup>			0	
SpecEvDiscount2	20% off discount	0.476	**	0.274	*
FMP-Price 1	\$80 <sup>^</sup>	0		0	
FMP-Price 2	\$85	-0.206		-0.243	
FMP-Price 3	\$90	-0.462	**	-0.701	**
FMP-Price 4	\$95	-0.971	**	-0.871	**
FMP-Price 5	\$100	-1.584	**	-1.235	**
Model Statistics					
Number choice sets		2616		2163	
Log L		-1118.303		-1028.805	
McFadden $\rho^2$		0.217		0.128	

\*\* indicates statistical significance at 0.01.

\* indicates statistical significance at 0.05.

<sup>a</sup> Constant is an alternative specific constant.

<sup>^</sup> indicates the base level for that attribute.

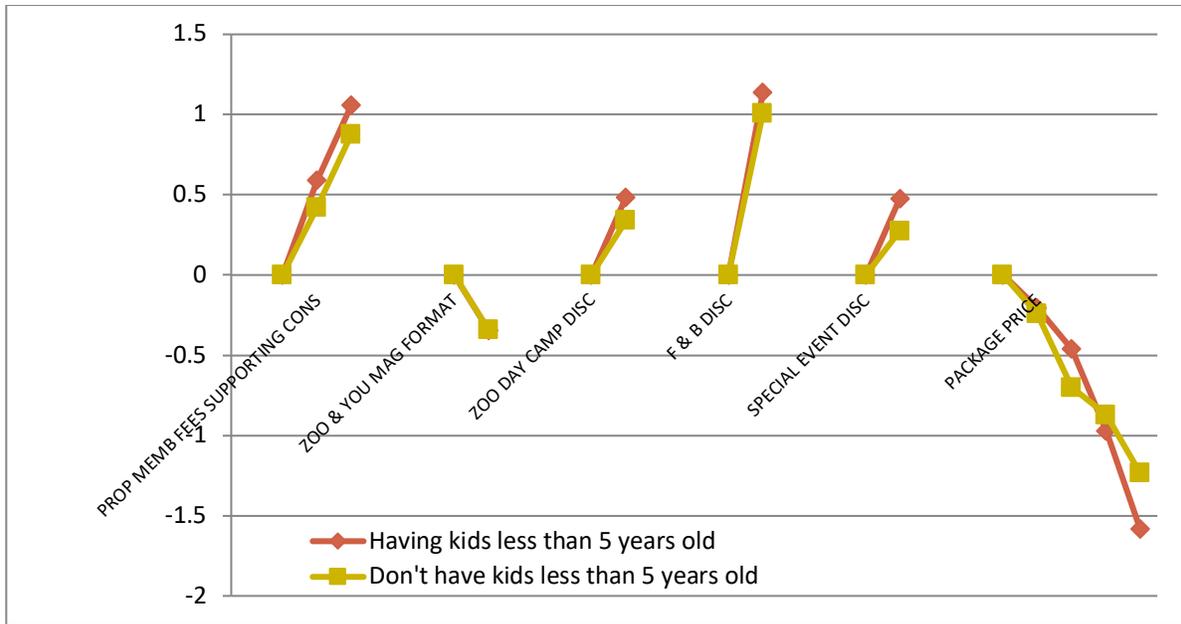


Figure 3.9. Conjoint Utilities for Zoo Visitors by Whether or not the Household Had a Child Younger than 5 Years Old.

The relative importance weights for visitors who had children younger than 5 years old and those who did not, were similar with only slight differences (Figure 3.10). While the differences were minor, for respondents who had children younger than five years old, the magazine “Zoo & You” format was the least important factor, whereas for those who did not have younger children, the discount on special events was the least important.

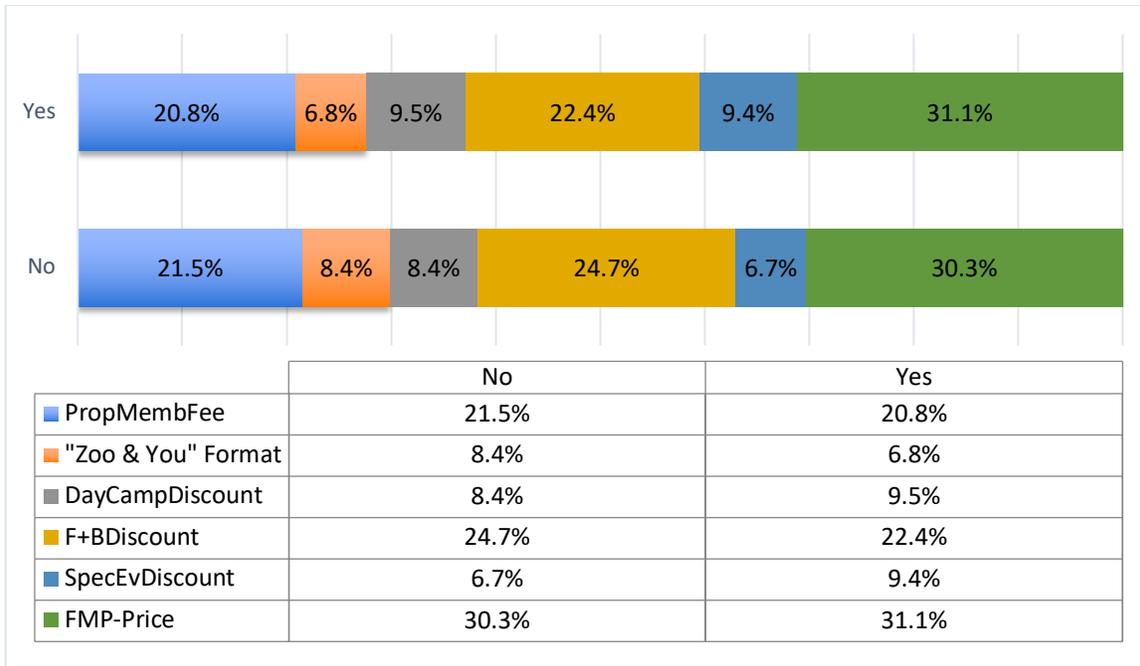


Figure 3.10. Relative Importance of Attributes for Visitor whether or not Having Children Younger than 5 Years Old.

### 3.6 Discussion and Conclusions

The current study utilized conjoint analysis to better understand factors influencing membership benefit choice in an urban zoo setting. The study also examined how preferences for membership benefit options varied among visitors grouped by key market segmentation variables, such as membership status, level of place attachment, and family composition.

Taken as a whole, the conjoint results produced some interesting information about zoo membership package decision making. A finding consistent across each analysis conducted is the most important factor by far was the price of the family membership package. This finding lends support for the previous work by Noone and Mount (2007) that actual price paid for a given service had a direct and negative effect on customers' future purchase intentions. Armstrong and Slater (2011) found that one of the barriers of purchasing a membership was poor value for money. Interestingly, while respondents placed price as the most important factor, the second level of the package price factor (\$85) was not significant in any of the analyses. This finding suggests that people are not sensitive to a small increase in the current family membership price, from \$80 to \$85. This small price change should not decrease the number of zoo members, and thus should result in increased membership revenue.

Other than package price, the discount on food and beverage and the proportion of membership fees devoted to animal conservation emerged as the next most important set of factors. The remaining study factors – discount on zoo day camps for kids, discount on special events, and the “Zoo & You” magazine format – were consistently the least important factors impacting respondents’ preferences. This set of findings suggests that visitors prefer to get a discount on the food and beverage items they purchase at the zoo and that they value the opportunity to have their zoo membership contribute to animal conservation programs. This later finding is consistent with Camarero and Garrido (2011) who found that museum members valued the opportunity to support the museum’s values and overall mission. They also proposed a combination of material and non-material benefits should be made available to members. Thus, promoting that part of the membership fees would be donated for animal conservation would have a strong positive influence on respondents’ intentions to purchase or renew their zoo membership.

No major differences were observed when comparing member and nonmember preferences, though compared to nonmembers, zoo members appeared to place slightly more weight on the family membership package price; and slightly less weight on the food and beverage discount. Although these differences were minor, they may reflect differences in how zoo members and nonmembers view the costs involved in visiting the zoo.

Two additional subgroup analyses were conducted – one based on place attachment and the other on family composition, specifically the presence of children under the age of five in the household. It was expected that respondents scoring high on place attachment would be generally more supportive of the zoo and thus less sensitive to variations in the specific options included in the zoo’s membership package. And the pattern of results appeared to confirm this expectation – those in the high place attachment group displayed lower factor coefficient values and as a result, less spread in the pattern of factor importance weights. This finding lends support to earlier place attachment research (Williams, et al., 1995; Kyle, et al., 2004) that indicated that those with higher levels of place attachment to a site or setting tend to be less sensitive to adverse conditions at those settings. In the present study, those who were highly attached to the zoo were least sensitive to the price or specific benefit levels included in the family membership package. No other notable differences were observed among the three place attachment subgroups.

The final subgroup analysis examined the impact on zoo membership preferences of having children less than five years old in the household. No major differences across the two subgroups

emerged; suggesting that the two groups valued the study factors in a similar manner.

### **3.7 Future Research and Limitations**

Although the study reported here provides important insight for zoo managers when developing membership benefit packages, there is still much to be learned regarding visitors' membership package preferences. Given the importance of the factor summarizing the proportion of membership fees used for animal conservation, future research should investigate the influence of other types of non-material benefits associated with the membership package. In particular, future work may include social, personal, or emotional aspects into the membership benefit package, such as holding tickets to the upcoming popular ticketed exhibitions for members, early morning viewing hours or afterhours members nights. For example, Whitney Museum of American Art, New York City, provided "Curate Your Own" as part of the membership experiences that members can customize their event and email preferences by opting-in one of five thematic series-Social, Insider, Learning, Family, or Philanthropy (Rega, 2011). In general, it would be helpful to gain insight into the factors that might convert those that are generally supportive to become more committed to the zoo. Additionally, the present study did not consider other types of membership packages, including Gold, Individual, and Senior. While family membership is the most popular in the present study, other types of zoo membership are also worth investigating in future research.

As with many studies, the current study must be considered with regard to the generalizability of the findings. Future research should utilize different sampling strategies and draw samples from different geographical locations to test the generalizability of the present study's finding. Future efforts should also explore the influence of geographical locations, for example, metropolitan area vs. rural area, on the relative importance of factors when purchasing or renewing a zoo membership package. Also in the present study, of the respondents that were members of the zoo, the majority were members for only 1 to 3 years' (70%), future studies should attempt to include those that have been zoo members for a longer period of time.

Finally, although the conjoint technique is useful and the results tend to be robust, future work should be conducted using alternative research approaches. For instance, qualitative techniques should be considered as an approach to examine peoples' thoughts and feelings about acquiring a zoo membership and different membership benefit options. A broader related issue

involves peoples' attitudes toward zoos in general. The present study focused on people that were visiting the zoo. However, it is likely that attitudes toward zoos vary among the general public; and including these less supportive perspectives would provide a more complete picture of the challenge ahead for zoos in general and zoo membership programs in particular.

