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# Predictors of Discretionary Effort in a Men's Chorus

Taryn B. Carnes

St. Cloud State University, [taryn.carnes@gmail.com](mailto:taryn.carnes@gmail.com)

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**Predictors of Discretionary Effort in a Men's Chorus**

by

Taryn B. Carnes

A Thesis

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree of

Master of Science

in Industrial/Organizational Psychology

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Thesis Committee:  
John Kulas, Chairperson  
Jody Illies  
Christopher Peterson

### **Abstract**

Data from 55 members of a Midwest Barbershop chorus were collected and analyzed as part of this study. The goal of this study was to examine the relationship between discretionary effort and three predictors: quality of relationship with leader, quality of relationship with coworkers, and self-efficacy for learning music. A better understanding of the relationship between these variables has the potential to focus group time on activities likely to be related to discretionary effort exerted. The results indicated a positive correlation between discretionary effort and self-efficacy for learning music, as well as mixed support for the positive relationship between discretionary effort and organizational friendship. Results include limitations and recommendations for future studies.

### **Acknowledgements**

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## Chapter I: Introduction and Review of Literature

### Discretionary Effort

Discretionary Effort is considered a specific form of organizational citizenship behavior (OCB) that is task-related (Frenkel & Bednall, 2016). It refers to contributions to an organization that cannot be merely formal role obligations (Kidwell & Bennett, 1993). In other words, it is when an individual goes above and beyond, or goes the extra mile, for the good of the organization. What differentiates discretionary effort from similar constructs such as engagement, is that the individual does not *have* to engage in the behavior, but chooses to do so (Dubinsky & Skinner, 2001). These behaviors or activities are not imposed by management and often are not observed by them, however, research has shown us that organizations benefit from members who exert discretionary effort.

While discretionary effort and OCB have many commonalities, it is important to establish them as separate constructs. The purpose of Lloyd's (2008) study was to do exactly that; Lloyd did find evidence of discriminant validity for discretionary effort, differentiating it from both in-role behavior and OCB. In her study, a confirmatory factor analysis indicated that the three were separate constructs and that a two factor model combining OCB and discretionary effort generated inadequate fit. The theoretical foundation of her differentiation was based on a few aspects. The first being that discretionary effort is "based on effort without which no job or role can be accomplished, making it possible for discretionary effort to be expressed in all roles and jobs," while OCBs are "behaviors that may or may not be discretionary depending on the role" (Lloyd, 2008; p. 22; Wolfe Morrison, 1994). Additionally,

Lloyd described discretionary effort as a motivational response that can be expressed in both OCB and in-role behavior.

The focus on discretionary effort has, in part, resulted from the challenges faced by companies to differentiate high potential and high performing employees to place in critical roles. One such differentiating factor is employee engagement, which at high levels, is related to discretionary effort (Piyachat, Chanongkorn, & Panisa, 2014; Saks, 2006). Employee engagement is often found in the literature to be related to discretionary effort but there is some disagreement over whether it is a factor that influences engagement (Watson, 2009) or a consequence of employees who are engaged (Harshitha, 2015).

An increasing number of authors and researchers have begun to look into antecedents of discretionary effort due to the growing need for organizations to gain and maintain a competitive advantage. Dubinsky and Skinner (2001) proposed four major factors as antecedents to discretionary effort exerted by salespeople: organizational antecedents, salesperson precursors, customer antecedents, and environmental factors (Fig. 1). In another study examining discretionary effort expended by customers of a fitness center, researchers found that personal goal clarity, relevance of service to goals, and employee interactions were predictors of customer effort. Furthermore, customers' discretionary effort was found to be related to customer satisfaction (Aggarwal & Basu, 2014).

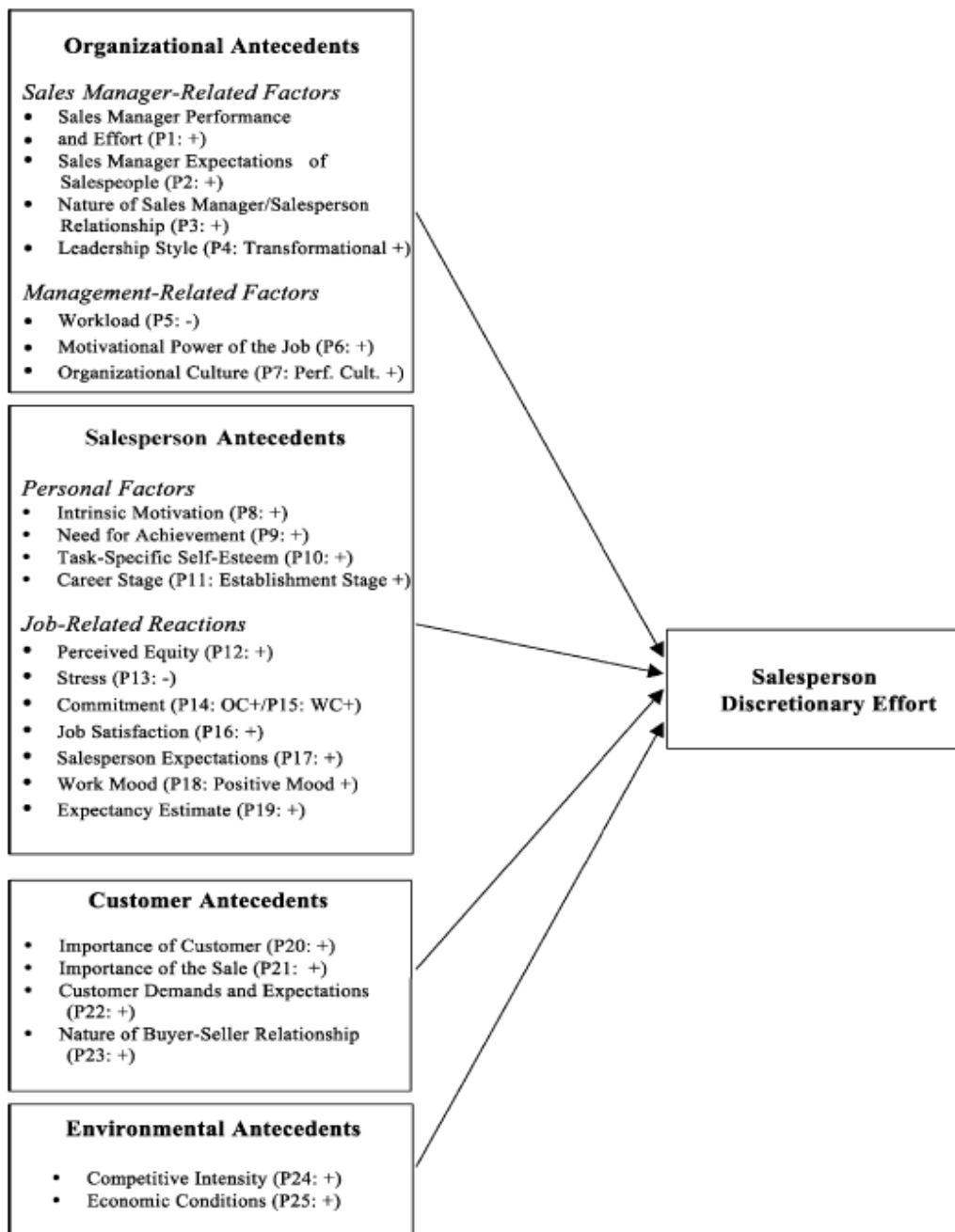


Figure 1. Antecedents of Salespeople's Discretionary Effort (Dubinsky & Skinner, 2001).

