

# **Skills and Personality Traits of the Collaborator: A Study of State Park Managers**

by

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## **ABSTRACT OF THE DISSERTATION**

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Though collaboration is praised for its potential and criticized for its difficulty, little is known about how a person's individual characteristics impact collaboration outcomes. It is the premise of this study that individual characteristics, in particular, personality traits and collaboration skills, play a greater role in collaborative outcomes than is currently assumed. An improved understanding of the link between personality, collaboration skills, and collaboration outcomes, has theoretical and practical implications that can improve the success of collaboration and in turn governmental performance.

Using a nationwide sample of state park managers, this study investigated how personality traits and collaboration skills influence the success of collaborations between government and other stakeholders, which are especially important in this policy context. To collect the data for this research, a mixed-methods approach was undertaken in which 17 state park managers were interviewed and 153 were surveyed nationwide. The in-depth qualitative interviews sought to understand how park managers perceive collaboration and how their personal characteristics impact their experiences of

collaboration success. Findings from the interviews indicate that park managers have difficulty working with stakeholders at the goal alignment phase of collaboration and that they need formal training in group process skills.

The quantitative survey relied on a nationwide random sample of managers of state parks in the US and sought to gauge the relationship among their personality, skills and collaboration success. The survey employed a letter-to-web mode of administration and included established measures for the main theoretical constructs of personality traits, collaboration skills, and collaboration success. Regression analyses and structural equation modeling show that the personality traits “agreeableness” and “extraversion,” along with “group process skills” and “interpersonal skills” were positively associated with successful collaboration. Interestingly, these collaboration skills seem to depend more on underlying personality than on formal education. The analysis also revealed that external factors such as stakeholder and park characteristics are not significant predictors of collaboration success. Thus, although certain group process skills are important to successful collaboration, it is individuals who are predisposed with personality traits that are advantageous in group process situations that have more successful outcomes.

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## **Chapter 1: Introduction**

This dissertation seeks to understand whether successful collaboration is primarily a result of personality, collaborative skills, or some combination thereof. At its heart, it is asking the question are collaborators born or is it something they become. Naturally, the answer will be more nuanced than that, but it is essential to begin with a simple premise and then work out the complexities from there. This topic has both theoretical and practical implications, and if they are carried out to fruition, they have the potential to improve governmental outcomes. The remainder of this chapter will begin with a brief background about collaboration, then turn to a discussion on the purpose and significance of this research, and conclude with an outline for the remainder of this dissertation.

### **Background**

There is much written about how collaboration can improve government outcomes. These include that it improves decision making (Poister, Thomas & Berryman, 2013; Brody, 2003; Wang, 2001; Poister, 2010; Robbins, Simonsen & Feldman, 2008), decreases legal battles (Lee, 2014; Kagan, 1991), builds trust between government and citizens (Ansell & Gash, 2008; Yang & Holzer, 2006; Majumdar, Highsmith & Cherrington, 2013; Halvorsen, 2003), increases transparency (Thomas, 2012; Norris & Reddick, 2013; Ganapati & Reddick, 2014), encourages sustainability (Portney & Berry, 2010; Wang, Van Wart & Lebrede, 2014), that citizen involvement in

performance measures promotes performance management (Moynihan & Pandey, 2010; Ho & Coates, 2002; Ho, 2006; Frederickson & Frederickson, 2006; Heikkila & Isset, 2007), and strengthens accountability (Gibson, Lacy & Dougherty, 2005; Handley & Howell-Moreny, 2010).

In addition to the overwhelming evidence that collaboration can improve governmental outcomes, there is also literature that describes the difficulties and problems associated with the collaboration process (Irvin & Sansbury, 2004). The complexities related to collaboration begin with bringing diverse stakeholders together, but then there is a need for good communication (Pandey & Garnett, 2006; Wang et al., 2014) and building trust between the groups (Leach & Sabatier, 2005). Often these groups have past histories of conflict. Since this process can take a long time, public managers must try and keep the stakeholders engaged in the process (Huxham & Vangen, 2000; Lasker, Weiss, & Miller, 2001; Fleishman, 2009). They may be worried about politicians overriding decisions (Freemuth, 1989; Yochim, 2011), and lastly, they have to deal with paradoxes that are an inherent part of collaboration (Emerson, 2009; Graddy & Chen, 2009; O'Leary & Bingham, 2009). In addition, public managers may not have the skills necessary to perform these tasks (Carpenter & Kennedy, 1988; Milward & Provan, 2006; Emerson, 2009). Because it is difficult to use collaboration, it has been found that practitioners are not widely adopting it. If collaboration is to be more widely used by practitioners, it is necessary to have a more complete understanding about what factors lead to successful collaborative outcomes. There are two general categories into which these factors fall: 1) external factors, which consist of organizational culture (Hofstede,

Neuijen, Ohayv & Sanders, 1990) and stakeholder attributes (Yang, Wang, & Jin, 2014), and 2) internal factors, which consist of personal traits (Goldberg, 1992) and collaboration skills (O’Leary, Choi & Gerard, 2012). A significant amount of research emphasized the importance of external factors, while a smaller but growing body of research, places the emphasis on internal - or what might also be called individual - factors.

### **Purpose of the Research**

Though both external and internal factors impact the success of collaboration, it is the purpose of this research to focus on the internal or what will be referred to in this paper as the individual factors. These individual factors are being examined because there is relatively little known about the characteristics of public managers who are good at collaboration. The literature suggests there are two main categories of individual factors: 1) collaboration skills, and 2) personality traits. In order to determine what skills and personality traits lead to successful collaboration, a survey will be sent to state park managers across the U.S. In this survey they will be asked questions about their collaboration skills (O’Leary, Choi & Gerard, 2012) and about their personality (Goldberg, 1992; Donnellan, Oswald, Baird & Lucas, 2006). These collaboration skills and personality traits will then be tested against a collaboration success measure (Thomson, Perry & Miller, 2009). The results from the quantitative analysis will narrow

down which skills are most essential and what personality types are better at collaboration.

This research will use a mixed-methods approach, and park managers will be interviewed in order to provide additional context. Though the analysis will reveal which individual factors lead to successful collaboration, it will not provide answers about why this may be happening. Park managers will be asked questions that probe the underlying reasons for why they collaborate, what they find challenging about collaboration, and who and what makes someone good at collaboration. Combining this contextual information with the empirical findings will provide a deeper understanding of how skills and personality can lead to better collaborative outcomes. This understanding leads to the ultimate purpose of this research, which is to enhance our academic knowledge about collaboration and improve its practical application in the field. This research will advance scholarship on the topic of collaboration, by providing new insights into what makes an individual good at collaboration. From a practical standpoint, it will offer guidance about which public managers should be selected to lead collaborations, and what skills they should be taught.

### **Significance of the Research**

This study will provide an empirical analysis of the impact of skill and personalities on collaboration, it will reveal new findings to add to the body of knowledge about the topic of collaboration, and it will provide new insights for its

practical application. This study is novel as it will measure the impact that skills and personality have on collaboration. Though there are a few studies that have attempted this in part or whole, there were limitations in those studies (discussed more in chapters 3 and 5) which this study addresses.

In addition to this empirical measure, this research is significant because it will reveal new findings that will add to our theoretical understanding of the topic of collaboration. The qualitative analysis will provide new knowledge about the following topics: 1) the phases of collaboration, 2) the goal alignment phase, 3) group process skills, 4) stakeholder perceptions and 5) personality perceptions. The quantitative analysis will provide significant findings about skills and personality and its impact on collaborative outcomes; these findings include: 1) overall personal ratings are accurate but more specific ratings are not, 2) external factors, such as stakeholders and park characteristics seem to play a lesser role in collaborative outcomes, 3) formal education does not seem to impact collaboration skills, 4) regarding skills, group process skills are essential, and 5) personality plays a vital role in collaborative success.

These theoretical findings will also have significance for improving government outcomes, and their practical application can enhance government collaborations. These practical applications will help the government to use both its staff and financial resources more efficiently. The application of the studies findings include: selecting individuals with the best collaboration personality traits to lead collaborations, and training public managers only in those collaboration skills that will most likely lead to success. These will be discussed more in the final chapter of this dissertation.



## **Outline of the Dissertation**

This dissertation is organized in the following manner. Following this introductory chapter, Chapter 2 begins by reviewing the collaboration literature and discussing what collaboration is and the many fields of research that bear upon the topic. This will be followed by discussions about the benefits of collaboration, its complexities and the theories that describe what makes an individual good at collaborating.

Chapter 3 provides the conceptual framework for this research and discuss the research hypotheses. Included in this chapter will be an explanation for why State Park Managers were selected for the sample population. There will also be descriptions of the dependent and independent variables.

Chapter 4 consists of the qualitative methods and findings from this research. How the sample was selected and how the data will be collected will be discussed. This will be followed by the development of the interview questionnaire and a substantive dialogue regarding the findings from the interviews.

Chapter 5 presents the quantitative methods and findings from this research. It will describe the sample selection, data collection and the development of the survey. Next, the data analysis and the studies results will be explained, and the chapter will conclude with an exploration of the implication and meaning of the findings.

Chapter 6 will continue with the implication and meaning of the findings, but this time it will combine the qualitative and quantitative findings into one holistic discussion on

the topic. This discussion will include both theoretical and practical implications and will end with the limitations of the research and suggestions for future research.

## **Chapter 2: Literature Review**

There is an inherent conflict that exists for the public administrator between the promise of improved performance through the use of collaboration and the difficulty in successfully managing a collaboration process. In this review of the collaboration literature in the field of public administration, this conflict will be further explored, but along with it there will be a discussion about what collaboration is, and a description of the various fields of study which are examining it. With particular interest, the review will also examine what it takes for a public administrator to be successful with the process of collaboration. This topic is important because “Policy makers in today’s network society are increasingly confronted with complex and wicked policy problems that require collective action” (Van Bueren, Klijn and Koppenjan, 2003).

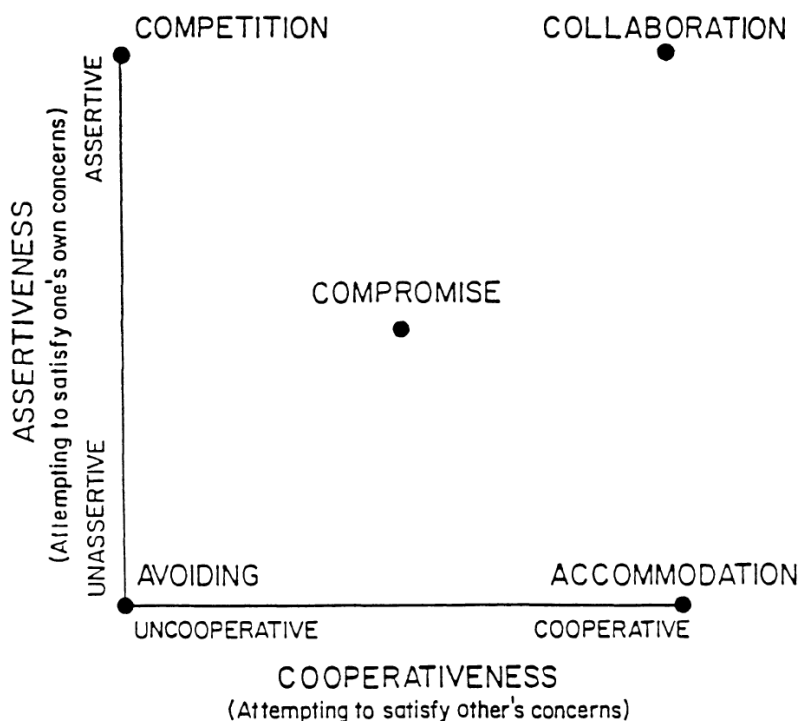
This literature review will proceed in the following order: 1) collaboration and its fields of study, 2) the benefits of collaboration, 3) the complexities of collaboration, and 4) what makes someone good at collaboration? In conclusion, what makes a collaboration successful will be examined.

### **Collaboration and its Fields of Study**

Since there are a number of fields that study aspects of collaboration there is no generally agreed upon definition of the term “collaboration” in the public administration literature. As such it is going to be necessary to establish a working definition for the

term “collaboration” and describe which fields of study will be used in this literature review. Thomas’ (1974,1992) two-dimensional taxonomy of conflict handling modes provides some valuable insight about some of the variables a working definition should include. In figure 2.1 Thomas (1992), plots “assertiveness (attempting to satisfy one’s

**Figure 2.1 Two-dimensional taxonomy of conflict handling modes**  
(Thomas, 1992)



own concerns)” against “cooperativeness (attempting to satisfy other’s concerns). As this figure illustrates collaboration only takes place when both assertiveness and cooperativeness are high, meaning that one must be both assertively seeking their own

concerns while attempting to satisfy the concerns of others. Though this explanation of figure 2.1 provides a useful starting point, it does not provide any description about the process of collaboration. Wood and Gray (1991) provide a definition of collaboration that includes process:

Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain.

Though good with process, the Wood and Gray (1991) definition lacks description about the needs and the relationships of those individuals participating in a collaboration. A better definition would combine elements of process, needs and relationship, and the working definition for collaboration that will be used in this study is that as defined by Mattesich, Murray-Close and Monsey (2001):

Collaboration is a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals.

The relationship includes a commitment to mutual relationships and goals; a joint developed structure and shared responsibility; mutual authority and accountability for success and sharing of resources and rewards.

Now having a definition for collaboration, it is necessary to determine which fields of studies research collaboration in a manner consistent with the definition just provided. The fields of study which meet this criterion, and which will be used in this review, include: 1) collaborative public management, 2) citizen participation (which includes: 2a) deliberative democracy, 2b) action research and 2c) new public service), 3) environmental conflict resolution, 4) networks, and 5) social theories on cooperation and game theory. Each of these will be explored in more detail in the following pages.

### ***Collaborative Public Management***

Collaborative public management is a voluntary process where various stakeholders work together to solve difficult problems. O’Leary and Bingham (2009) provide a useful definition of collaborative public management as:

Collaborative public management is a concept that describes the process of facilitating and operating in multiorganizational organizational arrangements to solve problems that cannot be solved or easily solved by single organizations. Collaborative means to co-labor, to achieve common goals, often working across boundaries and in multi-sector sector and multi-actor relationships. Collaboration is based on the value of reciprocity. Collaborative public management may include participatory governance: the active involvement of citizens in government decision-making.

There is a branch of collaboration that is called collaborative governance, which is similar to collaborative public management. However, O’Leary and Bingham (2009) state these branches differ because one is “focusing on collaboration among organizations, and the other focusing on civic engagement and ways for citizens to participate in governance.” Gray (1989) states that collaboration is different from other forms of cooperation because the stakeholders are interdependent, it allows for a constructive way to address differences between stakeholders, and once the decision is made there is joint ownership and the stakeholders are responsible for maintaining the partnership into the future.

### ***Citizen Participation***

Citizen participation is a type of collaboration whose focus is on citizens being the primary form of stakeholder. Schachter (2012) states that the literature about citizen

participation, emanates from ideas about the importance of citizenship and citizen interaction with government, and that it was a response to the reinventing government movement, which focused instead on government effectiveness and performance. To this point, Frederickson (1982) stated, “The effective public administration of the future should be intimately tied to citizenship...and to the effectiveness of public managers who work directly with the citizenry.” Though the reinventing government movement argued that reform occurred due to changes in bureaucracy, Schachter (1995) “posits that reform also requires reinventing ourselves as active citizens through education and information exchange.” This idea that citizens need to be active in government to promote and ensure democratic values is not new and according to Stivers (1990) can be traced back to Aristotle. Though citizens need to be active and participate in government, the government also needs to play a role to help ensure they do. Though theorists disagree about what government should do, most agree that government should understand who participates and why (Verba, Scholzman, Brady & Nie, 1993), the role of education (Nie, Junn & Stehlik-Barry, 1996), actively seeking out citizens, (Feldman, Khademian, Ingram & Schneider, 2006), engaging minorities (de Lancer Julnes & Johnson, 2011; Schachter & Liu, 2005), and serve rather than steer (Denhardt & Denhardt, 2000).

There are a number of sub-disciplines or similar fields in the citizen participation literature, which share a common belief in the importance of citizen participation. They include: 1) deliberative democracy, 2) action research and 3) new public service. Each of these will be discussed in greater detail in the following pages.

### ***Deliberative Democracy***

Deliberative democracy is a technique in which citizens are encouraged to be more involved in decision making than would ordinarily happen. Feldman et al. (2006) assert that the “The public manager...facilitates the practice of democracy by creating opportunities for people with different ways of knowing public problems to work together in a collective space to solve problems” (p. 93). In order to find those people with different points of view Feldman et al. (2006) urges public administrators to work beyond their boundaries and actively seek out people or parties who have a different way of knowing a particular issue. Actively seeking out new parties, “can help public managers identify new actants and alter associations that they might otherwise only discover through blind luck” (Feldman et al., 2006, p. 96). Deliberative democracy also encourages public managers to actively seek out and find people with different points of view, especially the marginalized, who are often difficult to reach.

### ***Action Research***

Action research goes by several names: community based research, participatory research, collaborative inquiry and participatory action research (Hutchison & Lord, 2012) and can be described as a process in which members of a community discuss a relevant topic, with the end goal of actionable improvement in their condition (Pedlar, 1995). In order for action research to be effective, it must be: 1) community based, 2) collaborative and 3) action oriented (Hutchison & Lord, 2012). The term “research” is used in this context not only to describe a more traditional research approach used by an



academic, but also to describe the role the community member plays as researcher in this process of their own self-betterment. Pedlar (1995) speaking about community members who participate in action research states that “life circumstances or quality of life can be enhanced through participation in a process of problem posing and problem solving” (Pedlar, 1995, p. 134).

### ***New Public Service***

The goals of public administration or - what public administrators should do - has changed over time and Denhardt and Denhardt (2003) suggest there are different criteria by which government is judged: there are legal and political concerns, economic and market ones, and finally democratic and social aspects. Traditional public administration is concerned with the legal and political aspects, new public management is concerned with the economic and market factors and new public service is concerned with the democratic and social issues (Denhardt, 2003). In fact, the term New Public Service (NPS) was coined by Denhardt & Denhardt (2000) to describe a public administration that focuses on this last goal. This movement adheres to the following principles: 1) “serve, rather than steer,” 2) “the public interest is the aim, not the by-product,” 3) “think strategically, act democratically,” 4) “serve citizens, not customers,” 5) “accountability isn’t simple,” 6) “value people, not productivity,” and 7) “value citizenship and public service above entrepreneurship” (Denhardt, 2000, p. 553-556). Though these aims may seem impractical and too idealistic, Bryer (2009) found that the outcomes of those who use a NPS approach can be superior to other governance

approaches. NPS attempts to change a trend in government that is mostly concerned with economy and efficiency and restore the notion of a public servant being one who serves people, especially those who do not have a voice. Denhardt (2000) states that “the primary role of the public servant is to help citizens articulate and meet their shared interests rather than to attempt to control or steer society” (p. 549).

### ***Environmental Conflict Resolution***

When it comes to environmental issues there are often substantial ideological differences between the stakeholders, and thus a need for conflict resolution. These ideological differences are even enshrined in the statute that gives the National Park Service its charter, where language describes its mission as 1) “conserve” and 2) “provide for enjoyment” (Freemuth, 1989, p. 278). The concept of “providing for enjoyment” is regarded as “use,” and this “use” could mean visitors enjoying a park, but it can also mean using the park’s resources to make a profit. This profit could come from harvesting natural resources or selling concessions to the park’s visitors. The business opportunities in a park can be lucrative, and when a park manager limits the business opportunity in favor of conserving the environment, this often results in a conflict. All too often this conflict is resolved by politics, where politicians who have been lobbied by the business interest pressure the manager to reverse their decision. This type of “economic bullying” (Yochim, 2011, p. 393) results in the environment becoming marginalized. Many will argue that the government should take a stronger stance and resist pressure from the present for a more long-term environmental objective (Frisch & Wakelee, 2011).

The literature also suggests that the economic use of natural resources varies within levels of government, with state forest services placing more emphasis on timber harvesting and profit and national forest services putting more emphasis on environmental protection (Koontz, 2002).

Since many of the first attempts at collaboration were pioneered over environmental issues (O’Leary & Bingham, 2003), environmental issues has their own type of collaboration called environmental conflict resolution (ECR). However, it should be noted that ECR has many similarities with interest-based negotiation, mutual-gains bargaining and dispute resolution. One way to think of ECR, is that it is a synthesis between conflict resolution and collaborative public management (Emerson, 2009). Emerson, Nabatchi, O’Leary and Stephens (2003) give a more detailed description, stating that ECR contains the following elements:

1. Participation is usually voluntary for all participants.
2. The parties or their representatives must be able to participate directly in the process.
3. Any and all participants must have the option to withdraw from the ECR for process and seek a resolution through a more formal process, such as litigation.
4. The third-party neutral must not have independent, formal authority to impose an outcome but rather should help the parties reach their agreement.
5. The parties must agree to the outcome or resolution of the dispute. The purpose of the process is to help parties reach their own solutions, which requires their consent to the...recommendation.

### ***Networks***

O’Toole (1997b) defines networks as “structures of interdependence involving multiple organizations or parts thereof, where one unit is not merely the formal subordinate of the others in some larger hierarchical arrangement.” The motivation

behind the literature on networks is that due to the complexity of today's problems, and the fact that easy issues have already been solved, society is now facing "wicked problems" (Clarke & Stewart, 1997). In order for government to solve these wicked or complex problems, individual agencies must stop trying to go it alone, and instead must shift "from silos to networks" (O'Leary, 2015). Though contrary to the traditional way that government conducts its business, Keast, Mandell, Brown and Woolcock (2004) argue that government is going to need to work differently and change their expectations in order to tackle these problems. One area where this change will need to take place is government changing their risk avoidance behavior and becoming more comfortable with taking risks. Romzek (2011) describing the challenging situations that participants in networks will face, states they must:

function within both formal and informal accountability relationships, and network actors face the challenge of reconciling the needs of multiple stakeholders, diverse expectations, and varying organizational missions and roles, while implementing complex service-delivery protocols.

These complexities are difficult for public administrators to manage because during the process they lose the ability to control the outcome and, as O'Toole (1997b) states, "Public administration increasingly takes place in settings of networked actors who necessary rely on each other and cannot compel compliance on the part of the rest." As a result of cognitive, strategic and institutional uncertainties, Van Bueren, Klijn and Koppenjan (2003) make the claim that "decisions can only adequately be handled by enhancing and intensifying interactions between stakeholders." This would imply that

individuals who are better at “enhancing and intensifying interactions between stakeholders” are going to be better at collaboration. In one procedure to help with this, Koppenjan (2008) suggests that all stakeholders must agree on the way the network will assess its own effectiveness and agree to the performance measures that will be used. If this does not happen it can “lead to a power struggle and a blame game, which does no justice to the efforts actors have made, prohibits learning and may even jeopardize future collaboration” (Koppenjan, 2008). In order to better understand network management, Agranoff and McGuire (2001) state amongst other items, “behavior” and “collaborative learning” need to be studied further.

### ***Social Theories on Cooperation and Game Theory***

Often cited in the network literature are topics like game theory and other social theories on cooperation. The reason why the theories on cooperation and game theory go together is because theorists wonder whether people cooperate to help the group or “game the system” so they can help themselves. Curious why cooperation arose as a biological adaptation, Axelrod and Hamilton (1981) wondered if biological evolution (as Darwin surmises) is a survival of the fittest, why do organisms cooperate? To test this they devised a model using game theory to “show how cooperation based on reciprocity can get started in an asocial world, can thrive while interacting with a wide range of other strategies, and can resist invasion once fully established” (Axelrod & Hamilton, 1981). In describing game theory, O’Toole (1997a) states:

game theory is a branch of mathematics designed to model decision making between two or more interdependent actors. The approach is particularly useful for present purposes, because it focuses on strategic choice: decision making among those whose choices are influenced by the decisions they anticipate from the others involved.

O'Toole (1997a) goes on to say that game theory exposes two threats to cooperation: 1) threats from uncertainty and 2) lack of institutionalization. One of the the problems of game theory is how to “develop the game and encourage its play to reduce uncertainty... while also stimulating...the innovative intent that inspired the initiative in the first place” (O'Toole, 1997a). Olsen (1965) would argue that it will take more than encouragement to get parties to cooperate, “unless there is a coercion to force them to do so, or unless some separate incentive...is offered...on the condition that they help bear the costs or burdens involved” (Olson, 1965). Olson (1965) is also concerned that small interest groups will be more successful in securing outcomes more favorable for them than the majority, and states “there is however a surprising tendency for the “exploitation” of the great by the small.”

According to Ostrum (1990) cooperation between government and other public and private institutions has not worked due to the following game issues: 1) prisoner's dilemma game, 2) logic of collective action and 3) the free rider problem. To move beyond the problem of individual organizations making poor choices due to their fear of the other organizations taking advantage of them, Ostrum (1990) argues that trust must be increased and one way do this is for the organizations to agree on ways to monitor the cooperation process. However, there are situations in which this lack of trust will lead to

there being no technical solution to the problem. According to Hardin (1968) tick-tack-toe is a game which fits this category because if all parties know perfectly know the rules of the game it is an un-winnable game. Unless, of course, one resorts to actions which abandon the rules of the game, such as, “I can hit my opponent over the head; or I can drug him; or I can falsify the records” (Hardin, 1968). “No technical solutions” are often found in situations which involve public commons, such as with farmers who graze animals on public lands, or polluters who release their toxins into the water or air. For an individual to justify this, Hardin (1968) states there must be a “psychological denial” whereby “The individual benefits as an individual from his ability to deny the truth even though society as a whole, of which he is part, suffers.” (p. 1244). To curb this individual desire for personal gain, it becomes necessary for the government to restrict individual freedom in order to benefit the group, or as Hardin (1968) states, so we can “put an end to this aspect of the tragedy of the commons.”

Though in this review of game theory there has been more pessimism than optimism over how individuals will engage in cooperation, O’Toole (1997a) says steadfastly, “The analytic approach of game theory; used heuristically, can identify a set of actions useful to public managers in enhancing prospects that sound innovations will succeed.” Others suggest that we need to more completely understand how networks influence policy, and Klijn (1996) states, “Research should also be directed toward management strategies that the various actors use in their interactions and their results.” By doing a more rigorous analysis of game theory which includes “analyzing the perceptions of actors, their strategic behavior, and the interaction of the strategic behavior

of series of actors in a series of games” (Klijn, 1996) we may better understand how to improve cooperation.