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## **CHAPTER 4. AN EXAMINATION OF ATTITUDES TOWARD A DONATION PROGRAM IN AN URBAN ZOO SETTING**

### **4.1 Chapter Abstract**

Donation programs have become an essential element for the development and operation of zoos and other nonprofit organizations. Yet, despite its importance and the increased research interest in this area, our understanding of individuals' attitudes toward donation programs is still limited. Therefore, to help zoo managers develop successful donation programs, the present study examined attitudes toward a donation program in an urban zoo setting. The study utilized a two-dimensional/bivariate framework that builds on traditional bipolar attitude measurement approaches to provide an alternative, richer view of human attitudes. The study results indicated most respondents held positive attitudes toward the FriendZ program. As a result, zoo members and nonmembers did not significantly differ in their attitudes toward the zoo donation program. Some differences were identified between attitudinal category groups, specifically, those that held positive attitudes toward the FriendZ program, were more likely to join the program and be more aware of tax-related benefits of joining compared to those that held negative or ambivalent attitudes. These results hold implications for zoo administrators and future efforts to study zoo-related attitudes.

### **4.2 Introduction**

Since the first American zoological parks opened in Cincinnati and Philadelphia in the 1870s (Jamieson, 1985), zoos have become one of the most popular tourist attractions for enjoyment and entertainment. Zoological parks “contain a collection of labeled animals to be protected and studied while incidentally providing enlightenment and enjoyment for the public” (Alexander and Alexander, 2007, p.140). As habitat loss and environmental degradation continue, zoos play a vital role in providing people an opportunity to see and experience wildlife and their habitats worldwide. According to Connect, published by American Association of Zoos and Aquariums (2014), about 180 million annual visitors pass through the gates of zoos and aquariums in the U.S. Despite the important role that zoos play in entertaining and educating the public, zoos have been remarkably under-researched (Mason, 2000). Through tangible objects exhibited and

interactive programs provided, modern zoos serve four primary purposes, entertainment, education, conservation, and scientific research.

Zoos are typically non-profit organizations (NPOs) that “produce revenue, yet also have to supplement this income with donor gifts” (Brady, Noble, Utter, & Smith, 2002, p. 920). Zoos rely on nominal entrance fees, membership dues, and donations as sources of income to balance their operational costs, which include professional salaries, animal care, and costs of special exhibitions (Carr & Cohen, 2011; Davey, 2007; Hosey, 2008; Paswan & Troy, 2004; Sargeant, 2008). In most cases, the largest source of financial support for zoos comes from private foundations and donors (Kleiman, Thompson, & Baer, 2010). Donors can be seen as customers in the for-profit sector where similar patterns of value and behavior are exhibited (Sargeant, 2008). Donations to zoos provide significant support for a variety of activities, ranging from building exhibits and improving habitats, to assisting with animal care and enhancing program offerings. According to Giving USA Foundation (2015), while Americans donated an estimated \$358.38 billion to charity in 2014, only 3% of that total went to the environmental/animals category. The challenges facing zoo managers are to attract new donors and to get existing donors to increase their level of support.

Interestingly, despite the importance of attracting new donors and maintaining current donors, very little has been done to explore and understand donation behavior in the context of zoo settings. Prior research exploring zoo-related issues has focused on studying zoo visitors, zoo animals, and the environment. For example, researchers have studied zoo visitors’ motives (Fraser & Sickler, 2009; Klenosky & Saunders, 2007; Morgan & Hodgkinson, 1999; Packer & Ballantyne, 2002; Turley, 2001), visitors’ overall experience and satisfaction (Lee, 2015; Ryan & Saward, 2004; Sickler & Fraser, 2009; Therkelsen & Lottrup, 2015; Tomas, Scott, & Crompton, 2002), visitors’ behavior (Davey, 2006; Davey, 2007a; Ridgway, Livingston & Smith, 2005), visitors’ knowledge and attitudes toward animals and the environment (Ballantyne, Packer, Hughes, & Dierking, 2007; Clayton, Fraser, & Saunders, 2009; Clayton, Luebke, Saunders, Matiasek, & Grajal, 2014; Luebke, Clayton, Kelly, & Grajal, 2015; Luebke & Matiasek, 2013), and visitors’ perceptions of the physical design of zoo exhibits (Fabregas, Guillen-Salazar, & Garces-Narro, 2012; Kutska, 2009; Ross, Melber, Gillespie, & Lukas, 2012; Yilmaz, Mumcu, & Ozbilen, 2010). A few empirical studies have also explored zoo research programs (Lawson, Ogden, & Snyder, 2008), volunteer activities (Fraser, Clayton, Sickler, & Taylor, 2009), and educational camps and entertainment elements (Bexell, Jarrett, & Ping, 2013).

Only a few studies have examined perceptions and attitudes in the context of zoo settings. For instance, two studies examined the influence of the physical setting/environment (e.g., naturalism) on zoo visitors' perceptions and attitudes towards animals (Behn, 2013; Yilmaz et al., 2010). Both studies found that more natural enclosures are associated with positive attitudes among visitors. Davey (2007b) studied perceptions of zoos in China and found an overall favorable attitude toward zoos and captive animals. Luebke and colleagues (2015) examined zoo visitors' attitudes and perceptions of climate change and found most respondents were highly concerned about global climate change, but perceived various obstacles to engaging in climate change mitigation behaviors. While these efforts have been helpful, little has been done to explore and understand individuals' attitudes toward the notion of supporting zoos through monetary donations.

Most researchers view attitudes as evaluative knowledge associated with an object, person, place or thing; that often lead to behavioral intentions and actual behaviors (Ajzen, 2001). Webb and colleagues (Webb, Green, & Brashear, 2000) stressed that differentiating donors from nondonors based on attitudes is likely to be a more effective and efficient segmentation strategy than just attempting to differentiate based solely on demographic and socioeconomic factors. Attitudes are assumed to underlie and impact individual intentions and behavior. In context of donation behavior in a zoo setting, individuals that have positive attitudes toward a zoo donation program would be expected to be more likely to donate to the zoo, while those that have negative attitudes would be less likely to donate.

However, while it is relatively straightforward to understand and anticipate behavior of individuals with positive or negative attitudes, anticipating the behavior of those with neutral attitudes may be more challenging (Klenosky, Perry-Hill, Mullendore, & Prokopy, 2015). Recent attitude research suggests that neutral attitudes can be generated in two different ways: either because a person has no feelings/evaluations of the attitude object or behavior in question or the person has simultaneous or conflicting positive and negative feelings or evaluations that effectively cancel out (Cacioppo, Gardner, & Berntson, 1997; Yoo, 2010). Individuals holding these two types of neutral attitudes have been labeled indifferent and ambivalent respectively. This distinction between the indifferent and ambivalent is usually overlooked and the two groups are treated as one (Klenosky et al., 2015; Yoo, 2010). However, the two distinct types of neutrality

and their consequences may affect decision-making processes and individual behavior (e.g., to donate or not donate) quite differently (Cacioppo et al., 1997; Klenosky et al., 2015; Yoo, 2010).

Developing an advanced understanding of individuals' attitudes toward supporting zoos through donations could hold substantial implications for both researchers and zoo professionals. Specifically, distinguishing ambivalence from indifference is important conceptually and practically. Attitudinal ambivalence is emerging as an important area of research for understanding the relations between evaluative judgments and behavior (Malhotra, 2005), and has not yet been applied to study zoos. In addition, understanding the range of attitudes individuals hold toward donating to zoos could help policymakers and practitioners develop marketing strategies to attract and retain donors (Plessis & Petzer, 2011) and could increase the level of giving obtained.

The remainder of this chapter is organized as follows. The next section provides background on attitude research approaches. The following section presents the study context and objectives, methods, and the results of an empirical study conducted to examine individuals' attitudes toward a zoo donation program. The final section summarizes study conclusions and implications for future research and practice.

### **4.3 Conceptual Framework**

Attitude refers to one's general evaluation of something that could be a person, a group of people, places, objects, or something abstract (Fazio, 2007). It is well accepted that attitudes are powerful determinants of behavior by social researchers. Allport (1935) stated that "the concept of attitude is probably the most distinctive and indispensable concept" in contemporary social psychology (p. 798). Even though attitudes can be difficult to measure because they are a hypothetical construct that cannot be observed directly (Gawronski, 2007), scientific research concerning attitudes has been conducted as early as in the 1920s (e.g., Thurstone, 1928). Consequently, substantial progress has been made in the context of attitude measurement.

#### **4.3.1 Bipolar Scale Approach**

The traditional conceptualization of attitudes assumes that an attitudinal evaluation is unidimensional, ranging from extremely negative to extremely positive on a bipolar continuum,

with a neutral point in the middle (Jonas, Bromer, & Diehl, 2000). An individual evaluates an object as negative or positive or neutral, but not as both positive and negative simultaneously. This approach of attitude measurement was originated by Thurstone (1928), who employed psychophysical phenomena such as brightness (bright-dim) and temperature (hot-cold) as a model for the bipolar conceptualization and measurement of attitudes (as cited in Cacioppo et al., 1997). This bipolar conceptualization of attitudes assumes the positive and negative evaluation processes underlying attitudes are reciprocally controlled and interchangeable (Cacioppo et al., 1997). While an individual’s positive beliefs about an attitude object increase, his negative beliefs about the object should decrease, moving from left (point B) to right (point A) on the continuum as shown in Figure 4.1.

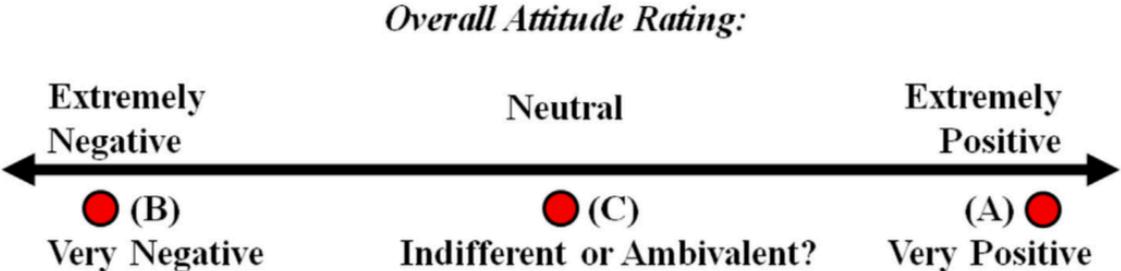


Figure 4.1. Univariate Bipolar Scale Approach (Klenosky et al., 2015).

Recently, there have been challenges to this one-dimensional view of attitudes, and researchers have pointed out the flaw of this measurement approach (Armitage & Conner, 2000; Yoo, 2010). In Figure 1, it is straightforward with Point A and Point B at the two end points of the scale. When people select point (A), they would be classified as holding a positive attitude. Likewise, those who pick point (B) would be classified as holding a negative attitude. However, the key issue occurs in the middle of the scale (at point C). When point (C) is selected, the neutral score of zero may represent two different groups. One group consists of subjects who have no feelings or evaluations at all toward the attitude object in question; while the other group consists of subjects who have both positive and negative evaluation toward the attitude object (Cacioppo et al., 1997). In short, in the traditional unidimensional conceptualization of attitudes does not allow one to determine whether a neutral rating refers to indifference or ambivalence (Jonas et al.,

2000; Walden et al., 2005). More importantly, by ignoring these differences, the traditional conceptualization also ignores possible behavior variations between these two groups.