A study by Sleebos, Ellemers, and Gilder (2006) explored possible individual differences that influence discretionary effort through two experiments. The study hypothesized that discretionary effort would largely be influenced by commitment to the group (a group-focused motive) as well as perceived acceptance into the group (a self-focused motive). Specifically, they believed that both the perception of being highly respected and the perception of being disrespected would enhance efforts on behalf of the group. In the first experiment, it was confirmed that both high and low respect motivated individuals to increase discretionary efforts. In the second experiment, a new variable was included and the same results were found with the added finding that efforts emerge only when people consider the way they have been evaluated by others as a diagnosis of their position within the group. Based on this previous research, focused on the drivers of discretionary effort, there is a need to further examine personal factors and intragroup dynamics in relation to effort exerted.

### **Self-Efficacy**

Originally studied by Bandura (1977), self-efficacy is the belief an individual has that he/she can successfully accomplish an objective or outcome. Self-efficacy includes personal judgments of ability as well as being able to organize and execute the actions or skills needed to demonstrate competent performance (Pintrich & Schunk, 1996). It can also be considered a form of perceived control, in that it reflects the extent to which an individual believes he/she can turn effort into success (Bandura 1989). Self-efficacy theory maintains that one's beliefs regarding his or her self-efficacy become a primary, explicit explanation for motivation (Bandura 1977, 1986, 1997).

While global self-efficacy can cover a broad class of situations, self-efficacy can also be narrowed to address feelings towards more specific tasks (Bandura, 1977). Within a single domain, an individual may hold a range of different self-efficacy beliefs which has led to the important distinction of task-specific self-efficacy (Bandura, 2001; Pajares, 1996; Pajares & Miller, 1995; Ritchie & Williamon, 2011). Thus far, there have been a limited number of studies focused specifically on self-efficacy for musicians (the intended population of interest for the current investigation). Early studies by McCormick and McPherson (2003) and McPherson and McCormick (2006) used single question measures to assess young students' anticipated results prior to a graded music test. In a study by Ritchie and Williamon (2007), three questionnaires were piloted to assess general musical self-efficacy as well as self-efficacy relating specifically to musical learning and performing. The reason for task-specific questionnaires is based on the idea that an individual can have a range of different self-efficacy beliefs within the domain of music. For example, a vocalist's self-efficacy for performing an operatic aria might differ from self-efficacy for improvising or scatting during a jazz tune.

Although research looking into musical self-efficacy is limited, there has been a great deal of self-efficacy research in broader contexts. In such studies, perceptions of personal competence "act as determinants of behavior by influencing the choices that individuals make, the effort they expend" and other such patterns and emotional reactions experienced (Pajares, 1996, p. 325). In addition to exerting more effort, students with self-efficacy in a particular domain are more likely to choose more difficult tasks, persist longer, and be less likely to experience anxiety (Bandura, 1986; McCormick & McPherson, 2003). Research has also shown that students tend to avoid tasks and situations for which they feel inadequate and favor those

with which they feel they can cope (Pintrich & Schunk, 1996). McCormick and McPherson (2003) believe this suggests that musicians who feel as though they are musically inadequate are less likely to continue with efforts to learn their instrument and more likely to turn their attention elsewhere.

### **Hypothesis 1**

Individuals with greater self-efficacy for learning music will exert more discretionary effort than those with lower self-efficacy for learning music.

### **Quality of Relationship with Leader**

Leader-member exchange (LMX) theory focuses on the individual relationship between a leader and subordinate independent of the relationship between the leader and group as a whole (Liden & Maslyn, 1998; Lunenburg, 2010). Early research distinguished members with high-quality LMX as being a part of an “in-group” (Graen & Cashman, 1975; Liden & Maslyn, 1998). These relationships are characterized by mutual feelings of respect, liking, contribution, and loyalty between a member and leader. In-group members also receive benefits such as influence in decision making, open communications, and consideration for the member on behalf of the leader (Lunenburg, 2010). Conversely, “out-group” members, or those who have low-quality LMX, have relationships characterized by less respect, liking, contribution, and mutual loyalty. A great deal of research has been done to identify antecedents and consequences of LMX differentiation (Li, Fu, Sun, & Yang, 2016). In terms of consequences, a substantial amount of the focus has been on the effects of LMX on individual-level outcomes.

The differentiation of relationships as a key dimension of LMX theory draws from social exchange theory (Sparrowe, Soetjijto, & Kraimer, 2006). Social exchange was defined

by Blau (1964, p. 91) as “voluntary actions of individuals that are motivated by the returns they are expected to bring from others, as well as social exchanges from relationships.” Key aspects of social exchange include that the nature of this return is unspecified and that it is based on an individuals’ trusting that the other side of the exchange will fulfill obligations in the long run (Holmes, 1981; Ma & Qu, 2011).

As it relates to LMX, social exchange specifies that returns would be expected by individuals engaged in a high-quality LMX relationship. While low-quality LMX relationships are based on exchanges directly specified by the employment contract, high-quality LMX relationships tend to result in the exchange of materials and benefits beyond what is required by the formal employment contract (Bauer & Erdogan, 2015). In return for the benefits received from their leader, in-group members tend to expend more time and effort, assume greater responsibility, and show greater levels of commitment to the organization to reciprocate. It has been found that individuals will go beyond what is required of them and exhibit OCBs to reciprocate for the development of strong LMX relationships and maintain a balanced social exchange with their leader (Wayne, Shore, Bommer, & Tetrick, 2002).

There are several meta-analyses confirming the positive relationship between LMX and OCBs (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Ilies, Nahrgang, & Morgeson, 2007; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016). In a study by Settoon, Bennett, and Liden (1996), the relationship between LMX and discretionary employee behaviors such as in-role behavior and citizenship behavior was tested using structural equation modeling. They found that leader-member exchange was highly related to citizenship behaviors, meaning that exchanges and relationships based on mutual trust and loyalty, interpersonal affect, and mutual

respect lead to a higher likelihood of a subordinate exhibiting more than the expected levels of performance or citizenship behaviors. A structural equation analysis by Hui, Law, & Chen (1999) found the same results. Overall, these results suggest that desired work behaviors are associated with the nature of the relationship with one's leader or supervisor.

## **Hypothesis 2**

Those who perceive high-quality LMX in their chorus will exert more discretionary effort than those who perceive low-quality LMX.

## **Organizational Friendship**

In addition to the relationships formed with a leader, friendships formed between members of an organization can be a motivational force that leads to positive work-related outcomes such as satisfaction, organizational commitment, engagement, and a reduction in turnover intentions (Palo & Rothmann, 2016; Riordan & Griffeth, 1995; Winstead, Derlega, Montgomery, & Pilkington, 1995). Research on coworker relationships has found that coworkers can provide fellow employees with a sense of identity, support, and friendship (Bowler & Brass, 2006; Love & Forret, 2008). While there have been many documented consequences of workplace friendship, the influence of this friendship on discretionary effort and other OCBs has not been an area of focus (Love & Forret, 2008; Podsakoff, MacKenzie, & Organ, 2006).