In this section, various forms of collaboration have been described, and despite the fact that they have different names, there exist many similarities among them. To this point, Bingham and O’Leary (2006) suggest that there is a “parallel play” occurring in the research on collaboration by scholars of public administration and management and by researchers studying conflict resolution” and “...that a synthesis across these disciplinary lines is missing.” With an understanding that there is “parallel play” between these fields and theories, in the remaining sections of this paper evidence from all of these fields and theories will be used. It should be stated that in the remainder of this literature review, that relevant articles from the various fields of study just described will be used next to each without reference to the field of study from which they come. This is being done because it is important to discuss the relevant research on a specific topic, regardless of the field of study of its author. This is also being done in hopes of bringing together the various fields of study to better understand collaboration. It is also important to make this distinction because the author of this dissertation will take some liberty with the use of the term collaboration. Collaboration will be used as an overarching principle that includes terms such as “citizen participation,” “action research,” “networks” and “conflict resolution” to name a few. However, direct quotes will not be changed and at times may seem awkward when apparently out of no where a more specialized term such as “citizen participation” is quoted.



## **The Benefits of Collaboration**

Overall the “The literature on collaboration is often celebratory and only rarely cautious (Berry et al., 2004). Many of these praises include the ways in which collaboration can improve governmental performance. These include that it improves decision making (Poister, Thomas & Berryman, 2013; Brody, 2003; Wang, 2001; Poister, 2010; Robbins, Simonsen & Feldman, 2008), decreases legal battles (Lee, 2014; Kagan, 1991), builds trust between government and citizens (Ansell & Gash, 2008; Yang & Holzer, 2006; Majumdar, Highsmith & Cherrington, 2013; Halvorsen, 2003), increases transparency (Thomas, 2012; Norris, 2013; Ganapati & Reddick, 2014), encourages sustainability (Portney & Berry, 2010; Wang, Van Wart & Lebrede, 2014), that citizen involvement in performance measures promotes performance management (Moynihan & Pandey, 2010; Ho & Coates, 2002; Ho, 2006; Frederickson & Frederickson, 2006; Heikkila & Isset, 2007), and strengthens accountability (Gibson, Lacy & Dougherty, 2005; Handley & Howell-Moreny, 2010). The remainder of this section will go into each of these claims in more detail.

### ***Better Decision Making***

The simple logic behind the saying *two heads are better than one* helps explain why collaboration can lead to better performance, but certain types of collaboration work better than others. Citizens or organizations that use or have intimate knowledge about specific government operations, and which are referred to as stakeholders, are the

preferred source for participation. Government agencies often are not sure who the major stakeholders are and Poister, Thomas and Berryman (2013) suggest a model called “The Georgia DOT 360 Degree Assessment Model,” whose purpose is to first determine who the relevant stakeholders are, and then have the stakeholders evaluate the agency or program. This model not only opens up new perspectives for organizational leadership, but the evaluations have helped the Georgia DOT to “ultimately improve its performance” (Poister et al., 2013, p. 302). However, some suggest that not all stakeholders equally contribute to improved performance, and unexpectedly, when it comes to environmental planning Brody (2003) states, “One of the most statistically powerful findings is that the presence of certain stakeholders, particularly industry, significantly increases local ecosystem plan quality” (p. 415). Brody (2003) also states that “Although the representation of stakeholders during the planning process may play a role in increasing the likelihood of plan implementation, on the basis of this study, it is not a significant factor when it comes to producing a high-quality outcome” (p. 414).

Another aspect of better decision making includes using democratic values, and better decision making should mean making decisions that people want. Wang (2001) states “Participation in decision making leads to better understanding and satisfaction of public needs and the building of consensus on service goals, priorities, and performance expectations” (Wang, 2001 p. 333). In addition, Poister (2010) urges the use of stakeholders when making more long-term or strategic plans.

As technology changes and e-governance becomes more readily available, it may allow for more citizens, who currently are not thought of as stakeholders to provide

meaningful input. Robbins, Simonsen and Feldman (2008) describe interactive web surveys that “allowed for real-time interactivity and was tailored to present respondents with trade-off s between service levels and taxes” (p. 564). This sort of interaction allows citizens to voice their priorities in services and programs, and serves as an education tool, by showing how programs are affected when you begin moving money around. Though these sort of applications are still in their infancy, they hold promise for new forms of collaboration to improve decision making.

### ***Adversarial legalism***

Another way that collaboration can increase performance is by decreasing the number of legal challenges, which are both costly and delay government action. Lee (2014) suggests that if administrators communicate and encourage collaboration with stakeholders and resolve conflicts before rule-making, the result should be fewer legal challenges and an increase in administrative efficiency. The key is to bring the adversarial stakeholders together in “an administrative process based more on informal discussion and debate, a search for shared values, a spirit of compromise and cooperation” (Kagan, 1991, p. 398). Lee (2014) found that “public meetings have a positive effect on the number of final rules enacted and a negative effect on the number of judicial challenges brought, which implies that public meetings contribute to promoting efficient administrative performance” (p. 389). “Increasingly, scholars are calling for alternatives, less litigious was of solving social problems, making public

policy, and resolving disputes.” (Kagan, 1991, p. 398). Bingham, Nabatchi and O’Leary, (2005, p. 547) state that some of the forms that collaboration can take include:

new quasi-legislative and quasi-judicial governance processes, including deliberative democracy, e-democracy, public conversations, participatory budgeting, citizen juries, study circles, collaborative policy making, and alternative dispute resolution, to permit citizens and stakeholders to actively participate in the work of government.

Though many of these forms of collaboration are difficult to implement, the benefits have the opportunity to outweigh the costs.

### ***Trust***

When there is distrust between the parties involved in a collaboration, this can lead to reduced participation and poor performance. When Ansell and Gash (2008) reviewed 137 cases of collaborative governance, they found 3 crucial factors that lead to success. They are “face-to-face dialogue, trust building, and the development of commitment and shared understanding” (2008, p. 533). In order to build trust, public managers should “focus on ‘small wins’ that deepen trust, commitment, and shared understanding” (Ansell & Gash, 2008, p. 533). Yang and Holzer (2006) encourage collaboration in the development of performance measures and argue that, to build trust in government, it is important to have performance measures that reflect its citizens’ values. Collaborations can also “increase the relevance of performance reports and their credibility in the public eye” (Halachmi & Holzer, 2010, p. 394). Majumdar, Highsmith, and Cherrington (2013) found that citizen involvement with performance measures made

programs perform better, which also helped them be more competitive in being awarded grant money. In addition to having citizens involved with performance measures, Halvorsen (2003) found that after participants attended project meetings, “they were significantly more likely to believe the USFS [*United States Forest Service*] was responsive” and “exposure to comfortable and convenient meetings is strongly associated with positive expectations of USFS performance” ( p. 540, italics mine).

### ***Transparency***

Transparency is a way of interacting with a government’s citizens by giving them information about what government is doing, and government transparency can improve government performance (Thomas, 2012). Too often, the way that government provides transparency is little more than one-way information (government to citizen) and it allows for little interactivity. Norris & Reddick (2013), however, sees e-participation and e-democracy as mechanisms to transform government and enable citizens to become more active participants. Also, as governments engage in e-government and put more information and services on the web, Ganaputi and Reddick (2014) have found that it improves efficiency by reducing administrative costs.

### ***Sustainability***

Sustainable government’s goal is to have revenues either match or exceed costs, and collaboration has been shown to improve sustainability. Portney and Berry (2010) found that one of the critical factors in getting local governments to implement

sustainability is by working with stakeholders early in the process to get buy-in and support. In addition, they found that cities whose populations are more apt to be involved in collaboration are also cities who implement more sustainable initiatives, so they state that “sustainable cities are participatory cities” (Portney & Berry, 2010, p. 133). Wang, Van Wart and Lebrede (2014) agree that stakeholder involvement is needed in to implement sustainability at the local level but argue that technical expertise is also necessary. However, they add that the public manager must be a skillful weaver if they are to bring two parties who are in conflict back together (Wang, Van Wart & Lebrede, 2014). Later in this paper, we will come back to this issue of the skill needed by public managers.

### ***Performance management***

As previously discussed, having collaboration in determining performance measures improves performance (Majumdar et al., 2013), but collaboration also has an impact on performance usage (Moynihan & Pandey, 2010). This performance usage, or what some call performance management, means that public managers are using performance information to make better decisions. The way that collaboration increases the use of performance management is that when citizens are involved with creating the performance measures it builds pressure on the elected officials to use them (Ho & Coates, 2002; Ho, 2006). Also, it has been found that agencies pick bolder performance goals when they have strong stakeholder support (Frederickson & Frederickson, 2006). However, one of the problems is that governments “typically do not use citizen input to

determine performance standards or monitor performance” (Heikkila & Isset, 2007, p. 238). Wichowsky and Moynihan (2008) argue that performance management systems often do not do a good job improving citizenship outcomes, but that performance measures could be written in ways that would also encourage governments to increase collaboration interactions.

### ***Accountability***

When public managers do not engage citizens, there can be a disconnect between government and its citizens, which results in accountability issues. Gibson, Lacy and Dougherty (2005) found that “the governance process in which community planning is combined with benchmarking and performance monitoring, is a vital link for reconnecting citizens through the participatory process and for developing a more visible measure of accountability” (p. 9). Another important consideration is the attitude of the public manager towards collaboration, and Handley and Howell-Moreno (2010) found that, “communities in which administrators feel greater accountability to citizens will have higher levels of citizen participation” (p. 601).

### **The Complexities of Collaboration**

Just as the literature is clear that collaboration leads to better performance, it is also clear in its conviction that collaboration is complex and difficult to manage.

Collaboration begins with bringing diverse stakeholders together, but then there is a need

for good communication (Pandey & Garnett, 2006; Wang et al., 2014) and building trust between the groups (Leach & Sabatier, 2005). Often these groups have past histories of conflict. Since this process can take a long time, public managers must try and keep the stakeholders engaged in the process (Huxham & Vangen, 2000; Lasker, Weiss, & Miller, 2001; Fleishman, 2009). On top of that, public managers may not have the skills necessary to perform these tasks (Carpenter & Kennedy, 1988; Milward & Provan, 2006; Emerson, 2009) and their attitudes and perceptions about collaboration play a role. They may be worried about politicians overriding decisions (Freemuth, 1989; Yochim, 2011), and lastly, they have to deal with paradoxes that are an inherent part of collaboration (Emerson, 2009; Graddy & Chen, 2009; O’Leary & Bingham, 2009).

### ***Communication***

The manager who is responsible for leading the collaboration must have good communication skills. Mintzberg et al. (2006) state that “Collaboration is fundamentally a communicative process, one that includes nonverbal, experimental and emotional communication.” Pandey and Garnett (2006) discuss the “complexity and uncertainty involved in communicating with multiple stakeholders in turbulent environments” (p. 45). To get stakeholders to work with technical experts, it requires a “skillful weaving together” of divergent points of view (Wang et al., 2014). In addition to public managers needing good communication skills, in order for a decision to be accepted by the population at large, the stakeholders need to accurately represent the community’s diverse set of ideas and values. Though some citizens or organizations may not be difficult to



find, managers need to actively seek out and communicate with hard to reach groups. As Feldman et al. (2006) suggests, public managers cannot depend on “blind luck” and having stakeholders come to them.

### ***Trust***

For stakeholders to set aside differences and work together toward a common solution, there needs to be trust among the stakeholders. In some cases, stakeholders may aggressively distrust each other due to past grievances. To turn that around, trust needs to be built. Edelenbos and Klijn (2007) describe that trust has three characteristics: 1) vulnerability, 2) risk and 3) expectations. This suggests that stakeholders are willing to be vulnerable and take risks as long as at least some of their expectations are going to be met. Leach and Sabatier (2005) suggest that “process” plays a role in improving trust, if the process ensures that all parties are respected and treated fairly. It begins by first establishing trust and then maintaining it throughout the proceedings. If the public agency sets the example and shows the other stakeholders how to interact with each other, it can make a critical difference in building trust (Leach & Sabatier, 2005). Surprisingly, there can be an issue when there is too much trust, which can “lead to overly relaxed attitudes from cooperating partners. This, in turn, could lead to risky and unhealthy situations in which trust easily turns into distrust” (Edelenbos & Klijn, 2007).

### ***Maintaining Interest***

Even after trust has been built among the stakeholders, it can be challenging to keep the members engaged throughout the process. Some factors can distract stakeholders' interest in working with the group; and these include inconvenience and frustration. Fleishman (2009) suggest that ““inconvenience factors’ rank high on the list of obstacles to participation.” Even factors that initially encourage stakeholders to join the collaboration do not guarantee that they will remain with the collaboration for the long run. Fleishman (2009) writes, “Although respondents indicated that resource availability was an important motivation to participate, there was no consistent evidence that it was correlated with actual participation patterns.” When stakeholders lose interest, or worse, become frustrated or disappointed with the experience, this can lead to partnerships that exist only on paper (Huxham & Vangen, 2000; Lasker, Weiss, & Miller, 2001).

### ***Lack of Skill***

As described earlier in this paper, there are many forms of collaboration and some of them work better than others, and some work better in specific situations. Knowing when and how to use each one requires a level of skill that not all public managers have. “Managers thus must be cognizant of the types of collaborative structures they are attempting to manage or manage in (Milward & Provan, 2006, p. 6).” This is especially burdensome for managers who are using the process for the first time. Emerson (2009) states that “public managers are exploring cooperative networks and partnerships with

stakeholders, but when challenges arise, they may not be familiar with or skilled in interest-based negotiation, let alone multiparty negotiation.” When public managers do not have the skills to discern which process to use, “managers often choose less effective methods because they are unfamiliar with more productive options” (Carpenter & Kennedy, 1988, p. 18). The wrong process or management can lead to poor results, and O’Leary and Bingham (2009) state, “Conflict within networks is not inevitable, yet it is predictable if it is not managed.” If a lack of skill leads to a conflict within the group, and as a result, the manager has a negative experience with collaboration, this can lead to negative perceptions and attitudes about collaboration that can persist throughout the manager’s career.

### ***Managerial Perceptions and Attitudes***

A manager’s overall perception of, and their attitude toward the value of collaboration is important; if they have a positive attitude towards collaboration, they are going to be more likely to use it. If they have a negative attitude towards it, then they are going to be less likely to use it. Public administrators are in a unique position to use collaboration because they have a fair amount of discretion, and “it is discretion that gives street-level practitioners the ability to adapt to changes in policy and management” and it is they who “are manifestly responsible for making policy work” (Brodkin, 2011, p. i253-255). When “making policy work” the public administrator has the option to engage in collaboration or not. Lewis and Ramakrishnan (2007) found that front-line workers are quicker to adopt immigrant friendly practices than their elected city councils.

That is not to say that all administrators in government act the same; “service bureaucracies” are more likely to adopt diversity-friendly policy changes than are “administrative bureaucracies” (Jones-Correa, 2008, p. 42). Further evidence by Meier and O’Toole (2006) shows “bureaucratic values to be far more influential in explaining bureaucratic outputs and outcomes than political factors” (p. 177). Since these “bureaucratic values” can determine whether managers use collaboration.

There is much literature written about which types of managers are going to be more likely to use collaboration. Yang and Pandey (2011) found that successful collaboration was significantly linked with managers who used transformational leadership. Transformational leadership is described by Bass (1991) as leadership that promotes intellectual stimulation to find creative solutions and stirs “employees to look beyond their own self-interests for the good of the group” (p. 21). This ability to look beyond self-interest is a form of serving others, and Denhardt and Denhardt (2000) state that when citizens do not have a clear voice it is the job of the public servant to help articulate their goals and provide their voice. In order to do this, Feldman, Khademian, Ingram, and Schneider (2006) describe a process in which administrators actively seek out different points of view and do not wait for those views to come to them. Managers who exhibit these type of behaviors are also described as having high levels of Public Service Motivation (PSM). Perry (1996) found that people who exhibit higher levels of PSM have: 1) attraction to policy making, 2) commitment to the public interest, 3) compassion and 4) self-sacrifice. In later work, Coursey and Pandey (2007) were able to reduce Perry’s four factors down to three, by removing the dimension of self-sacrifice.

### ***Politics***

Fleishman (2009) has found that organizations are most interested in collaborating when they have “‘political interest’ (e.g., achieving policy goals through the network, influencing policy) and ‘shared goals’ (e.g., compatible goals and objectives and the desire to work with organizations that share one's goals).” However, for the results of a collaboration to be accepted by all, the stakeholders need to represent the diverse points of view that exist in a community, and often these points of view do not agree with each other. Freemuth (1989) has found that park professionals tend to prefer the environmental preservation mission over the mission of use and economic profit. However, when business interests complain of the impact that environmental decisions have on their bottom line, politicians will often side with business interests (Yochim, 2011). When the goal of a collaboration is conflict with politicians, this can lead to additional complexities.

### ***Paradox***

On top of all the other complexities that a manager must face, there is an inherent paradox that occurs when they engage in collaboration. O’Leary and Bingham (2009) write, “These paradoxes of collaborative public management epitomize how challenging a time it is to be a public manager.” Not least among these paradoxes is the need to wear the “multiple hats” of participant, agency representative, authority figure, and collaboration leader (O’Leary & Bingham, 2009). In addition to this paradox, O’Leary and Bingham (2009) state:

Collaborative public management in networked settings has both vertical and horizontal dimensions, involving an array of public and private actors. A network manager may be involved simultaneously in managing across governmental boundaries, across organizational and sectoral boundaries, and/or through formal contractual obligations.

The manager must try and find a balance between these often opposing and disparate tasks otherwise, the collaboration can fail. Speaking of this, Emerson (2009) writes:

If we push too far on the deliberative values side, we risk managing process for process's sake. Claims of "process fatigue" set in. If we push too far on the performance and efficiency side, we risk jeopardizing the trust-building principles of engagement that make collaborative public management and conflict resolution effective.

In addition to the paradoxes that managers face, the stakeholders who are involved with the collaboration also face paradoxes, and they “must assess the tradeoff between the benefits of cooperation and this vulnerability” (Graddy & Chen, 2009).

Gazley and Brudney (2007) have identified additional complexities such as "mission drift, the possible loss of institutional autonomy or public accountability, cooptation of actors, greater financial instability, greater difficulty in evaluating results, and the expenditure of considerable institutional time.” Carpenter and Kennedy (1988) outline additional complexities in public disputes that, if not properly managed, can lead to a spiral of conflict. They are:

**a) Complicated network of interests**

- (1) New parties emerge
- (2) Varying levels of expertise
- (3) Different forms of power
- (4) Lack of continuing relationships
- (5) Differing decision-making procedures
- (6) Unequal accountability

**b) Procedures not standardized**

- (1) No formal guidelines
- (2) Influence of government rules and regulations
- c) **Broad range of issues**
  - (1) New issues emerge
  - (2) The importance of technical information
  - (3) Strongly held values

Despite the numerous complexities of collaboration, the literature still maintains that collaboration can lead to improved government performance. The next section of this paper will examine which characteristics make a public administrator a better collaborator.

## **What Makes Someone Good at Collaboration?**

Since each person is better at performing specific functions over others, it means that some people are also going to be better at collaborating. With this assumption in mind, the next question to ask is: are there commonalities among the individuals who are good at collaborating? The literature does provide input on this topic, and there are two categories that describe what makes an individual good at collaboration. They are: 1) collaboration skills and 2) personality traits.

### ***Collaboration Skills***

The literature states that public administrators need a variety of skills to use collaboration successfully. If managers are going to be able to implement the collaborative process effectively, they need to know what works. According to Carpenter

and Kennedy (1988), “conflict management is neither an art nor a science. It is a skill that can be learned like any other skill through study and practice.” Irvin and Stansbury (2004) find that collaboration works when there are low costs and high benefits, but does not work when there are high costs and low benefits. Knowing when and how to use each one requires a level of skill that not all public managers have. “Managers thus must be cognizant of the types of collaborative structures they are attempting to manage or manage in” (Milward & Provan, 2006, p. 6). This is especially burdensome for managers who are using the process for the first time, and as such Emerson (2009) states that “public managers are exploring cooperative networks and partnerships with stakeholders, but when challenges arise, they may not be familiar with or skilled in interest-based negotiation, let alone multiparty negotiation” (Emerson, 2009). When public managers do not have the skills to discern which process to use, “managers often choose less effective methods because they are unfamiliar with more productive options” (Carpenter & Kennedy, 1988, p. 18). The wrong process or management can lead to poor results and O’Leary and Bingham (2009) state, “Conflict within networks is not inevitable, yet it is predictable if it is not managed.” If a lack of skill leads to a conflict within the group and as a result, the manager has a negative experience with collaboration, this can lead to negative perceptions and attitudes with collaboration that can persist throughout the manager’s career. When trying to understand which type of learning works best in developing collaboration skills, DuPraw, et al. (2015) “found that experiential learning is the most powerful collaborative capacity-building strategy for individuals and groups.”



Professionalism is another skill that is important to successful collaboration. McGuire (2009) has found that “the agencies most capable of working with multiple jurisdictional and organizational partners are those that are considered to be the most professionalized, as conceptualized in terms of education, training, and organizational structure.” It is also important that the administrator has skill in understanding how severe a problem is, and McGuire and Silvia (2010) empirically found that “perceptions of the severity of problems and managerial skill explains the level of intergovernmental collaborative activity.” This means that when managers perceive the problem as severe, they are more likely to use collaboration.

### ***Personality Traits***

The idea that personality somehow plays a role is even understood by practitioners, and Shaw (2003) wrote that one interviewee stated that working in a collaborative spirit is “a matter of personalities.” Shaw (2003) also found that “Compatibility and friendship were important to the people who were successful in establishing partnerships” and “studies have shown that compatibility or having good interpersonal relationships is important in a successful partnership.”

Goldman and Kahnweiler (2000) who studied nonprofit executives, found that collaborators who “are predisposed to perceiving their respective collaborations as successful are extrovert, feeling males who have high role ambiguity and low role boundary occupational stress.” This study also stated, “their personal characteristics enable them to view prospective collaborations with more enthusiasm and hope than

executives with other personal characteristics.” Goldman and Kahnweiler (2000) established this “collaborator profile” for nonprofit executives using a combination of the Myers-Briggs Type Indicator, Occupational Stress Inventory, Internal Control Index, Social Orientation Tasks, demographic questions and some additional collaboration profile questions. However, they measured this against the executives’ perceptions about their own collaboration success, and they note in their recommendations that future studies should be “measuring actual outcomes rather than perceived outcomes of collaboration” (Goldman & Kahnweiler, 2000, p. 447). They also recognize the need to interview both “successful and unsuccessful collaborators about factors leading to collaboration outcomes” (Goldman & Kahnweiler, 2000, p. 447). Another study by O’Leary, Choi & Gerard (2012) that examined the skill sets required for collaboration found that members of the Senior Executive Service cited interpersonal skills and individual attributes over skills and expertise.

As seen in this section there are numerous examples of how individual factors impact a public administrator’s ability to collaborate successfully. If an administrator can navigate this field with some combination of personal traits and skills that contribute to a successful collaboration, then they can improve government performance. However, if they do not have the right combination, then they will be likely to fail. It has been glibly said that collaboration is “An unnatural act, performed by non-consenting adults” (Clevenger, 1997).

The two big takeaways from this review of the literature are: 1) collaboration can achieve great results and 2) collaboration is difficult to do well. These two statements

conflict with each other, and to put it in more colloquial terms, it is much like saying, ‘if you can get it running it’s a real work horse!’” Though this dichotomy may be of interest to an academic, to a practitioner who already feels overwhelmed with the problems at hand, the challenge to get collaboration to work may not be worth it. Brody (2003) has questioned how public administrators would answer the question “Does collaboration improve governmental performance?” and says it is not clear you would get an overwhelming response in the affirmative. This is problematic because there is little disagreement that the problems facing government are becoming more complex and difficult for one organization to handle on its own. As a result, it is going to become more and more necessary for government to work together and use collaboration (Van Bueren, Klijn & Koppenjan, 2003).

Even though some managers perceive a need for the use of collaboration to face challenging problems, the use of collaboration has not been adopted by all. In fact, Leong, Emmerson and Byron (2011) state that though “many disciplines are identifying this rise in collaboration as a new era of governance...this philosophy has not yet diffused widely throughout DOI agencies in practice.” In order to improve collaboration and have it used more widely throughout government, it will be necessary to choose administrators who are good at collaboration. To this point, Shaw (2003) stated, “managers should exercise care in choosing the staffers who will work regularly with staff members of another organization.” Though the literature has provided some insight into who may be good at collaboration, it by no means has determined the definitive answer

to this question. In the next section, a conceptual framework and hypotheses will be described so that research can be conducted to address these important questions.

## **Chapter 3: Conceptual Framework and Hypotheses**

The literature review in the previous chapter has provided evidence that collaboration can improve governmental outcomes; however, it also argues that collaboration is difficult. Though collaboration is difficult, there are examples where collaboration has led to successful outcomes, which leads one to wonder why certain outcomes are successful and why others are not. Though the literature provides a variety of explanations, there has been less research on how the individual manager impacts the success of the collaboration. In this chapter the purpose of the research will be discussed, which is to understand better how an individual manager positively or negatively impacts the success of collaboration. This purpose will be expanded into a conceptual framework that will describe how the research will be organized. In brief, the research is seeking to understand which of the independent variables - 1) individual skills and 2) personality types - has the most significant impact on the dependent variable, successful collaborative outcomes. Throughout this chapter and during relevant discussion points, the hypotheses of the research will be presented with a rationale for the expected direction each independent variable will have on the dependent variable. There will be a complete summary of the hypotheses at the end of the chapter. Before the research purpose and conceptual framework discussion, what will follow next is the reasoning and justification for selecting “state park managers” as the population of interest for this study.