### **4.3.2 Bivariate Approach**

Given this shortcoming of the bipolar approach, recent work has advanced the evaluative space model, a bivariate conceptualization of attitudes that allows for negative and positive attitudes to exist independently (Armitage & Conner, 2000; Cacioppo et al., 1997; Klenosky et al., 2015; Walden et al., 2005). This model expanded attitude theory and measurement to accommodate the coexistence of positive and negative evaluative processes underlying attitudes. Rather than a single linear continuum, ranging from negativity to positivity, positivity and negativity are envisioned as two separate orthogonal concepts, as depicted in Figure 4.2.

In this two-dimensional representation, one measurement is employed to assess the degree of positivity toward the attitude object and another is employed to assess the degree of negativity, accommodating all possible combinations of positive and negative evaluative activation (Cacioppo et al., 1997). In Figure 2, point A represents individuals that may feel positive and not at all negative, corresponding to a highly positive attitude. Conversely, point B represents those who score high on negativity and low on positivity corresponding to a highly negative attitude. Point C refers to individuals who experience low levels of both positive and negative evaluations, and can be categorized as indifferent; and point D refers to those who have a mixed or conflicting evaluation for the object involved, and can be classified as ambivalent. The two-dimensional or bivariate model makes significant contributions because it recognizes indifference and ambivalence as two distinct attitudinal states (Walden et al., 2005). Thus, it provides a rationale and approach to differentiate between individuals who are indifferent or ambivalent in ways that bipolar models do not (Klenosky et al., 2015).



approximately one million people. RPZ consists of four zones that are organized by the types of habitats and animals housed, including the Adaptation Zone, the South America Zone, the Asian Zone, and the African Animals Zone. A 7-acre expansion of Expedition Tanzania was opened to the public in 2012, in which six African elephants resided. On August 20<sup>th</sup>, 2014, a female calf (Nandi) was born, the first ever elephant born in the State of Arizona. A new attendance record was set at the end the year, with 618,482 visitors walking through the gates. Besides the membership program provided, RPZ also has a “Zoo FriendZ” program available. Through an annual gift of \$300 or more, Zoo FriendZ helps support, advocate for, and enhance the value of RPZ to the community.

It is reasonable to expect zoo members to differ from nonmembers in their attitudes joining the Zoo FriendZ program. Zoo members might be the core supporters who attend and promote zoo programs and events and engage in volunteer opportunities (Camarero & Garrido, 2011; Fraser et al., 2009; Olsson, 2010; Paswan & Troy, 2004). Some members or nonmembers might be ambivalent toward donating to RPZ if they hold both positive and negative attitudes toward Zoo FriendZ program; while others might be indifferent toward giving to RPZ if they have no feelings/evaluations at all.

The overall goal of this study is thus to examine attitudes toward RPZ Zoo FriendZ program held by zoo members and nonmembers. The primary objective is to compare zoo members and nonmembers regarding their demographic characteristics, zoo visitation behaviors, awareness of the Zoo FriendZ program, and beliefs and attitudes toward Zoo FriendZ program. A secondary objective is to explore the variability of both member and nonmember attitudes by examining potential differences across subgroups that may hold positive versus negative attitudes toward “FriendZ” program, as well as those that are indifferent versus ambivalent. In an attempt to attain the study goals, we developed three research questions:

1. What are the attitudes held by people toward supporting the RPZ by joining the Zoo FriendZ program? Do zoo members differ from nonmembers regarding their overall attitudes toward RPZ Zoo FriendZ program?
2. Do zoo members differ from nonmembers regarding their demographic characteristics, zoo visitation behaviors, awareness of the Zoo FriendZ program, and beliefs and attitudes toward the Zoo FriendZ program?

3. Do zoo members differ from nonmembers regarding the variability in attitudinal positions? That is, are there differences in demographic characteristics, behaviors, and Zoo FriendZ awareness and beliefs across subgroups that may hold positive versus negative attitudes toward Zoo FriendZ program, as well as those that hold indifferent versus ambivalent attitudes?

#### **4.5 Methods**

The data used to address our study objectives were generated using an online survey administered to both zoo members and nonmembers. The link to the online survey using the Qualtrics survey system was sent by RPZ staff to the subscribers of its email list. The email list includes about 50,000 active email addresses. Out of that number about 20,000 are estimated to be members. Members' email addresses were collected on membership forms and nonmembers' email addresses were collected through event sign-ups and newsletter sign-ups. The link to the online survey was sent out to all email list subscribers on August 11th, 2017. The survey was open until September 30th, 2017. During the survey open window, 307 responses were recorded, yielding a 0.6% overall response rate (0.9% for members and 0.4% for nonmembers).

The first section of the survey gathered data on zoo membership related questions, including membership status and types. The next section assessed attitudes toward zoo FriendZ program. This section began with a general description of zoo FriendZ program (Figure 4.3). Respondents were then asked to rate their familiarity with FriendZ program (using a four-point scale ranging from "not at all familiar" to "very familiar"). Drawing from prior approaches to assess attitudinal ambivalence (Armitage & Conner, 2000; Klenosky et al., 2015), respondents were then asked to provide two ratings: one to assess degree of positivity toward FriendZ program and one to assess degree of negativity. The positivity rating stated "Considering only the positive things you associated with the Zoo FriendZ program (and ignoring any negative things), how would you rate your attitudes towards the Zoo FriendZ program?" (using a five-point scale ranging from "not at all positive" to "extremely positive"). Similarly the negativity rating was "Now considering only the negative things you associated with the Zoo FriendZ program (and ignoring any positive things), how would you rate your attitude toward Zoo FriendZ program? (with a five-point scale ranging from "not at all positive" to "extremely negative"). The next section of the

survey obtained data on zoo visitation and place attachment scale (an eight-item scale, adapted from Williams and Vaske, 2003, consisting of two subscales, place identity and place dependence). The final section included questions on demographic characteristics.

**Section B. Questions about the Reid Park Zoo FriendZ program.**



Zoo FriendZ is a group of people who have committed to conservation, outreach, philanthropy, and the continued growth of the Zoo. Through an annual gift of \$500 or more, Zoo FriendZ members help support Zoo education programs, exhibit enhancements, conservation efforts, and capital projects. Reid Park Zoological Society is a 501(c)(3) nonprofit and donations are tax deductible. In appreciation of their support, the entire household receives free, unlimited access to the Zoo during regular business hours, invitations to special behind-the-scenes tours and events.

B3. Before reading the above description, how familiar were you with the Zoo FriendZ program?

- Not at all familiar
- Somewhat familiar
- Familiar
- Very familiar

B5. Considering only the positive things you associated with the Zoo FriendZ program (and ignoring any negative things), how would you rate your attitude towards the Zoo FriendZ program on the following scale?

- Not at all positive
- Slightly positive
- Moderately positive
- Very positive
- Extremely positive

B6. Use the space below to list all the positive things that you associated with becoming a member of the Zoo FriendZ program.

B7. Considering only the negative things you associated with the Zoo FriendZ program (and ignoring any positive things), how would you rate your attitude towards the Zoo FriendZ program on the following scale?

- Not at all negative
- Slightly negative
- Moderately negative
- Very negative
- Extremely negative

B8. Use the space below to list all the negative things that you associated with becoming a member of the Zoo FriendZ program.

Figure 4.3 Approach used to Assess Familiarity with and Attitudes toward FriendZ Program.

The data were compiled and analyzed using STATA 11.2. Differences between membership status subgroups were examined using chi-square analysis and independent sample *t*-tests; and differences across attitudes category subgroups were examined using chi-square analysis and ANOVA. Additional qualitative analyses of open-end data were performed using content analysis to interpret meaning from the content of text.

**4.6 Results**

**4.6.1 Demographic Profile**

An overall profile of survey participants is presented in Table 4.1. Of the 307 participants, most were female (85.4%), between the ages of 30 and 45 (43.2%), and Caucasian (64.8%). Most participants completed a Bachelor degree (34.2%) or a Master degree (24.1%). About 48.8% of

the participants have lived in Tucson for more than 20 years and 16.5% for more than 11 years. Most of the participants (55.4%) have children 5 years old or younger in their household, 43.6% and 34.9% of the participants have children between 6 to 11 years old and between 12 to 17 years old respectively.

Table 4.1 Profile of Survey Participants (N=307).

<b>Variable</b>	<b>Category</b>	<b>Percentage</b>
Gender	Male	14.6
	Female	85.4
Age	Under 30	10.5
	30-45	43.2
	46-60	22.3
	Over 60	23.3
Ethnicity/Race	Caucasian	64.8
	African-American	1.4
	Asian/Pacific Islander	10.1
	Hispanic/Latino	10.5
	Mixed ethnic heritage (please specify):	5.6
	Other (please specify):	7.7
Highest level of education	Less than high school	0.0
	High school graduate or GED	11.9
	Associates or trade-school degree	18.3
	Bachelors degree (4-year)	34.2
	Masters degree	24.1
	Professional or doctoral degree	11.5
Years lived in Tucson	Not applicable	3.4
	Less than 2 years	6.1
	Between 2-5 years	14.8
	Between 6-10 years	10.4
	Between 11-20 years	16.5
	More than 20 years	48.8
Children in the household	No children	26.1
	5 years old or younger	55.4
	Between 6-11 years old	43.6
	Between 12-17 years old	34.9

About fifty-eight percent of the participants were current zoo members and 41.7% were nonmembers (Table 4.2). Among the zoo members, 57.2% had the Family membership, 17.0% had the Senior membership, 12.6% had the Gold membership, and 11.3% had the Individual membership. Most of them have been members for 1-2 years (22.9%) or 2-3 years (22.0%). When asked about the likelihood of renewing their membership, about 78.1% of participants agreed that they are somewhat likely or very likely to renew, with a mean of 4.16 (coded 1 as very unlikely to 5 as very likely) and standard deviation of 1.41.

Table 4.2. Membership Status.

<b>Variable</b>	<b>Category</b>	<b>Percentage</b>
Membership status	Members	58.3
	Nonmember	41.7
Membership type	Family	57.2
	Senior	17.0
	Gold	12.6
	Individual	11.3
	Not sure	1.9
Years of member	Less than 1 year	18.6
	1-2 years	22.9
	3-4 years	22.0
	5-6 years	17.0
	7-8 years	5.1
	More than 8 years	14.4

#### **4.6.2 Zoo Experience and Behavior**

The most popular activities visitors enjoyed and participated while visiting RPZ were the giraffe feeding (65.0%), followed by the Conservation Learning Center (44.5%), wildlife carousel (41.7%) and the gift shop/café (40.3%) (Table 4.3).

Table 4.3. Activity Participation while at RPZ (Percent Participating).

	Giraffe feeding	Conservation Learning Center	Camel rides	Train rides	Wildlife carousel	Purchasing at the gift shop or café
Participated	65.0	44.5	17.3	23.3	41.7	40.3
Not participated	35.0	55.5	82.7	76.7	58.3	59.7

Analysis of zoo visitation behavior indicated that 68.3% of the participants visited within the last 6 months and 17.7% visited the zoo more than 6 months ago (Table 4.4). In regard to the pattern of visiting RPZ, 51.8% of the participants visit the zoo 3 or more times a year, 29.1% of them visit the zoo about 1 or 2 times a year.

Table 4.4. Zoo Visitation Behavior.