Similar to leader-member exchange, coworker exchange may explain the relationship between quality of friendships and positive work-related outcomes. Coworker exchange is based on the same theory as leader-member exchange. Like LMX, the quality of relationships at other levels (coworkers, team members) could be characterized by the same mutual respect,



trust, and obligation between parties (Ong, 2013; Uhl-Bien, Graen, and Scandura, 2000).

Therefore, reciprocity, or social exchange, is important in relationships between members of an organizational who are of similar status.

Reciprocity aside, there may be more fundamental needs driving coworker friendships. The idea that individuals seek to form interpersonal bonds has been weaved into the theories of a number of individuals from Freud to Maslow (Baumeister & Leary, 1995). Self-Determination Theory (SDT) and innate psychological needs are one means to explain relationships as a driver of positive work outcomes. Self-Determination Theory is a meta-theory of motivation made up of six mini-theories that emphasize individual performance and its link to motivations and aspects of an individual's identity (Sheldon, Turban, Brown, Barrick, & Judge, 2003). Among the mini-theories that comprise SDT, the two at the forefront are sources of motivation and the satisfaction of needs (Meyer & Gagne, 2008). This first states that there are two overarching forms of motivation: intrinsic and extrinsic (Deci & Ryan, 1985). Intrinsic motivation refers to doing an activity for its own sake due to enjoyment or interest, while extrinsic motivation refers to doing an activity for instrumental reasons, such as a material reward (Meyer & Gagne, 2008).

The satisfaction of needs states that individuals develop to their full potential when they are able to satisfy innate psychological needs (Jex & Britt, 2014). Research has identified three fundamental needs that fall under the umbrella of these psychological needs: autonomy, competence, and relatedness or belongingness, also known as the "Big Three" of needs to satisfy (Sheldon, Elliot, Kim, & Kasser, 2001). When applying SDT to work settings, this suggests that the satisfaction of the Big Three in a work environment will be motivating to the

individual (Jex & Britt, 2014). Evidence has supported positive relationships between aggregated scores of need satisfaction and outcomes such as job satisfaction, engagement, lower burnout, decreased turnover, and higher performance (Gagne & Deci, 2005; Van den Broeck, Vansteenkiste, & De Witte, 2008). Based on these results, it can be argued that the need for relatedness would drive individuals to form and maintain strong, stable relationships which would motivate individuals towards these positive outcomes (Baumeister & Leary, 1995).

### **Hypothesis 3**

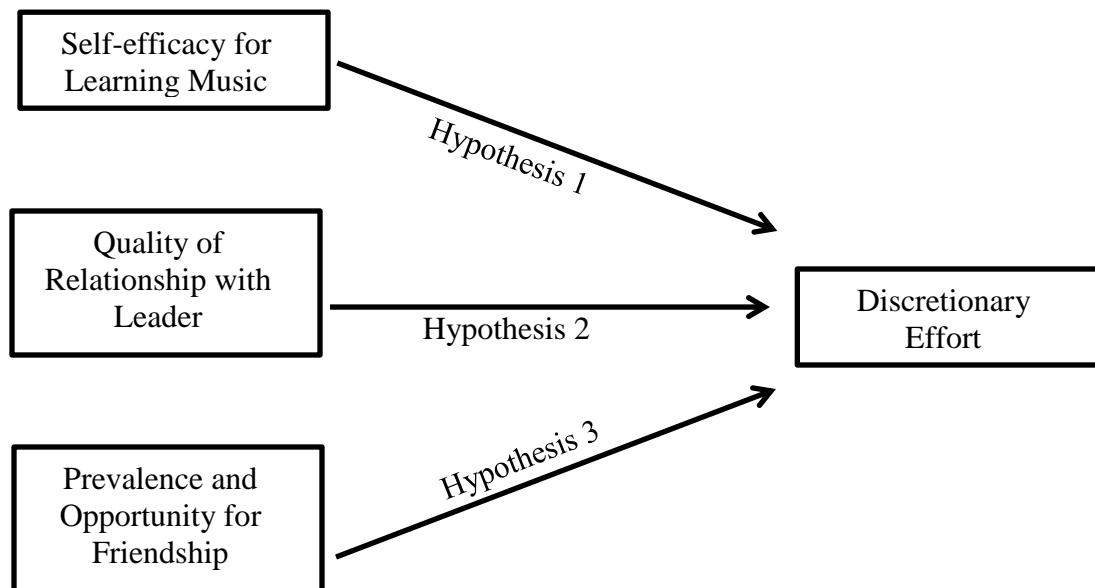
Those who perceive a greater prevalence and opportunity for friendship in their chorus will exert more discretionary effort than those who perceive a lower prevalence and less opportunity for friendship.

### **Volunteer Organizations**

When talking about volunteer organizations, discretionary effort and performance take on a different significance than when discussing the workplace. Without the reward of pay and benefits, it may be more difficult to explain why individuals would exert effort surpassing what is required of them to maintain membership in an organization. While research has delved into outcomes such as commitment and satisfaction in volunteer organizations, predictors of discretionary effort have not been widely explored (Vecina & Chacón, 2013).

Although there are differences between the organization one works for and the organization one joins for recreational activities, both stand to benefit from members performing to the best of their ability. This is particularly true for the intended population of this study due to the fact that they are a competitive society and choruses may gain a

competitive advantage by having members who put forth a great deal of time and effort towards helping the group succeed. The chosen predictors were relevant to the population of interest as well. Barbershop choruses and, on a higher level, the Barbershop Harmony Society strives for fellowship among members which is why quality of relationships are of interest. Additionally, due to the recreational nature of the choruses that belong to the Barbershop Harmony Society, there are varying levels of musical ability and knowledge, which is why self-efficacy for learning music was chosen.



*Figure 2. Model of Hypotheses*

## Chapter II: Method

### Participants

Participants were recruited through a barbershop chorus based out of Hilltop, Minnesota called the Great Northern Union (GNU). The board was approached for permission to distribute the surveys to members and the director. Through the chorus board, the online surveys were distributed to the “active member” emailing list. A separate email was sent to the director with the survey to be completed for each individual chorus member. Of the 73 individuals on the active member list, 55 responded to the survey request for a response rate of 75%. The director completed one survey for each individual who responded to the member survey for an equivalent total of 55 surveys. Participants’ mean age was 52.69 ( $SD = 16.69$ ). While all are recreational members of the chorus, the majority do not have a profession related to music. Tenure in the GNU chorus ranged from 1 to 32 years, averaging at 11.69 years ( $SD = 8.61$ ). The average number of years participants had been singing in public in their lives was 34.51 ( $SD = 17.66$ ).