## Reasons for Selecting State Park Managers

Though there is no doubt that research on collaboration in the public sector could investigate any number of agencies within government, it is necessary to reduce the scope for practical reasons and the state park service is a good branch of government to select. For one, much of the pioneering research about collaboration investigated environmental issues (O’Leary & Bingham, 2003). In fact, one segment of the work on collaboration literature is called environmental conflict resolution. Part of the reason that agencies who deal with environmental issues, which the state park service is one, are a good choice for studying collaboration is that there are often substantial ideological differences among the stakeholders. These ideological differences are even enshrined in the statute that gives the National Park Service its charter, where language describes its mission as 1) “conserve” and 2) “provide for enjoyment” (Freemuth, 1989, p. 278). The concept of “providing for enjoyment” is often thought of in terms of *use*, and this *use* could mean visitors enjoying a park, but it can also mean using the park’s resources to make a profit. This profit could come from harvesting natural resources or selling concessions to the park’s visitors. The business opportunities in a park are often lucrative, and when a park manager limits the business opportunity in favor of conserving the environment, this often results in a conflict. One way to resolve conflict is through the process of collaboration. Lastly, Pedlar (1995), speaking on the topic of active research, which is another segment of the collaboration literature, argues that practitioners and academics of leisure are in an ideal position to carry out this type of work.

After selecting the branch of government to study the next question is to decide which level of government to research, and these include state, federal, county and municipal parks. One consideration is the sample size. According to the National Park Service (NPS) website (<http://www.nps.gov/faqs.htm>), there are 413 national park areas, and though it may be possible to do a census instead of a survey, we will later discuss other reasons why the NPS may not be a suitable choice. Finding information about municipal and county parks is more difficult. This is because sometimes these levels of government do not have park systems, and if they do they may be administered by a Public Works departments and be more difficult to track down. As a result, it will be nearly impossible to determine the total population, which will render sampling ineffective. After reviewing all 50 State Park Service websites, it was found that 3,463 locations are listed under their authority. However, this list will need to be cleaned because not all Park Services oversee the same type of areas. For example, some State Parks also manage the State Forests, but in other States they have a separate State Forest Service. Rules will be formulated in order to clean the list uniformly. From the aforementioned rationale, it appears that national or state park systems are the best option to choose. However, Emerson and Nabatchi (2015) suggest that collaborative governance regimes form in three ways. The first is that they are self-initiated, the second they are independently convened and third they are externally directed. For this research, and since we are interested in how public administrators' perceptions interact with collaboration, those collaborations which are self-initiated will be of the most interest. If the collaboration is initiated due to a mandate in policy, or from the direction

of external forces, the managers are not choosing to collaborate on their own. More laws require the National Park Service to participate in collaboration than there are at the state level; thus the reason for researching state park services managers. The last reason for selecting state park service managers has to do with the principal investigators knowledge and background with the New Jersey State Park Service (NJSPS). The principle investigator has worked in the NJSPS for 18 years and as a consequence, has a unique understanding of how a state park service works and this will provide additional insight into this research.

## **Research Purpose and Conceptual Framework**

The purpose of this research is to understand how a state park manager's individual factors impact the success of collaboration. To achieve this purpose, it is necessary to understand which individual factors lead to successful collaboration. According to the literature, there are two main categories, 1) collaboration skills, and 2) personality traits. While reviewing the literature, two articles were found that will provide some of the groundwork and from which this research will expand upon. The first is an article by Goldman and Kanhweiler (2000) titled "A collaborator profile for executives of nonprofit organizations" and the second by O'Leary, Choi & Gerard (2012) titled "The skill set of the successful collaborator." What follows is a discussion of the strengths of each article along with the studies' limitations and how they will be addressed in this research.



In the Goldman and Kanhweiler (2000) article, the authors' goal is to determine if there is a collaborator profile for nonprofit executives and they found that successful collaborators are "extravert, feeling males who have high role ambiguity and low role boundary occupational stress" (p. 435). The strength of this article is that it attempts to understand the individual factors that make a person a good collaborator; in this case, it uses the established Meyers-Briggs personality test. Another strength is that it tests this and other factors against a measure of collaboration that is more rigorous than asking the individual to rate their level of collaboration success. However, since the time that this article was published, there is now an improved and more empirically rigorous measure of successful collaboration, created by Thomson, Perry and Miller (2009), which will be used in this research and discussed further in the dependent variable section of this chapter. Despite the strengths of Goldman and Kanhweiler's article, there are also some weaknesses. The first is their finding that the gender "male" is associated with higher successful collaboration outcomes. This is somewhat problematic, due to the self-assessment of the measure collaboration and that men and women experience the negotiating table differently (Kray & Thompson, 2004). It would be preferable to find the personality traits and skills that determine successful collaboration that apply to both genders, so as not to promote gender bias. From a research framework perspective, there are additional limitations to this research. Goldman and Kanhweiler (2000) make use of the measure "occupational stress inventory" to determine a "collaborator profile" for an individual. The problem with this measure is that it is more a measure of the workplace environment than individual characteristics, and the authors state that one question in this

measure asks is, “My supervisor provides me with useful feedback about my performance” (Goldman & Kanhweiler, 2000). Though it is agreed the work environment can have an impact on the outcome of collaboration, the concern is that this measures the unit as the “organization” rather than as the “individual.” Their research attempts to classify both individual and external factors into an individuals collaboration profile. Another issue with this study is that due to its sole focus on personality and psychological measures, it misses the importance of skills. Though an individual may have the personality profile of someone who is good at collaboration, it would be difficult to imagine they would be successful at collaboration without the skills, experience, and knowledge about how to conduct a collaboration. The next article does a good job addressing the skills necessary to collaborate.

In the O’Leary, Choi & Gerard (2012) article, the authors set out to determine the skill set of successful collaborators. They begin by reviewing the literature and grouping the skill sets into 3 categories: 1) person, 2) organization and 3) task. These 3 categories then get further divided into 7 categories: 1) individual attributes, 2) communication, 3) group process skills, 4) conflict management, 5) strategic leadership, 6) sharing and 7) technical/substantive knowledge. These categories were then used to analyze open-ended questions that were sent to federal senior executive service (SES) employees. The authors admit that a weakness of their study was a low 5.05% response rate, indicating that there may be bias issues and that their results are not generalizable. However, they also note their surprise that administrators place higher importance on factors relating to personal attributes and interpersonal skills rather than skills of group process, strategic

leadership, and technical expertise. This article's main strength is that it provides a useful and comprehensive list of skills that are necessary for collaboration. However, its main weakness is that it assumes the people surveyed are strong collaborators because of the "fact that SES members are standard-setting senior executives who often have significant decision authority as well as deep knowledge, extensive experience, and long tenure in national governance issues" (O'Leary, Choi & Gerard, 2012, p. S74). Though it may be these individuals are in fact good at collaboration, without using a more rigorous measure of successful collaboration, it is difficult to know. Another issue, is with the category of skills described as "individual attributes." Within that list, attributes such as "open mind," "patience," "empathetic" and "self-confident and risk-oriented" are outlined. Though it may be possible to learn how to become more patient or develop an open mind, there is another school of thought that would argue that these are personality traits and, in the case of one's tendency towards taking risks, is genetically determined (Cesarini, Dawes, Johannesson, Lichtenstein, & Wallace, 2009). For this research every attempt will be made to maintain a clear distinction between collaboration skills and personality traits. It also seems prudent, then, to use more well-tested and proven measures of personality.

By examining the strengths and weaknesses of these two articles (see table 3.1 for additional information), it will be possible to build a more empirically rigorous framework around the research question, *which individual factors have the greatest impact on a public administrator's ability to succeed in collaboration?* Building on the

**Table 3.1 Comparison, Strength and Weaknesses of Articles**

<b>Authors</b>	O'Leary, Choi & Gerard (2012)	Goldman & Kahnweiler (2000)
<b>Title</b>	"The skill set of the successful collaborator"	"A collaborator profile for executives of nonprofit organizations"
<b>Methodology</b>	Qualitative	Quantitative
<b>Measure of collaboration</b>	Assumed since high level SES employees	"Working together: A profile for collaboration" instrument
<b>Factors</b>	Individual attributes  Interpersonal skills  Group process skills Strategic leadership skills Technical expertise	Meyer-Briggs personality test  Occupational stress inventory  Internal control index Social orientation tasks
<b>Strengths</b>	Comprehensive list of skills	Use of personality test
<b>Weaknesses</b>	Poor response rate leads to bias and not generalizable  Does not use a validated personality test  Assumes collaboration success due to being SES employee	Use of non-individual factors  Lack of collaboration skills  Uses inferior collaboration success measure

foundation set by these two articles, a more complete conceptual framework will be established. The greatest strengths of these articles are that they each examine one important aspect about how an individual succeeds in collaboration. The Goldman and Kahnweiler (2000) examines psychology and personality, and the O'Leary, Choi & Gerard (2012) examines the skillset. In some ways, the two articles are each exploring one aspect of the nature vs. nurture argument, which questions whether an organism's actions are due to hereditary factors or learned behavior. So the research question of this dissertation can more accurately be stated as, ***which individual factors, where individual factors are grouped as personality traits and collaboration skills, have the greatest impact on a public administrator's ability to succeed in collaboration?*** This leads to the research's first hypothesis:

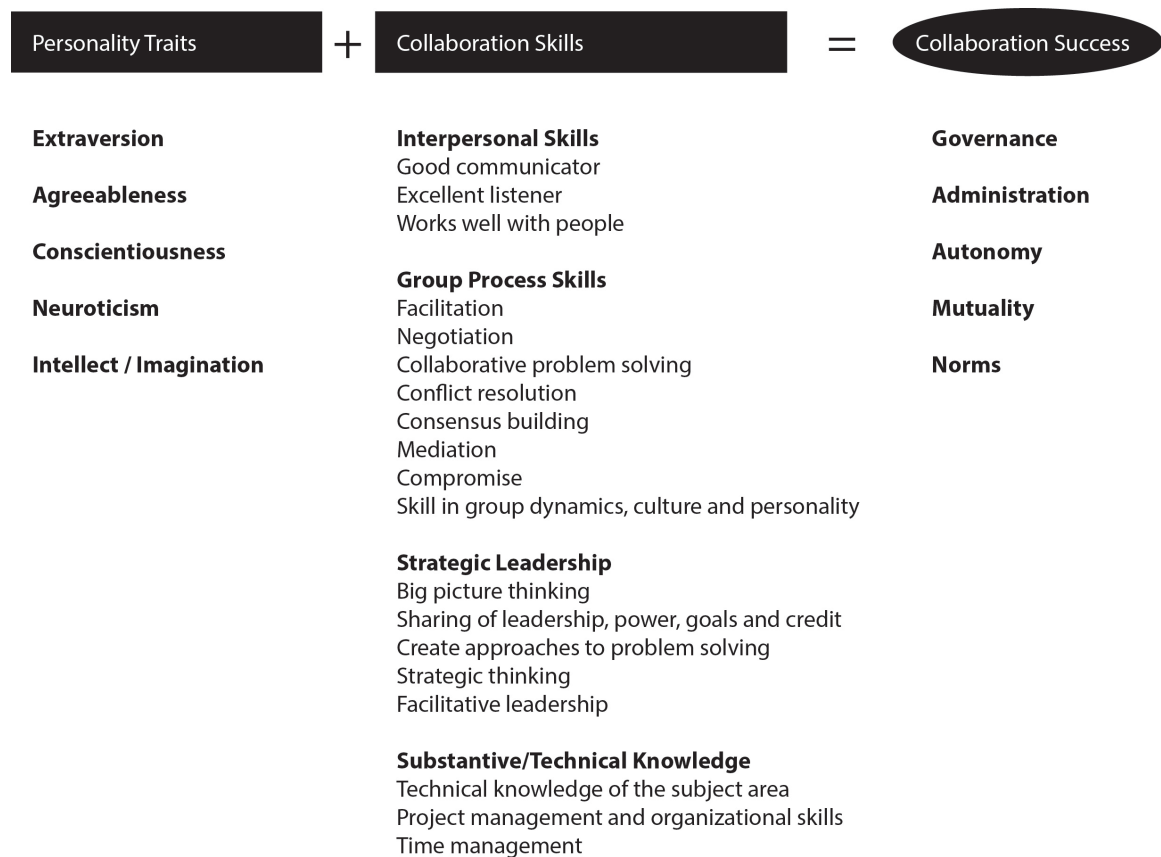
*H<sub>1</sub>* : Personality traits will be more positively associated with successful collaboration than collaboration skills.

The assumption, that personality traits will have a bigger impact than collaboration skills, is based on the research by O'Leary, Choi & Gerard (2012) in which they found that administrators place higher importance on factors relating to personal attributes and interpersonal skills than on skills pertaining to group process, strategic leadership, and technical expertise.

Each article chooses to use only one type of method, either qualitative or quantitative. This research will combine the two, and use a mixed-methods approach to provide correlation between the variables and to provide a richer understanding of why these correlations may be taking place. Finally, this research will improve upon the

success of collaboration measure used in the two articles. In the O’Leary, Choi & Gerard (2012), the measure of collaboration success was assumed because the subjects were SES employees, and the Goldman and Kahnweiler (2000) uses an outdated model of measure. In this research, the more empirically rigorous method designed by Thomson, Perry and Miller (2009) will be used. See figure 3.1 for a model of the research question.

**Figure 3.1 Model of the Research Question**



In this research question the dependent variable is “*successful collaboration*” and the independent variables will be categorized as “*personality traits*” and “*collaboration skill*” factors. These variables will be further explained in the following paragraphs.

## **Dependent Variable**

To determine the impact of the independent variables on collaboration, it is necessary to have a reliable way to measure and operationalize the dependent variable “successful collaboration.” Social scientists often grapple over the best way to measure the organizational performance, and this study about collaboration is no different in this respect. Ideally, a scientist would design a method where each person who responded to a survey would take part in an independent audit, where the quantity and quality of their collaborations would be objectively measured. However, the cost of this type of assessment is prohibitive for most researchers, and as a result, many studies rely on self-reported responses. Though common source bias (CSB) can be an issue with self-reported responses, there are ways to minimize its impact, and George and Pandey (2017) “argue that claims on CSB are exaggerated.” Meier and O’Toole (2013) have found that administrators tend to overestimate their levels of performance and they caution using self-reported measures without additional corresponding measures. From the literature review, the Thomson, Perry and Miller (2009) collaboration measure stands out, because it attempts to address many of these concerns. This collaboration measure uses a variety of theoretical perspectives to construct its model, and these include a “comprehensive, systematic cross-disciplinary examination of the literature grounded in case study

research and fieldwork” (Thomson, Perry and Miller, 2009). Thomson, Perry and Miller (2009) measure collaboration using the following 5 dimensions: 1) governance, 2) administration, 3) autonomy, 4) mutuality and 5) norms. Through empirical testing, they were able to reduce their original 56 Likert-scale questionnaire down to 17 questions, making it a manageable tool to use in a survey. Other researchers have used this model to measure collaboration, including Chen (2008) who used an early version of this model (Thomson, 2001). This research will also use the Thomson, Perry and Miller (2009) collaboration measure for the dependent variable.

## **Independent Variables**

As described earlier the independent variables are categorized as 1) personality traits and 2) collaboration skill. To measure and operationalize each of these factors, this research will use existing validated models, to be discussed next and followed by the research question.

### ***Personality Traits***

Personality theories seek to classify individuals by their psychological characteristics (Rothe, 2017) and social scientists are still developing personality trait theory. One debate in particular that has persisted in personality theory is whether personality traits are fixed and primarily determined by genetics or if personality is more fluid and influenced by the environment. Studies involving identical twins separated at



birth have found evidence for the genetic determination of personality (Bouchard, Lykken, McGue, Segal and Tellegen, 1990). These types of studies cannot explain all the variation, so it appears that the environment is also having an impact. Research by Srivastava, John, Gosling and Potter (2003) found that personality does change over a person's lifetime, with the personality traits conscientiousness and agreeableness increasing till about the age of 60. Another area of concern for personality theory is determining the best way to measure personality. Though over the years there has been a variety of personality measures used, as psychometric analysis by a range of researchers consistently found 5 statistically significant factors related to personality, the theory of the Big-Five began to emerge (Digman, 1990). This is not to say that the Big-Five does not have its critics and some argue that it does not cover the full spectrum of normal personality or even take into account abnormal personality (Boyle, 2008).

With an acknowledgment of some of its theoretical limitations, and an understanding that personality is not static, this research will use the Big-Five personality traits based on the work by Goldberg (1992, 1999). Specifically, it will use the Mini-IPIP scales developed by Donnellan, Oswald, Baird and Lucas (2006) which uses a shortened 20 question test based on the Goldberg model. See appendix D for the questions. This model uses the following 5 factors to measure personality: 1) extraversion, 2) agreeableness, 3) conscientiousness, 4) neuroticism, and 5) intellect/imagination. The Mini-IPIP has been validated and found comparable in accuracy to other Big-Five tests that use more questions (Donnellan, Oswald, Baird & Lucas, 2006). Because the survey

will be asking questions about additional topics, it is necessary to use a model that has limited questions to increase response rates.

Of these 5 personality traits, it is expected that some will be more positively associated with successful collaboration than others. As such this research makes the following hypotheses:

*H<sub>2-1</sub>* : The personality trait *extraversion* will be more positively associated with successful collaboration.

*H<sub>2-2</sub>* : The personality trait *agreeableness* will be more positively associated with successful collaboration.

*H<sub>2-3</sub>* : The personality trait *conscientiousness* will be more positively associated with successful collaboration.

*H<sub>2-4</sub>* : The personality trait *neuroticism* will be less positively associated with successful collaboration.

*H<sub>2-5</sub>* : The personality trait *intellect/imagination* will be more positively associated with successful collaboration.

These hypotheses are based on the descriptions that authors use when describing successful collaborators (Shaw, 2003; Goldman & Kahnweiler, 2000; Yang & Pandey, 2011). The only outlier within these hypotheses is the personality trait neuroticism. All of the other traits are listed as the socially preferred trait, ie. the opposite of extraversion is introversion, and introversion is a socially maligned trait. Due to this trait being listed as a negative, it is expected that this trait will be less positively associated with successful collaboration.

### ***Collaboration Skill***

To test collaboration skill factors, the comprehensive list of collaboration skills compiled by the O’Leary, Choi & Gerard (2012) study will be used. The collaboration skills listed from this study fall into the following 5 categories: 1) individual attributes, 2) interpersonal skills, 3) group process skills, 4) strategic leadership, and 5) substantive/organizational skills. Since this research will be using the Mini-IPIP to determine personality traits, the individual attributes questions will not be used. The other 4 categories will be used since they all relate to collaboration skills.

Of the 4 categories of collaboration skills, it is expected that some will be more positively associated with successful collaboration than others. As such, this research makes the following hypotheses:

*H<sub>3-1</sub> : Interpersonal skills* will be more positively associated with successful collaboration.

*H<sub>3-2</sub> : Group process skills* will be more positively associated with successful collaboration.

*H<sub>3-3</sub> : Strategic leadership skills* will be more positively associated with successful collaboration.

*H<sub>3-4</sub> : Substantive Technical / knowledge skills* will be more positively associated with successful collaboration.

The assumptions made in these hypotheses are based on the research presented by O’Leary, Choi & Gerard (2012), in which they compiled the skills from numerous collaboration studies and interviews with executive level SES employees.

## Other Variables

This chapter has described the dependent variable and the independent variables, but other variables could potentially influence the success of collaboration. The control and demographic variables will be discussed in the remainder of this section.

One set of questions focused on the quantity and quality of the interactions with stakeholders. A list of stakeholders was adapted from Freeman (2010), which created categories of stakeholders for very large organizations. The first question asked the respondent to identify the types of stakeholders they collaborate with. It is expected that the greater the number, the more potential there will be for conflict among the stakeholders and a decrease in the success of the collaboration. From this, the following hypothesis is proposed:

H<sub>4-1</sub> : A greater the number of stakeholders will be less positively associated with successful collaboration.

Another question in this group asked the respondent to rate the relationship they have with the stakeholder categories. It is expected that a better relationship with a stakeholder will increase the success of the collaboration. From this, the following hypothesis is proposed:

H<sub>4-2</sub> : A better relationship with stakeholders will be more positively associated with successful collaboration.

Regarding the demographics questions of age, years of service in their organization and current years in their position, it is expected that, since those who are older and have

more seniority will have had more experience with collaboration, they will perform better and have better collaboration outcomes. From this, the following hypothesis is proposed:

H<sub>4-3</sub> : An individuals seniority in tenure will be more positively associated with successful collaboration.

Other demographic questions asked about the surrounding development, meaning whether the park is in an urban, suburban or rural area and the distance the park is from an urban area. From the initial interviews, it was found that proximity to stakeholders is essential for there to be collaboration. From this, the following hypothesis is proposed:

H<sub>4-4</sub> : An individuals proximity to urban areas will be more positively associated with successful collaboration.

The remaining demographic questions inquired about annual visitation and the size of the park in acres. It is presumed that greater visitation will result in greater interest on the part of stakeholders, thus increasing the potential for collaboration. Regarding the size of the park, typically, there is not much land in urban areas for large parks, which means that smaller parks will tend to be in more urban areas. From this, the following hypotheses are proposed:

H<sub>4-5</sub> : Greater annual visitation will be more positively associated with successful collaboration.

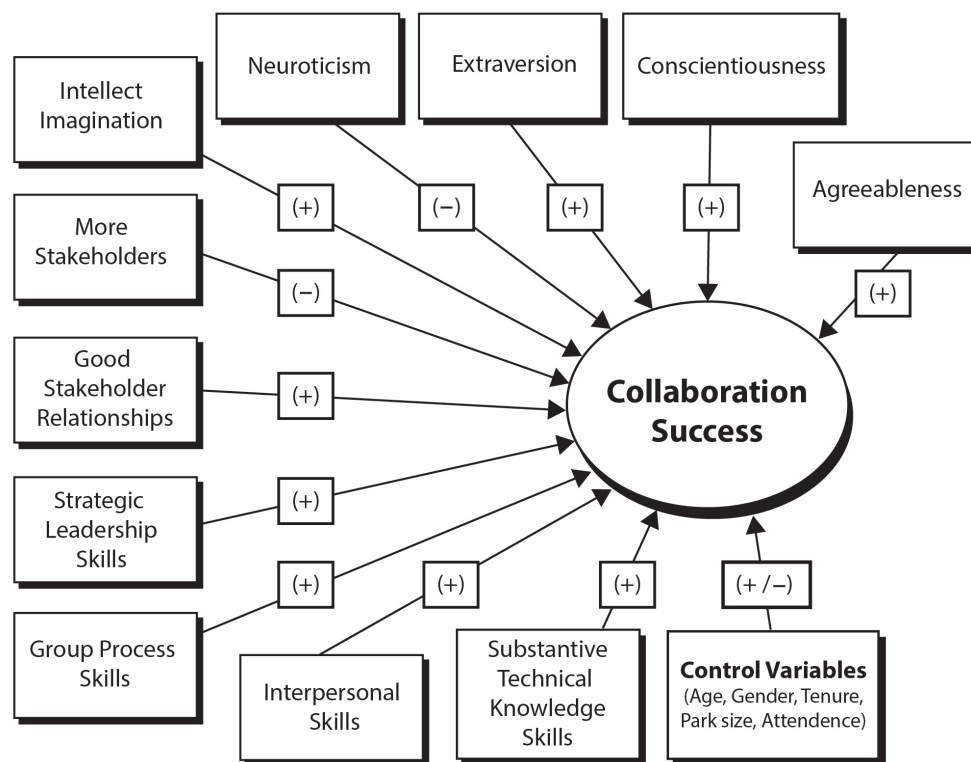
H<sub>4-6</sub> : Smaller acreage size will be more positively associated with successful collaboration.

In the next section there will be a summary of the research hypotheses.

## Summary of Research Hypotheses

On the next page is figure 3.2 which illustrates the impact of the independent variables on the dependent variable and there expected directions, and this is followed by a listing of the 16 hypothesizes of this research.

**Figure 3.2 Empirical Model of Factors Impact on Successful Collaboration**



## The Research Hypotheses of this Research

$H_1$  : Personality traits will be more positively associated with successful collaboration than collaboration skills.

$H_{2-1}$  : The personality trait *extraversion* will be more positively associated with successful collaboration.

$H_{2-2}$  : The personality trait *agreeableness* will be more positively associated with successful collaboration.

$H_{2-3}$  : The personality trait *conscientiousness* will be more positively associated with successful collaboration.

$H_{2-4}$  : The personality trait *neuroticism* will be less positively associated with successful collaboration.

$H_{2-5}$  : The personality trait *intellect/imagination* will be more positively associated with successful collaboration.

$H_{3-1}$  : *Interpersonal skills* will be more positively associated with successful collaboration.

$H_{3-2}$  : *Group process skills* will be more positively associated with successful collaboration.

$H_{3-3}$  : *Strategic leadership skills* will be more positively associated with successful collaboration.

$H_{3-4}$  : *Substantive Technical / knowledge skills* will be more positively associated with successful collaboration.

$H_{4-1}$  : A greater the number of stakeholders will be less positively associated with successful collaboration.

$H_{4-2}$  : A better relationship with stakeholders will be more positively associated with successful collaboration.

$H_{4-3}$  : An individuals seniority in tenure will be more positively associated with successful collaboration.

$H_{4-4}$  : An individuals proximity to urban areas will be more positively associated with successful collaboration.

H<sub>4-5</sub> : Greater annual visitation will be more positively associated with successful collaboration.

H<sub>4-6</sub> : Smaller acreage size will be more positively associated with successful collaboration.



## Chapter 4: Qualitative Methods and Findings

The research for this dissertation is using both qualitative and quantitative methods, which is referred to as a mixed methods approach (Clark & Creswell, 2011). In this chapter, the qualitative methods used in this research and the findings will be discussed. The purpose of the qualitative methods used in this research is to provide a fuller and more rich description around many of the questions asked in the survey, as well as to determine if there are any gaps in the literature. Though the quantitative research will attempt to create a linear relationship between the multi-faceted phenomena being studied, it will not be able to explain why this phenomena is occurring, and this is where human insight is needed. Denzin and Lincoln, (2005) suggest that the qualitative researcher is more like a “quilt maker” or “*bricoleur*” who weaves pattern from chaos, and who “works between and within competing and overlapping perspectives and paradigms” (p. 6). This is similar to how humans experience the world, and relevant to how one experiences and participates in a collaboration process. At any given moment, a park manager may be trying to keep the collaboration in order, build trust among the participants, and balance the needs of their organization with the needs of others. To better understand this multi-faceted collaboration experience, it is necessary to interview people who have experienced it.