Variable	Category	Percentage
Last time visited Reid Park Zoo	Never	0.7
	Within the last 6 months	68.3
	Between 6 months and 1 year ago	17.7
	Between 1-2 years ago	9.7
	Between 2-5 years ago	1.3
	More than 5 years ago	2.3
Pattern of visiting Reid Park Zoo	I usually visit the zoo 3 or more times a year	51.8
	I usually visit the zoo about 1 or 2 times a year	29.1
	I usually visit the zoo every couple of years	7.7
	I have only visited the zoo once or twice in the last 5 years	9.0
	I have not visited the zoo in the last 5 years	2.3

The likelihood of taking different actions in support of the RPZ was measured in a 5-point Likert scale, with 1 being “Very unlikely” and 5 being “Very likely” (Table 4.5). “Post to Facebook or other social media” had the highest mean of 3.24 and standard deviation of 1.45. “Write a letter” and “Attend a meeting” had a mean of 2.76 and standard deviation of 1.25 and a mean of 2.76 and standard deviation of 1.26 respectively.

Table 4.5. Likelihood of Taking Actions in Support of the RPZ.

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>
Post to Facebook or other social media	3.24	1.45
Write a letter	2.76	1.25
Attend a meeting	2.76	1.26

5-point Likert scale with 1 being “Very unlikely” and 5 being “Very likely”

### 4.6.3 Knowledge About the RPZ FriendZ Program

About half of the participants (49.0%) knew that RPZ Society is 501c3 nonprofit organization before reading the description provided on the survey (Table 4.6). Similarly, about a bit more than half of the participants (53.1%) knew that a donation to the RPZ Society would be tax deductible. When asked about how familiar they were with FriendZ program, 58% of the participants were not at all familiar, followed by 30.5% somewhat familiar, 8.2% familiar, and only 3.3% very familiar, with a mean of 1.57 (coded 1 as not at all to 5 as very familiar) and standard deviation of 0.78. In addition, about 40.0% of the participants were undecided, when asked about the likelihood of joining the FriendZ program, and about 43.3% were very unlikely or somewhat unlikely to become a FriendZ member. Only 21.1% were very likely or somewhat likely to join the program and 1.6% were already a member of FriendZ.

Table 4.6. Knowledge About the RPZ FriendZ Program.

<b>Variable</b>	<b>Category</b>	<b>Percentage</b>
Knew that PRZ society is 501c3 nonprofit organization	Yes	49.0
	No	51.0
Knew that donation to the RPZ is tax deductible	Yes	53.1
	No	46.9
Familiarity with FriendZ program	Not at all	58.0
	Somewhat familiar	30.5
	Familiar	8.2
	Very Familiar	3.3
Likelihood to become a FriendZ member	Very unlikely	25.9
	Somewhat unlikely	17.4
	Undecided	40.0
	Somewhat likely	12.1
	Very likely	9.0
	I am a member	1.6

#### 4.6.4 Place Attachment Measure

The eight-item place attachment scale, adapted from Williams and Roggenbuck (1989), consisted of subscales for place identity and place dependence. The Cronbach's alphas of .87 for place identity and .87 for place dependence (Table 4.) demonstrated adequate internal consistency. Further, Pearson correlation analysis showed a significant correlation between place identity and place dependence ( $r=.7050, p<.001$ ). These findings provide further evidence of construct validity for the two-dimensional conceptualization of place attachment (Kyle, Graefe, & Manning, 2004; Williams & Roggenbuck, 1989). In the subsequent analyses, the scores of two subscales were combined and averaged as one representing overall place attachment score.

Table 4.7. Place Attachment Scale (adapted from William and Vaske, 2003).

Items	$\alpha$	M	SD
<b>Place Identity</b>	.87		
RPZ means a lot to me.		3.89	.87
I am very attached to RPZ.		3.63	.96
I identify strongly with RPZ.		3.43	.91
I feel no commitment to RPZ. *		3.69	1.06
<b>Place Dependence</b>	.87		
RPZ is the best place for what I like to do.		3.60	.86
I get more satisfaction out of visiting RPZ than any other.		3.29	.87
Doing what I do at RPZ is more important to me than doing it in any other place.		3.15	.88
I wouldn't substitute any other area for doing the types of things I do at RPZ.		3.23	.93

\* Reverse coded

#### 4.6.5 Member and Nonmember Differences

Differences between the member and nonmember subgroups are summarized in Table 4.8. As shown in the table, while the two groups did not differ in terms of gender and education levels, those in the member group tended to be older, with fewer under 30 and more over 60 compared to the nonmember group. Additionally, compared to the nonmember group, there were more Hispanic/Latino respondents and fewer Asian and Native American respondents in the member group. The two groups also differed in terms of their zoo visitation pattern, last time visit, and attachment levels. Specifically, those in the member group were visiting the zoo more often and

most visits were within the last 6 months, and they are more likely to be more highly attached to the zoo. In contrast, those in the nonmember group were more likely to visit the zoo less and have a lower level of attachment to the zoo.

Table 4.8. Demographic Characteristics, Visitation Pattern, and Attachment Levels by Member Status.

Variable	Members (N=179)	Nonmembers (N=128)	Significance (Chi square)
<b>Respondent gender</b>			$\chi^2(1, 293) = 0.198$
Male	15.4%	13.6%	
<b>Respondent age</b>			$\chi^2(3, 295) = 20.408^{**}$
Under 30	5.1%	18.3%	
30-45	41.7%	45.8%	
46-60	22.9%	21.7%	
Over 60	29.1%	14.2%	
<b>Respondent ethnicity</b>			$\chi^2(5, 286) = 25.912^{**}$
Caucasian	69.6%	57.4%	
African-American	0.0%	3.5%	
Asian/Pacific Islander	5.3%	17.4%	
Hispanic/Latino	14.0%	5.2%	
Native American	5.3%	11.3%	
Mixed ethnic heritage	5.9%	5.2%	
<b>Education</b>			$\chi^2(4, 294) = 5.113$
High school graduate	12.0%	10.9%	
Associates degree	16.6%	21.0%	
Bachelors degree	31.4%	38.7%	
Masters degree	25.7%	21.9%	
Doctoral degree	14.3%	7.6%	
<b>Visitation pattern</b>			$\chi^2(4, 298) = 63.505^{**}$
Visit the zoo 3+ times a year	70.1%	24.8%	
Visit the zoo about 1-2 times a yr	19.8%	43.0%	
Visit the zoo every other year	5.1%	11.6%	
Visited the zoo once or twice in the last 5 years	5.1%	14.9%	
Not visited the zoo in last 5 years	0%	5.8%	
<b>Last visit</b>			$\chi^2(5, 299) = 69.884^{**}$
Never	0%	1.7%	
Within the last 6 months	86.0%	42.2%	

Table 4.8. Continued.

Between 6 months to 1 year ago	10.7%	28.1%
Between 1-2 years ago	3.4%	19.0%
Between 2-5 years ago	0%	3.3%
More than 5 years ago	0%	5.8%
<b>Attachment levels</b>		$\chi^2(2, 289) = 9.249^*$
Low Attachment	24.0%	40.7%
Medium Attachment	33.9%	28.0%
High Attachment	42.0%	31.4%

\*p < 0.05, \*\*p < 0.01

#### 4.6.6 Attitudes toward FriendZ Program

Attitudes toward RPZ FriendZ program were assessed by examining the joint or bivariate distribution of positivity and negativity ratings for the member and nonmember subgroups. The distribution for member attitudes (Table 4.9) shows that the majority rated FriendZ program with high levels of positivity and low levels of negativity. For most members (90 or 53.9%) their attitude was “fully positive”, meaning their positivity rating ranged from 1 to 4 and their negativity rating was 0. The next largest group (44 or 26.3%) were those that had positivity rating with slightly lower negativity ratings, indicating they were “mostly positive, but had some ambivalence”. A small group of members (16 or 9.6%) could be classified as being “equally ambivalent” (meaning they had equal positivity and negativity ratings) and only two members as “indifferent” (meaning a 0 on both ratings). In addition, a small number of members were classified with attitudes that were either “mostly negative, with some ambivalence” (12 or 7.2%) or “fully negative” (3 or 1.8%).

The bivariate distribution for the nonmember group (Table 4.10) displayed similar variability in the pattern of their positivity and negativity ratings. As with the members, the largest groups of nonmembers were those that were “fully positive” (57 or 48.7%), and those that were “mostly positive, with some ambivalence” (27 or 23.1%). In contrast to the member group, a larger number of nonmembers were “equally ambivalent” (21 or 17.9%). Only one nonmember was “indifferent” (1 or 0.9%). Like those in the member group who held negative attitudes toward FriendZ program, a small number of nonmembers were classified with attitudes that were either “mostly negative, with some ambivalence” (10 or 8.5%) or “fully negative” (1 or 0.9%).

Table 4.9. Member Respondents' Attitude toward FriendZ Program (n=167).

		<i>Positivity Rating</i>					
		(N)	0	1	2	3	4
<i>Negativity Rating</i>	0		1.2% (2)	2.4% (4)	10.2% (17)	28.4% (48)	12.6% (21)
	1		0.6% (1)	4.2% (7)	7.2% (12)	10.8% (18)	5.4% (9)
	2		0.6% (1)	3.0% (5)	4.2% (7)	1.8% (3)	0.6% (1)
	3		--	1.8% (3)	1.8% (3)	1.2% (2)	0.6% (1)
	4		0.6% (1)	--	--	0.6% (1)	--

Note: Entries are the percentage (count) of nonmember respondents in each cell. Blue = Indifferent; Dark Red = Fully negative; Light Red = Mostly negative, some ambivalence, Yellow = Equally ambivalent; Light Green = Mostly positive, some ambivalence, Dark Green = Fully positive.

Table 4.10. Nonmember Respondents' Attitude toward FriendZ Program (n=117).

		<i>Positivity Rating</i>					
		(N)	0	1	2	3	4
<i>Negativity Rating</i>	0		0.9% (1)	3.4% (4)	7.7% (9)	22.2% (26)	15.4% (18)
	1		--	4.3% (5)	6.0% (7)	6.8% (8)	6.8% (8)
	2		--	2.6% (3)	12.0% (14)	2.6% (3)	0.9% (1)
	3		0.9% (1)	4.3% (5)	0.9% (1)	1.7% (2)	--
	4		--	--	0.9% (1)	--	--

Note: Entries are the percentage (count) of nonmember respondents in each cell. Blue = Indifferent; Dark Red = Fully negative; Light Red = Mostly negative, some ambivalence, Yellow = Equally ambivalent; Light Green = Mostly positive, some ambivalence, Dark Green = Fully positive.

The next step in the analysis was to create four attitude groups are created (Table 4.11) – those who were positive dominant (those who had either fully positive or mostly positive attitudes toward FriendZ program), negative dominant (those who were either fully negative or mostly negative), indifferent, and equally ambivalent. Table 4.11 summarizes the percent in each attitude group and for both members and nonmembers combined. As expected most of the respondents in the combined sample were in positive dominant group (218 or 76.8%), followed by ambivalent group (37 or 13.0%), negative dominant group (26 or 9.2%), and indifferent group (3 or 1.0%). Since there were only 3 respondents in the “Indifferent” group, the rest of analyses regarding attitudes toward FriendZ program excluded these 3 respondents. A chi-square analysis  $\chi^2(3, 281) = 4.347$  was conducted to test the independence of the member and nonmember subgroups across the three remaining attitude groups. The results indicated that zoo members and nonmembers did

not differ in terms of attitude group membership ( $Pr=0.114$ ). Given these findings and the small numbers involved, subsequent analyses focused on the combined sample of respondents.

Table 4.11. Attitude Categories toward FriendZ Program (n=284).