### Measures

**Discretionary effort.** A combination of three measures was used to gather data on discretionary effort. The first (discretionary effort I) is taken from Kmec and Gorman (2010) and is the response to one item that asks the participant how much effort they put towards their role beyond what is required. Participants respond on a 4-point Likert-type scale ranging from 1(*none*) to 4 (*a lot*). The second measure (discretionary effort II) consisted of participants reporting an average total time (in hours) spent on discretionary chorus related activities per month. The specific activities outlined include time spent practicing music and choreography

outside rehearsal, volunteering for meetings and activities in conjunction with the board, logistics, marketing, and music and performance, attending unrequired performances and events, and an “other” category. The third measure of discretionary effort (discretionary effort III) is a 3-item survey completed by the leader to assess perceptions of subordinate’s levels of discretionary effort exerted. This measure was taken from Frenkel and Bednall (2016) and contains items drawn from both the Conscientiousness dimension of OCB in Chinese society (Farh, Earley, & Lin, 1997) and the 4-item scale of spontaneity (Eisenberger et al., 2001). Participants rate each item on a 7-point Likert-type scale with varying scale anchors for each item. The composite Cronbach’s alpha was reported at .90. To reflect our sample, ‘employee’ was changed to ‘member’ and ‘work’ was changed to ‘performance.’

**Self-efficacy for learning music.** The attitudes toward specific musical performance activities was adapted by Ritchie and Williamon (2011) from Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers’ (1982) General Self-Efficacy Scale. The measure is an 11-item self-report survey specifically assessing self-efficacy for learning music. Participants rate each item on a 7-point Likert-type scale ranging from 1 (*not at all sure, 0%*) to 7 (*completely sure, 100%*). Cronbach’s alpha was reported as .82.

**Quality of relationship with coworkers.** The two-dimensional workplace friendship scale created by Nielsen, Jex, and Adams (2000) is a self-report measure designed to assess friendship prevalence and friendship opportunities. The measure consists of total of 12 items, 6 items for each of the two subscales. During the initial development and validation of the measure, Cronbach’s alpha for each subscale was reported as .84 (friendship opportunity) and

.89 (friendship prevalence). Participants rate each item on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). To reflect our sample, ‘at work’ was changed to ‘in the group,’ ‘coworkers’ was changed to ‘members,’ and ‘job’ and ‘workplace’ were changed to ‘rehearsal.’

**Quality of relationship with leader.** Leader-member exchange quality was measured using Schriesheim, Neider, Scandura, and Tepper’s (1992) LMX-6. This measure is based on the conceptualization of LMX as a construct with three distinct subdimensions: perceived contribution, loyalty, and affect. Perceived contribution refers to the importance of the subordinate’s job to the leader and the subordinate’s ability to perform the job well. Loyalty addresses goal congruence and support for goals of the leader. Affect refers to satisfaction with leader human relations and technical ability. The 6-item measure contains 2 items for each subdimension. Participants rate each item on a 5-point Likert-type scale with varying scale anchors. Cronbach’s alpha was reported as .81. To reflect our sample, the word ‘supervisor’ was changed to ‘leader,’ ‘on my present job’ was changed to ‘in my present group,’ ‘job’ was changed to ‘performance,’ and in certain items, the word ‘work’ was removed, for example ‘work goals’ was changed to ‘goals.’

## **Procedure**

Participants were asked to read and sign an informed consent describing the voluntary and confidential nature of data collection. Data was collected via online surveys distributed in two waves, approximately one week apart. Surveys included the measures outlined above as well as a demographic survey. The artistic director was provided with a separate online survey to assess individual levels of discretionary effort exerted by each chorus member at the same

time that the first wave of surveys was available online for participants. Once data collection and analysis was completed, participants were provided with additional information about the study.

### **Common-Method Variance**

In studies solely based on self-reported data (such as the current), the issue of common-method variance must be addressed. Common-method variance is any variance that is attributable to the measurement method rather than the constructs the measures represent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This type of error is seen as problematic because it has the potential to threaten the validity of the conclusions drawn about the relationships between measures (Campbell & Fiske, 1959). For this study specifically, self-report bias is of concern due to the fact that the respondent providing the data for both the measurements of predictor and criterion variable is the same.

In cases when it may not be feasible to change the study's design to control for common-method bias, there are other possible remedies that can be considered. One such remedy is the separation of measurement of predictor and criterion variables. This can be achieved by creating a time lag, or measuring the variables at different times. In addition, researchers can use different response formats, media, or locations (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For example, the predictor variable could be measured using a Likert scale on a computer-based survey site while the participants are at home and the criterion variable is measured at a testing facility using open-ended questions on a paper-and-pencil survey the following week.

In addition to the procedure of sending surveys out in two waves, we may employ statistical controls in an attempt to diminish common-method bias. For the current study, a marker-based technique was used in an attempt to identify common-method variance. Using this technique, a marker variable, or variable that measures a construct that is theoretically unrelated to our other variables, was added to our questionnaires. In this case, a driving behavior survey was added as the survey considered unrelated to the other constructs. Because these constructs are thought to be unrelated, the expected correlation with our substantive constructs should be around 0 (Williams, Hartman, and Cavazotte, 2010). Following data collection, correlations among all variables and the marker variable will be noted.



## Chapter III: Results

### Preliminary Analyses

To begin, items were reverse-scored as required. Then, scale composites were calculated by averaging item responses across all items on the scale. The one differing scale was the hours per month of discretionary effort exerted (discretionary effort II). This scale was summed rather than averaged. Scale reliabilities were then assessed by calculating Cronbach's alpha for each measure. These values can be found in Table 1. The organizational friendship scale and driving behavior scale were found to have acceptable reliabilities. The self-efficacy, leader-member exchange, and discretionary effort scale completed by the leader had reliabilities slightly under what is considered acceptable ( $\alpha = .70$ ). Finally, z-scores were created for the two discretionary effort scores as well as the composite scores of the director's measure of members' discretionary effort. These z-scores were then averaged to create a composite score of discretionary effort exerted for each participant. Table 2 shows the descriptive statistics for each measure. No correlation was found to exist between the driving behaviors scale and other measures, therefore there was less concern for common-method variance.

Table 1

*Reliability Statistics for Variables*

Scale	Cronbach's Alpha	<i>k</i> of Items
Discretionary Effort (III)	.61	3
Self-Efficacy for Learning Music	.66	11
Organizational Friendship	.88	12
Leader-Member Exchange	.59	6
Driving Behaviors	.70	9

Table 2

*Descriptive Statistics for All Study Variables*

Variables	Mean (Total)	Possible Range	SD	N
Age	52.69	--	16.69	55
Years with the GNU	11.69	--	8.61	55
Years singing publically	34.51	--	17.66	55
Discretionary Effort (I)	3.27	1 - 4	0.71	55
Discretionary Effort (II)	27.04	--	20.16	55
Discretionary Effort (III)	5.37	1 - 7	1.00	55
Self-Efficacy for Learning Music	6.10	1 - 7	0.55	55
Organizational Friendship	4.14	1 - 5	0.60	55
Leader-Member Exchange	4.15	1 - 5	0.37	55
Driving Behaviors	5.46	1 - 7	0.69	55