This chapter will begin with a discussion of how the sample was selected, then describe how the qualitative data will be collected, explain how the interview questionnaire was developed, and how the data will be analyzed. This will be followed

by the qualitative findings, in which there will be a discussion of: 1) the benefits of collaboration, 2) complexities with collaboration, 3) how personality impacts collaboration, 4) the skills required for collaboration, and 5) collaboration predictors.

The chapter will conclude with a discussion of the findings theoretical significance and relevance for practitioners and next steps.

## **Qualitative Sample Selection**

For the survey, the population will be state park service managers from all 50 states. Titles that will be considered eligible for the study will include park superintendent, park manager or equivalent. To determine the population size, the websites for all 50 state park services were visited and all the sites that the state listed under its management was compiled. This resulted in 3,463 sites listed. State park services differ from each other in the type of sites they manage. The diversity of sites that state parks oversee is numerous, and includes: parks, recreation areas, museums, natural areas, arboretums, capital buildings, beaches, monuments, reserves, preserves, point of interest, forests, interpretive center, trails, greenways, trains, tramways, piers, waysides, mansions, palaces, parkways, resorts, waterways, sanctuaries, observatories, corridors, islands, campgrounds, golf courses, ski tracks, complexes, reservoirs, quarries, fields, watersheds, scenic sites, adventure centers, caves, mines, heritage centers, backcountries, river accesses, marinas, boat launches, picnic areas, conservation areas, historic prairies, battlefields, and prisons.

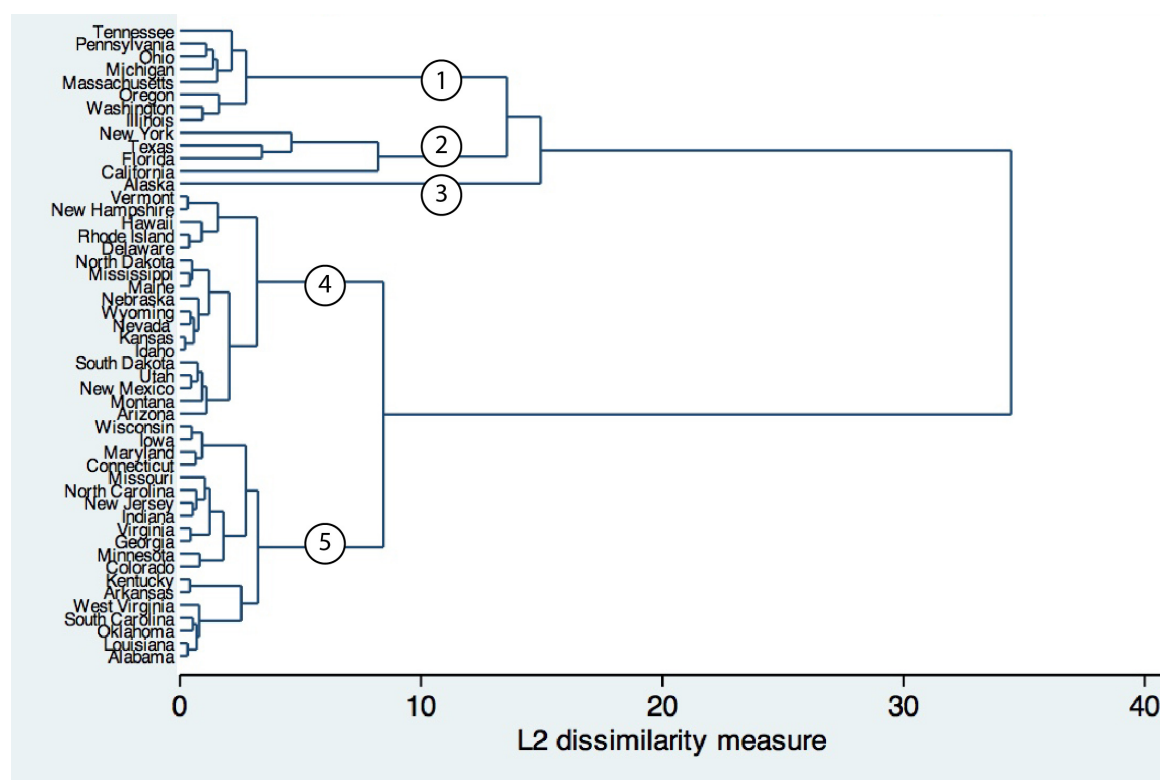
In order to create congruence among the states and what they manage, it was determined to only include sites which had the terms; “park,” “recreation” or “recreational” in their names. This resulted in 2085 parks and recreation(al) areas or sites in the United States.

Cluster analysis was used to group the 50 states of the U.S. into 5 clusters. According to Van Ryzin (1995) due to the “high costs” of random sampling, evaluators “wisely choose” to use purposive sampling. However, evaluators have few methodological tools at their disposal to accomplish this task. Teddlie and Yu (2007) describe purposive sampling as a non-probability sampling technique. One of the purposive sampling techniques, is cluster analysis, which “refers to a family of statistical techniques for classifying objects (or cases) based on measured characteristics of those objects” (Van Ryzin, 1995). Van Ryzin (1995) states that the benefits of using cluster analysis include: 1) since it uses numerous variables it creates a more sophisticated typology, 2) works in many different sample sizes, 3) provides insight with the selection process and 4) its results offer judgement on whether the findings are generalizable to the population.

To perform cluster analysis on the 50 states, each state is evaluated by 6 variables. They are: 1) the number of state parks, 2) total state population, 3) the size in acres of the parks and recreations areas, 4) annual state park service attendance, 5) annual state park service budget and 6) the number of full-time employees employed by the state park service. The number of state parks was determined through an analysis of websites as described earlier in this section. The state population data were obtained from the U.S.

Census Bureau (2016) and size in acres from the U.S. Census Bureau (2010). The remaining 3 variables - attendance, budget and full-time employees - came from the Leung, Jordan and Miller (2016) National Association of State Park Directors Statistical Report of State Park Operations: 2014-2015. It was necessary to standardize the variables into Z scores so that larger variables do not overshadow the impact of smaller variables (Van Ryzin, 1995). Using Stata, the Ward's method of cluster analysis was performed, and the result are depicted in figure 4.1.

**Figure 4.1 Dendrogram for State Park Cluster Analysis by State**



To better understand what the clustering means, it is necessary to determine the similarities among the states within each cluster, so the means of each variable by cluster was calculated. See table 4.1 for the details. The clusters can be described in the

**Table 4.1 Mean of Variables by Cluster Grouping**

<b>Cluster Group # and Name</b>	<b># of Parks</b>	<b>State Population</b>	<b>Park Acreage</b>	<b>Park Attendance</b>	<b>Park Budget</b>	<b>FTE's</b>
<b>1</b> ( <i>Middle Group</i> )	43.8	5,673,277	98,465	10,800,000	42,900,000	349.5
<b>2</b> ( <i>Smaller Group</i> )	30.2	1,914,943	68,545	4,675,833	15,700,000	111.4
<b>3</b> ( <i>Lowest and Outlier Group</i> )	42.0	741,894	3,336,132	3,779,629	14,700,000	85.0
<b>4</b> ( <i>Super Group</i> )	149.5	26,900,000	672,572	43,600,000	209,000,000	1,459.3
<b>5</b> ( <i>Larger Group</i> )	98.5	8,996,610	160,256	36,600,000	69,100,000	471.4
<b>Mean</b>	<b>56.1</b>	<b>6,448,927</b>	<b>208,262</b>	<b>15,200,000</b>	<b>50,100,000</b>	<b>366.8</b>

following manner. Group 1 is best described as the group that falls in the *middle group*. It is neither the smallest nor the largest in any of the categories, and the mean of all of the variables rank in the middle, except for the variable park acreage which is one rank smaller than the middle ranking. Group 2 is best described as the *smaller group*. 4 out of 6 categories rank below Group 1, except for the number of parks and acreage, in which this group's mean ranks the lowest. Group 3 is best described as the *lowest and the outlier group* and only includes the state of Alaska. Except for the number of parks, which it ranks the second lowest, and the acreage which it ranks the highest, the rest of the variables rank the lowest. Group 4 is best described as the *super group*, its variable

means rank the highest in every variable, except for acreage, which is only beat by Group 3 (Alaska). Group 5 is best described as the group that is the *larger group*. The mean of its variables are larger than the middle but smaller than the super group. The only variable that deviates from this trend is park acreage, which when ranked against the others lands in the middle ranking.

After clustering the states into 5 groups, there remains the question of the sample size and how to select which parks in each cluster are chosen. Regarding the sample size for interviews in qualitative research, Mason (2010) states that various authors recommend sample sizes ranging between 5-60 and with Guest, Bunce and Johnson (2006) stating that when they interviewed a homogenous group they “found that saturation occurred within the first twelve interviews, although basic elements for metathemes were present as early as six interviews.” Considering saturation reasons, as well as this dissertation is using a mixed-methods approach, where the qualitative aspect of this study is playing a supporting role. It is the goal of this research to get between 12 - 16 interviews.

The last remaining question is how to select the parks from each cluster. First, the states were grouped by cluster and the mean of each variable by cluster was performed. Generally, the analysis of these means did not find a state which best represented the mean of the cluster. As such, it would not be possible to just use the state that best approximated the mean of the cluster. Instead, 1-3 states from each cluster would be selected. Where possible, states were selected by whether they listed email addresses on their State Park website. Once a state was chosen, the parks were then randomly selected

from the state. In cluster group 4 (the super group) none of the states listed any web addresses on their website, so instead email addresses were obtained through the survey. The manner in which these email addresses were obtained was through a question that asked respondents to leave an email address if they would like to receive findings from the research. Regarding cluster group 3, which consists only of Alaska, it was found that the entire state only has 5 park superintendents. Requests to participate in the interview were emailed to all 5 park superintendents.

In total, invites to participate in the interview was sent to 80 parks, from this 16 park managers were interviewed. Table 4.2 describes the states selected by cluster grouping and the total number of respondents. On a positive note, at least one respondent from each cluster was interviewed. Cluster 1 had 4 interviewed, cluster 2 had 5 interviewed, cluster 4 had 3 interviewed and cluster 5 had 4 interviewed. Though

**Table 4.2 Cluster Group, Geographical Region and State Selected**

<b>Cluster Group # and Name</b>	<b>States Selected</b>	<b>(n)</b>	<b>States Selected</b>	<b>(n)</b>	<b>States Selected</b>	<b>Total</b>
<b>1</b> ( <i>Middle Group</i> )	Maryland	1	New Jersey	3		4
<b>2</b> ( <i>Smaller Group</i> )	Montana	3	New Mexico	1	Maine	1
<b>3</b> ( <i>Lowest and Outlier Group</i> )	Alaska	1				1
<b>4</b> ( <i>Super Group</i> )	Florida	2	Texas	1		3
<b>5</b> ( <i>Larger Group</i> )	Pennsylvania	4				4
					<b>Total</b>	<b>17</b>

Alaska only had one park manager interviewed, this was not considered problematic since the state only has 5 superintendents.

## **Qualitative Data Collection**

To collect the qualitative data, the sampled respondents participated in semi-structured interviews, meaning that the interviewer will have a set of predetermined questions but will be allowed to ask additional questions to further explore the topic and probe for more detailed responses. See appendix A for the interview protocol and the list of the structured questions.

Though the majority of the interviews occurred over the phone, some (due to proximity) did take place at the park office. For those participating in person, the respondent signed a consent form that was approved by IRB. The consent form consisted of a description of the research, informed the participant that the study was confidential, relayed that participation was wholly voluntary and that they would not be compensated for their participation. The consent form also noted that the interview would be audio recorded. The interviews conducted in person were recorded using a mobile phone app named “Voice Record” and those conducted by phone were recorded using an app on a mobile device named “TapeACall.” Those who were interviewed by phone received a copy of the consent form by email prior to the interview, and then gave verbal consent to proceed with the interview. The interviews ranged from 10-49 minutes, however the majority of the interviews lasted 20-30 minutes.



## **Development of the Interview Questionnaire**

The purpose of the qualitative interview is twofold: 1) it will provide a more rich and nuanced description of how park managers perceive collaboration, especially in context with the purpose of this research; and 2) it will seek to uncover gaps in the literature. These two interests are what guided the question formation. See appendix A: Interview Protocol for a full list of the structured questions.

The first research question was written in a way to set up the discussion and to ensure that the interviewer and investigator were talking about the topic of collaboration in a similar way. This question asked about the experience the respondent had with collaboration. This question was important for several reasons: 1) it allowed for the respondent to begin thinking about a real-life example of collaboration they had experienced, 2) it provided the investigator some idea of the complexity of the collaborations they had been involved with, and 3) it gave the investigator an opportunity to refocus the collaboration discussion into a scope that was more aligned with the purpose of this research study. For example, some respondents began discussing collaboration with co-workers, when the focus of this research is the collaboration between the park and outside organizations. When this happened, the investigator would either inform the respondent about the intent of this study, or further probe and ask them if they had experience collaborating with outside organizations.

The remaining questions were similar to the questions used in the survey. They included: 1) the dependent variable, a measure of collaboration success, and the

independent variables, 2) skills with collaboration, and 3) personality impact on collaboration. For the dependent variable, two types of questions were used. The first asked the respondent to talk about their overall impression with collaboration and this included questions that asked about their likes and dislikes with the process. The second type of questions asked about how to measure collaboration success, or more simply, how do we know if someone is good at collaboration? The questions that focused on the independent variables asked about skills and personalities. When it came to skills, the respondent was asked to describe their collaboration skills and how they learned these skills. One additional probing questions asked whether they have become more or less collaborative over their career. The impact of personality on collaboration was explored, through questions about the types of personality that are better at collaboration and the role psychology plays. The final question was open-ended and asked the respondent if they had anything else they would like to share about the topic.

## **Qualitative Data Analysis**

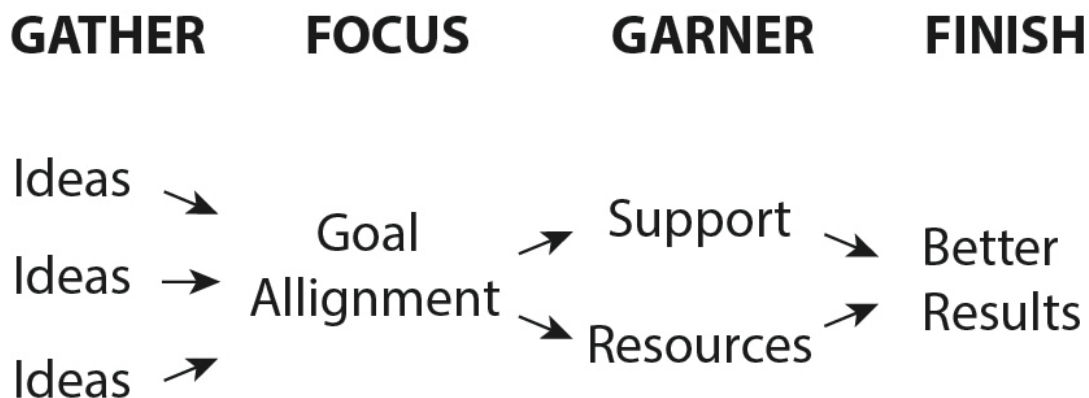
Since this research is obtaining qualitative data, the process of content analysis will be used to determine the major themes that the subjects discussed in the interview. The interviews will be audio recorded and these recordings will be transcribed and then analyzed using content analysis. Conventional content analysis as described by Hsieh and Shannon (2005) as content analysis whose “coding categories are derived directly from the text data.” This differs from summative content analysis which often relies on

software which counts keywords. During content analysis, each transcribed interview will first be broken down into keywords, then these keywords will be grouped into codes, and finally the codes will be grouped into general categories. After performing this process on each of the interviews, the categories from all of the interviews will be compiled into one spreadsheet, and the categories will be further reduced. The findings from the content analysis of the interviews will be discussed in the next section.

## **Qualitative Study Findings**

For this qualitative research, 17 park managers from 9 different states across the U.S. were interviewed either by phone or in person, using a semi-structured interview process (see appendix A for a list of the questions). In general, the questions sought to understand what makes a person good at collaboration. The interviews were audio recorded. Conventional content analysis was performed and found 5 categories of interest. These categories are: 1) benefits of collaboration, 2) complexities with collaboration, 3) how personality impacts collaboration, 4) the skills required for collaboration and 5) collaboration predictors.

One thing that became apparent through content analysis is that the benefits from and complexity with the collaboration process change throughout the process and that this process occurs in phases. The phases of collaboration seem to occur in the following order: 1) gather ideas, 2) focus goals, 3) garner support and resources and 4) finish with better results. See figure 4. 2 for an illustration of these phases. Most of the

**Figure 4.2 Phases of Collaboration**

park managers who were interviewed appreciated the first and last stage, namely gathering a more diverse set of ideas and finishing with better results. The most difficult part of collaboration occurs when the ideas then need to be reduced, or as this stage is called the “focus” stage. There are some reasons why this stage is the most challenging, and it will be discussed in more detail shortly, but getting people to compromise their own needs so that group consensus can be formed is difficult. This finding is significant, and provides elucidation on where in the collaboration process special attention and support are needed to ensure that a collaboration is successful. It may be that managers rush through this stage, or try to avoid it because it is can be such an emotionally charged and vulnerable period of time. Using this “four phases of collaboration” framework, the benefits and complexities will be examined. This will be followed by a discussion of the

findings, and how personality, skills and the predictors impact the outcome of collaboration.

## **Benefits of Collaboration**

The benefits of collaboration will be examined using the four phases of collaboration framework: 1) gather ideas, 2) focus goals, 3) garner support and resources and 4) finish with better results.

### ***Gathering More Diverse Ideas***

A major theme that ran through the interviews can be paraphrased with the colloquialism “two heads are better than one.” Park managers understood that they did not know it all, and this was expressed with statements like, “so you really don't have the whole picture.” Getting a variety of ideas from a diverse set of stakeholders can address this weakness, and one park manager, speaking about this, stated, “I think it brings a lot of new and fresh ideas to the table.” Information asymmetry is problematic, and for the collaboration to be successful, all sides of the group need to share the information and the ideas that they have.

In the park service, it is not uncommon for individuals to move from park to park to seek promotions, and often this causes the park manager to move to new locations within the state sometimes far from the area in which they previously worked. One challenge of moving into a new landscape is that the manager does not know the local

issues and the players involved. Stakeholders can provide a wealth of information, and give the park manager information about the history and the steps that will need to be taken in the future. One person stated, “their experience, they kind of know the issues, they know the history. They kind of have a vision for what's moving forward.”

Sharing information goes both ways, and it is often the park manager who has the information that the rest of the collaboration group does not. One area where this is especially prevalent, is the knowledge of the rules and laws that govern a state park. As one park manager stated, “There's legislative requirements and laws and regulations that we have to go by and that takes time.” The stakeholders are often unaware of the mandatory details which will have to be addressed. This is especially frustrating for the stakeholders who are not used to working within these governmental constraints. To keep the group engaged during bureaucratic procedures, it is essential that the park manager be someone who looks for solutions rather than the reasons why it cannot be done. As one manager said, “I have a lot of peers that still want to get bogged down with all the governmental regulations and red tape and they become what I call the jaded state employees.” To remedy that, the same person later stated, “So you really need someone that is goal oriented and self-motivated, but at the same time, patient and calculated, if that makes sense.” It is essential for the park manager to provide the group with this information early on, so that the group can have an opportunity to discuss how to work with - and perhaps around - these constraints.

This phase of gathering ideas is a phase of learning and is an essential step. It can help minimize the ill effects of “not knowing what you do not know.” When done

properly, this phase of a collaboration will inform both the park manager and the stakeholders about the things that they do not know and provide a greater understanding about the issue. This will help the group to step back from their peep-hole, and look at the wider landscape around them. In order for the collaboration to work, the stakeholders must look beyond the solution of singular needs, and find a solution that will address multiple needs. This is not easy, and it requires a significant amount of skill and openness on the part of the person(s) leading the collaboration. As one of the interviewed said, “I think I learned that it works better in the long run...they really do know things you don't know. No one person knows everything”

### ***Goal alignment***

As briefly mentioned earlier, and to be discussed in more detail in the next section, the “goal alignment” phase is the most difficult phase. However, there are benefits to be gained from this phase. First, a benefit of goal alignment is that by working through the varied opinions and ideas, the group can create a more nuanced and wide-ranging approach to the issue. As one manager commented, “Compromise can be a little bit hard to take, but I think that everyone working together, you get a lot more bang for your buck.” The second benefit of this process is, perhaps, unexpected: the group will become more cohesive and it will require less effort to keep the group momentum going. To this point, one interviewee stated, “If were all going in the same direction it doesn’t matter if were talking all that much.” By this, the manager implied that it requires less effort, in this case, getting together and talking, to move the plan forward once everyone

agrees to a course of action. Through the process of goal alignment, the collaboration group creates a goal that is better than created by any individual. When done properly, the challenging process of compromise builds cohesion, which allows the group to act in a more united way, rather than working against each other.

### ***Garnering support and resources***

Once agreeing to a goal, the collaboration group must determine how to achieve the goal, and for this, the collaboration will need to garner additional support and resources. Though gathering of support and resources can and does occur at various times throughout the collaboration process, it is separated out here as a distinct phase because it describes the action that will need to take place to turn the aligned goal into an end product.

The support and resources necessary to implement the goal will come from the members of the collaboration as well as from sources outside of the group. The members of the group, having agreed upon a goal, will now be asked to give support to the initiative, be it a commitment of staff time or financial resources. The very act of aligning goals has in some way already primed the members for their support, as one stated, “Sure, you make better decisions, you make more transparent decisions, and you have more buy-in with decisions over the long run.” This buy-in, this support is important because as another stated, “People will maybe have a greater sense of investment in the outcome.” The group may also be asked to get external support to



ensure the achievement of the goal. What often happens in these collaborations is that a group of stakeholders agree to an outcome, but to make it happen, they need further support from the public, other stakeholder groups, politicians or other higher level government officials. Any of these parties may need a substantial amount of convincing in order for them to grant their support. What is often the case is that stakeholders who are not bound by the constraints of a mid-level park manager are needed to persuade the potential external supporters. As one park manager said:

I think the non-profit, there's sometimes a little bit more agile than the state government entities...then again, we usually have a little bit more resources than the non-profit

This park manager discussed that government has more resources than the non-profit, and though this is often the case, it is not always true that the park manager is the one who holds the purse strings. To convince those in government who have the ability to provide funding, it is often the park friend's group or another non-profit who performs this role.

Stating it another way, one interviewee said:

We had not gotten all of the resources, whether that be funding, full-time employees, and various things. So our partnerships with volunteer groups, army corps, and various people are absolutely essential to providing quality customer service and a safe environment for our visitors.

This person makes an important distinction. The goals of a collaboration are not always lofty ideas or big and expensive new amenities; often, they are basic safety and public service needs. There are times when the non-profit will provide the resources themselves to complete a collaboration goal. As stated by one park manager, "Our friend's group has raised money to help fix a building, and that is good." As seen in this section, the support

and the resources often go hand in hand, and the support and resources of internal and external members are needed by the park manager to improve the park and give the stakeholders the public service they want. As one park manager stated, “it's just kind of a one hand washes the other sort of situation.”

### ***Finishing with better results***

In general, the park managers interviewed agreed that both the quality and quantity of the results improved due to the collaboration process. Regarding how collaboration improves the quality of the final result, one manager said, “I think you get a better product and better service for the public.” Most agreed that it was not easy to get to the final result, but one stated:

I think by overcoming challenges by asking tough questions and getting input from various folks that have different operational needs and goals brings it all together, and it challenges all of us to make the end product the best that it could be.

In addition to the quality, the end result was that the group was able to accomplish more than an individual on their own, and one interviewee said, “You can do a lot more together than you can on your own, and a collaboration is how you do that.” Similarly, another stated, “When people work together for the same goal, they can accomplish almost anything.” One park manager who was interviewed provided an additional way that collaboration increased quantity, and that was by preventing waste. The manager elaborated that, when one works and implements something without input from others, “sometimes you end up having to redo things or change things.” This is a relevant

distinction, and speaks of another reason why it is important to seek input from a diverse set of viewpoints, because doing so helps to ensure that the limited resources that government has will be used more efficiently.

## **Complexities with Collaboration**

This section will use the same sub-headings as the last section. Of note, it was found that the majority of the complexities with collaboration occur at the second stage, aligning goals. Nearly 70% of the key words for the topic “complexity” were further coded with the term “alignment.” This is not say that there are not complexities with the other stages; however, park managers primarily have difficulty getting the stakeholders to agree on the goals of the collaboration. The remainder of this section on the complexities with collaboration will discuss the complexities involved with: 1) gathering ideas, 2) focusing the goals, 3) garnering support and resources and 4) finishing with better results.

### ***Gathering More Diverse Ideas***

Though park managers mostly found gathering diverse ideas a positive element of collaboration, their primary challenge was finding people who could provide unfamiliar view points and experiences. Several of those interviewed expressed similar statements; one stated, “There’s plenty of people around that could do something for you. However, it is not always so easy finding them.” Another manager after finally finding the

stakeholder to partner with said, “we have been struggling so hard...I wish I'd known you guys were in this area.” Park managers, with a solution-oriented point of view, often reflected on how this problem could be fixed. One stated, “The thing is that we just need us and the public to mix together a little bit better, I think that would be helpful - like getting outside of our silos.” Another park manager elaborated:

So I think some of that networking and bringing people together and maybe doing some collaborative training on specific parts like I went to this trail stewardship training where they try and bring different people, different organizations together. They bring the whole organizations along with the state organizations all together to try and work with, trying to make that collaboration happen. A lot more of that needs to be done.

To improve collaboration, it is important to have opportunities for different stakeholders to interact with each other. These interactions could take place at conferences, through professional organizations - and most importantly government officials need to find and promote opportunities for stakeholders from various disciplines to mingle and learn what other ideas are out there.

### ***Goal Alignment***

The majority of the issues cited by park managers regarding the complexity of collaboration had to do with goal alignment. One person summed it up by saying, “when things don’t go well it’s because of different objectives.” Several themes emerged from goal alignment. They are: 1) troubles with persuasion, 2) difficulties with facilitation, 3) dealing with conflict, and 4) loss of control and feelings of vulnerability.