Attitude Categories	Members	Nonmembers	Combined
Positive Dominant	80.2% (134)	71.9% (84)	76.8% (218)
Ambivalent	9.6% (16)	17.9% (21)	13.0% (37)
Indifferent	1.2% (2)	0.9% (1)	1.0% (3)
Negative Dominant	9.0% (15)	9.4% (11)	9.2% (26)

Additional analyses were thus conducted to examine differences across the three attitude categories in terms of demographic characteristics, familiarity with the FriendZ program, experience visiting the zoo, level of place attachment, activity participation, and past visitation behavior. A comparison of the three groups is presented in Table 4.12. In terms of demographic characteristics, the groups did not differ in terms of gender, educational attainment, but did differ in terms of ethnicity. Specifically, compared to the other groups, fewer Caucasians were in the equally ambivalent group and more Asian and Mixed ethnic heritage respondents were in the equally ambivalent group. The likelihood of joining the FriendZ program was significantly higher for those in the positive dominant, compared to those in the negative dominant and equally ambivalent groups. A similar pattern was found for awareness of tax deductible of RPZ society; however, the familiarity with FriendZ program and awareness of 501(c)(3) nonprofit organization did not differ among these attitude groups. While the mean of writing a letter to support the zoo was significantly higher for those in the positive dominant, compared to the other two groups, the mean scores of attending a meeting and posting on social media did not differ among the attitude groups. In terms of place attachment levels, the mean of place identity was higher in the positive dominant group, but the differences in means of place dependence and place attachment for negative dominant and equally ambivalent group failed to achieve statistical significance. As for zoo activities, a camel ride was higher for those in the negative dominant group and purchasing at the zoo giftshop or café was higher for those in the positive dominant; and the relationships were statistically significant. Finally, zoo visitation pattern did not differ across the three attitude groups.

Table 4.12. Demographic Characteristics, FriendZ Program Familiarity/Awareness, Place Attachment, Zoo Visitation Pattern and Activities by Attitude Category.

	Negative Dominant <sup>+</sup> (n=27)	Equally Ambivalent (n=37)	Positive Dominant <sup>+</sup> (n=218)	Significance
Respondent gender (% female)	92.0%	85.7%	85.1%	$\chi^2(2, 274) = .887$
Educational attainment <sup>a</sup> – Mean	4.0	4.2	4.0	F (2, 272) = 0.65
Caucasian	68.0%	40.0%	68.4%	$\chi^2(10, 269) = 25.484^{**}$
African-American	0%	8.6%	0.5%	
Asian/Pacific Islander	4.0%	20.0%	8.6%	
Hispanic/Latino	12.0%	11.4%	10.1%	
Mixed ethnic heritage	4.0%	11.4%	4.8%	
Familiarity w/FriendZ <sup>b</sup> – Mean	1.63	1.30	1.62	F (2, 279) = 2.84
Likelihood to join FriendZ <sup>c</sup> – Mean	2.07 <sub>a</sub>	2.27 <sub>a</sub>	2.67 <sub>b</sub>	F (2, 279) = 4.32*
Awareness of 501(c)(3) nonprofit organization <sup>d</sup>	37.0%	35.1%	50.9%	$\chi^2(2, 282) = 4.475$
Awareness of tax deductible <sup>d</sup>	40.7%	35.1%	56.0%	$\chi^2(2, 282) = 6.951^*$
Writing a letter—Mean <sup>c</sup>	2.26 <sub>a</sub>	2.43 <sub>a</sub>	2.91 <sub>b</sub>	F (2, 275) = 5.10**
Attend a meeting—Mean <sup>c</sup>	2.48	2.59	2.82	F (2, 272) = 1.21
Post to Facebook or other social media—Mean <sup>c</sup>	3.37	3.03	3.29	F (2, 271) = .61
Place Identity—Mean <sup>e</sup>	3.41 <sub>ab</sub>	3.39 <sub>a</sub>	3.76 <sub>b</sub>	F (2, 267) = 4.64*
Place Dependence—Mean <sup>e</sup>	3.17	3.19	3.35	F (2, 270) = 1.20
Place Attachment—Mean <sup>e</sup>	3.30	3.29	3.55	F (2, 265) = 3.03
Low Attachment	28.0%	43.2%	29.1%	$\chi^2(8, 268) = 12.149^*$
Medium Attachment	56.0%	24.3%	29.1%	
High Attachment	16.0%	32.4%	41.8%	
Giraffe feeding <sup>f</sup>	52.2%	61.8%	65.9%	$\chi^2(2, 262) = 1.777$
Purchase at giftshop/Cafe <sup>f</sup>	21.7%	29.4%	44.9%	$\chi^2(2, 262) = 6.695^*$

Table 4.12. Continued.

Visited the Zoo past year <sup>g</sup>	92.3%	81.1%	85.1%	$\chi^2 (2, 278) = 1.545$
Visited the Zoo 3 or more times a year <sup>g</sup>	53.9%	63.9%	44.7%	$\chi^2 (2, 277) = 4.963$

\* $p < 0.05$ , \*\* $p < 0.01$

<sup>+</sup> Negative dominant are the sum of the fully negative and mostly negative, some ambivalence respondents; positive dominant are the sum of the fully positive and mostly positive, some ambivalence respondents. Means with different subscripts are significantly different from each other (at  $p < .05$ ).

<sup>a</sup>1=Less than high school, 2=High School/GED, 3=2yr college degree, 4=4yr college degree, 5=Master degree, 6=Professional or doctoral degree

<sup>b</sup>1=Not at all familiar, 4=Very familiar.

<sup>c</sup>1=Very unlikely, 5=Very likely.

<sup>d</sup>Percent within attitude category that participants knew RPZ Society is a 501(c)(3) nonprofit organization.

<sup>e</sup>1=Strongly disagree, 5=Strongly agree.

<sup>f</sup>Percent engaging in selected activities while visiting the Zoo.

<sup>g</sup>Percent within attitude category that visited the Zoo during the past year.

#### 4.6.7 Open-ended Responses

Perceptions about Zoo FriendZ program were assessed in two open-ended questions (Figure 4.3). The questionnaire asked respondents to “list all of the positive things you associated with becoming a member of the Zoo FriendZ program” (positive prompt) in one box and “list all the negative things you associated with becoming a member of the Zoo FriendZ program” (negative prompt) in another box. There was no statistical significance between members and nonmembers who had responded to the positive prompt and negative prompt. Specifically, 48.0% of members responded to the positive prompt compared to 47.7% of nonmembers ( $\chi^2_{1,307} = .0045$ ,  $p = .946$ ); whereas 44.1% of members responded to the negative prompt compared to 37.5% of nonmembers ( $\chi^2_{1,307} = 1.3542$ ,  $p = .245$ ).

A more in-depth qualitative analysis of the open-ended questions revealed some differences between member and nonmember perceptions of Zoo FriendZ program (Table 4.13). While both groups frequently referenced the conservation, education, and unlimited access to the zoo benefits, members wrote more about the benefits of conservation and education in response to the positive prompt. Along these lines, many more members listed support for RPZ, special events, and tax deductible as positive things. In contrast, nonmembers’ comments focused more on the

unlimited access benefit.

In response to the negative prompt, members were far more likely to mention the amount of donation was expensive or the cost was too great compared to the benefits received. A couple of members and nonmember also noted that they needed more information on the Zoo FriendZ program.

Table 4.13. Example Member and Nonmember Responses to Open-ended Prompts about the Positive and Negative Aspects of Zoo FriendZ Program.

Prompt	Response
Positive:	
• Support RPZ	It can help and support the zoo’s development - member
• Conservation	Support conservation efforts - nonmember
• Education	Educational programs and enhanced exhibits - nonmember
• Tax-related	Knowing that my donations to Zoo FriendZ are in fact tax deductible would make me more likely to donate - member
• Special Events	Special tours, intimate involvement with zoo, passion - member
Negative:	
• Cost/Expensive	It is so expensive. It’s hard to think of giving \$500 at once to a group not knowing what exactly it goes, whether or not they are managing it well, etc - member
• More Information	I don’t know anything about zoo FriendZ program. I haven’t heard about it until taking this survey - member

The variability of responses to both positive and negative prompts between the three attitude groups (negative dominant, equally ambivalent, and positive dominant) were also examined. While statistical significance was found between the three attitude groups in response to the positive prompt, there was no significant difference between them in response to the negative prompt (Table 4.14). In general, the positive dominant were more likely to respond to both prompts than all other attitude categories.

Table 4.14. Number of All Respondents Who Responded to Open-ended Prompts about the Positive and Negative Aspects of FriendZ Program by Attitude Category.

Prompt	Negative Dominant <sup>+</sup> n=27	Equally Ambivalent n=37	Positive Dominant <sup>+</sup> n=218	Significance
Positive	5 (18.5%)	12 (32.4%)	127 (58.3%)	$\chi^2 (2, 282) = 21.098^{**}$
Negative	9 (33.3%)	13 (35.1%)	101 (46.3%)	$\chi^2 (2, 282) = 2.896$

\*p < 0.05, \*\*p < 0.01

<sup>+</sup> Negative dominant are the sum of the fully negative and mostly negative, some ambivalence respondents; positive dominant the sum of the fully positive and mostly positive, some ambivalence respondents.

In examining the differences in responses to both prompts, we find only a few qualitative differences between negative dominant, ambivalent, and positive dominant attitude groups (Table 4.15). Specifically, a number of positive dominant responses recognized the conservation and education benefits of the FriendZ program, whereas none of the negative dominant mentioned these benefits. Positive dominant participants were also far more likely to cite tax deductible, unlimited access and special events benefits provided by FriendZ program. The advantages of overall support to the zoo were recognized by those in the equally ambivalent and positive dominant groups, but by one member of the negative dominant group. Finally, all three attitude groups noted the cost was high to join the FriendZ program.

Table 4.15. Example Negative Dominant, Equally Ambivalent, and Positive Dominant Responses to Open-ended Prompts about the Positive and Negative Aspects of Zoo FriendZ Program.

Prompt	Response
Positive:	
<ul style="list-style-type: none"> <li>Support RPZ Conservation Education</li> </ul>	FriendZ support the zoo’s entire program, its animals, their habitats, and maintenance, as well as educational and community outreach events – positive dominant
<ul style="list-style-type: none"> <li>Education Unlimited Access Special Events</li> </ul>	Support Zoo education programs, exhibit enhancements, conservation efforts, and capital projects and the entire household receives free, unlimited access to the Zoo during regular business hours, invitations to special behind-the-scenes tours – positive dominant
Negative:	
<ul style="list-style-type: none"> <li>Cost/Expensive</li> </ul>	The requirement of amount is high – equally ambivalent Too expensive – negative dominant
<ul style="list-style-type: none"> <li>More Information</li> </ul>	I don’t know anything about zoo friend program. I haven’t heard about them until taking this survey - equally ambivalent

#### 4.7 Discussion

The findings of the study extend our understanding of key variables influencing attitudes toward zoo donation programs and contribute to the attitude literature in the context of urban zoo settings. The first research question sought to examine respondents’ overall attitude toward supporting the RPZ by joining the FriendZ program, as well as whether group difference existed between zoo members and nonmembers. Most respondents held positive attitudes toward the FriendZ program, as a result, zoo members and nonmembers did not significantly differ in their attitudes toward the donation program. Subsequent qualitative analysis suggests that the cost of joining the donation program was a key concern to most respondents. Thus even though a person may hold a positive attitude toward the FriendZ program, the cost involved seems to inhibit the likelihood of actually joining the donation program.