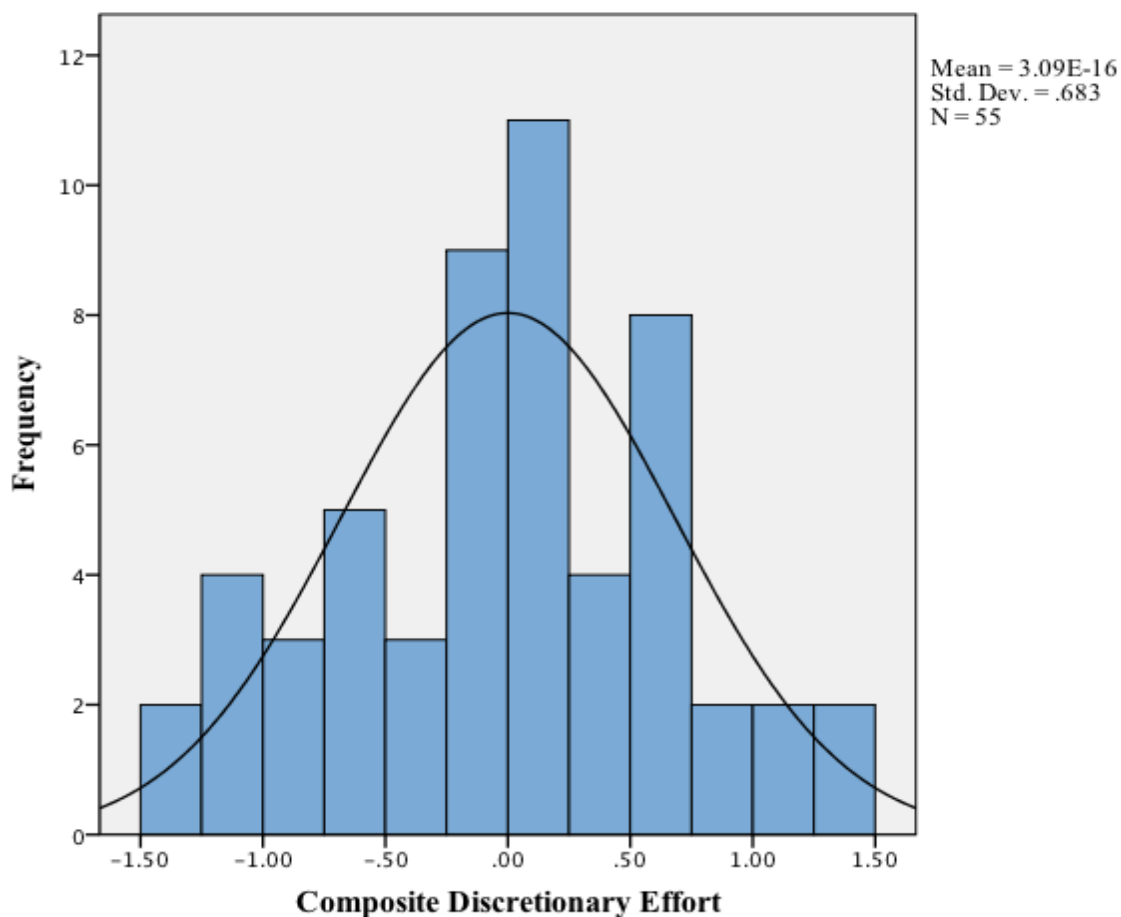


Figure 3. Histogram of Composite Discretionary Effort Variable

### Test of Hypotheses

Hypothesis 1 predicted that self-efficacy for learning music would be positively related to discretionary effort exerted. Correlations indicated that there was a weak but significant positive relationship between self-efficacy for learning music and the composite discretionary effort score,  $r(53) = .30$ ,  $p < .05$ . Additionally, a significant correlation was found between self-efficacy and the number of hours members exerted discretionary effort per month (discretionary

effort II),  $r(53) = .27, p < .05$ . These results suggest that self-efficacy for learning music is positively related to discretionary effort exerted. Therefore, hypothesis 1 was supported.

Hypothesis 2 predicted that high quality leader-member exchange would be positively related to discretionary effort exerted. Pearson correlations were found to be in the predicted direction for the composite discretionary effort score,  $r(53) = .18, n.s.$  All individual measures of discretionary effort, besides the leader survey (discretionary effort III), were found to have positive, non-significant relationships with leader-member exchange. The leader survey (discretionary effort III) had a negative, non-significant correlation,  $r(53) = -.03, n.s.$  Hypothesis 2 was not supported.

Hypothesis 3 predicted that organizational friendship would be positively related to discretionary effort exerted. Although there was a non-significant relationship found between organizational friendship and overall discretionary effort scores, it was significantly correlated with the one item measure of discretionary effort (discretionary effort I),  $r(53) = .29, p < .05$ . Similarly, when the scales two dimensions, opportunity for and prevalence of friendship, were examined separately, prevalence of friendship maintained a significant relationship with discretionary effort I,  $r(53) = .37, p < .01$ , while opportunity for friendship did not. On its own, prevalence of friendship indicated a positive, significant relationship with the composite discretionary effort,  $r(53) = .29, p < .05$ . Overall, there was mixed support for Hypothesis 3.

Table 3

*Pearson Correlations Among Study Variables*

Variables	1	2	3	4	5	6	7	8	9	10
1. Discretionary Effort Composite	-									
2. Discretionary Effort (I)	.82**	-								
3. Discretionary Effort (II)	.71**	.52**	-							
4. Discretionary Effort (III)	.53**	.15	-.07	-						
5. Self-Efficacy for Learning Music	.30*	.26	.27*	.08	-					
6. Organizational Friendship	.21	.29*	.11	.02	-.11	-				
7. Org. Friendship Opportunity	.05	.13	-.05	.02	-.16	.86**	-			
8. Org. Friendship Prevalence	.29*	.378**	.22	.01	-.04	.90**	.56**	-		
9. Leader-Member Exchange	.18	.24	.16	-.03	.33*	.35**	.29*	.32*	-	
10. Driving Behaviors	-.06	-.01	-.15	.04	-.01	.14	.06	.18.15	-	-

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

## Chapter IV: Discussion

The main purpose of this study was to expand on the literature on discretionary effort. There is a need in the research to expand on personal and intragroup factors as they are related to the amount of effort individuals exert. An additional purpose of was to explore these study variables within this specific volunteer sample.

Hypothesis 1 stated that self-efficacy for learning music would be positively related to discretionary effort exerted. This was supported. Self-efficacy for learning music was found to have a positive relationship with our composite measure of the three measures of discretionary effort.

Hypothesis 2 stated that high quality leader-member exchange would be positively related to discretionary effort exerted. This was not supported. All individual discretionary effort scale scores as well as the composite score had weak, non-significant correlations in this sample. What is interesting about this result is that LMX had a positive relationship with organizational friendship. It could be that those members who feel there is a great prevalence and opportunity for friendship feel that this is the case due to positive actions or direction from their leader.

Hypothesis 3 stated that organizational friendship would be positively related to discretionary effort exerted. This hypothesis was partially supported. As a whole, organizational friendship was found to have a positive, significant relationship with the one-item measure of discretionary effort, but not the other two or the composite. When the two dimensions of organizational friendship were examined separately, the prevalence of friendships dimension was found to be positively related to the composite discretionary effort.