Several park managers voiced concerns over their ability to persuade people to their point of view. When people disagree, one possible solution is the use of persuasion to try and convince a person to change their point of view. Sometimes disagreement results from nothing more than the other stakeholders not having the information that they need, which leads to unrealistic expectations, and as one person explained:

They're not really understanding the scope of what you do and you know, that they can be a lot of, a lot of expectations that are unrealistic when it comes to the state and what we can and can't do.

Often it is difficult to explain what you are trying to say, and one person said,

“Sometimes you get kind of tongue-tied and how do you express your side of it.

Sometimes that's difficult, and I wish I was better at it.” Sometimes interviewees felt that persuasion required using heavy-handed techniques which they were uncomfortable with, and one stated:

You got to kind of put a salesman hat on, but I'm not going to sell everybody on everything I am saying, but I hope they can at least understand where I am coming from and why I am taking those positions or why I am describing it the way I am.

This statement ended with almost a remorse for having to persuade the other stakeholders.

Another difficulty involved the facilitation process and the numerous skills that must be employed simultaneously in order to do it well. One interviewee listed a number of skills that are required:

Knowing your audience, the need to be in a room, the need to be part of the decision making process, building trust, being open and honest, being patient and you have to be a facilitator. You have to be able to take a group of people and their different ideas and their different ways of thinking and filter that and put it

on paper or a presentation and deliver it back to them in a fair and accurate way that moves your goal forward.

Few people have all of these skills, let alone the ability to do them well. One park manager described their concern over their inability to facilitate by saying:

If I was a better personal communicator, maybe I could have changed that. Even if you're not selling out, maybe there's ways I could have presented that better so that it didn't become conflict at all.

To deal with the difficulty of facilitation, some suggested that having an outsider do the facilitation would be useful, and one stated, "It's not always easy, and it also helps to have a good facilitator - somebody that can bring a lot of folks together." Though a few park managers had some training in facilitation, many had not, and one said, "I haven't had training in facilitation, and I just don't have a lot of personal experience as the leader of a facilitated process." There was a general desire by those interviewed to have better skills at facilitation, and a park manager stated, "If we had a process, a stakeholder process - guidelines that we would use to facilitate...I would invite it."

Dealing with conflicts and difficult people was another theme that emerged from the interviews regarding complexities with goal alignment. As discussed earlier, when stakeholders agree on the objectives, collaboration is a more straightforward prospect, but when people do not agree it can be at best challenging, and at worst, it can lead to conflict. Speaking about stakeholders who are difficult to work with and who were unwilling to engage, one park manager said, "There's usually give and take, they don't want to, they don't talk, they don't want to modify their agenda or their goal to meet a group goal." Often the problem is not that stakeholders who disagree withhold their

comments, but that they try to disrupt the collaboration process, as this one park manager stated:

I'm just thinking about like some of the people that were in the working group that had come on, and we're not necessarily, even though they said that they were, committed to working toward the working group goals... and it's easy to throw a monkey wrench into the works sometimes, and there need to gum up the process, its a lot harder to build things than to kind of tear them down.

One manager expressed his resentment towards people obstructing the process in an even stronger way by saying, "Well in one very specific incident...I felt like there were people who were there to sabotage, I felt very uneasy about that and to the point of anger."

When frustrations with a collaboration reach a level of anger, the group is in conflict, and it can be difficult to turn that around. One manager, trying to be positive about conflict, stated, "Yeah it used to be a pain in the ass to put everybody in a room and fight about things, but when you came out of the room for the most part...even if you didn't all agree, at least you all knew where everybody was."

Another sentiment expressed by many of the park managers was that collaborations could lead to a loss of control over the situation. To this point, one person said, "There a lot to dislike, its unpredictable, which is something I dislike, you just don't know how it's going to go." Similarly another park manager stated:

I wish you could just make the decision and move forward. But that is not always the outcome, especially when you invite other people, or whether you have to collaborate with someone, you can't make the decision that you necessarily want. That's a risk I guess. Accepting whatever decision comes out of it. I guess that would be the difficult part.

Sometimes there are outside forces that take over a collaboration process, and one interviewee described a situation they had experienced:

When it gets too intense with the politics, it takes over a collaborative process, and everyone else no longer has a voice...It's very easy for the managers and other interest groups and other agencies to be pushed out because politics is now controlling the collaborative process.

The same respondent also used the word "dismissed" to describe how they felt when they were told to stand down by management. In extreme cases, the collaboration can lead to stakeholders trying to take over the management of a park, with one respondent stating, "We have to protect what we do and not let others take it over."

These conflicts can lead to a person feeling vulnerable, and this vulnerability can make it difficult for people to feel safe and willing to engage in the collaboration. The feeling of vulnerability was expressed by one park manager, who said, "Basically you'r going to show people your strengths and your weaknesses because you gotta work with them. Maybe there's a fear about that."

A significant amount of this chapter has been spent on discussing the issues with goal alignment. This has been done because it was a topic that came up over and over in the interviews. Since it came up so often, it was important to go into more depth to further explore how managers struggle with this stage of collaboration. Managers are painfully aware that this stage of collaboration determines whether collaborations work. Though this will be discussed in greater detail later in this dissertation, public administrators need better collaboration skills so they can do a better job during this difficult phase. The next section will examine the next phase of collaboration, garnering support and resources.



### ***Garnering Support and Resources***

As discussed in the benefits section, garnering support is essential to take the aligned goal and turn it into reality, but this is not always easy to do. This frustration was expressed by a park manager who said:

It really depends on the partners. It could be a really positive, smooth flowing thing or it can be a really big pain in the backside depending on who your partners are; how prepared they are, how committed they are, and how many resources they are willing to invest.

Often the partners have expectations that government, due to limited resources can no longer meet. One manager said “We do not have the money we used to have” and another stated, “We are struggling with the loss of employees.”

Park managers often agree with the partners’ expectations, and they are looking to the partners to assist and provide resources that are desperately needed. With less money and staff, park managers sometimes feel they have to take any and all opportunities, rather than going after outcomes that will be in the best interest of the park; as one park manager stated, “it’s hard because when there's funding and so you have to take it, you have to take that opportunity to spend that money when you can.” When the resources are given, it is not always easy to meet the requirements, or the strings that are attached to the resource, but again with limited resources park managers feel obligated to do so; as one stated, “and that will be a big challenge when it comes to non-profits and deal with the grants and what not as well.”

### ***Finishing with Better Results***

Though in general park managers believed that collaboration leads to better results, there were some difficulties in getting to those results. The biggest problem in getting better results is that it takes time and is a lengthy process, as expressed by two park managers who said, “Usually takes longer to get to a final result” and that you need to have “patience to see it through.” Another park manager described this in more detail:

In situations like that you just have to take your time, a lot of times it takes longer to get done what you need to get done when you're working or dealing with a person like that.

The other difficulty that some managers spoke about was when the collaboration does not lead to any results. If at some point in the collaboration the goals cannot be aligned, or stakeholders cannot find the support or resources it can lead to the collaborations end; as one person stated, “If it's bad enough, it'll fall apart.”

### **Personality and Collaboration**

The interview questions about personality and its impact on collaboration, consisted of descriptions of personality traits and whether these traits encouraged or discouraged collaboration. In this section the personality traits will be categorized as either: 1) positively associated with collaboration or 2) negatively associated with collaboration. The traits discussed in the interviews are traits one would generally expect to be listed, and similar to those examined in previous research. Examples of personality traits that were positively associated with successful collaboration are open,

outgoing, and concerned about others. Examples of personality traits that were negatively associated with successful collaboration are closed-off, opinionated and interested in self over others.

There will not be a discussion of each personality trait, and for a listing of the personality traits see table 4.3. The primary reason for not having a discussion on every

**Table 4.3 Personality Traits and Collaborative Outcome Association**

<b>positively associated</b>			<b>negatively associated</b>	
assertiveness	inclusive	process oriented	aggressive	narcissistic
compromiser	integrity	receptive	assertiveness	not a people person
detail orientated	<b>introverted*</b>	relaxed	authoritative	ornery
easy going	listener	sharing	bossy	overbearing
empathetic	not too serious	thoughtful	closed body language	protecting fiefdoms
engaged	open mindedness	understanding	closed mindedness	recalcitrant
enthusiastic	open yet firm	unemotional	decisive	selfish
extrovert	outgoing	welcoming	direct	strong ego
facilitative	outspoken	works with others	distrustful	strong willed
helpful	passionate	wise	follower	uncompromising
honest	patient		intransigent	uniformity
humble	people focused		<b>introverted*</b>	wary
humorous	personal conviction		my way or the highway	

*\* indicates personality trait description listed under both positively and negatively associated*

personality trait is because the findings do not provide much in the way of new understanding, and mostly conform to the findings from previous studies. There is, however, one trait that is worth discussing, and that is “introverted.” It was described as both positively and negatively associated with collaborative outcomes. Since it was the only trait that was listed as both, it seems to merit further examination. The next section will explore what managers said about the personality trait “introverted.”

### ***Introverted***

Park managers were in disagreement about whether the personality trait “introverted” was associated positively or negatively with successful collaboration. Those who believed introverts were less successful with collaboration stated things like, “I think that really helps as opposed to, you know, being closed off and introverted and not sharing all the information that you have.” Another park manager describe it this way: “If you're closed off or you're kind of an introverted person, you might have a tough time collaborating with other folks.” One park manager described it from the point of view of the extrovert and said, “I think extroverts, talk and communicate a little better.” However, this was not the only point of view, and another park manager said, “You can certainly be an introvert and, and be good at collaborating with others.” Many took another tack and said that extroverts might be better, but introverts can do it, too. An example of this was:

I think just being willing to communicate with others and wanting to communicate with others and, I'm just guessing here, but I would assume it

would probably be easier for those who are outgoing...but (one) can certainly be introverted too and be good at it.

Another stated:

Based on my experience, I don't know if I have a strong position either way on that. I would think the more enthusiastic and outgoing you are, would only play towards your successes. But I'm an introvert, so I'm not always the first one to jump up in a meeting because I guess it can kind of work. But, I don't know if I could really answer that one for you.

This last statement makes an important distinction: one's views on introversion are shaped by whether one is, oneself, an introvert or an extrovert. There may be some self-selection bias going on, in which extroverts believe that, since they have this trait, they are better at collaboration. However, an introvert who does not have this type of personality may realize that there are other skills or personality traits that can be used to achieve a successful collaboration. To this point, one park manager stated:

Not so much, differences between introvert and extrovert, an extrovert might come out of a meeting, where they meet a lot of new people and discuss a lot of things for a couple hours and feel really energized and excited and ready to get the work. Whereas for me, something like that takes energy and takes it out of me and, I get done with meetings and oh, I gotta sit here and kind of process things before I get back into it. So it's very minor. I wouldn't say it makes them seem like they know what they are doing. People work differently.

This begs the question, is it personality or skill that has the greatest impact on an individual's success with collaboration? From these interviews, it would seem that extroverts tend to believe personality is important, whereas introverts emphasize the skill side of the equation. Another park manager, lending credence to this explanation stated,

“It’s somewhat innate, personality type thing. If you really practice something you can do it over time, but I never had the time or the inclination to do it.” Though the question of skill vs. personality will not be answered in the qualitative methods in this study, it will be interesting to see if the quantitative analysis sheds any light on this matter. The next section will continue with the qualitative analysis, and discuss what was learned about the impact of skill on collaboration.

## **Collaboration Skill**

In keeping with the research framework established in chapter 3, where the list of skills from O’Leary, Choi and Gerard (2012) was discussed, this same set of skills was used to create the categories for content analysis (see appendix D for a listing of these skillsets). These interviews also revealed additional categories, not included in the O’Leary, Choi and Gerard (2012) research, that deserve additional consideration. These additional categories include: 1) trust building, 2) core values and 3) experience. Similar to the last section, skills that have already been described by previous studies will not be further described here; instead, this section will discuss the three additional categories as described above.

### ***Building Trust***

Though it could be argued that building trust fits into one of the skillsets that O’Leary, Choi and Gerard (2012) describe, due to the importance that park managers

attach to it, this research will treat it as its own separate skill. As one manager states, gaining trust is more important than the outcome:

Gaining trust and building relationships is probably more important than the goal is supposed to be, because at the end of the day there is going to be another goal coming down at some other point of time and your going to need these people again to at least talk to and you have to have that open relationship to be able to do that.

Trust is the bond that keeps the collaboration together, and it needs to be nurtured because managers will need to work with these stakeholders for many years to come. Not all managers have the same ability to build trust among stakeholders, and though some of it may be personality, there are also learnable skills that can be used to build trust, as one park manager describes it:

That's definitely a skill, using the psychology on someone who you're talking to, their background, even changing your dialect and the way you talk to someone to gain trust and rapport with.

Though more research needs to be done in order to better understand how and what skills are best at building trust, since trust is such an important component - without it the collaboration will fail - it should be listed as its own separate skill.

### ***Core Values***

Several park managers spoke about the importance of core values, and that core values are a skill that can be taught to people. For the purposes of this conversation, the core value is a personal belief in the benefit of collaboration, or as one manager describes it:

I think it goes back to just my personal belief that I think it's important to tell staff that we don't manage our parks in a vacuum. It's critical for us to interact with the communities that we work with stakeholders and agencies.

An interesting thing about core values is that they can be encouraged by the organization, but it is difficult to mandate them, because once you mandate, they become a rule or regulation instead of a value. One manager put it this way:

I think it's important to want to collaborate with others, the desire, the desire to do so, it is one thing to be forced to do something, but it's another thing to do something that you want to do. It's sort of a wanting to do it as opposed to being forced to instead of being required to do it.

The way to encourage this core value is for an organization to put emphasis on the value of collaboration. One manager stated, "I think that for any government agency to have to encourage it and maybe offer some sort of training, I think that that would be very important." This suggests that core values can be learned, and if organizations want to encourage collaboration they need to provide training and support.

### ***Experience***

One interview question asked whether the manager had become more or less collaborative throughout their career, and overwhelmingly the response was they had become more collaborative. One respondent who answered this question explained:

Because I've seen the benefits of the end, the result of that you can achieve by collaborating and would you say your skills or your ability to do it and have improved just because of practice. It's been easier and I've seen the benefits, the results from it. So more of an experience thing.



Experience was the primary way that the interviewers had learned about collaboration.

When asked about informal training, of which experience would be one example, one interviewee stated:

By being part of it, in other peoples processes or with other agencies, being involved in their discussions, being involved in our own agencies discussions as a player, I guess you kind of learn what you like about how somebody is conducting and how you would do it differently.

Though training is undoubtedly necessary, at some point the only way someone gets good at collaborating is by doing it. Through trial and error, they learn what works for them and what does not, and over time they get better at collaborating. For these reasons, experience is another skill that needs to be analyzed when looking at collaborative success outcomes.

## **Collaboration Predictors**

Some of the questions from the interview sought to understand what measures would predict the use of collaboration and collaboration success. From the interviews it was found that there are a number of collaboration predictors which should be further researched. They include: 1) complexity, 2) proximity and 3) responsibility. Each of these predictors will be discussed throughout the remainder of this section.

### ***Complexity***

One dimension that was discussed by a few of the interviewees had to do with how complex the area managed is and its relation to collaboration. Some suggested that

there may be a link between complexity and the need to collaborate. One manager explained a situation where they had to plan a large and complex event, and as a result of the number of different government agencies and other stakeholders involved, it required that they collaborate. Another respondent stated:

When I went to [a less complex state park]...I learned a lot about the resource but I didn't know about people. But when I went to [a more complex park] that's where I learned about people.

This comment suggests that complex parks require more collaborating with people.

Another respondent indicated that a large and complex weather disaster forced them to work with new stakeholders and people they had never worked with before. The situation was too big for one person to handle, and they stated, "Really to get anything done you had to be part of a team, you couldn't just march and plow through, there were too many things going." More research is needed to determine the importance of this predictor.

### ***Proximity***

One predictor measure that was surprising, but probably should not have been, was proximity, and several interviewees spoke about the importance of proximity to stakeholders for collaboration to take place. If organizations are close together in physical proximity, there are more opportunities for interaction and collaboration. One interviewee stated, "I work with the water authority because I have to, very close proximity" another interviewee said:

if you look how it was set up before, forestry and parks together, before they usurped the forests we had. I think at the local level, even though we may not have talked real well at the higher level, if you went down to (a specified park), the forestry guys and the park guys, they were in the same building, they got along well.

In addition to physical proximity being important, some respondents talked about process or technological barriers which created proximity issues with collaboration. One interviewee, discussing this point said:

one way not to promote [collaboration] is to, we went from a management planning process to a process of a checklist...it was a way to make it a paper trail rather than a people trail, was a way to isolate people and develop little fiefdoms rather than actually putting people together.

Even though these stakeholder use to meet frequently and collaborate, when the meetings were replaced with forms and checklists, it resulted in a decrease in physical interactions, which increased effective distance. One manager, speaking about how one colleague became more collaborative, cited a proximity reason, which in this case meant getting out of the office and talking with constituents. He stated:

When (this person) actually got involved with the fishermen...(they) became a much better collaborator...(by being) out there walking every day, looking and talking to these people and its a different story.

In future studies, it will be useful to ask managers about their proximity to stakeholders in to determine how much of a factor this is.

## ***Responsibility***

One park manager, when asked if they thought complexity resulted in a greater use of collaboration, gave another reason, and stated they thought it had more to do with responsibility. He returned to the issue repeatedly in his comments:

I think that's natural as you move up the ranks and are promoted and get more responsibility. As a park manager trainee when I was just starting out, there's very little collaboration that you do.

When I was an assistant park manager and I had a field manager above me, he would be more involved with all the partnership and big picture type stuff in the collaboration, whereas I was more involved with the day to day and the direct supervision of the employees and then running the park

Where I am now, I am the only park manager at my site. It's really all on my shoulders. So the nature of the beast, I'm more involved now than when I was as a trainee.

Though this manager was the only person who described responsibility as a predictor measure, the manager's clarity and logic suggest that this measure needs additional research.

## **Discussion**

This qualitative research sought to understand how a park manager's skills and personality traits impact the success of collaboration. The research interviewed 17 park managers across the U.S., and content analysis was used to analyze the interviews. From this analysis, several findings of interest were uncovered; they are: 1) collaboration occurs in phases, 2) the goal alignment phase is difficult, 3) group process skills are necessary, 4) stakeholders are perceived to impact the success of collaboration, and 5)

introverts struggle with the belief that extroverts are better collaborators. In the remainder of this section, these findings will be further discussed.

### ***Phases of Collaboration***

One thing that became apparent through content analysis is that the benefits and complexities involved with collaboration occur in phases. These phases are: 1) gathering ideas, 2) focusing goals, 3) garnering support and resources, and 4) finishing with better results.

In the gathering ideas phase, park managers benefited from an increase in the quality of the ideas generated by working with a diverse set of stakeholders. As one manager said, “I think I learned that it works better in the long run...they really do know things you don't know. No one person knows everything.” The main complexity that park managers faced in this phase was the difficulty in finding stakeholders to brainstorm with. They wanted to find stakeholders with whom they were unfamiliar, and who could provide viewpoints and ideas unknown to them.

After gathering the ideas, the next phase was to narrow down the goals, or what was named the focusing goals phase. A benefit from focusing goals was that it allowed the collaboration to take elements from different ideas and combine them into a more comprehensive goal. The primary complexity of this phase is that it is difficult to get the group to agree to one set of goals. It is in this phase that conflict can occur, and this can have detrimental impacts on the collaboration. However, if the group succeeds in focusing goals and arriving at consensus, there is another benefit. This process requires

negotiation and addressing the concerns of individual members of the group, and this process builds trust and cohesion among the members of the collaboration.

Once the group has focused the goal, the next phase is to garner support and resources so that the goal can be implemented. Park managers agree that this is a good way to increase the amount of resources available for park improvements. However, their concern with this step is that, due to the shrinking of government, they find themselves needing to garner more support and resources than they had in the past. As one manager said, “We do not have the money we used to have,” and another stated, “We are struggling with the loss of employees.”

The last phase is finishing with better results, and the park managers interviewed agreed that both the quality and quantity of the results improved due to the collaboration process. The biggest difficulty in getting better results is that it takes time, as expressed by two park managers who said, “Usually takes longer to get to a final result” and that you need to have “patience to see it through.”

### ***Goal Alignment is Difficult***

The majority of the issues cited by park managers regarding the complexity of collaboration had to do with goal alignment. There were several themes that emerged around goal alignment; they are: 1) troubles with persuasion, 2) difficulties with facilitation, 3) dealing with conflict, and 4) loss of control and feelings of vulnerability. Getting people to compromise on their own personal ideas and agree on a group decision is difficult, and one park manager summed it up by saying, “when things don’t go well its

because of different objectives.” Nearly 70% of the keywords for the topic “complexity” were further coded with the term “alignment,” and this indicates that that park managers are very concerned about this part of the collaboration. The importance of this finding needs to be emphasized because it highlights the precise point where collaborations are most likely to fail. Park managers also believe they lack the skills necessary to overcome these challenges. Poor group process skills are a leading cause of collaboration failure, and this fact provides researchers and practitioners with key information on where particular attention and support is needed to improve collaboration outcomes.

### ***Group Process Skills are Needed***

To meet the challenges of goal alignment, park managers need better group process skills. Group process skills include facilitation, negotiation, conflict resolution, consensus building and mediation. One park manager stated, “I haven't had training in facilitation and I just don't have a lot of personal experience as the leader of a facilitated process” and another person when asked if they would like training stated, “I would invite it.” When asked about how they learned collaboration skills, most stated that this learning came from experience. Though this fact seemed not to deter managers, because most managers said they have become more collaborative throughout their career, it does seem that a trial and error method could be improved. Only a few park managers stated that they had formal training in collaboration, and one stated that the park service they belonged to had their own in-house training on collaboration. It appears that there is a lack of collaboration training for park managers and this is a matter deserving of remedy.

### ***Stakeholder Perceptions***

Park managers have a widely held perspective that stakeholders have a lot of impact on whether collaborations are successful or not. This sentiment was summed up by one park manager who said, “It could be a really positive, smooth flowing thing or it can be a really big pain in the backside depending on who your partners are.” Though managers generally stated that they had good relationships with stakeholders, there were also examples of bad relationships and failed collaborations. It should not be surprising that park managers perceive that stakeholders have a significant impact on collaborations since so much of collaboration time is spent working with them. To provide additional understanding about the impact of stakeholders, the quantitative methods portion of this research will further investigate variables relating to stakeholders.

### ***Introverts struggle with collaboration perceptions***

Park managers who self-identified as being “introverted” seemed to be conflicted about how this personality trait impacts their own collaboration success, and they were aware that “introverts” are not perceived as being good collaborators. Of interest, the personality traits “introverted” was listed by park managers as both positively and negatively associated with collaboration. Personality traits that were positively associated with successful collaboration tended to be terms that are related to openness, being outgoing and being concerned about others. Personality traits that were negatively associated with successful collaboration tended to be terms that are related to being closed-off, opinionated and interested in self over others. The term “introverted” was the



only term that was used to describe both successful and unsuccessful collaboration. The respondents who answered that “introverts” were successful at collaboration tended to also self-identify as “introverts.” As one park manager stated, “It’s somewhat innate, personality type thing. If you really practice something you can do it over time, but I never had the time or the inclination to do it.” They spoke in a conflicted manner about their introversion, with one saying:

Whereas for me, something like that takes energy and takes it out of me and, I get done with meetings and oh, I gotta sit here and kind of process things before I get back into it.

It appears that introverts want to be good at collaborating and they work hard at it. It also seems that they believe introverts are good at collaboration, but there is some concern that self-bias may be at play here. This is difficult to determine without additional information about the impact that personality has on successful collaboration. The next chapter of the study will focus on the quantitative methods and this topic will be reexamined there.

## **Chapter 5: Survey Methods and Findings**

The research for this dissertation is using both qualitative and quantitative methods, which is referred to as a mixed methods approach (Clark & Creswell, 2011). In this chapter, the quantitative methods used in this research and the findings, based on a nationwide survey of park managers, will be discussed. The purpose of this quantitative analysis is to determine which independent variables are associated with successful collaboration. It is important from both theoretical and practical perspectives to better understand the correlations among these variables to gain more insight on the antecedents of collaboration in this policy context.

This chapter will begin with a discussion about how the sample was selected; it next describes how the quantitative data was collected; this will be followed by an explanation of how the survey questionnaire was developed and how the data were analyzed; it concludes with the quantitative findings and a discussion of their theoretical and practical implications.

### **Quantitative Sample Selection**

For the survey, the population is state park managers from each of the 50 states. Titles that will be considered eligible for the study will include park superintendent, park manager or equivalent. To determine the population, the website for all 50 state park services was visited and all the sites that the state listed under its management was

compiled. This resulted in 3,463 sites listed. State park services differ from each other in the type of sites they manage. The types of sites that state park departments oversee is numerous and includes: parks, recreation areas, museums, natural areas, arboretums, capital buildings, beaches, monuments, reserves, preserves, point of interest, forests, interpretive center, trails, greenways, trains, tramways, piers, waysides, mansions, palaces, parkways, resorts, waterways, sanctuaries, observatories, corridors, islands, campgrounds, golf courses, ski tracks, complexes, reservoirs, quarries, fields, watersheds, scenic sites, adventure centers, caves, mines, heritage centers, backcountries, river accesses, marinas, boat launches, picnic areas, conservation areas, historic prairies, battlefields, and prisons. To create consistency among the states and what they manage, it has been determined only to include sites which had the terms; “park,” “recreation” or “recreational” in their names. This resulted in 2085 parks and recreation(al) areas or sites in the United States. The total number of individuals who possess a park manager title is not wholly known because a manager may oversee more than one area, so the unit of analysis will be the park or recreational area.