The second research question of the study investigated whether member and nonmember differences exist in terms of their demographic characteristics, zoo visitation behaviors, and awareness of the Zoo FriendZ program. The study results showed that compared to nonmembers, zoo members visited the zoo more often and were more likely to visit within the last 6 months.

Members were also more likely to be older and Hispanic/Latino and have a higher level of attachment to the zoo. A significantly higher percentage of members compared to nonmembers knew that RPZ Society was a 501(c)(3) nonprofit organization and a donation to the RPZ Society was tax deductible. In addition, zoo members and nonmembers did not differ in terms of gender, education levels, and familiarity to the donation program overall.

The third research question explored the differences between attitudinal groups. In light of the variability in attitudinal positions toward RPZ FriendZ program, while the results did not show zoo members and nonmembers differ in terms of the distribution of the four attitude categories, some differences in regard to other factors were identified between attitude groups across the combined sample of members and nonmembers. Specifically, there were fewer Caucasian and more Asian and Mixed ethnic heritage respondents in the equally ambivalent group compared to the percentage in both negative dominant and positive dominant groups. As expected from prior research (Klenosky et al., 2015), the likelihood of joining the FriendZ program was significantly higher for those in the positive dominant group, compared to those in the negative dominant and equally ambivalent groups. In addition, a higher percentage of individuals in positive dominant group were aware that a donation to the RPZ Society was tax deductible.

Additionally, about 13% of participants were identified as a member of the equally ambivalent category compared to only about 1% of participants in the indifferent category. Unfortunately, in the present study, the number of respondents in the indifferent attitude group was too small to analyze. Nevertheless, care should be taken in treating individuals with equal positive and negative feelings about an attitude object or topic (the ambivalent) the same as those who have no feelings about that topic (the indifferent) (Klenosky et al., 2015; Yoo, 2010).

#### **4.8 Implications and Future Research**

Donation programs have become a key element for the development and operation of zoos and other nonprofit organizations. Unfortunately, however, little guidance is available to help zoo managers understand the relationship between individuals' attitudes and donation programs. The results of this investigation help to bridge the gap in understanding individuals' attitudes toward donation program in the context of a zoo setting. The analysis of zoo member and nonmember's attitudes and related behaviors sheds light on the factors that may influence the likelihood of joining the donation program in zoos. Thus, the findings of this study may have important

managerial implications, especially for zoo managers who want to develop appropriate marketing strategies to increase the level of donations.

First, as indicated in the Noone and Mount's (2007) study, the price paid for one particular experience had a direct and negative effect on intentions to return, regardless of one's satisfaction with that experience. Similar findings in this study showed even though individuals had positive attitudes towards the FriendZ program, the money required to join the program was generally perceived as a major constraint. Future research could be directed at overcoming these price-related objections to joining a zoo donation program.

Another possible solution could be providing multiple donation levels, so that individuals who are willing to donate a lower amount have the option to do so (Rega, 2011). Another finding from the negative comments was that individuals perceived the money requested for joining the donation programs did not match the benefits the program offered. Thus, follow-up research is needed to find out individuals' preferences on the donation program benefits to avoid being perceived as poor value for money.

Conjoint analysis can be used to determine what program benefits individuals are willing to pay to become a donor to the zoo. Specifically, conjoint analysis examines how individuals trade off different levels of monetary donation versus the benefits associated with joining the donation program. Based on the outcomes of the analysis, the amount of money requested to join in the donation program can be modified to match their behavior and expectation, which may make it more likely that individuals would participate in the donation program. Additionally, Paswan and Troy (2004) study indicated that one's income often has a strong relationship with service membership levels. This suggests that household income could be a good segmentation variable to examine in future research.

With the monetary aspect in mind, the intangible aspects of the donation programs may be explored and promoted, such as sense of belongings to the zoo, social recognition, philanthropy, and personal values and inclinations (Bennett, 2003). An emphasis on these intangible elements may alleviate the negative impact from the money solicited (Paswan & Troy, 2004).

Another possible constraint to join the zoo donation program was lack of awareness. For example, this was indicated by the respondents' narratives that they needed more information on the donation program. Furthermore, about half of the respondents did not know that RPZ society was a 501c3 nonprofit organization and that donations to the RPZ are tax deductible. About 60%

indicated that they were not familiar with the donation program. The finding was consistent with Slater and Armstrong's (2011) findings that individuals were unaware of the membership scheme and the marketing communication for membership were confusing and unclear. In addition, our findings showed that individuals who were more highly attached to the zoo were aware of these tax issues and were more familiar with the donation program compared to those who were less attached. Therefore, communication and other related marketing efforts may focus on individuals who are not currently attached to the zoo.

Waters (2009) suggested that donors who provide annual giving and donors who give major gift may be treated differently. While casual relationships with annual giving donors were developed through direct mail marketing, tight relationships should be developed through face-to-face cultivation of major gift donors. Furthermore, personalized attention to major gift donors to discuss their concerns and the programs and services of the organization should be employed. The strategies that could be used to reach these individuals may vary significantly and is an important issue for future research.

Finally, most past research has employed the traditional bipolar approach to assessing attitudes. While the bivariate approach employed in this research provided an alternative approach for studying attitudes, the context of this particular study may have limited the insights that could have been obtained due to the lack of respondents in the indifferent attitude group, and the small numbers in the ambivalent and negative attitude groups. Future research involving zoos could benefit from employing the bivariate framework to examine attitudes toward visiting zoos in general or attitudes toward visiting specific types of zoo exhibits (e.g., cages versus more naturalistic venues). In short, such "controversial" contexts may be more suitable contexts for employing the bivariate attitude framework and advancing understanding of zoo-related attitudes.

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## **CHAPTER 5. CONCLUSIONS**

### **5.1 Introduction**

The aim of this dissertation is to gain a better understanding of individuals' membership benefits preferences and attitudes toward donation programs in the context of urban zoo settings. Similar to other nonprofit organizations, zoo membership dues and donations are critical funding resources for zoo operation, animal care and special exhibitions. Despite a wealth of knowledge in the literature with respect to zoo visitors, animals, exhibits, and related programs, little research has been conducted on individuals' preferences for zoo membership benefit packages and attitudes toward donation programs. To fill the gaps in these areas, the first objective of this dissertation was to provide an overview of previous research on zoos and other relevant organizations. Based on the review, the second objective was to empirically examine zoo membership and donation programs through two independent studies. The first study explored individuals' membership benefit package preferences and the second study examined individuals' attitudes toward a donation program at an urban zoo setting.

### **5.2 Summary of Empirical Findings**

The first study, presented in Chapter 3, examined factors that influence current and prospective members' decision-making when choosing a membership package at an urban zoo. More specifically, the study explored a) preferences for selected membership program benefits and benefit levels, b) how current members and nonmembers differed regarding their preferences for membership benefit options, and c) how these preferences varied among visitors grouped by family composition and level of place attachment to the zoo. The study findings suggested that price of membership package was the most important factor, followed by the discount on food and beverage and the proportion of membership fees devoted to animal conservation. As expected, zoo visitors who scored high on place attachment were more supportive of the zoo and less sensitive to variations in the specific options included in the zoo's membership package. This finding lends support to earlier place attachment research (Williams, et al., 1995; Kyle, et al., 2004). Both zoo members and non-members had the same ordering of the relative importance weights among the

study factors; no significant differences across visitors having children less than 5 years old in the household and visitors not having less than 5 years old children emerged.

In the second study, presented in Chapter 4, attitudes toward RPZ Zoo FriendZ program were examined. In particular, this chapter investigated a) attitudes held by individuals toward supporting the RPZ by joining the Zoo FriendZ program, b) whether zoo members differ from nonmembers regarding their demographic characteristics, zoo visitation behaviors, awareness of the Zoo FriendZ program, and attitudes toward the Zoo FriendZ program, and c) whether zoo members differ from nonmembers regarding the variability in attitudinal positions. A two-dimensional/bivariate attitude approach was employed to explore potential differences among attitudinal position groups. The study findings indicated while most respondents held positive attitudes toward the donation program, zoo members and nonmembers did not differ significantly. The likelihood of joining the donation program was significantly higher for those in the positive dominant attitude group compared to those in the negative dominant and equally ambivalent groups. Additionally, a qualitative analysis revealed that many respondents were concerned about the cost or affordability of the donation program; and perceived the benefits of the program as a poor value.

### **5.3 Concluding Remarks**

This dissertation makes a number of important contributions to the literature base on zoo membership and donation programs, as well as provides information which may prove valuable for practitioners and managers at zoos and other non-profit organizations. The contributions are as follows: (1) filled the gap in the literature by examining attitudes toward donation programs in the context of urban zoo settings, and extended the application of the two-dimensional/bivariate attitude framework which allowed to capture individuals' underlying attitudes toward a complex object; (2) presented empirical findings from two analyses investigating individual's zoo membership benefit preferences and donation program attitudes; (3) offered evidence to inform zoo managers when developing membership benefit packages and when planning marketing efforts to recruit new donors and maintain existing donors.

Looking again at the methodologies of the empirical studies, conjoint analysis and bivariate attitude framework contain both advantages and disadvantages. First, looking at conjoint analysis, due to human beings' perception capabilities, the number of attributes and the number of

levels of attributes under study needs to be considered carefully. The attributes and attribute levels of interest need to be realistic and managerially relevant. In a poorly designed study, it is possible that a particular attribute could be overvalued or undervalued (e.g., if the range of a price attribute is too small or too large). Nevertheless, conjoint analysis is a powerful tool for understanding consumer choice and purchase behavior; and for designing and managing products or service programs.

Second, with respect to the attitude study, it was noticed that only a couple respondents fell into the indifferent attitude category. One possible reason this occurred is that the sample size in the study was relatively small and a bigger sample size might have been required. A second possible reason is that individuals' who were indifferent toward the zoo donation program did not participate in the study at all. In Yoo's (2010) study, the voters with an ambivalent attitude were more likely to vote and shown to behave very differently compared to the voters with an indifferent attitude, even though they share a neutral attitude toward a political object.

The bipolar approach has emerged as an important conceptual and practical tool in attitude research, especially when the subject or topic involved is controversial and likely to result in highly polarized positive and negative attitude positions. Psychologically speaking, "the world is a simpler place when viewed in terms of dichotomies or bipolarities" (Cacioppo et al., 1997, p.22). However, the world in social sciences has never been simple. Recent evidence demonstrated the two-dimensional/bivariate approach allowed researchers to capture the richness of human attitudes, particularly toward objects or topics as complex and important.

Undertaking this research study has been an invaluable learning experience. I have gained some understanding of the nature of membership and donation programs in the context of an urban zoo setting. Research can be frustrating and sometimes tedious, yet at other times immensely rewarding and even exhilarating. I have learned the importance of communication between academia and practitioners and the need to advocate for collaboration. For example, with the help of RPZ staff team, I was able to reach out to the pool of zoo members and potential members, as well as to collect data on set. Surprisingly, there has been no data collected at all in terms of donors' demographic information and no assessment has been conducted related to the donation program at RPZ. As such, the findings of the studies would inform RPZ staff with valuable information regard to the development of membership and donation programs. Thus, the collaboration between academic scholars and field practitioners has tremendous benefits for both parties.