There are practical applications to the results found through this study. In most chorus rehearsals, the vast majority of rehearsal time goes to warming up and the actual rehearsal of music and choreography. If individuals' beliefs in their ability to learn music increases the likelihood that they will exert effort towards the chorus on their own time, it can be beneficial to tailor rehearsal time towards increasing their self-efficacy. For example, this might be done through the actual teaching of sight-reading, or the ability to read music notes and rhythms, so members will feel more adept at learning new music at home. The fact that this population of singers is divided between those who are able to read music fluently and those who are not may indicate future research opportunities. One such direction would be to look at differences in musical self-efficacy between those who can and cannot read music and see if there is, in turn, a difference in discretionary effort exerted. This would further support or reject the notion of devoting time to teaching members how to read music.

The mixed results regarding organizational friendship suggest that further research on this relationship is warranted. The significant relationship with the prevalence for friendship dimension raises questions as well. This could be due to the fact that many individuals in the present sample have been members for many years and feel as though they have developed many friendships in the chorus and that these friends support their involvement and effort exerted outside of rehearsal time. The group as a whole may not have enough new members joining for there to be ample opportunity to develop new friendships. Further support of the relationship between organizational friendship and discretionary effort might suggest that there should be a focus on building and developing relationships within the group through practices such as quartet singing or group retreats.

Heretofore, the study results have only been discussed as being unidirectional. Arguments have been made for the ways in which increased self-efficacy, LMX, and organizational friendship might lead to greater discretionary effort exerted, but it is possible that the relationship is bidirectional. In regards to self-efficacy, it is possible that the more time and effort an individual puts into practicing music, both alone and with others, the more confidence they have in their ability to learn music as they are improving in this area. Additionally, if an individual is going above and beyond for the group by always being prepared or volunteering more time than is required, their peers and leader may view them in a more positive light, leading to greater levels of LMX and organizational friendship.

Aside from the results found based on the presented hypotheses, the relationship between self-efficacy and LMX is worth noting. This could be due to the fact that chorus members who feel confident in their ability to learn music feel more comfortable in their relationship with their leader, while those who lack this confidence may feel their leader expects more of them, or would not be happy with their ability level. Another possibility is that those who feel they are friendly or comfortable with their leader are able to ask for help or guidance with the technical aspects of the music, therefore increasing their belief in their ability. The relationship between self-efficacy and LMX may suggest that it is beneficial for leaders to nurture their relationships with individuals who have lower levels of self-efficacy in the hopes that they will feel more comfortable seeking out ways in which to improve their skills. Doing so might also show these members that they do not need to be at a certain ability level to maintain a relationship with their leader.



One limitation of this study was the small sample size. Although a large majority of current GNU chorus members responded to the survey, future research could extend to other choruses within the Barbershop Harmony Society, or even other choruses of different styles and genres. One reason that other choruses were not considered for this study was due to the difficulty in finding a chorus with a leader willing to complete such a large number of surveys about the chorus members. An interesting direction for future research with this population would be to collect data from choruses at different levels of performance. It may be that choruses that tend to be better performers are better performers because their members exert more discretionary effort. Membership in highly regarded choruses may also be related to the variables in the study, such as self-efficacy.

Another possible limitation was the researcher's personal relationship with the chorus leader. Due to this, there was concern over the participants' trust in the confidentiality of the survey, specifically the leader-member exchange survey, despite assurance that the study was completely confidential. Mean scores on the leader-member exchange survey seemed inflated ( $M = 4.15$ ) with a very low standard deviation ( $SD = .37$ ). This may have been avoided had another researcher been the one to present the study to the chorus and board.

Lastly, limitations have been noted regarding the measures used, specifically the measure of discretionary effort that was completed by the leader. Due to the nature of discretionary effort, it is behavior that is often unobservable, or not exhibited in situations that the leader might see or take notice of. Therefore, it is likely that a leader would not have the most accurate perceptions of how much discretionary effort an individual exerts, especially if this individual exerts effort towards tasks that are mainly done outside of rehearsal. This was

supported by low correlations between the leaders' discretionary effort ratings and the two measures of self-assessment.

On a broader level, the study results regarding self-efficacy and discretionary effort suggest that individuals are more likely to exert extra effort towards something they feel competent at. The results regarding friendship and discretionary effort suggest that individuals who feel as though they are working towards something in a group where they have friends or the opportunity to make friends are more likely exert more effort for that group. Due to the numerous positive organizational outcomes related to discretionary effort, these findings indicate that it would be beneficial for organizations to focus efforts on variables related to discretionary effort, such as self-efficacy and organizational friendship.

## References

- Aggarwal, P., & Basu, A. K. (2014). Value co-creation: Factors affecting discretionary effort exertion. *Services Marketing Quarterly*, 35(4), 321-336.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bandura, A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1989). Regulation of cognitive processes through perceived self efficacy. *Developmental Psychology*, 25(5), 729.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.
- Bandura, A. (2001). *Guide for constructing self-efficacy scales* (revised). Available from F. Pajares, Emory University, USA.
- Bauer, T. N., & Erdogan, B. (Eds.). (2015). *The Oxford handbook of leader-member exchange*. Oxford University Press.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497.
- Beck, J. W., Beatty, A. S., & Sackett, P. R. (2014). On the distribution of job performance: The role of measurement characteristics in observed departures from normality. *Personnel Psychology*, 67(3), 531-566.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of Applied Psychology*, 91(1), 70.

- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81.
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109-134.
- Deci, E. L., & Ryan, R. M. (2010). *Self-determination*. John Wiley & Sons, Inc.
- Dubinsky, A. J., & Skinner, S. J. (2002). Going the extra mile: Antecedents of salespeople's discretionary effort. *Industrial Marketing Management*, 31(7), 589-598.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38(6), 1715-1759.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42.
- Farh, J. L., Earley, P. C., & Lin, S. C. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, 421-444.
- Frenkel, S. J., & Bednall, T. (2016). How training and promotion opportunities, career expectations, and two dimensions of organizational justice explain discretionary work effort. *Human Performance*, 29(1), 16-32.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362.
- Graen, G. B., & Cashman, J. F. 1975. A role-making model of leadership in formal organizations: A developmental approach. In J. G. Hunt & L. L. Larson (Eds.),

Leadership frontiers: 143–165. Kent, OH: Kent State University Press.

Harshitha, N. (2016). Employee engagement: A literature review. *CLEAR International Journal of Research in Commerce & Management*, 6(12), 97-100. Retrieved from <http://www.clear-research.in>

Hesketh, I., Cooper, C. L., & Ivy, J. (2016). Wellbeing and Engagement in Policing: The Key to Unlocking Discretionary Effort?. *Policing: A Journal of Policy and Practice*, 11(1), 62-73.

Holmes, J. G. (1981). The exchange process in close relationships. In *The justice motive in social behavior* (pp. 261-284). Springer, Boston, MA.

Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational Behavior and Human Decision Processes*, 77(1), 3-21.

Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92(1), 269.

Jex, S. M., & Britt, T. W. (2014). *Organizational psychology: A scientist-practitioner approach*. John Wiley & Sons.

Kidwell, R. E., & Bennett, N. (1993). Employee propensity to withhold effort: A conceptual model to intersect three avenues of research. *Academy of Management Review*, 18(3), 429-456.