### **Sampling**

To sample this population, random sampling was used. Each park and recreational area was assigned a random number using the random number generation feature in Excel, and the list was then sorted numerically and in increasing order. Initially, to determine the response rate and to make sure there were no significant issues with the online survey, letters were sent on November 8, 2017, to the first 100 parks or

recreational areas on this list. Within two weeks, 20 respondents had taken the survey. Finding no problems with the survey, and with an initial indication that response rates would be around 20%, it was determined that a total of 800 letters would need to be sent out (see the next section, Quantitative data collection, for more details about the letter). On November 27, 2017, an additional 700 letters were mailed, for a total mailing of 800 letters. On January 3rd, 2018 the survey was ended. Of the initial sample size of 800, exactly 100 letters were returned undeliverable, making the effective initial sample size 700. It is noteworthy that, though websites of each state park in the sample had been visited, it was not always straightforward to determine the mailing address. One reason for this is that, since state parks are a place to be visited, the park may list the physical or a GPS address so that people can find the park, and not list their mailing address. To find the mailing address, additional internet searches were conducted, but even then it was not always apparent whether the address was a physical or mailing address. From the final sample size of 700, there were 153 surveys completed and returned, which resulted in a final response rate of 22%.

Though 22% is a satisfactory response rate, it is still necessary to determine if the sample is representative of the total population. See table 5.1 Demographics of Survey Respondents. One concern over the demographics of this sample is gender, with 79% of the respondents were male and only 21% were female. Though these percentages are not representative of the general U.S. population, since the respondents are persons in management positions, it is perhaps not surprising to find that equity issues occur in park

**Table 5.1 Demographics of Survey Respondents**

<b>Category</b>	<b>Count</b>	<b>%</b>	<b>Total</b>
<b>Gender</b>			150
Male	119	79.3%	
Female	31	20.7%	100%
<b>Age</b>			152
18-25	1	0.7%	
26-35	19	12.5%	
36-45	53	34.9%	
46-55	46	30.3%	
56-65	29	19.1%	
Over 65	4	2.6%	100%
<b>Education</b>			152
High school	2	1.3%	
Some college	7	4.6%	
2-year college degree	20	13.2%	
4-year college degree	94	61.8%	
Masters degree	26	17.1%	
Advanced degree	2	1.3%	
Other	1	0.7%	100%
<b>Years in Organization</b>			152
Less than 1 year	3	2.0%	
1-2 years	4	2.6%	
3-5 years	10	6.6%	
6-10 years	17	11.2%	
11-15 years	30	19.7%	
16-20 years	32	21.1%	
More than 20 years	56	36.8%	100%
<b>Development Description</b>			152
Urban	15	9.9%	
Suburban	26	17.1%	
Rural	111	73.0%	100%

management positions, as other authors have discussed (Arnold & Shinen, 1998; Anderson & Shinen, 2001; Smith, Santucci, Xu, Cox, & Henderson, 2012). The age range of the respondents in this sample is typical for those in management positions. The education level, though higher than that of the general U.S. population, is expected, since many park manager positions require at minimum a bachelor's degree. The development description is also in keeping with expectations since most state parks are located in rural areas.

Another area that was examined, was whether the received survey responses are representative of the initial sampling frame (population). To determine this, the number of surveys sent and received from each state cluster groups (which are described in the previous chapter) was analyzed, see table 5.2 Surveys received by Cluster Group. From this analysis, it was determined that cluster 1, the middle group, was over-represented by

**Table 5.2 Surveys Received by Cluster Group**

<b>Cluster</b>	<b>Count</b>		<b>Percent</b>		<b>Difference</b>
	<b><i>Received</i></b>	<b><i>Sent</i></b>	<b><i>Received</i></b>	<b><i>Sent</i></b>	
<b>1</b> ( <i>Middle Group</i> )	65	257	43.0%	32.1%	10.9%
<b>2</b> ( <i>Smaller Group</i> )	35	161	23.2%	20.1%	3.1%
<b>3</b> ( <i>Lowest and Outlier Group</i> )	0	5	0.0%	0.6%	-0.6%
<b>4</b> ( <i>Super Group</i> )	18	168	11.9%	21.0%	-9.1%
<b>5</b> ( <i>Larger Group</i> )	33	209	21.9%	26.1%	-4.3%
<b>Total</b>	<b>151</b>	<b>800</b>	<b>100.0%</b>	<b>100.0%</b>	

11%; cluster 2, the smaller group was over-represented by 3%; cluster 3, lowest and outlier group, which is only the state of Alaska, returned no responses; cluster 4, the super group, was under-represented by 9%; and cluster 5, the larger group, was under-represented by 4%. This may have resulted from the high number of returned letters; however, this did not appear to be the cause, since clusters 4 and 5 (which were under-represented) had a return rate similar to that of cluster 1 (which was over-represented). Though this research was not able to determine why certain clusters were over- or under-represented, it is interesting that the two largest groups are also the two most under-represented. Perhaps the size or complexity of their parks had an impact on response rates. Another factor that may have impacted the response rate for cluster 4 is the impact of climate change. During the timeframe that the survey was mailed out, three out of four states in this cluster (Florida, Texas and California) were dealing with natural disasters. During this hurricane season, Florida was hit by 4 hurricanes (Jeanne, Dennis, Wilma and Irma), Texas was hit by hurricane Harvey, and California was dealing with massive wildfires. During natural disasters, it is common for parks to assist other parks with disaster clean-up work.

## **Quantitative Data Collection**

To collect the quantitative data, the sampled respondents participated in a web-based survey using the software Qualtrics. Since email addresses were not available, as discussed in the previous sampling section, it was necessary to send the survey using a paper letter through the US Postal Service (see appendix C: Survey Invitation Letter for

more details). To increase the response rate, many of the techniques used followed the tailored design method (Dillman, Smyth, & Christian, 2014). Some of these techniques included using hand-written envelopes, actual postage stamps instead of metered mail postage, hand-written signature instead of photocopied, and placing the letter on official letterhead from a recognized university. In addition to these techniques, a short hand-written message was written on each letter, and a facsimile of the principal investigators business card was included. Though the tailored design method does not advocate mixed mode procedures, i.e., moving the respondent from mail to a web-based format (Dillman, Smyth, & Christian, 2014), actions were taken to try and minimize the impact of going from one mode to another. One such action involved simplifying the URL address, by using the web based application TinyURL which provides a shorter and easier to use URL address. This was then included in the survey invitation letter, using a bold, blue and non-serif font to increase the success of transcribing the address into a web-based platform. Despite this precaution, it was found that some states' IT departments block TinyURL addresses, and some individuals did contact the principal investigator by email about this issue. When this occurred an email was sent back with a hyperlink to the longer URL address.

The Qualtrics survey was open for responses from November 27, 2017, until January 3, 2018. Though this period occurred after the thanksgiving holiday and throughout the winter holidays, this was considered a reasonably good time to survey park managers. The time of less public activity for many parks is after the fall camping



and leaf season and before the preparations for spring begin, so it was assumed that park managers would have more time to take the survey during this time.

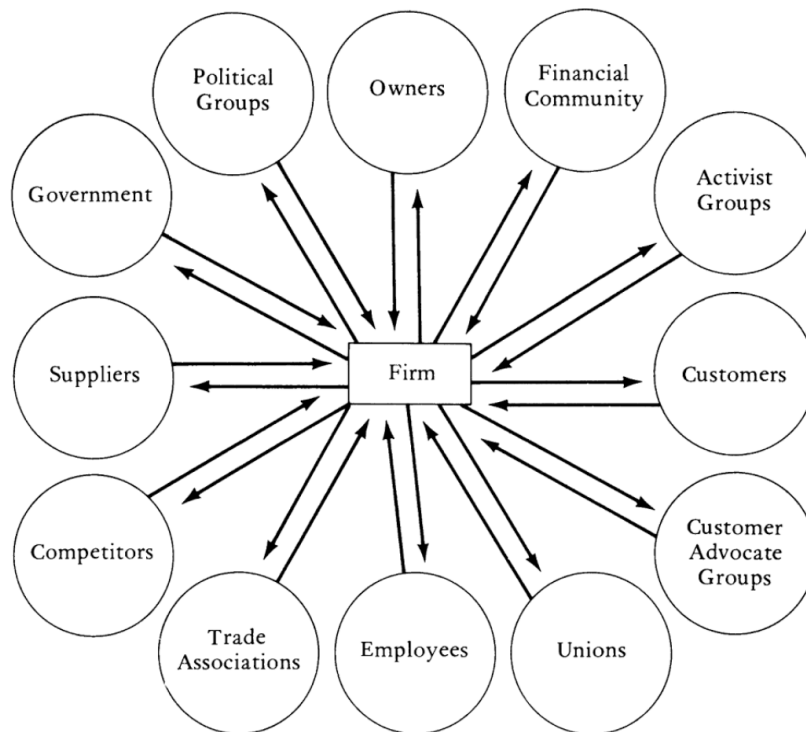
## **Development of the Survey Questionnaire**

The purpose of the quantitative survey is to provide the data to assist in answering the research questions and hypotheses as discussed in Chapter 3, the conceptual framework and hypotheses. The questions selected for this survey were chosen to accomplish this task and the rationale was given in Chapter 3. A brief summary of that rationale, along with some additional information, will be discussed in this section. For the items in the survey, see Appendix B: Survey Questionnaire. After giving consent to continue, the respondent is provided a warm-up question to pique interest in the topic and to increase survey completion rates. The next set of questions examine the dependent variable, “successful collaboration.” These questions use a 7-point Likert scale, and investigate the five dimensions of: 1) governance, 2) administration, 3) autonomy, 4) mutuality and 5) norms, devised from the model by Thomson, Perry and Miller (2009).

The remaining questions in the survey reference the independent variables, control questions and demographic questions. These questions, first, sought information regarding the number of stakeholders, the level of impact that the stakeholders have, and what type of relationship exists between the park manager and each stakeholder. These questions help gauge the complexity and the level of conflict that may be occurring in the

collaboration. The stakeholder list used in this study is adapted from Freeman (2010), which created categories of stakeholders for very large organizations (see figure 5.1). It was necessary to adapt this model to better fit the stakeholders which parks collaborate. The stakeholder groups “competitors” and “financial community” do not apply, “activist groups” was changed to “environmental activist groups,” and “customer advocate group” was changed to “patron advocate group.” Of note, one respondent commented on the

**Figure 5.1 Stakeholder Map of a Very Large Organization from Freeman (2010)**



survey that the stakeholder “non-profit” is a category that was needed. Freeman (2000) did not have this category, and it is an oversight by this research which should be rectified in future studies. The stakeholder questions are followed by 5-point Likert scale questions that ask the respondent about their skill with collaboration. These questions are derived from the work of O’Leary, Choi & Gerard (2012), and include skills as defined by the following categories: 1) individual attributes, 2) interpersonal skills, 3) group process skills, 4) strategic leadership, and 5) substantive/organizational skills. To determine how the independent variables of personality impact collaboration, the Mini-IPIP scales developed by Donnellan, Oswald, Baird and Lucas (2006), which use a shortened 20-question test based on the Goldberg (1992, 1999) model, were used. Next, the respondents were asked to rate their abilities at collaboration, with questions specifically asking about their skills, personality and overall collaboration success. The last section of the survey asked demographic questions, and these included, age, gender, education, years in their organization, years in their current job, annual visitation, size in acres of park and questions about location and the development type that surrounds the park. The survey finished with an opportunity to provide additional comments and a question about whether or not the respondent would like to receive findings from the study.

## **Quantitative Data Analysis**

Data collected from the Qualtrics web survey was analyzed using STATA 12.1. The statistical analysis included the use of: 1) descriptive statistics, 2) testing the scales

using Cronbach's alpha ( $\alpha$ ), 3) ordinary least squares (OLS) regression, and 4) structural equation modeling (SEM). The remainder of this section will focus on the quantitative findings from the statistical analysis.

### **Descriptive Statistics**

The first level of statistical analysis will be to examine the descriptive results. This will provide some background information about the park managers and the variables being studied that will be relevant to the other levels of statistical analysis. These results will also provide some additional insights into the topic of collaboration. The descriptive results will examine the following categories: 1) dependent variables, 2) stakeholders, 3) skills, 4) personality, 5) personal rating, and 6) demographics.

### ***Dependent Variable***

The dependent variable for this research uses the "successful collaboration" measure that was created by Thomson, Perry and Miller (2009). Their model asks 17 questions about collaboration that are based on five dimensions of collaboration: 1) governance, 2) administration, 3) autonomy, 4) mutuality and 5) norms. Each question used a 7-point Likert scale and to calculate the "successful collaboration" measure used for this study, the sum of the scores for all 17 questions was calculated. This created a variable whose score ranged from 0-119 (see Table 5.3 for the summary statistics). The

**Table 5.3 Summary Statistics for Successful Collaboration Scale**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>	<b>Comparison %</b>
<b>Successful Collaboration Scale (sum)</b>	153	92.248	13.536	31	118	0.775
<b>Successful Collaboration Scale (mean)</b>	153	5.426	0.796	1.824	6.941	0.775
<b>Personal Rating: Collaboration Performance</b>	153	9.444	1.662	0	12	0.787

mean of this sum was slightly over 92; however, to provide better context, the mean of the 17 questions is a better indicator. The mean score for all 17 questions is 5.426 out of 7 possible, which can be interpreted from the scales on the questionnaire, to fall between “more than somewhat” to “to a large extent” and signifies a relatively high level of successful collaboration. Also included in Table 5.3 is a personal rating scale, which combines the results of two questions which ask the park manager about their collaborative performance results. Of interest, when the means are converted into comparison percentages, the result of the Thomson, Perry and Miller (2009) successful collaboration scale very closely approximate the personal rating. Later in this paper, it will be shown that regression analysis found similar results. Self-assessment ratings have often been criticized for inherent issues of personal bias; however, in this sample, personal bias does not appear to be an issue, or another explanation may be that both the

personal measure and the Thomson, Perry and Miller (2009) measure have issues with personal bias.

### ***Stakeholders***

Park managers were asked questions about the stakeholders they collaborate with, to determine if relationship status and quantity of stakeholders would have an impact.

The hypotheses assumed that more stakeholders would have a negative impact and that better relationships would have a positive impact. Table 5.4 ranks the stakeholder

**Table 5.4 Mean Rating of Relationship with Stakeholder Groups**

<b>Stakeholder</b>	<b>Obs</b>	<b>Mean Rating (in rank order)</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>	<b>Rating Description</b>
Patrons	140	7.243	0.839	4	8	(8) Extremely good
Other Governmental Agencies	146	7.151	0.817	4	8	(7) Moderately good
Patron Advocate Groups	110	7.082	0.949	4	8	(6) Slightly good
Nearby Landowners	146	6.699	1.072	3	8	(5) Neither good or bad
Suppliers	96	6.635	0.919	4	8	(4) Slightly bad
Lease Holders	93	6.570	1.047	3	8	
Environmental Activists Groups	94	6.553	1.160	3	8	(3) Moderately bad
For Profit Organizations	100	6.470	1.201	3	8	(2) Extremely bad
Political Groups	72	6.056	1.124	3	8	
Trade Associations	36	5.806	0.980	5	8	
Unions	49	5.714	1.429	2	8	

groups and all of the groups' mean ratings range between "neither good or bad" and "extremely good." Though individual scores ranged from 2 to 8, or "extremely bad" to "extremely good," in general, managers have a reasonably good relationship with their stakeholders. Patrons, other governmental agencies and patron advocate groups ranked highest, and trade associations and unions ranked lowest. It was somewhat surprising to see that, overall, the relationships were ranked so positively; however, the ranking order was somewhat anticipated, with stakeholders who tend to have similar interests ranking higher and those with dissimilar interests ranking lower. One exception to this may be the environmental groups, whose mean landed in the middle of the rankings, and who would certainly seem to have aligned interests. Though this research did not ask questions about this, it would seem plausible that, due to the similarities of interests between managers and environmental groups, battles over turf and competition for similar resource pools could be contributing to the lower score. Park managers were also asked about the number of stakeholder groups they collaborate with (see Table 5.5), and the mean number of stakeholder groups was a little over 5 stakeholder groups. This signifies that park managers are dealing with a variety of stakeholders.

**Table 5.5 Summary Statistics for Total number of Stakeholder Groups**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Total (n) of Stakeholder Groups	153	5.745	2.270	0	11

### *Skills*

To test the collaboration skill factors, the skills list compiled by O’Leary, Choi & Gerard (2012) was used. Their list included 20 skills, that were categorized into the following: 1) interpersonal skills, 2) group process skills, 3) strategic leadership skills, and 4) substantive/organizational skills. Each question used either a 5 or 7-point Likert scale, and the sum of the questions for each skill category was taken. See Table 5.6 for the summary statistics. To compare the mean score among the 4 categories, it was

**Table 5.6 Summary Statistics for Collaboration Skills Scale**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>	<b>Comparison %</b>
<b>Interpersonal Skills</b>	153	18.092	2.475	0	21	0.862
<b>Substantive / Technical Knowledge Skills</b>	153	16.961	2.444	0	20	0.848
<b>Strategic Leadership Skills</b>	153	19.510	3.430	0	25	0.780
<b>Group Process Skills</b>	153	29.359	5.720	0	40	0.734
					<b>Mean</b>	<b>0.806</b>
<b>Personal Rating: Collaboration Skill</b>	153	9.183	1.804	0	12	0.765



necessary to calculate a comparison score. This was calculated by dividing the mean score by the number of questions and then dividing that number by the scale number, which created a score from 0 to 1. Using this comparison score, it can be seen that park managers rated themselves as having higher “interpersonal skills” and lower “group process skills.” Of note, these same skills will also be found to be statistically significant variables in the final OLS regression. Also included in Table 5.6 is a personal rating scale, which combines the results of two questions which ask the park manager about their collaboration skills. When asked to rate their overall skills with collaboration, park managers rated themselves lower (at 0.765) than when they were asked about each skill individually (the mean comparison percentage was 0.806). This indicates that their overall impression of their collaboration skills is less than what their actual skills suggest.

### ***Personality***

To test the impact that personality has on collaboration, it was necessary to determine what the characteristics of the park managers’ personality are. In order to measure this, the Mini-IPIP scale developed by Donnellan, Oswald, Baird and Lucas (2006) was used, which is a condensed version of the Big-Five personality (Goldberg 1992). This model uses the following 5 factors to measure personality: 1) extraversion, 2) agreeableness, 3) conscientiousness, 4) neuroticism, and 5) intellect/imagination. Each factor was tested with 4 questions using a 5-point Likert scale, and the sum of the questions for each personality trait was taken in order to create a scale. See Table 5.7 for

**Table 5.7 Summary Statistics for Personality Scale**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>	<b>Comparison %</b>
<b>Conscientiousness</b>	153	15.889	2.832	0	20	0.794
<b>Agreeableness</b>	153	15.111	3.176	0	20	0.756
<b>Intellect / Imagination</b>	153	15.065	3.189	0	20	0.753
<b>Extraversion</b>	153	12.072	3.751	0	20	0.604
<b>Neuroticism</b>	153	9.078	2.674	0	17	0.454
<b>Personal Rating: Personality Impact</b>	153	9.340	1.868	0	12	0.778

the summary statistics. When comparing the mean scores for each of the personality traits, it was found that the park managers scored highest for “conscientiousness,” “agreeableness” and “intellect/imagination,” and lowest for “neuroticism,” with “extraversion” falling in the middle. Also included in Table 5.3 is a personal rating scale, which combines the results of two questions which ask the park manager about the impact that their personality has on collaborative results. When asked to rate the impact of personality on collaboration, park managers rated themselves at 0.778, which is similar to their self-rating score for collaboration skills.

### ***Personal Rating***

Though the park managers' personal ratings have already been discussed, those ratings have been considered without comparison among the other personal ratings. Now the personal measures will be compared with each other. See Table 5.8 for the summary statistics. Comparing the mean score rating, park managers rated themselves

**Table 5.8 Summary Statistics for Personal Rating Scale**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
<b>Collaboration Performance Rating</b>	153	9.444	1.662	0	12
<b>Personality Impact</b>	153	9.340	1.868	0	12
<b>Collaboration Skill Rating</b>	153	9.183	1.804	0	12

highest for performing well at collaborations, and in determining whether personality or skill has the more significant impact on collaboration, the ratings suggest that personality has a stronger impact. This is just a preliminary finding, and the question will be further addressed in the regression analysis and SEM sections of this chapter.

### ***Demographics***

Demographics has been discussed in this paper; however, they were examined to gauge the representativeness of the sample. Now the summary statistics for these variables will be explored (see Table 5.9). As described earlier, there is a gender bias

**Table 5.9 Summary Statistics for Demographic Variables**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
<b>Gender</b>	150	1.207	0.406	1	2
<b>Education</b>	152	4.954	0.848	2	8
<b>Years in Organization</b>	152	5.546	1.526	1	7
<b>Years in Position</b>	152	3.757	1.578	1	7
<b>Development</b>	152	2.632	0.658	1	3
<b>Miles from Urban Area</b>	152	4.586	1.747	1	7
<b>Annual Visitation</b>	149	611,126	1187653.000	1,000	11,000,000
<b>Park Size (acres)</b>	149	5,617	15282.02	4	130,402

with more males represented in this sample; however, it should be noted that, in the regression analysis, gender was not found to be significant variable. Park managers, on the whole, are highly educated, with the mean indicating a score of nearly 5, which corresponds to a 4-year college degree. This is not surprising, as a college degree is a requirement by many states for the job. When looking at years in the organization and years in the position, the mean of this sample falls between “11-15 years” and “16-20 years” with the organization, and close to “6-10 years” in their current position. These scores indicate that the park managers are at the midpoint, or slightly beyond, in their career. The type of development surrounding their parks tends to be rural, and the mean distance from an urban area falls between “15-29 miles” and “30-59 miles,” indicating

they are a distance from urban areas. The mean visitation for the park manager's parks is 611,126 visitors and the park's mean size is 5,617 acres. This indicates that the typical park manager is busy with visitation, with a considerable amount of land to manage.

### ***Regression Analysis and Results***

In this section, the results from the OLS regression analysis will be discussed. Before performing regression analysis, it is first necessary to turn the individual variables into indices. Those variables that were adopted from other research, were combined in the same manner in which the authors combined theirs (Thomson, Perry & Miller, 2009; O'Leary, Choi & Gerard, 2012; Donnellan, Oswald, Baird & Lucas, 2006). This left the stakeholder variables and the demographic variables. There were not enough stakeholder variables to combine them into an index, so they remain as individual variables, and the demographic variables were split into two indices named "personal characteristics" and "park characteristics." To confirm that the indices maintained internal reliability, the indices were tested using Cronbach's alpha, and the results can be found in Table 5.10. Scores over 0.70 indicate that the internal reliability is acceptable. The index for "substantive/technical knowledge" was extremely close to the cut-off with a 0.699, but the indices for "conscientiousness," "neuroticism," "intellect/imagination," and "personal characteristics" all fell below the 0.70 internal reliability threshold. To more clearly examine the large number of possible relationships, groups of independent variables were run separately against the dependent variable "collaboration success." The smaller groups were selected by the following research categories: 1) stakeholders, 2) skills,

**Table 5.10 Descriptive Statistics for Analytical Variables**

<b>Dependent Variables</b>	<b>Obs</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>	<b>Alpha</b>
Governance	153	3	14	11.203	1.971	-
Mutuality	153	6	35	28.150	4.673	-
Administration	153	4	28	20.261	4.500	-
Autonomy	153	8	21	16.614	3.440	-
Norms/Trust	153	3	21	16.020	3.157	-
Total Collaboration Scale	153	31	118	92.248	13.536	0.788
<b>Independent Variables</b>						
Stakeholders (n)	153	0	11	5.745	2.270	-
Stakeholder Rating	152	4	8	6.723	0.707	-
Group Process	153	0	40	29.359	5.720	0.883
Strategic Leadership	153	0	25	19.510	3.430	0.808
Substantive/Technical Knowledge	153	0	15	12.660	2.040	<b>0.699</b>
Interpersonal Skills	153	0	21	18.092	2.475	0.7455
Extraversion	153	0	20	12.072	3.751	0.7969
Agreeableness	153	0	20	15.111	3.176	0.7480
Conscientiousness	153	0	20	15.889	2.832	<b>0.5661</b>
Neuroticism	153	0	17	9.078	2.674	<b>0.4351</b>
Intellect/Imagination	153	0	20	15.065	3.189	<b>0.6362</b>
Personal Rating	153	0	12	9.183	1.804	0.9224
Personal Characteristics	153	0	26	18.948	3.776	<b>0.6000</b>
Park Characteristics	153	0	1.11e+07	600,624	1,184,169	<b>0.0206</b>

3) personality, 4) personal ratings, and 5) demographics. The results of this initial OLS regression can be seen in Table 5.11. The results from this initial analysis will provide the data necessary to begin determining whether the hypotheses from chapter 3 are

**Table 5.11 Initial Regression Analysis**

<b>Variables</b>	<b>Category</b>	<b>Coefficient</b>	<b>R-Squared</b>
Stakeholders (n)	Stakeholders	0.1449**	0.369
Stakeholders Rating		0.558***	0.369
Group Process	Skills	0.154	0.198
Strategic Leadership		0.159	0.198
Substantive/Technical Knowledge		-0.058	0.198
Interpersonal Skills		0.260***	0.198
Extraversion	Personality	0.519**	0.188
Agreeableness		0.781**	0.188
Conscientiousness		0.442	0.188
Neuroticism		-0.489	0.188
Intellect/Imagination		0.475	0.188
Personal Rating: Skill	Personal	0.291**	0.296
Personal Rating: Personality	Ratings	-0.167	0.296
Personal Rating: Performance		0.245***	0.296
Age	Demographic:	-0.025	0.024
Gender	Personal	0.056	0.024
Education	Characteristics	0.132	0.024
Years in Organization		-0.019	0.024
Years in Position		0.015	0.024
Park Acreage	Demographic:	0.096	0.031
Distance from Urban Area	Park	-0.056	0.031
Annual Visitation	Characteristics	0.083	0.031

Note: Table shows standardized coefficients

\*p<.10, \*\*p<.05, \*\*\*p<.01

supported. Two of the hypotheses examined the relationship between stakeholders and collaboration and, were stated as:

H<sub>4-1</sub> : A greater number of stakeholders will be less positively associated with successful collaboration.

H<sub>4-2</sub> : A better relationship with stakeholders will be more positively associated with successful collaboration.