Despite of careful designing the empirical studies, some limitations remained. Due to the nature of conjoint analysis, the attributes under examination may have impacted the results. Future scholars interested in factors influencing individuals' decision on zoo membership benefits may start with a focus group to come up with attributes and attribute levels. As for the bivariate attitude approach, future research is needed in alternative attitude topics in the context of zoos. For example, examining attitudes toward visiting zoos in general or attitudes toward visiting specific types of zoo exhibits (e.g., cages versus more naturalistic venues) may be a more suitable and productive context for realizing the benefits of the bivariate attitude framework. Doing so may well have resulted in a broader range of attitudinal positions and provided greater understanding of zoo-related behaviors and attitudes.

## **APPENDIX A. PREVIOUS STUDIES EXAMINING MEMBERS AND MEMBERSHIP PROGRAMS**

This appendix lists previous studies examining members and membership programs.

Table A.1. Previous Studies Examining Members and Membership Programs.

Author(s) (date)	Location	Study approach and sample	Aims	Salient Finding(s)
Caldwell & Andereck (1994)	North Carolina Zoological Society (NCZS)	Mail survey of members (n=371)	To investigate motives for joining, and continuing membership in, a recreation-related voluntary organization, NCZS.	1.The most important reason for joining membership was to contribute to society; 2. The least important reason was for an incentive or material benefit;
Camarero & Garrido (2011)	Spanish museums of fine arts, Spain	Mail survey of members (n=236)	To explore the relationship between museums and their donors (friends)	Benefits (material and non-material) positively related to organizational identification; organizational identification positively correlated to future commitment.
Holmes & Slater (2012)	UK	Mail survey, online survey, and in-depth interview to members in different associations (n=44)	To explore the spectrum of participation by members of heritage supporter association	1. Identify a new form of engagement-substituters; 2. Identify a new group of members based on their motivation-hobbyists; 3. Identify barriers to participation--distance, aging, work and family commitments, and participation in other membership
Kinser & Fall (2006)	160 zoological parks and aquariums in US	Online survey of zoo managers (n=73)	To determine how zoo managers employ relationship-building communication, evaluation, and feedback strategies to retain members.	1. More mass-oriented mechanisms to communicate with their members; 2. Most frequently employed feedback techniques are membership hotlines and comments from web sites; 3. Zoo managers evaluate their membership programs; 4. Mass media-oriented tactics serve as better predictors among those zoos that measure behavioral outcomes.

Table A.1. Continued.

Klenosky et al. (2008)	Brookfield Zoo, IL, US	Online survey of members (n=1000) and onsite survey of visitors (n=508)	To examine preferences for zoo membership benefit package options.	1. Both members and nonmembers preferred free tickets over unlimited admission discounts for zoo attractions/exhibits; 2. Interested nonmember group had the highest implicit price for the 10 percent gift shop discount.
Klenosky et al. (2015)	Indiana, US	Mail survey of members (n=348) and nonmembers (n=755)	To investigate the attitudes toward land trusts held by both land trust members and nonmembers.	1. Members had higher levels of familiarity with and hold more positive attitude toward land trusts; 2. Members were more educated and more likely to engaged in non-consumptive outdoor activities, while nonmembers were more likely to engage in hunting and fishing; 3. Nonmembers were more likely to hold indifferent, ambivalent, or negative attitudes toward land trusts.
Maher, Clark, & Motley (2011)	Children's museum Northeastern US	On-site survey of visitors (n=192)	Use SERVQUAL to measure service quality in relationship to visitor membership	Staff empathy is a significant predictor of museum membership
Olsson (2010)	Zoo Nordens Ark, Sweden	Interview with active members (n=12)	To examine the relationships between member motivations, relations and roles.	Active members have different motives, relations and roles in active membership.
Paswan & Troy (2004)	Art museum, Southern metropolitan city, US	Mail survey of members (n=524)	To investigate motivational dimensions for membership in a non-profit art museum and their relationship with membership levels	1.High-end members scored high on social recognition and philanthropy; 2. Low-end members more motivated by children's benefits and tangible member benefits; 3. Income had a significant influence on membership level

Table A.1. Continued.

Slater (2010)	UK	Interview with friends or members of at least 5 heritage supporter groups (n=16)	To understand friends and members of heritage supporter groups (their perceptions and involvement)	Five themes emerged: organization; engagement with the organization; involvement; motivation; and relationships with other members.
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## **APPENDIX B. REID PARK ZOO SURVEY**

In this appendix, we attach the survey questionnaire used for Study I.



# Reid Park Zoo Survey

Thank you for taking the time to complete this survey. Your feedback will be used to help improve our services. Please note that your participation in the survey is voluntary; you are free to skip any questions that you do not care to answer; and all your responses will be kept confidential. Thanks again for your help!

## **Section A. Some questions about the RPZ membership program.**

**A1. Are you currently a Reid Park Zoo member?**

No       Yes      If yes, how long have you been a member? \_\_\_\_\_ (years). *If "Yes" please skip to A5.*

**A2. If you are not currently a RPZ member, have you ever been a member in the past?**

No       Yes      If yes, how long ago? \_\_\_\_\_ (years or months)

If yes, what was the main reason you let your membership lapse? \_\_\_\_\_

**A3. If you are not currently a member, how likely are you to become a Reid Park Zoo member in the future?**

Very Unlikely       Somewhat Unlikely       Undecided       Somewhat Likely       Very Likely  
to become a member      to become a member      to become a member      to become a member

**A4. If you are not currently a member, please explain why you would or would not become a member in the future.**

*If you are not currently a Zoo member, please skip to Section B on the next page.*

**A5. If you are a zoo member, what type of membership do you currently have?**

Senior       Individual       Family       Gold       Not sure

**A6. If you are a zoo member, how likely are you to renew your membership when it expires?**

Very Unlikely       Somewhat Unlikely       Undecided       Somewhat Likely       Very Likely  
to renew      to renew      to renew      to renew

**A7. If you are a zoo member, please explain why you would or would not renew your Zoo membership.**

RPZ. B1

**Section B. Now some questions about Zoo membership options.**

In this section of the survey, we'd like you to imagine that you were thinking about purchasing a membership to the Zoo or renewing your current Zoo membership because it was about to expire. In the following six questions, you will be presented a series of choices involving two alternative membership packages that might be available to you. These membership packages will be described as "Package A" and "Package B."

After reading the descriptions of the two packages, your task will be to indicate whether you would choose "Package A" or "Package B." If neither package appeals to you, you have the option of selecting "I would not choose either package."

**Note that the following benefits will be included in ALL the membership packages presented:**

- ***Unlimited free Zoo admission for two adults and up to four children or grandchildren under age of 18 (all who live in the same household)***
- ***Member-only discount in zoo gift shop***
- ***Free subscription to monthly online newsletter***
- ***Discounts to more than 160 other zoos and aquariums***

**In contrast, the following benefits will VARY across the membership packages presented:**

- ***Portion of Membership Fees Supporting Animal Care and Conservation*** – the portion of your membership fees used to support animal care and conservation at the Zoo
- ***Member-only Magazine "Zoo & You" Format*** – whether you will receive the magazine "Zoo & You" as a hard copy sent via mail or as a digital copy sent via email
- ***Member-only Discount on Zoo Day Camps for Kids*** – discounts on Zoo day camps for kids
- ***Member-only Discount on Food and Beverage*** – discounts on food and beverage purchases at the Zoo
- ***Member-only Discount on Special Events*** – discounts on tickets to special zoo events (e.g. ***Howl-O-Ween, Zoo Lights, etc.***)
- ***Membership Package Price*** – total annual cost of the Zoo membership package

If other benefits/features are not listed, please assume they would be the same across all membership packages. Thus, consider only the differences between the packages and benefit options presented.

**B1.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
 (Choice 1 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
5% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	1% of membership fees
Hard copy sent via mail	"ZOO & YOU" MAGAZINE FORMAT	Hard copy sent via mail
No discount	MEMBER DISCOUNT ON DAY CAMPS	10% off discount
No discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	No discount
10% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	10% off discount
\$90	MEMBER PACKAGE PRICE	\$100

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

**B2.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
 (Choice 2 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
5% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	5% of membership fees
Digital copy sent via email	"ZOO & YOU" MAGAZINE FORMAT	Digital copy sent via email
No discount	MEMBER DISCOUNT ON DAY CAMPS	No discount
10% off discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	No discount
10% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	10% off discount
\$85	MEMBER PACKAGE PRICE	\$85

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

RPZ. B1

**B3.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
(Choice 3 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
1% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	1% of membership fees
Digital copy sent via email	"ZOO & YOU" MAGAZINE FORMAT	Digital copy sent via email
10% off discount	MEMBER DISCOUNT ON DAY CAMPS	10% off discount
No discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	10% off discount
10% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	20% of discount
\$100	MEMBER PACKAGE PRICE	\$100

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

**B4.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
(Choice 4 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
5% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	10% of membership fees
Hard copy sent via mail	"ZOO & YOU" MAGAZINE FORMAT	Hard copy sent via mail
No discount	MEMBER DISCOUNT ON DAY CAMPS	No discount
10% off discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	10% off discount
20% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	20% off discount
\$100	MEMBER PACKAGE PRICE	\$90

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

RPZ. B1

**B5.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
 (Choice 5 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
10% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	10% of membership fees
Digital copy sent via email	"ZOO & YOU" MAGAZINE FORMAT	Hard copy sent via mail
10% off discount	MEMBER DISCOUNT ON DAY CAMPS	10% off discount
10% off discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	10% off discount
20% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	10% off discount
\$95	MEMBER PACKAGE PRICE	\$95

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

**B6.** Suppose that you could only choose from the two membership packages below. Which would you choose?  
 (Choice 6 of 6)

PACKAGE A	MEMBER BENEFITS INCLUDED	PACKAGE B
10% of membership fees	PORTION OF FEES SUPPORTING ANIMAL CARE & CONSERVATION	5% of membership fees
Hard copy sent via mail	"ZOO & YOU" MAGAZINE FORMAT	Digital copy sent via email
10% off discount	MEMBER DISCOUNT ON DAY CAMPS	No discount
No discount	MEMBER DISCOUNT ON FOOD & BEVERAGE	No discount
10% off discount	MEMBER DISCOUNT ON SPECIAL EVENTS	20% off discount
\$80	MEMBER PACKAGE PRICE	\$80

PACKAGE A

I WOULD NOT CHOOSE EITHER PACKAGE

PACKAGE B

RPZ. B1

**Section C. Some questions about your experience visiting the Zoo.**

**C1. When was the last time you visited Reid Park Zoo?**

- This is my first time at Reid Park Zoo       Within the last 6 months       Between 6 months and 1 year ago       Between 1 – 2 years ago       Between 2 – 5 years ago       More than 5 years ago

**C2. Which of the following best describes your general pattern of visiting Reid Park Zoo in the last five years?**

- I usually visit the Zoo 3 or more times a year       I usually visit the Zoo about 1 or 2 times a year       I usually visit the Zoo every couple of years       I have only visited the Zoo once or twice in the last five years       I have not visited the Zoo in the last five years

**C3. While visiting the Zoo, which activities do you normally enjoy? (Mark all that apply)**

- Giraffe feeding
- Conservation Learning Center activities for kids
- Camel rides
- Train rides
- Wildlife Carousel
- Purchasing at the gift shop or café
- Other \_\_\_\_\_