Kmec, J. A., & Gorman, E. H. (2010). Gender and discretionary work effort: Evidence from the United States and Britain. *Work and Occupations*, 37(1), 3-36.

- Li, Y., Fu, F., Sun, J. M., & Yang, B. (2016). Leader–member exchange differentiation and team creativity: An investigation of nonlinearity. *Human Relations*, *69*(5), 1121-1138.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management*, *24*(1), 43-72.
- Lloyd, R. (2008). Discretionary effort and the performance domain. *The Australasian Journal of Organisational Psychology*, *1*, 22-34.
- Love, M. S., & Forret, M. (2008). Exchange relationships at work: An examination of the relationship between team-member exchange and supervisor reports of organizational citizenship behavior. *Journal of Leadership & Organizational Studies*, *14*(4), 342-352.
- Lunenburg, F. C. (2010). Leader-member exchange theory: Another perspective on the leadership process. *International Journal of Management, Business, and Administration*, *13*(1), 1-5.
- Ma, E., & Qu, H. (2011). Social exchanges as motivators of hotel employees' organizational citizenship behavior: The proposition and application of a new three-dimensional framework. *International Journal of Hospitality Management*, *30*(3), 680-688.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2016). Leader–Member exchange (LMX) and performance: A Meta-Analytic review. *Personnel Psychology*, *69*(1), 67-121.
- McCormick, J., & McPherson, G. (2003). The role of self-efficacy in a musical performance examination: An exploratory structural equation analysis. *Psychology of Music*, *31*(1), 37-51.

- McPherson, G. E., & McCormick, J. (2006). Self-efficacy and music performance. *Psychology of Music, 34*(3), 322-336.
- Meyer, J. P., & Gagne, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology, 1*(1), 60-62.
- Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal, 37*(6), 1543-1567.
- Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a two-dimensional workplace friendship scale. *Educational and Psychological Measurement, 60*(4), 628-643.
- Ong, L. D. (2013). Workplace friendship, trust in coworkers and employees' OCB. *Актуальні проблеми економіки, (2)*, 289-294.
- Palo, J., & Rothmann, S. (2016). Work engagement in the mining industry in South Africa: The role of tasks and relationships. *Journal of Psychology in Africa, 26*(3), 221-229.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research, 66*(4), 543-578
- Pajares, F., & Miller, M. D. (1995). Mathematics self-efficacy and mathematics performances: The need for specificity of assessment. *Journal of Counseling Psychology, 42*(2), 190.
- Pajares, F., & Schunk, D. (2001). The development of academic self-efficacy. *Development of Achievement Motivation. United States, 7*.
- Pintrich, P.R. and Schunk, D.H. (1996) *Motivation in Education: Theory, Research and Applications*. Englewood Cliffs, NJ: Prentice-Hall.

- Piyachat, B., Chanongkorn, K., & Panisa, M. (2014). The Mediate Effect of Employee Engagement on the Relationship between Perceived Employer Branding and Discretionary Effort. *DLSU Business & Economics Review*, 24(1).
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Podsakoff, P. M., MacKenzie, S. B., & Organ, D. W. (2006). Organizational citizenship behavior: Its nature, antecedents, and consequences.
- Riordan, C. M., & Griffeth, R. W. (1995). The opportunity for friendship in the workplace: An underexplored construct. *Journal of Business and Psychology*, 10(2), 141-154.
- Ritchie, L., & Williamon, A. (2007, November). Measuring self-efficacy in music. In *Proceedings of the International Symposium on Performance Science* (pp. 307-312).
- Ritchie, L., & Williamon, A. (2011). Measuring distinct types of musical self efficacy. *Psychology of Music*, 39(3), 328-344.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Schriesheim, C. A., Neider, L. L., Scandura, T. A., & Tepper, B. J. (1992). Development and preliminary validation of a new scale (LMX-6) to measure leader-member exchange in organizations. *Educational and Psychological Measurement*, 52(1), 135-147.
- Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81(3), 219.



- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology, 80*(2), 325.
- Sheldon, K. M., Turban, D. B., Brown, K. G., Barrick, M. R., & Judge, T. A. (2003). Applying self determination theory to organizational research. In *Research in Personnel and Human Resources Management* (pp. 357-393). Emerald Group Publishing Limited.
- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports, 51*(2), 663-671.
- Sleebos, E., Ellemers, N., & de Gilder, D. (2006). The carrot and the stick: Affective commitment and acceptance anxiety as motives for discretionary group efforts by respected and disrespected group members. *Personality and Social Psychology Bulletin, 32*(2), 244-255.
- Sparrowe, R. T., Soetjijto, B. W., & Kraimer, M. L. (2006). Do leaders' influence tactics relate to members' helping behavior? It depends on the quality of the relationship. *Academy of Management Journal, 49*(6), 1194-1208.
- Uhl-Bien, M., Graen, G. B., & Scandura, T. A. (2000). Implications of leader-member exchange (LMX) for strategic human resource management systems: Relationships as social capital for competitive advantage. *Research in Personnel and Human Resources Management, 18*, 137-186.
- Van den Broeck, A., Vansteenkiste, M., & De Witte, H. (2008). Self-determination theory: A theoretical and empirical overview in occupational health psychology.

- Vecina, M. L., Chacón, F., Marzana, D., & Marta, E. (2013). Volunteer engagement and organizational commitment in nonprofit organizations: what makes volunteers remain within organizations and feel happy?. *Journal of Community Psychology, 41*(3), 291-302.
- Watson, T. (2009). Turbocharging employee engagement: The power of recognition from managers. Retrieved from <http://www.towerswatson.com/assets/pdf/629>.
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology, 87*(3), 590-598.
- Williams, L. J., Hartman, N., & Cavazotte, F. (2010). Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods, 13*(3), 477-514.
- Winstead, B. A., Derlega, V. J., Montgomery, M. J., & Pilkington, C. (1995). The quality of friendships at work and job satisfaction. *Journal of Social and Personal Relationships, 12*(2), 199-215.

**Appendix A: Demographics**

Name:

Age:

Number of years you have sung with your current chorus:

Number of years you have sung with Barbershop Harmony Society:

Number of years you have sung publically in your lifetime:

**Appendix B: Measuring Discretionary Effort (I)**

How much effort do you put into the chorus beyond what is required?

- (1) None
- (2) A little
- (3) Some
- (4) A lot

### **Appendix C: Measuring Discretionary Effort (II)**

On average, how many hours per month do you spend exerting effort for the chorus past what is required of you to maintain membership?

Please describe how many hours per month you spend on each of the following activities:

- \_\_\_\_\_ hours per month practicing music outside of rehearsal
- \_\_\_\_\_ hours per month practicing choreography outside of rehearsal (including early birds)
- \_\_\_\_\_ hours per month volunteering time for board meetings/activities
- \_\_\_\_\_ hours per month volunteering time for logistics meetings/activities
- \_\_\_\_\_ hours per month volunteering time for marketing meetings/activities
- \_\_\_\_\_ hours per month volunteering time for music & performance meetings
- \_\_\_\_\_ hours per month attending unrequired performances/events
- \_\_\_\_\_ hours per month volunteering time for any other volunteer position in the chorus

### Appendix D: Attitudes Toward Specific Musical Performance Activities I

We would like for you to think of one specific performance activity in which you have recently had a prominent role (e.g. an ensemble performance of a well-known piece).