The regression analysis supported the significance of each variable in these hypotheses, and wholly supported H<sub>4-2</sub>; however, it did not support the direction indicated in H<sub>4-1</sub>, which stated that a greater number of stakeholders would result in a negative correlation. This is surprising because a greater number of stakeholders should result in greater conflicts, resulting in less successful collaborations. One caveat to this is that the park managers' mean rating of their relationship with stakeholders was 6.7, which is approaching the "moderately good" rating. Perhaps having "good" relationships, and having "more" of them, increased the number of successful outcomes.

Another set of hypotheses examined the relationship between skills and collaboration, and were stated as:

H<sub>3-1</sub> : *Interpersonal skills* will be more positively associated with successful collaboration.

H<sub>3-2</sub> : *Group process skills* will be more positively associated with successful collaboration.

H<sub>3-3</sub> : *Strategic leadership skills* will be more positively associated with successful collaboration.

H<sub>3-4</sub> : *Substantive Technical / knowledge skills* will be more positively associated with successful collaboration.



The regression analysis provided mixed support for these hypotheses. Regarding direction, the analysis generally supported the hypothesized direction of the indicators, except for “substantive technical / knowledge skills” where the regression suggested a slightly negative coefficient. However, this was not found to be statistically significant. In fact, the only variable that was found to be statistically significant was “interpersonal skills” with a P-value less than 0.01. The variable “group process” approached significance, but its P-value was 0.121. These findings are interesting because it could be argued that the questions for “interpersonal skills” measured personality instead, with questions that addressed the beliefs “I am a good communicator,” “I am a good listener,” and “I work well with people.” This issue will be discussed more in the conclusion of this chapter.

Another group of hypotheses examined the impact that personality had on collaboration, and these were stated as:

$H_{2-1}$  : The personality trait *extraversion* will be more positively associated with successful collaboration.

$H_{2-2}$  : The personality trait *agreeableness* will be more positively associated with successful collaboration.

$H_{2-3}$  : The personality trait *conscientiousness* will be more positively associated with successful collaboration.

$H_{2-4}$  : The personality trait *neuroticism* will be less positively associated with successful collaboration.

$H_{2-5}$  : The personality trait *intellect/imagination* will be more positively associated with successful collaboration.

The regression analysis supported the direction of all 5 of these hypotheses; however, only the personality traits for “agreeableness” and “extraversion” were found to be statistically significant. The personality trait for “neuroticism” was close with a P-value of 0.128.

The next set of hypotheses looked at demographic variables, and sought to understand more about the personal characteristics of the park manager as well as the general characteristics of their park. These hypotheses were stated as:

H<sub>4.3</sub> : An individuals seniority in tenure will be more positively associated with successful collaboration.

H<sub>4.4</sub> : An individuals proximity to urban areas will be more positively associated with successful collaboration.

H<sub>4.5</sub> : Greater annual visitation will be more positively associated with successful collaboration.

None of the variables for these hypotheses were found to be statistically significant. The only demographic variable that came close was for “education” with a P-value of 0.107, however, this variable was not included among the original hypotheses.

Having completed the initial OLS regressions, the final OLS regression was operated with a reduced amount of variables. It was decided that only variables with P-values less than 0.15 and which did not have issues with internal reliability would be used in the final regression model. See Table 5.12 for the results of this calculation. From the results, it can be seen that the two skills, “group process skills” and “interpersonal skills” are statistically significant, with “group process skills” being highly significant. For

**Table 5.12 Final Regression Analysis**

<b>Variables</b>	<b>Coefficient</b>	<b>R-Squared</b>
Group Process	0.238***	0.266
Interpersonal Skills	0.242**	0.266
Extraversion	0.094	0.266
Agreeableness	0.240***	0.266
Education	0.135*	0.266

Note: Table shows standardized coefficients

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$

personality traits, only “agreeableness” was found to be significant, and it was highly significant. Lastly, the demographic variable “education” was found to be somewhat significant.

With the information from this regression analysis it is now possible to discuss the final hypothesis of this research:

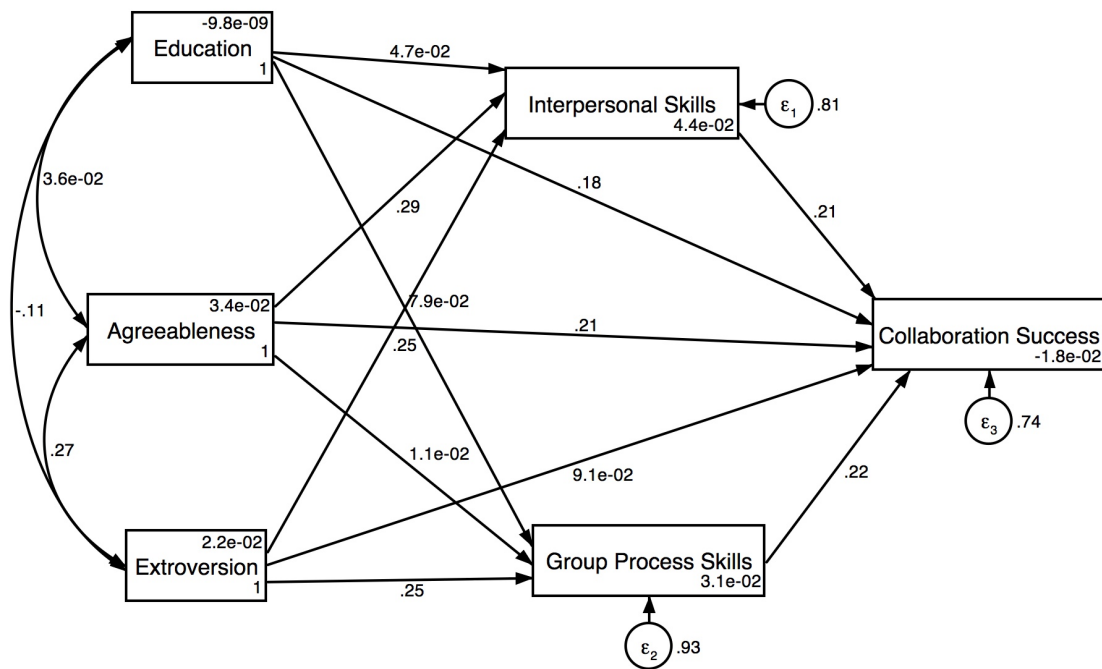
$H_1$ : Personality traits will be more positively associated with successful collaboration than collaboration skills.

The final OLS regression was the only regression run that examined both personality and skills against the dependent variable “collaboration success.” Both skills and personality had a highly significant index, with skills having “group process” with a standardized coefficient of 0.238 and personality having “agreeableness” with a standardized coefficient of 0.240. The impact of each of these indices is quite similar. The only other index that is significant is for “interpersonal skills,” and the question that remains is, should this be categorized under personality or skill? Though the work by O’Leary, Choi

and Gerard (2012) considered this a skill, the questions included in this index are, “I am a good communicator,” “I am a good listener,” and “I work well with people.” These questions have similarities with the questions asked in the personality Mini-IPIP scales (Donnellan, Oswald, Baird & Lucas, 2006), though some of the questions on the latter scale are asked in the negative (including “Don’t talk a lot,” “Am not interested in other people’s problems,” and “Am not really interested in others”). The first question just listed is from the “extraversion” set of questions and the second two are from the “agreeableness” set of questions. The SEM analysis depicts both of these personality traits as having a significant impact on “interpersonal skills;” this fact will be discussed more fully in the next section. If the OLS regression is run without the “interpersonal skill” index, the statistical significance for both “group process skills” (with 0.2990 coefficient) and “agreeableness” (with 0.3016 coefficient) increases. Since the coefficient for “agreeableness” is slightly larger, this study cannot make a definitive statement, but there is some evidence that  $H_1$  is supported.

### ***Structural Equation Modeling (SEM)***

To gain a more complete understanding of how these variables impact each other, the same variables used in the final OLS regression were used to build a structural equation model. Using the SEM builder in STATA, the model in Figure 5.2 was created. The theory behind the structure of the model, was based on theories of personal

**Figure 5.2 Initial Structural Equation Model****Table 5.13 Estimates for the SEM Pathways**

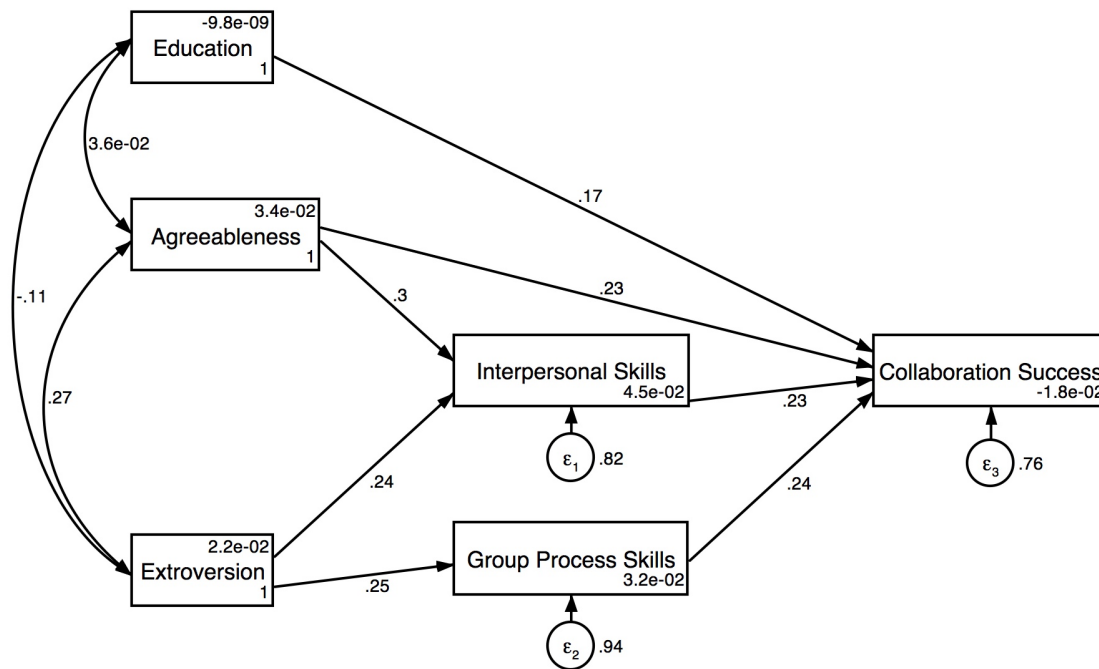
Structural	Coefficient	Standard Error
<b>Interpersonal Skills &lt;—</b>		
Education	0.038	0.060
Agreeableness	0.256***	0.066
Extraversion	0.204***	0.064
<b>Group Process Skills &lt;—</b>		
Education	0.072	0.072
Agreeableness	0.011	0.080
Extraversion	0.239***	0.077
<b>Collaboration Success &lt;—</b>		
Interpersonal Skills	0.242**	0.098
Group Process Skills	0.238***	0.081
Education	0.135*	0.070
Agreeableness	0.240***	0.081
Extraversion	0.094	0.078

Note: Table shows standardized coefficients

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$

development, in which major portions of an individual's personality are formed early in life, and with the assumption that collaboration skills are developed later. It was also presumed that education would be a precursor to learning collaboration skills. After completing the structure of the model, the model was estimated to determine which paths would be statistically significant. See Table 5.13 for the results. Any paths that were not statistically significant were removed from the SEM model, resulting in Figure 5.3 the final SEM model. This model indicates that the personality traits “agreeableness” and “extraversion” has a significant impact on “interpersonal skills.” The personality trait,

**Figure 5.3 Final Structural Equation Model**



“extraversion” has a significant impact on “group process skills.” All of the variables except “extraversion” have a significant impact on “collaboration success.” It is interesting that “education” is not correlated with either of the skills; therefore, it is impacting the success of collaboration in a way that is not uncovered by this model. This model suggests that park managers are improving their collaboration skills through an interaction with their personality, rather than from a more formal education process. The implications of this and the other findings from the quantitative research will be discussed further in the next section.

## **Discussion**

This quantitative research sought to understand how a park manager’s skills and personality traits impact the success of collaboration. The research surveyed 153 park managers across the U.S., and the data collected was analyzed using OLS regressions and SEM. From this analysis several findings of interest were uncovered, and they are: 1) overall personal ratings are accurate but more specific ratings are not, 2) external factors, such as stakeholders and park characteristics seem to play a diminished role in collaborative outcomes, 3) formal education does not seem to impact collaboration skills, 4) regarding skills, group process skills are important, and 5) personality plays an important role in collaborative success. In the remainder of this section, these findings will be further discussed.

### ***Personal Ratings***

The preliminary findings indicate that park managers self-rated overall collaborative success score is very similar to the score generated by the Thomson, Perry and Miller (2009) collaboration measure. The regression analysis found the self-rating is highly significant and correlated with the collaboration success dependent variable. However, when asked to rate their individual collaboration skills or the impact their personality has on outcomes, park managers were not as accurate. When it came to predicting their level of collaboration skills, their accuracy was still significant, though not highly significant, and there was no statistical significance in their ability to gauge how their personality impacted collaboration success. Perhaps these findings should not be surprising, judging whether a collaboration ends successfully, or the amount of collaboration skill they have, is fairly straightforward. However, understanding how their personality impacts collaboration outcomes requires the ability to assess complex interactions, and it was found that park managers were not able to accurately self-rate themselves on this measure.

### ***External Factors***

Another surprising finding is that demographic factors - those external to the park manager - seem to play a lesser role in collaborative outcomes. The research hypotheses stated that a higher number of stakeholders would have a negative impact, and a better the relationship with stakeholders would have a positive impact. The findings of this



research supported neither. The fact that stakeholders are neither having a positive or negative effect can be interpreted to mean they are having a neutral or a mitigated impact. Other external factors were examined, including park size, annual visitation and miles from urban areas. This research assumed that greater park size, more visitors, and proximity to an urban area would all increase the success of collaboration. Though perhaps somewhat counterintuitive, the rationale was that complexity (more visitors, greater park size) would require park managers to seek out potential collaborators to help solve problems, and that proximity to urban areas would provide a greater number of potential stakeholders to collaborate with. However, these external factors, were also not found to be statistically significant. These findings provide additional support for the importance of the individual characteristics of a park manager as it pertains to collaboration outcomes.

### ***Education***

The only demographic variable examined in this study that had statistical significance was the variable “education.” Education was found to contribute to collaboration success, but not towards a person’s collaboration skills. This at first does not appear to make sense, because it is assumed that skills are learned, and that education would be playing a role. However, it is not necessarily true that formal education is where park managers are learning collaboration skills, and both the SEM and the interviews provide evidence for this. See Figure 5.3 for a diagram of this model. The SEM analysis indicated no significant pathways from education to either “interpersonal

skills” or “group process skills,” but had its own direct connection with “collaboration success.” Though the quantitative research was not able to determine why formal education is effecting collaboration outcomes, it appears that more years of education is connected to collaboration success. Though this is only speculative, perhaps as people advance in education they also incorporate a more diverse set of viewpoints into their thinking, which results in them becoming more collaborative.

### ***Skills***

A primary goal of this research was to determine the impact that skills have on successful collaboration, and “group process skills” were found to be highly significant. The skill categories that were not found to be significant were “strategic leadership” and “substantive/technical knowledge.” The other skill category, “interpersonal skills,” as discussed in the last section, was found to be more closely linked with personality, and was removed as a category of skill. It is interesting that “strategic leadership” and “substantive/technical knowledge” were not found to be significant. However, it may be that both of these types of skills frame the park manager as an authority figure (in the negative sense) and this is having an impact on the collaboration. As previously stated, “Group process skills” were found to be highly correlated with successful collaboration. “Group process skills” was an index that measured skills in, facilitation, negotiation, collaborative problem solving, conflict resolution, consensus building, mediation, compromise and group dynamics. These skills are the ones that are needed to address some of the most difficult aspects of collaboration.

### ***Personality***

This study found that personality plays a significant role in collaborative success, and at various points in the research the personality traits “agreeableness” and “extraversion” were found to be significant. The personality traits that were not found to be significantly correlated are, “conscientiousness,” “neuroticism,” and “intellect/imagination.” It was somewhat surprising that “conscientiousness” was not found to be significant, but the questions on this category asked about order vs. messiness and getting chores done. Perhaps the very process of collaboration requires someone to be at the same time okay with some messiness (allowing emotions to run high as people disagree) and desiring order (getting everyone back on board and working towards a common goal). Though it was not surprising to see that “neuroticism” did not improve collaboration, it was surprising that it did not have a negative effect either. Questions in this category asked about being relaxed and getting upset easily, again similar to “conscientiousness.” The personality trait “intellect/imagination,” also was not significant, and again this was somewhat surprising. The questions for this trait, asked about imagination and abstract ideas. Though one might think that a person who is very smart or very imaginative may be better at finding unique and creative solutions, it could be that the ideas of people who exhibit this trait strongly are just too creative, or what some might call “out there,” and that they are disconnected from the more practical needs of the group.

Questions about the personality trait “*agreeableness*” asked park managers to rate whether statements like “sympathize with others’ feelings” or “am not interested in other

people's problems" described them. In many ways, these questions sought to understand how thoughtful a person is about other people's needs. It makes sense that a person who is more "agreeable" would be better at collaboration than someone who is not sensitive to other peoples needs.

As stated earlier, personality plays an important role in collaboration, and it appears that park managers who are good at skills are primarily gaining these skills as a result of their personality. Though this topic will also be explored more in the final chapter, when the findings from the interviews will be added, it appears that the main way park managers are gaining collaborative experience is through a combination of trial and error and their personality.

## **Chapter 6: Conclusion, Limitations and Future Research**

The final chapter of this dissertation will begin with a summary that highlights the major findings from this research. This summary will combine the findings from the quantitative study, which has determined what variables makes collaboration successful, with the findings from the qualitative study, which will add depth to our understanding of why these variables are important. Next, the theoretical and practical implications of the findings will be discussed. This will be followed by the limitations of the research, and concluded with directions for future research.

### **Summary of the Findings**

The research in this dissertation was designed to examine the factors that lead to successful collaboration. Specifically, it focused on the role that individual managers, in this case, state park managers, play in collaborative outcomes. Data was collected using a mixed-methods approach with interviews and surveys. The interviews sought to understand the perceptions that park managers have about collaboration, with a specific interest in the skills and personality traits that lead to positive outcomes. The surveys were constructed so that indices on “personality,” “collaboration skill,” “stakeholder impact,” and other variables, including demographic variables, could be calculated and then tested against the dependent variable, “collaboration success.” In general, the quantitative results found that park managers with the personality traits “agreeableness” and, to a lesser extent, “extraversion,” and those with good “group process” and

“interpersonal skills” are more positively associated with “successful collaboration.” The demographic variable “education” was also found to be significantly correlated with “successful collaboration.”

This research uncovered new findings about collaboration, and in the remainder of this section, some of the major findings will be discussed. This discussion will include: 1) external factors are insignificant, 2) the goal alignment phase of collaboration is difficult, 3) group process skills are essential, 4) collaborators are empathetic and possibly outgoing, and 5) what's more important, personality or skill?

### ***External Factors are Insignificant***

The hypotheses that were written prior to the research being conducted assumed that external factors such as park characteristics and stakeholder attributes would have an impact on collaborative outcomes. However, though park managers did speak about the importance of external factors, none of them were found to be statistically significant. One external factor that park managers spoke both good and bad about, was the other stakeholders in the collaboration. Though many of the comments were positive, some expressed concern that the wrong stakeholders made collaborations more difficult. This sentiment was summed up by one park manager who said, “It could be a really positive, smooth flowing thing or it can be a really big pain in the backside depending on who your partners are.” The survey asked questions about the number of stakeholders and the manager’s relationship with the stakeholders, and it was hypothesized that a higher amount of stakeholders and poor relationships with stakeholders would result in a

negative collaboration outcome. The statistical analysis did not find any significance with either of these variables. It should not be surprising that park managers perceive that stakeholders have a significant impact on collaborations, since so much of collaboration time is spent working with them; however, when the analysis was completed, stakeholders were not found to have a significant impact. This means that either stakeholders do not have an impact, or there is something else taking place. One possible scenario is that once park managers identify stakeholders who are difficult to work with, they choose not to collaborate with them. Though this selection process may increase collaboration success, it also raises concerns about democracy because certain stakeholder groups are being excluded from the collaboration process. This scenario was not confirmed from the data collected in this research and should be explored in future studies.

The other external factors were park characteristics, and included the variables park size, annual visitation and miles from urban areas. This research assumed that greater park size, more visitors, and proximity to an urban area would all increase the success of collaboration. The rational - possibly counterintuitive - was made that complexity (more visitors, greater park size) would require park managers to seek out potential collaborators to help solve problems, and that proximity (closer to urban areas) would provide more potential stakeholders to collaborate with. These external park characteristics were found not to be statistically significant. The interviews did not provide much support for the impact of park characteristics either. One park manager when asked about whether they collaborated more at a larger or smaller park, stated the

smaller, and made the distinction that they were an assistant manager at the larger park, and that the senior manager performed the majority of the collaboration functions at that park. It appears the external factors are playing a lesser role in collaborative outcomes, which lends support to the primary research interest of this study; namely, that the internal factors, personality and collaboration skill, are playing a greater role in collaboration outcomes.

### ***The Goal Alignment Phase is Difficult***

The content analysis of the interviews provided a framework and a model to describe the phases of collaboration, and the phase “goal alignment” is the most difficult phase for park managers. When talking about the complexities with collaboration, the majority of the comments concerned elements associated with goal alignment, and they include: 1) troubles with persuasion, 2) difficulties with facilitation, 3) dealing with conflict, and 4) loss of control and feelings of vulnerability. Park managers also believe they lack the skills needed to overcome these challenges, and one stated, “I feel like most managers don’t have training in it at all and it takes a lot of skill to do it, and it’s incredibly necessary.” It is problematic that this phase, which is the most difficult phase, is led by managers who lack training in group process skills. This decreases the potential for successful collaborative outcomes. However, this knowledge provides an opportunity to address the problem, and will be discussed in greater detail later.



### ***Group process skills are essential***

To improve park managers' success with goal alignment, they need to learn group process skills. Of all of the skills identified by O'Leary, Choi & Gerard (2012), only group process skills and interpersonal skills were found to be significantly related to successful collaboration outcomes. As argued earlier in this paper, interpersonal skills are closely linked to personality traits, and should be considered part of the personality measure rather than the skills group. Group process skills include facilitation, negotiation, collaborative problem solving, conflict resolution, consensus building, mediation, compromise and skills in group dynamics (O'Leary, Choi & Gerard, 2012).

The interviews provide some insight into how park managers learn their collaboration skills, and the findings indicate it is primarily through trial and error and experience. One park manager described a situation in which they learned what not to do by watching people who were poor at collaborating. The SEM analysis supported the finding that managers learn by experience. Though education was found to be statistically significant with successful collaboration, it did not have any significant pathways to group process skills. This model suggests that park managers are improving their collaboration skills via a process that does not stem from formal education. Few park managers had formal training in collaborating, but as one said, "I would invite it."

### ***Collaborators are empathetic and possibly outgoing***

This study found that personality plays a significant role in collaborative success, and the personality traits "agreeableness" and to a lesser extent "extraversion" were

found to be significant. The term “agreeableness” is used because that is the terminology that the Big-Five personality traits uses (Goldberg, 1992), but the term is vague and needs additional clarification. Donnellan, Oswald, Baird and Lucas (2006) developed the Mini-IPIP scales from the Big-Five. the Mini-IPIP scales were used in this study, and they include four questions that asked about “agreeableness.” These questions asked the park managers to rate whether statements like “sympathize with others’ feelings” or “am not interested in other people’s problems” described themselves. Perhaps a better term to describe what this trait measured is “empathy.” In the interviews, no one used the term, “agreeable” to describe those who are good at collaboration, but a number of them did use the word “empathy.”

Another term that park managers widely used to describe successful collaborators was the word, “extrovert.” The quantitative results did not completely confirm that the personality trait “extraversion” has a significant impact. In the initial regression, which only measured personality traits against collaboration, “extraversion” was found to be significant; however, in the final regression, when skills and education were added, it lost its significance. From the SEM analysis, it appears that “interpersonal skills” and “group process skills” were in some way responsible for this change in significance. Another interaction that could be occurring, and which may help explain why park managers perceive extroverts as better collaborators, is that in the SEM analysis, “extraversion” is the only variable that has a significant path to “group process” skills. The questions about “extraversion” ask the park manager to rate themselves on whether they, “talk to a lot of different people at parties” and “stay in the background.” It is reasonable to assume

that extraversion would be useful when utilizing group process skills such as facilitation, consensus building and group dynamics, because they require someone to take the lead and talk with a lot of different people.

So far in this summary, it has been demonstrated that both personality and skills have an impact on collaboration outcomes - but is one of them more important? This will be discussed in the next section.

### ***Collaboration: Is it Personality or Skill?***

The primary purpose of this research was to determine which individual characteristics have the most significant impact on collaborative outcomes. The two main categories of these individual factors are personality and skill, so the question needs to be asked, “what is more important, personality or skill?”

The quantitative analysis found that both personality and skill are significantly correlated with successful collaboration. As discussed previously in chapter 5, in the final analysis, the personality trait “extraversion” loses significance, and “interpersonal skills” is re-categorized as a measure of personality. This leaves the personality trait, “agreeableness” and the collaboration skill “group process skills” as the two remaining significant variables from these categories. When comparing the standardized coefficients, “agreeableness” scores negligibly higher with 0.240 compared with “group process skills” at 0.238, which does not provide enough confidence that a comparison of the standardized coefficients will answer the question of which one is more important. In chapter 5, it was argued that, since “interpersonal skills” should be re-categorized as a

measure of personality, this provided additional support for H<sub>1</sub>, which states that personality traits will be more positively associated with successful collaboration than collaboration skills.

In the qualitative analysis, it was found that park managers talked more about skills than they did about personality, even though the majority of follow-up questions probed the topic of personality. One park manager was shocked by a question that asked if personality had an impact on collaboration, and others asked what was meant by that question. This is not to say that all park managers had the same response; some had very informed opinions about the topic and described specific examples. It appeared from the interviews, that skills are a more known quantity, and managers have more experience with and have heard more about collaboration skills than they have about the impact of personality. Personality was less understood, and those who had opinions on the topic did so because they had observed people with different personalities in collaborative settings and they had made judgments about what works and what does not. It appeared that people who self-identified as introverts also had strong perceptions about the importance of personality and they tried to minimize its impact by emphasizing the importance of skill.