**C4. Please indicate how likely you would be to take each of the following actions in support of the RPZ.**

	<u>Very Unlikely</u>	<u>Somewhat Unlikely</u>	<u>Uncertain</u>	<u>Somewhat Likely</u>	<u>Very Likely</u>
a. Sign a petition	<input type="checkbox"/>				
b. Write a letter	<input type="checkbox"/>				
c. Attend a meeting	<input type="checkbox"/>				
d. Post to Facebook or other social media	<input type="checkbox"/>				

**C5. Please indicate the extent to which each statement describes your feelings about the Reid Park Zoo (RPZ).**

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	<u>Strongly Agree</u>
a. RPZ is the best place for what I like to do.	<input type="checkbox"/>				
b. I get more satisfaction out of visiting RPZ than any other.	<input type="checkbox"/>				
c. Doing what I do at RPZ is more important to me than doing it in any other place.	<input type="checkbox"/>				
d. I wouldn't substitute any other area for doing the types of things I do at RPZ.	<input type="checkbox"/>				
e. RPZ means a lot to me.	<input type="checkbox"/>				
f. I am very attached to RPZ.	<input type="checkbox"/>				
g. I identify strongly with RPZ.	<input type="checkbox"/>				
h. I feel no commitment to RPZ.	<input type="checkbox"/>				

***Section D. Some final questions for classification purposes.***

**D1. Indicate the number of people in your household within each of the following age categories. Please include yourself in the count.**

5 years old or younger	Between 6 – 11 years old	Between 12 – 17 years old	Between 18 – 24 years old	Between 25 – 34 years old	Between 35 – 64 years old	65 years old or older
------------------------	--------------------------	---------------------------	---------------------------	---------------------------	---------------------------	-----------------------

**D2. How long have you lived in the Tucson area?**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable – I currently do <u>not</u> live in the Tucson area	Less than 2 years	Between 2 – 5 years	Between 6 – 10 years	Between 11 – 20 years	More than 20 years	

**D3. If you have lived in the Tucson area for less than 6 years, where did you live before?**

\_\_\_\_\_ (Specify city/state or country)

**D4. Which best describes your ethnicity?**

<input type="checkbox"/> Caucasian	<input type="checkbox"/> African-American	<input type="checkbox"/> Asian/Pacific Islander	<input type="checkbox"/> Hispanic/Latino
<input type="checkbox"/> Mixed ethnic heritage (please specify): _____	<input type="checkbox"/> Other (please specify): _____		

**D5. What is your home Zip Code:** \_\_\_\_\_

**D6. What is the highest level of education you have completed?**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than high school	High school graduate or GED	Associates or trade-school degree	Bachelors degree (4-year)	Masters degree	Professional or doctoral degree

**D7. What is your age?**

<input type="checkbox"/>				
Under 30	30-45	46-60	Over 60	Prefer not to answer

**D8. What is your gender?**  Female  Male

***That's all the questions we have.  
Thanks for your time!***

RPZ. B1

## **APPENDIX C. REID PARK ZOO ONLINE SURVEY**

In this appendix, we attach the survey questionnaire used for Study II.



# Reid Park Zoo Survey

Hello! Thank you for taking the time to help with my survey. Please remember that your participation is entirely voluntary, all responses will be kept confidential, and the study findings will be presented at the group level only. If you are uncomfortable with any of the questions asked, you may skip the question and continue with the remaining questions; at no time will the survey "force" you to respond.

While taking the survey, if you are interrupted or would like a break, you may stop and continue the survey later. Simply close your Internet browser and, when you are ready to continue, click on the same email link that you first used. The survey will bring you back to the last question you answered, having saved all your previous answers.

If you have any questions about this study please contact Lin Zhang at 765-409-4460 or [zhang855@purdue.edu](mailto:zhang855@purdue.edu). If you have any concerns about the treatment of research participants in this study, please contact the Committee on the Use of Human Research Subjects at Purdue University, Young Hall, 155 S. Grant St., West Lafayette, IN 47907-2114. The committee can also be reached via phone at 765-494-5942 or through email at [irb@purdue.edu](mailto:irb@purdue.edu).

Click the arrows below when you are ready to begin the survey.

## **Section A. Some questions about the zoo membership program.**

**A1. Are you currently a Reid Park Zoo member?**

- No       Yes

**Logic Display--If No is Selected**

**A2. If no, have you ever been a member in the past?**

- No       Yes, how long ago? \_\_\_\_\_ what was the main reason you let your membership lapse? \_\_\_\_\_

**A3. How likely are you to become a Reid Park Zoo member in the future?**

- Very Unlikely       Somewhat Unlikely       Undecided       Somewhat Likely       Very Likely  
to become a member      to become a member      to become a member      to become a member

**A4. Please explain why would or would not become a member in the future.** \_\_\_\_\_

**Logic Display--If Yes is Selected**

**A2. If yes, how long have you been a member?**

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-6 years
- 7-8 years
- More than 8 years

**A3. What type of membership do you currently have?**

- Senior
- Individual
- Family
- Gold
- Not sure

**A4. How likely are you to renew your membership when it expires?**

- Very Unlikely  
to renew
- Somewhat Unlikely  
to renew
- Undecided
- Somewhat Likely  
to renew
- Very Likely  
to renew

**A5. Please explain why you would or would not renew your zoo membership.** \_\_\_\_\_

**Section B. Questions about the Reid Park Zoo FriendZ program.**



Zoo FriendZ is a group of people who have committed to conservation, outreach, philanthropy, and the continued growth of the Zoo. Through an annual gift of \$500 or more, Zoo FriendZ membership helps support Zoo education programs, exhibit enhancements, conservation efforts, and capital projects. Reid Park Zoological Society is a 501(c)(3) nonprofit and donations are tax deductible. In appreciation of their support, the entire household receives free, unlimited access to the Zoo during regular business hours, invitations to special behind-the-scenes tours and events.

**B1. Before reading the above description, did you know that the Reid Park Zoological Society is a 501(c)(3) nonprofit organization?**

- Yes
- No

**B2. Before reading the above description, did you know that a donation to the Reid Park Zoological Society would be tax deductible?**

- Yes
- No

**B3. Before reading the above description, how familiar were you with the Zoo FriendZ program?**

- Not at all familiar
- Somewhat familiar
- Familiar
- Very familiar

**B4. How likely are you to become a member of RPZ Zoo FriendZ program?**

- Very unlikely to become a member
- Somewhat unlikely to become a member
- Undecided
- Somewhat likely to become a member
- Very likely to become a member

**B5. Considering only the positive things you associated with the Zoo FriendZ program (and ignoring any negative things), how would you rate your attitude towards the Zoo FriendZ program on the following scale?**

- Not at all positive
- Slightly positive
- Moderately positive
- Very positive
- Extremely positive

**B6. Use the space below to list all the positive things that you associated with becoming a member of the Zoo FriendZ program.**

**B7. Now considering only the negative things you associated with the Zoo FriendZ program (and ignoring any positive things), how would you rate your attitude towards the Zoo FriendZ program on the following scale?**

- Not at all negative
- Slightly negative
- Moderately negative
- Very negative
- Extremely negative

**B8. Use the space below to list all the negative things that you associated with becoming a member of the Zoo FriendZ program.**

### **Section C. Some questions about your experience visiting the zoo.**

**C1. When was the last time you visited Reid Park Zoo?**

- |                          |                             |                                       |                            |                            |                             |
|--------------------------|-----------------------------|---------------------------------------|----------------------------|----------------------------|-----------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>    | <input type="checkbox"/>              | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>    |
| Never                    | Within the last<br>6 months | Between 6<br>months and 1<br>year ago | Between 1 – 2<br>years ago | Between 2 – 5<br>years ago | More than 5<br>years<br>ago |

**C2. Which of the following best describes your general pattern of visiting Reid Park Zoo in the last five years?**

- |  |   |   |  |   |
|--|---|---|--|---|
| <input type="checkbox"/>                       | <input type="checkbox"/>                          | <input type="checkbox"/>                      | <input type="checkbox"/>   | <input type="checkbox"/>                          |
| I usually visit the zoo 3 or more times a year | I usually visit the zoo about 1 or 2 times a year | I usually visit the zoo every couple of years | I have only visited the zoo once or twice in the last five years | I have not visited the zoo in the last five years |

**C3. While visiting the Zoo, which activities do you normally enjoy? (Mark all that apply)**

- Giraffe feeding
- Conservation learning center activities for kids
- Camel rides
- Train rides
- Wildlife Carousel
- Purchasing at the gift shop or café
- Other \_\_\_\_\_

**C4. Please indicate how likely you would be to take each of the following actions in support of RPZ.**

	<u>Very Unlikely</u>	<u>Somewhat Unlikely</u>	Uncertain	<u>Somewhat Likely</u>	<u>Very Likely</u>
Write a letter	<input type="checkbox"/>				
Attend a meeting	<input type="checkbox"/>				
Post to Facebook or other social media	<input type="checkbox"/>				

**C5. Please indicate the extent to which each statement describes your feelings about the Reid Park Zoo (RPZ).**

	<u>Strongly Disagree</u>	<u>Disagree</u>	Neutral	<u>Agree</u>	<u>Strongly Agree</u>
RPZ is the best place for what I like to do.	<input type="checkbox"/>				
I get more satisfaction out of visiting RPZ than any other.	<input type="checkbox"/>				
Doing what I do at RPZ is more important to me than doing it in any other place.	<input type="checkbox"/>				
I wouldn't substitute any other area for doing the types of things I do at RPZ.	<input type="checkbox"/>				
RPZ means a lot to me.	<input type="checkbox"/>				
I am very attached to RPZ.	<input type="checkbox"/>				
I identify strongly with RPZ.	<input type="checkbox"/>				
I feel no commitment to RPZ.	<input type="checkbox"/>				

**Section D. Some final questions for classification purposes.**

**D1. Indicate the number of people in your household within each of the following age categories. Please include yourself in the count.**

5 years old or younger	Between 6 – 11 years old	Between 12 – 17 years old	Between 18 – 24 years old	Between 25 – 34 years old	Between 35 – 64 years old	65 years old or older
------------------------	--------------------------	---------------------------	---------------------------	---------------------------	---------------------------	-----------------------

**D2. How long have you lived in the Tucson area?**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable – I currently do <u>not</u> live in the Tucson area	Less than 2 years	Between 2 – 5 years	Between 6 – 10 years	Between 11 – 20 years	More than 20 years	

**D3. If you have lived in the Tucson area for less than 6 years, where did you live before?**

\_\_\_\_\_ (Specify city/state or country)

**D4. Which best describes your ethnicity?**

<input type="checkbox"/> Caucasian	<input type="checkbox"/> African-American	<input type="checkbox"/> Asian/Pacific Islander	<input type="checkbox"/> Hispanic/Latino
<input type="checkbox"/> Mixed ethnic heritage (please specify): _____	<input type="checkbox"/> Other (please specify): _____		

**D5. Your home Zip Code:** \_\_\_\_\_

**D6. The highest level of education you have completed?**

<input type="checkbox"/>					
Less than high school	High school or GED	Associates	Bachelor	Master	Professional or doctoral degree

**D7. What is your age?**

<input type="checkbox"/>				
Under 30	30-45	46-60	Over 60	Prefer not to answer

**D8. Your gender:**  Female  Male

**D9. Any additional comments** \_\_\_\_\_

***That's all the questions we have.  
Thanks for your time!***