*Very poorly*

*Excellently*

Rate how well the above performance went:	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

*Not at all sure*  
0%

*Completely sure*  
100%

I am confident that I can successfully learn the music for this performance.	1	2	3	4	5	6	7
One of my problems is that I cannot get down to practicing or rehearsing for this specific performance when I should.	1	2	3	4	5	6	7
If I cannot play the music for this performance at first, I will keep practicing until I can.	1	2	3	4	5	6	7

When I set important learning goals leading up to this performance, I can rarely achieve them.	1	2	3	4	5	6	7
I am likely to give up preparing for this performance before completing it.	1	2	3	4	5	6	7
When I have something unpleasant to do in preparation for this performance, I can stick to it until I finish it.	1	2	3	4	5	6	7
When I decide to do this performance, I go right to work on the music.	1	2	3	4	5	6	7
When first playing the music for this performance, I soon give up if I am not initially successful.	1	2	3	4	5	6	7
The prospect of failure in this performance makes me work harder in preparation.	1	2	3	4	5	6	7
I am likely to give up working toward this performance easily.	1	2	3	4	5	6	7

I am not capable of dealing with most problems that may come up when working toward this performance.	1	2	3	4	5	6	7
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**Appendix E: Organizational Friendship Opportunity and Prevalence**

1. I have the opportunity to get to know my coworkers.
  - (5) Strongly agree
  - (4) Agree
  - (3) Neither agree nor disagree
  - (2) Disagree
  - (1) Strongly disagree
2. I am able to work with my coworkers to collectively solve problems.
  - (5) Strongly agree
  - (4) Agree
  - (3) Neither agree nor disagree
  - (2) Disagree
  - (1) Strongly disagree
3. In my organization, I have the chance to talk informally and visit with others.
  - (5) Strongly agree
  - (4) Agree
  - (3) Neither agree nor disagree
  - (2) Disagree
  - (1) Strongly disagree
4. Communication among employees is encouraged by my organization.
  - (5) Strongly agree
  - (4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

5. I have the opportunity to develop close friendships at my workplace.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

6. Informal talk is tolerated by my organization as long as the work is completed.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

7. I have formed strong friendships at work.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

8. I socialize with coworkers outside of the workplace.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

9. I can confide in people at work.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

10. I feel I can trust many coworkers a great deal.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

11. Being able to see my coworkers is one reason why I look forward to my job.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

12. I do not feel that anyone I work with is a true friend.

(5) Strongly agree

(4) Agree

(3) Neither agree nor disagree

(2) Disagree

(1) Strongly disagree

### **Appendix F: Leader-Member Exchange Quality**

For the following survey, please consider your “job” within the chorus to be the fulfillment of your basic responsibilities as a member.

1. The way my leader sees it, the importance of my performance to his/her performance is:
  - (5) Very great – it critically affects his/her performance
  - (4) Great
  - (3) Moderate
  - (2) Somewhat
  - (1) Slight to none – it has little effect no his/her performance
  
2. My leader would probably say that my goals and his/hers are:
  - (5) The same
  - (4) Similar
  - (3) Unrelated
  - (2) Different
  - (1) Opposite
  
3. In my present group, this is how I feel about the way my leader and I understand each other:
  - (5) Very satisfied
  - (4) Satisfied
  - (3) Undecided or neutral
  - (2) Dissatisfied
  - (1) Very dissatisfied

4. The way my leader sees me, he/she would probably say that my ability to perform well is:
  - (5) Exceptional
  - (4) Good to very good
  - (3) Average
  - (2) Below average
  - (1) Poor
5. I feel that my goals and those of my leader are:
  - (5) The same
  - (4) Similar
  - (3) Unrelated
  - (2) Different
  - (1) Opposite
6. In my present group, this is how I feel about the way my leader provides help on hard problems:
  - (5) Very satisfied
  - (4) Satisfied
  - (3) Undecided or neutral
  - (2) Dissatisfied
  - (1) Very dissatisfied

**Appendix G: Driving Behavior Survey**

1. I have trouble staying in the correct lane.
  - (7) Always
  - (6) Very Frequently
  - (5) Frequently
  - (4) Sometimes
  - (3) Infrequently
  - (2) Very Infrequently
  - (1) Never
  
2. I forget to make appropriate adjustments in speed.
  - (7) Always
  - (6) Very Frequently
  - (5) Frequently
  - (4) Sometimes
  - (3) Infrequently
  - (2) Very Infrequently
  - (1) Never
  
3. I forget where I am driving to.
  - (7) Always
  - (6) Very Frequently
  - (5) Frequently
  - (4) Sometimes

(3) Infrequently

(2) Very Infrequently

(1) Never

4. I maintain a large distance between myself and the driver in front of me:

(7) Always

(6) Very Frequently

(5) Frequently

(4) Sometimes

(3) Infrequently

(2) Very Infrequently

(1) Never

5. I decrease my speed until I feel comfortable:

(7) Always

(6) Very Frequently

(5) Frequently

(4) Sometimes

(3) Infrequently

(2) Very Infrequently

(1) Never

6. During bad weather, I drive more cautiously than other vehicles on the road:

(7) Always

(6) Very Frequently



- (5) Frequently
- (4) Sometimes
- (3) Infrequently
- (2) Very Infrequently
- (1) Never

7. I yell at the driver/drivers who make me nervous:

- (7) Always
- (6) Very Frequently
- (5) Frequently
- (4) Sometimes
- (3) Infrequently
- (2) Very Infrequently
- (1) Never

8. I pound on the steering wheel when I'm nervous:

- (7) Always
- (6) Very Frequently
- (5) Frequently
- (4) Sometimes
- (3) Infrequently
- (2) Very Infrequently
- (1) Never

9. I swear/use profanity while I am driving:

(7) Always

(6) Very Frequently

(5) Frequently

(4) Sometimes

(3) Infrequently

(2) Very Infrequently

(1) Never

### Appendix H: Measuring Discretionary Effort (III)

Indicate the chorus member you are evaluating:

1. This member tries hard to increase skills to improve the quality of performance
  - (1) Never
  - (2) Rarely, in less than 10% of the chances when he/she could have
  - (3) Occasionally, in about 30% of the chances when he/she could have
  - (4) Sometimes, in about 50% of the chances when he/she could have
  - (5) Frequently, in about 70% of the chances when he/she could have
  - (6) Usually, in about 90% of the chances when he/she could have
  - (7) Always
  
2. This member does not mind taking on new and challenging assignments
  - (1) Never
  - (2) Rarely, in less than 10% of the chances when he/she could have
  - (3) Occasionally, in about 30% of the chances when he/she could have
  - (4) Sometimes, in about 50% of the chances when he/she could have
  - (5) Frequently, in about 70% of the chances when he/she could have
  - (6) Usually, in about 90% of the chances when he/she could have
  - (7) Always
  
3. This member complies with company rules and procedures
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree

(4) Neither agree or disagree

(5) Somewhat agree

(6) Agree

(7) Strongly agree