The evidence from this mixed-methods approach provides a nuanced answer on whether personality or skill has a greater impact on collaborative outcomes. The quantitative findings provide an indication of support for personality over skills, though skills are also found to be important, and the qualitative findings suggest that park managers are more comfortable with skills determining outcomes than they are with

personality determining outcomes. It should be noted, that the SEM analysis found a complex interaction between personality and skills. From the interviews, it was found that park managers are learning collaboration skills through trial and error instead of through a more formal education process. It appears that through the process of learning, an individual's personality may be impacting which skills they gravitate towards. A person who is more agreeable and extroverted will find more success with skills where those traits are advantageous. In the phases of collaboration, it was found that the “aligning goals” phase gave park managers the most difficulty, and also had the greatest impact on whether a collaboration would succeed or not. The skills that a park manager needs to align goals are the same skills described as “group process skills,” and which were found to significantly impact the success of a collaboration. What can be inferred from the findings of this research is although certain group process skills are important to successful collaboration, it is individuals who are predisposed with personality traits that are advantageous in group process situations that have more successful outcomes.

Though this may appear to answer the question postulated at the beginning of this section - that personality is more important than skills - it should be noted that the population sampled had little formal training in collaboration skills. Without studying a population that has had formal training in collaborative skills, it is difficult to say that this research was able to conclusively determine whether personality is more important than skill.

What this research did find is that personality plays an important role in collaboration success and perhaps a greater role than it was previously assumed. However, collaboration skill is also very important, and without it collaborations will be less

successful. The implications of this and other findings from the research will be discussed more in the next section.

## **Theoretical and Practical Implications**

The findings from this research have both theoretical and practical implications. This study makes contributions to collaboration theory, and has implications regarding collaboration measures, collaboration skills and the impact of personality. This study used the Thomson, Perry and Miller (2009) collaboration measure as the dependent variable. Though this measure has been used in other research, (Thomson, 2001; Chen, 2008) it has not been extensively used and tested by other researchers. Though not the primary purpose of this research, factor analysis was performed on the collaboration measure variables, and though Thomson, Perry and Miller (2009) use a 5-dimension model, Eigenvalues from this sample suggest that a 3-dimension model would suffice. Additional research is needed to confirm if the collaboration measure can be simplified. In addition to the collaboration measure, park managers were also asked to measure their own collaboration performance, and there was strong correlation between this self-assessment and the more formal measure. Though both measures are self-reported measures, there is some support from this study that simplified measures with few questions can give accurate measures. This information could be useful, especially for studies where space for 17 questions to measure collaboration is not available. This should not suggest, that a 1- or 2-question collaboration measure should replace the

Thomson, Perry and Miller (2009) measure. It should be stated, too, that park managers were not as accurate with more complex measures, such as how their personality impacted collaboration.

One of the significant findings from this study is that, of all the skills that are related to collaboration, group process skills are the most important. This has specific relevance to the work by O’Leary, Choi & Gerard (2012), in which 7 categories of skills are outlined. Though this study only examined 5 of those categories, it has found that group process skills are the most necessary for collaborators to have. Generally, this finding shows the importance of group process skills in collaboration and highlights that these skills are needed at the goal alignment phase of collaboration. This information should be valuable to other researchers, even outside the field of public administration, who are studying collaboration.

This study also provides new findings about personality’s impact on collaboration. Shaw (2003) suggests that “managers should exercise care in choosing the staffers who will work regularly with staff members of another organization.” This study provides information about what type of “staffers” these “managers” should choose; namely, individuals with the personality traits “agreeableness” and to a lesser extent “extraversion.” The findings also shed new light on, and confirm some of the work by Goldman and Kahnweiler (2000), who studied nonprofit executives and found that collaborators are “feeling” and “extroverts.” Though in this research, the terms “agreeableness” and “empathetic” have been used, “feeling” has a similar meaning, and the “extrovert” finding was substantiated in the initial regression analysis but dropped out

in the final analysis. These findings confirm that personality plays an important role in collaboration and the importance of personality should play a more prominent role in the collaboration literature.

This study has practical applications for collaboration endeavors, and the findings suggest that networking and group process skills need to be improved. There was a time when park managers were the masters of their ships, they had more people and resources to get the job done and they needed less help from outside organizations. One park manager, who was critical of how times have changed, and remembering a bygone era, stated, “I hope that others will be able to have the experience that I have had.” Though he spoke this sentiment his tone indicated it probably was not going to happen. At the current time, there is little hope that resources will dramatically increase for park services, with many park managers indicating that they have less funding and staff than they used to. This, combined with a world that is becoming more complex and costly, with increases in population, new demands for public services, and new legal and building code requirements, means that projects that used to be completed in-house now require architects and construction companies. Where park managers used to be the head custodian of the park, they have increasingly become seekers of resources from outside organizations. By and large, they have not been formally taught the skills they need to perform this new collaborative function and, as the findings from this study indicate those that have personalities that better complement these skills have better collaboration outcomes. What follows are some implications and recommendations on how to improve collaboration success.



To improve collaboration outcomes, managers need opportunities to network with potential stakeholders, and they need formal training in group process skills. One concern that park managers expressed was their inability to find the stakeholders they need for collaborations. Several park managers suggested that government needs to find ways to increase opportunities for stakeholders to network. This can be done by: promoting collaboration opportunities, encouraging their employees to join professional organizations, providing resources to attend conferences, and inviting park staff to meetings where other stakeholders will be. Though some of these options require funding, some only require mindfulness and encouraging employees to network more often.

Another way that collaboration outcomes can be improved is to increase training in group process skills for public managers. In the findings, group process skills improved collaborative outcomes. Group process skills include, facilitation, negotiation, collaborative problem solving, conflict resolution, consensus building, mediation, compromise and skills in group dynamics (O’Leary, Choi & Gerard, 2012). Ideally, governments would pay for this training, and one possible way to improve the outcomes of this training would be to include stakeholders in the training sessions. With limited financial resources, it may not be possible for governments on a large scale to provide this training. Perhaps stakeholders’ organizations could provide this training, or group process skills should be incorporated into public administration curriculums. Other authors agree that public administration students should be taught practical skills (Cooper & Gulick, 1984), and Posner (2009) adds, “Future practitioners will sorely need

improved guidance and training, which can best be provided in our schools of public administration.” Teaching students the value of, or what might be called an ethic of, collaboration, also provides essential support for democratic institutions. These students will be the next generation of public administrators who as Yang and Callahan (2007) describe will “determine who will participate, how they will participate, and how the values and concerns shared by the public will be incorporated into the decision-making process, as well as how they will be reflected in the outcome.”

### **Limitations of the Research**

There were limitations to this study, and as with many studies, generalizability could be an issue with this research. This study used state park managers as the population for its sample, so it could be argued that collaborations in a park setting are different from, say, a collaboration in an emergency management context. However, the argument was made that park managers are a valid population because they use collaboration on a regular basis. In the findings, this research has stated that without studying a population that has had formal training in collaboration skills, it is difficult to determine whether personality or skill plays a greater role in collaboration success. However, despite these limitations, it is likely that the major findings of this research are relevant for a wide range of public administration settings. These include the causal process where personality contributes to collaboration skills which impact collaboration success ( personality → skill → collaboration success ); the phases of collaboration; and

the importance of group process skills during the goal alignment phase of collaboration. With that being said, to determine conclusively if the results from this study are generalizable, additional studies in other fields of government need to be conducted.

This study relied almost wholly on self-reported responses, so it is possible that common source bias (CSB) is an issue. In themselves, self-reported responses do not disqualify a researcher from using them and uncovering valuable findings, and George and Pandey (2017) have created a flowchart to help researchers minimize the impact of CSB in self-reported response surveys. Others suggest that researchers should employ procedural remedies that “maximize respondent motivation...and minimize task difficulty” and, when that does not minimize bias, to make use of statistical remedies (Podsakoff, MacKenzie & Podsakoff, 2012).

Another issue that caused some difficulty for the study, was that some of the indices overlapped between skill and personality. SEM analysis revealed that one index in particular, the interpersonal skills index, was a better measure of personality than skill. It would have been difficult to know this without this analysis, and one benefit from this study is that more attention should be made in separating personality from skill variables.

It may be an overgeneralization to say that personality is more important than skill in collaborative outcomes, because park managers receive little collaboration skill training. If park managers were to receive more group process skill training, it is possible that the results would put less emphasis on personality and more on training. If the recommendations made in the “Practical Implications” come to fruition it may be possible to retest this population and see if the results change.

It is possible that the construct of the research model was missing variables that are important to an individual's success with collaboration. Though skills and personality were explored, it is possible that other significant variables were not accounted for. Besides personality, there may be additional psychological factors that influence collaboration results. There could be physical attributes at play, and there have been some studies which indicate that height (Judge & Cable, 2004) and appearance (Anderson, Johnson & Reckers, 1994) impact earnings and career progression. Could these individual physical attributes be having an impact? One variable in this study, that was significant, was education. This variable needs further exploration and further literature review could uncover additional important individual variables.

### **Directions for Future Research**

The findings from this research highlight the importance that an individual's personal characteristics have on collaborative outcomes. Though there is some literature investigating the connection between personal characteristics and collaboration, our understanding is incomplete and more research is needed. As stated in "Limitations of the Research" above, since this research only investigated state park managers, there may be issues with the generalizability of the findings. To remedy this, additional studies looking at other fields and levels of government should be studied. Not only is this important to generalize the findings, but if studies of collaboration in other fields get

similar results, they will corroborate the results of this study. It is also not known if there are additional personal characteristics that may be influencing outcomes.

Future studies should further investigate the psychology literature to find other variables, and then test them against the collaboration measure. When asked about the impact that psychology has on collaboration, park managers spoke about feelings of vulnerability, body language, and moments where it was uncomfortable. The same person who spoke about feelings of uncomfortableness, also spoke about a facilitator who would not allow the group to enter heated or emotional discourse, and thought that the “elephant in the room” should have been confronted. Of interest, there are some studies which suggest that “the greater the tension, the less likely collaboration will occur” (Thomson, Perry & Miller, 2008), while others suggest there is a role for the “edge of chaos” (Innes, 1999) because chaos is a natural part of the creative process. It would seem that people who are able to tolerate a certain amount of chaos, yet still have a need for order, are well-suited for collaboration. Future studies should investigate these tolerance levels, and determine whether collaborations which are more peaceful or chaotic have better outcomes. The findings from these future studies will inform how group process skills should be taught.

The research found that education was significantly related to collaboration outcomes, but did not reveal clearly why this is happening. From the interviews, it was determined that the majority of park managers are not receiving formal education in collaboration skills. If a population of public managers who had received formal collaboration could be found, future research could survey this population and compare it

with the park managers studied in this research. From this, it could be determined if personality has the same impact on collaboration success, or if its preeminence in this study results from the fact that the population studied lacks formal training.

The last area of future research that is being recommended is the best way to train public managers in group process skills. Though this research has identified which collaboration skills are important, it is not known which group process skills are the most effective and how they should be taught to public managers. To use the example of the group process skill, “facilitation,” it is not known whether calm and peaceful facilitations are more effective than those described as “on the edge of chaos.” Future research can determine this, and answer questions related to other group process skills, to inform those who are creating collaboration curriculums. Future studies like these will add both to our body of understanding and provide insight to those who will implement them in the field. Research like this has the potential to improve government outcomes through improved collaborative processes.

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## Appendix A: Interview Protocol

The following are the interview questions that will be used in the qualitative research. The interview process is semi-structured, so the interviewer will select from the following questions but will be allowed to ask additional follow-up questions to further probe for additional information.

### Introduction

*Thank you for being willing to participate with this interview. You were sent the informed consent by email, and in that form it stated that this interview would be recorded for analytical purposes. Do you give your consent to audio record this interview?*

### Interview Questions

1. What is your name and title and what public department/agency do you work for?
2. What do you think collaboration refers to in the government sector?
3. Have you had personal experiences with collaboration?
4. What types of collaboration have you had experience with?
5. What is your overall impression of the collaboration process?
6. What is it you like about collaboration?
7. What is you dislike about collaboration?
8. How would you describe your skills at conducting the collaboration process?
9. What kind of formal training have you had in conducting collaboration?
10. What kind of informal training have you had in conducting collaboration?
11. If you had a mentor in government, how have they described collaboration with you?
12. What are the difficult aspects of collaboration?

13. What obstacles keep you from using the collaboration process?
14. What skills do you think are necessary to be good at using the collaboration process?
15. What skills do you wish you were better at when it comes to using the collaboration process?
16. What kind of training would you like to receive to be better at collaboration?
17. How do you think personality impacts one's ability to collaborate?
18. What kind of personalities are better at collaboration?
19. Would you consider yourself collaborative early on in your career?
  - (a) If no, what changed to make you more collaborative?
  - (b) If yes, were you always a collaborative person?
20. Do you think psychology plays a role in collaboration?
  - (a) If yes, how?
21. Does collaboration force us to confront our own strengths and weaknesses?
22. Do you think the process of that makes one feel uneasy?
  - (a) Explain?
23. How can you tell if someone is good at collaboration?
  - (a) How could we measure one's ability to collaborate?
24. Do you have anything else you would like to share about collaboration?

*This concludes the interview. Thank you for your participation.*

## Appendix B: Survey Questionnaire

**Q1.1** You are invited to participate in a research study that is being conducted by Joshua L. Osowski, who is a Parks Professional and a PhD student in the School of Public Affairs and Administration at Rutgers University. This consent form is part of an informed consent process for a research study and it will provide information that will help you to decide whether you wish to volunteer for this research study. The information below will help you to understand what the study is about and what will happen in the course of the study. If you are 18 years of age or older and consent to participate in the study, please indicate your agreement below. If you do not wish to participate in this study, then simply close this window or page to exit this survey.

     **I am 18 years of age or older and consent to participate in this study (to continue, scroll down to the >> arrow button at the bottom of page)**

**Q1.2 Purpose of Study:** The purpose of this research study is to determine how a park manager's skills and personality traits impact collaboration outcomes. Approximately 300 subjects will participate in the study, and each individual's participation will last approximately 15-20 minutes.

**Study Procedures:** Participation in this study will involve answering a series of questions. Most questions will be multiple choice with a small number of open ended questions.

**Data Collection:** This research is confidential. Confidential means that the research records will include some information about you and this information will be stored in such a manner that some linkage between your identity and the responses in the survey exists. Some of the information collected about you includes: state your park is in, gender, approximate age, years of service, and personality trait questions.

**Access to Research Data:** The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be kept for 3-5 years after the research is collected and electronic records will be permanently deleted from the hard drive.

**Data Transmission & Storage:** Research data will be sent from the electronic device you complete the survey on, and the researchers will download the data from the secure Rutgers Qualtrics Website. Once downloaded, the data will be stored on password protected computers. Please note that we will keep this information confidential by limiting individual access to the research data and keeping it in a secure location.

**Risks of participation include:** *There are no foreseeable risks to participation in this study.* All data transfers use commonly-used encryption protocols to protect wireless transfers so that these risks are minimized.

**Benefits:** You may receive no direct benefit from taking part in this study. The benefits of taking part in this study are that you are providing your personal insight to assist with valuable research about the topic of collaboration.

**Voluntariness:** Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable. If you decide to participate and choose to later withdraw from the study, then you may do so at any time by contacting the researcher. After withdrawing from the study, your data will no longer be used or disclosed in the study, except as required by law.

**Questions about the Research:** If you have any questions about the study or study procedures, you may contact myself at jlo91@scarletmail.rutgers.edu, or in writing at: Joshua Osowski, 111 Washington St., Newark, NJ 07102, or by phone at: 973-353-5093. You may also contact my faculty advisor Greg VanRyzin by email at vanryzin@rutgers.edu, or in writing at: Gregg VanRyzin, 111 Washington Street, Newark, NJ 07102 or by phone at: 973-353-3985.

**Questions about Participant Rights:** If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers, the State University of New Jersey at:

Arts & Sciences Institutional Review Board  
Office of Research and Regulatory Affairs  
335 George Street, Suite 3200  
New Brunswick, NJ 08901-8559  
Telephone: 732-235-2866  
Email: humansubjects@orsp.rutgers.edu

**Q2.1 Please indicate the extent to which you agree, or disagree, with the following statement:**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Collaboration is important to the work my organization does (1)							

**Q3.1 Please indicate to what extent your organization or partner organizations engage in certain behaviors or exhibit certain attitudes:**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Partner organizations take your organization's opinions seriously when decisions are made about the collaboration. (1)							
Your organization brainstorms with partner organizations to develop solutions to mission-related problems facing the collaboration. (2)							

**Q4.1 Please indicate to what extent your organization or partner organizations engage in certain behaviors or exhibit certain attitudes:**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Partner organizations (including your organization) have combined and used each other's resources so all partners benefit from collaborating. (1)							
Your organization shares information with partner organizations that will strengthen their operations and programs? (2)							
You feel what your organization brings to the collaboration is appreciated and respected by partner organizations. (3)							
Your organization achieves its own goals better working with partner organizations than working alone. (4)							
Partner organizations (including your organization) work through differences to arrive at win-win solutions? (5)							



**Q5.1 Please indicate to what extent your organization or partner organizations engage in certain behaviors or exhibit certain attitudes:**

	Not at all (1)	To a small extent (2)	Less than somewhat (3)	Somewhat (4)	More than somewhat (5)	To a large extent (6)	To a great extent (7)
You, as a representative of your organization in the collaboration, understand your organization's roles and responsibilities as a member of the collaboration. (1)							
Partner organization meetings accomplish what is necessary for the collaboration to function well. (2)							
Partner organizations (including your organization) agree about the goals of the collaboration. (3)							
Your organization's tasks in the collaboration are well coordinated with those of partner organizations. (4)							

**Q6.1 Please indicate to what extent your organization or partner organizations engage in certain behaviors or exhibit certain attitudes:**

	Not at all (1)	To a small extent (2)	Less than somewhat (3)	Somewhat (4)	More than somewhat (5)	To a large extent (6)	To a great extent (7)
The collaboration hinders your organization from meeting its own organizational mission. (1)							
Your organization's independence is affected by having to work with partner organizations on activities related to the collaboration. (2)							
You, as a representative of your organization, feel pulled between trying to meet both your organization's and the collaboration's expectations. (3)							

**Q7.1 Please indicate to what extent your organization or partner organizations engage in certain behaviors or exhibit certain attitudes:**

	Not at all (1)	To a small extent (2)	Less than somewhat (3)	Somewhat (4)	More than somewhat (5)	To a large extent (6)	To a great extent (7)
The people who represent partner organizations in the collaboration are trustworthy. (1)							
My organization can count on each partner organization to meet its obligations to the collaboration. (2)							
Your organization feels it worthwhile to stay and work with partner organizations rather than leave the collaboration. (3)							



**Q8.3 Rate the relationship you have with the following stakeholder groups? (If you do not collaborate with a stakeholder, check "not applicable")**

	Extremely good (1)	Moderately good (2)	Slightly good (3)	Neither good nor bad (4)	Slightly bad (5)	Moderately bad (6)	Extremely bad (7)	Not applicable (8)
Nearby Land Owners (1)								
For Profit Organizations (2)								
Environmental Activists Groups (3)								
Patrons (4)								
Patron Advocate Groups (5)								
Unions (6)								
Trade Associations (7)								
Suppliers (8)								
Lease Holders (9)								
Other Government Agencies (10)								
Political Groups (11)								

**Q9.1 How effective are you with the following?**

	Extremely effective (1)	Very effective (2)	Moderately effective (3)	Slightly effective (4)	Not effective at all (5)
Facilitation (1)					
Negotiation (2)					
Collaborative problem solving (3)					
Conflict Resolution (4)					
Consensus Building (5)					
Mediation (6)					
Compromise (7)					
Skills in group dynamics (8)					

**Q10.1 How effective are you with the following?**

	Extremely effective (1)	Very effective (2)	Moderately effective (3)	Slightly effective (4)	Not effective at all (5)
Big picture thinking (1)					
Sharing of leadership (2)					
Create approaches to problem solving (3)					
Strategic thinking (4)					
Facilitative leadership (5)					

**Q11.1 How competent are you with the following?**

	Extremely competent (1)	Somewhat competent (2)	Neither competent nor incompetent (3)	Somewhat incompetent (4)	Extremely incompetent (5)
Technical knowledge of the subject area (1)					
Project management (2)					
Organizational skills (3)					
Time management (4)					

**Q12.1 Please indicate the extent to which you agree, or disagree, with the following statements about you?**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
I am a good communicat or (1)							
I am a good listener (2)							
I work well with people (3)							

**Q13.1 How well does each describe you?**

	Extremely well (1)	Very well (2)	Moderately well (3)	Slightly well (4)	Not well at all (5)
Am the life of the party. (1)					
Sympathize with others' feelings. (2)					
Get chores done right away. (3)					
Have frequent mood swings. (4)					
Have a vivid imagination. (5)					
Don't talk a lot. (6)					
Am not interested in other people's problems. (7)					
Often forget to put things back in their proper place. (8)					
Am relaxed most of the time. (9)					
Am not interested in abstract ideas. (10)					
Talk to a lot of different people at parties. (11)					
Feel others' emotions. (12)					
Like order. (13)					
Get upset easily. (14)					
Have difficulty understanding abstract ideas. (15)					
Keep in the background. (16)					
Am not really interested in others. (17)					
Make a mess of things. (18)					
Seldom feel blue. (19)					
Do not have a good imagination. (20)					



**Q14.1 Thinking about your personal collaboration abilities, please answer the following:**

	Excellent (1)	Good (2)	Average (3)	Poor (4)	Terrible (5)
How would you rate your skills at collaboration? (1)					
How does your personality impact your ability to collaborate? (2)					
How would you rate your performance with collaboration? (3)					

**Q14.2 Please indicate the extent to which you disagree, or agree, with the following statements about you?**

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
My skills at collaboration improve my ability to collaborate (1)							
My personality improves my ability to collaborate (2)							
Overall, the collaborations I am involved with result in successful outcomes (3)							

**Q15.1 What is your age in years?**

- ☐ 18-25 (1)
- ☐ 26-35 (2)
- ☐ 36-45 (3)
- ☐ 46-55 (4)
- ☐ 56-65 (5)
- ☐ Over 65 (6)

**Q15.2 What is your gender?**

- ☐ Male (1)
- ☐ Female (2)

**Q15.3 What is your highest level of completed education?**

- ☐ Less than high school (1)
- ☐ High school (2)
- ☐ Some college (3)
- ☐ 2-year college degree (4)
- ☐ 4-year college degree (5)
- ☐ Masters degree (6)
- ☐ Advanced degree (PhD, MD, JD) (7)
- ☐ Other (specify): (8) \_\_\_\_\_

**Q15.4 How many years have you been in your current organization?**

- ☐ Less than 1 year (1)
- ☐ 1-2 years (2)
- ☐ 3-5 years (3)
- ☐ 6-10 years (4)
- ☐ 11-15 years (5)
- ☐ 16-20 years (6)
- ☐ More than 20 years (7)

**Q15.5 How many years have you been in your current position?**

- ☐ Less than 1 year (1)
- ☐ 1-2 years (2)
- ☐ 3-5 years (3)
- ☐ 6-10 years (4)
- ☐ 11-15 years (5)
- ☐ 16-20 years (6)
- ☐ More than 20 years (7)

**Q15.6 About how many visitors does your park receive annually?**

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**Q15.7 About how many acres in size is your park?**

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**Q15.8 What best describes the development of the area that surrounds your park?**

- ☐ urban (1)
- ☐ suburban (2)
- ☐ rural (3)

**Q15.9 About how many miles is your park to the nearest town of 50,000 people or more?**

- ☐ 0-4 (1)
- ☐ 5-9 (2)
- ☐ 10-14 (3)
- ☐ 15-29 (4)
- ☐ 30-59 (5)
- ☐ 60-100 (6)
- ☐ More than 100 (7)

**Q15.10 In which state does you park reside?**

**Q16.1 Do you have any additional comments about collaboration?**

**Q16.2 If you would like to receive the findings of this study after it is completed, please enter your email address below. Thanks.**

## Appendix C: Survey Invitation Letter



**RUTGERS**

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**Joshua L. Osowski**  
Regional Superintendent  
Northern Region



STATE OF NEW JERSEY  
DEPT. OF ENVIRONMENTAL PROTECTION  
DIVISION OF PARKS AND FORESTRY  
STATE PARK SERVICE

PO Box 1100  
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Joshua.Osowski@dep.nj.gov

Dear Park Superintendent,

My name is Josh Osowski and I am a Park Superintendent for the New Jersey State Park Service and also a PhD student in public administration at Rutgers University. For my dissertation, I am examining the professional experiences and views of park managers, like yourself, across the US. In particular, my research focuses on the topic of collaboration.

Because of your expertise as a park manager, I am inviting you to participate in this research by completing an online survey that will take approximately 15 minutes. To get started, please visit:

**<https://tinyurl.com/Rutgers2017>**

There is no compensation for your participation, nor are there any known risks. Participation is strictly voluntary and you may refuse to participate at any time. A summary of the results of the survey will be shared with all participants after the survey closes. The findings of this study will be published in my dissertation and, later, a public administration journal. My hope is that the findings will help scholars and practitioners better understand the factors that contribute to successful collaboration.

Thank you in advance for your participation,

Josh Osowski

Regional Park Superintendent & PhD Candidate

*I really appreciate  
your help with this!*

## **Appendix D: Skill Set of the Successful Collaborator**

Adapted from O’Leary, Choi and Gerard (2012)

### **Individual Attributes**

- Open minded
- Patient
- Risk taking/change oriented
- Unselfish
- Persistence
- Emotional intelligence
- Respect

### **Interpersonal Skills**

- Communication skills
- Listening
- Works well with people

### **Group Process Skills**

- Facilitation
- Negotiation
- Collaborative problem solving
- Skill in group dynamics
- Compromise
- Conflict resolution
- Consensus building
- Mediation

### **Strategic Leadership Skills**

- Big picture thinking
- Facilitative leadership
- Strategic thinking
- Creative approaches to problem solving
- Sharing of leadership

### **Substantive / Technical Knowledge Skills**

- Technical knowledge of the subject area
- Project management
- Organizational skills
- Time management