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Employee Satisfaction and Delaying Turnover in

Land-Grant University Offices of Admissions:

Using Self-Determination Theory to Describe Professional Employee Satisfaction

by

Stephen Keller

A dissertation proposal

submitted in partial fulfillment

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Committee Approval

To the Graduate Faculty:

The members of the committee appointed to examine the thesis of Stephen Keller find it satisfactory and recommend that it be accepted.

Dr. Paul Watkins, Chair

Dr. Alan Frantz, Committee Member

Dr. Gloria Jean Thomas, Committee Member

Dr. Mark Neill, Committee Member

Dr. Lyle Castle, Graduate Faculty Representative



Office for Research Integrity 921 South 8th Avenue, Stop 8046 • Pocatello, Idaho 83209-8046

December 23, 2015

Stephen Keller College of Education MS 8059

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Acknowledgments

My educational pursuits have been very humbling. I am humbled because of the many generous, thoughtful, and encouraging people who helped propel me through each stage of education and, ultimately, through this dissertation experience. All of the educators from whom I have been fortunate to learn deserve a piece of the recognition for this project. I would especially like to acknowledge the capable and compassionate professors from Idaho State University's Doctor of Education Program namely Dr. Paul Watkins, Dr. Alan Frantz, Dr. Gloria Thomas, Dr. Mark Neill, and Dr. Peter Denner. I would also like to acknowledge the friendly and helpful advisors who helped me discover the program. Lesa Wagner and Chris Vaage from Idaho State University – Twin Falls were instrumental in opening the gate to this wonderful opportunity.

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iv

List of Figures	vii
List of Tables	viii
Abstract	ix
Chapter I: Introduction	1
Background of the Study	4
Statement of the Problem	7
Statement of Purpose and Research Questions	7
Definitions	8
Biases	11
Methodology	12
Significance of the Study	14
Study Organization	15
Chapter II: Literature Review	16
Employee Turnover	16
Self-Determination Theory	
Summary and Analysis: State of the Literature	64
Chapter III: Methodology	66
Participants/Sampling	67
Instrumentation	68
Procedures	72
Design/Analysis	72
Measures	75
Methods Summary	78
Chapter IV: Research Findings	80
Demographic Analyses	
Data Analyses	
Conclusion	
Chapter V: Discussion and Conclusions	
Conclusions	
Conclusions Summary	
Recommendations for University Offices of Admissions	

Table of Contents

Suggestions for Future Research	104
References	107
Appendix A: Autonomy, Competence, and Relatedness Questions	117
Appendix B: Intrinsic/Extrinsic Motivation Questions	119
Appendix C: Turnover Intentions Questions	121
Appendix D: Demographic Questions	122
Appendix E: Questionnaire Initial E-mail	125
Appendix F: Questionnaire Reminder E-mail	127
Appendix G: Questionnaire Final Reminder E-mail	129
Appendix H: Scale User Agreement	131

LIST OF FIGURES

Figure 1	. Research Design	74	4
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LIST OF TABLES

Table 1. Length of time employed by an office of admissions
Table 2. Respondent ages
Table 3. Respondent gender information
Table 4. Respondent permanent office location
Table 5. Respondent office of admissions position type
Table 6. Number of offices of admissions in which respondents have been employed 85
Table 7. Respondent initial employment intentions for their current position
Table 8. Descriptive statistics
Table 9. Regression 1 model summary
Table 10. Regression 1 ANOVA91
Table 11. Regression 1 coefficients
Table 12. Regression 2 model summary92
Table 13. Regression 2 ANOVA92
Table 14. Regression 2 coefficients
Table 15. Regression 3 model summary94
Table 16. Regression 3 ANOVA94
Table 17. Regression 3 coefficients

ABSTRACT

The purpose of this study is to 1) better understand the turnover intentions of professional higher education admissions employees on a national level, 2) identify the extent to which motivation mediates employee satisfaction in an office of admissions, 3) determine if self-determination theory (Deci & Ryan, 2008) provides a theoretical explanation for admissions employee satisfaction, and 4) use the theoretical underpinnings of self-determination theory to describe employee satisfaction in a way that can lead to a delay in voluntary admissions turnover. Self-determination theory has been used in many social sectors to explain human satisfaction and motivation, but it has not yet been applied to entry-level positions within higher education such as an office of admissions.

Professional admissions employees from land-grant universities across the country were identified as prospective respondents for a self-determination theory employee satisfaction questionnaire. Their responses were analyzed to determine whether or not self-determination theory provided an accurate description of employee satisfaction. The study results confirmed that self-determination theory provided a partial explanation of employee satisfaction within an office of admissions setting. Of the three primary components of self-determination theory, only autonomy and competence were shown to impact employee satisfaction. This partial explanation of admissions employee satisfaction can be utilized to increase the duration and quality of professional admissions employees despite the entry-level nature of most admissions positions. The results of this study will be beneficial to offices of admissions, student affairs offices, and other higher education divisions staffed by traditionally short-term employees. By improving the

ix

quality of work performed and the length of time employed, even if only by one or two years, the impact on institutions of higher education can be significant.

CHAPTER I

INTRODUCTION

Good employees can be hard to find and can also be hard to retain after being hired. Whether good, bad, or mediocre, the employees of almost all organizations are the primary catalysts for an organization's greatest achievements, disappointments, and expenditures. An employee's decision to remain with or to leave an organization can have far-reaching effects on coworkers, customers, corporations, and capital markets. "As the global economy becomes increasingly knowledge based, organizations that can successfully retain their human resources have an advantage over organizations that have challenges with retention. Indeed, a number of studies have shown that turnover negatively effects [*sic*] performance" (Felps et al., 2009, p. 545). Employee retention and turnover, therefore, have become subjects of great importance to many researchers in the areas of business, sociology, psychology, leadership, change theory, and education, among others. The subject of the current study is employee turnover in a university office of admissions setting.

Traditionally, employee turnover research has assumed a bilateral definition that divides turnover into two main categories – involuntary and voluntary turnover (McElroy, Morrow, & Rude, 2001; Shaw, Delery, Jenkins, Jr., & Gupta, 1998; Stumpf & Dawley, 1981; and Wells & Muchinsky, 1985). Involuntary turnover is the termination of employees regardless of employee intentions to stay or leave. Voluntary employee turnover, however, places the locus of control with the employee with the employee determining if she or he leaves the organization. Turnover research involves both

involuntary and voluntary employee turnover, but it is the voluntary exit of employees that is of most concern to researchers in recent years and is the focus of this study.

Trends in voluntary turnover research from the past 20 years include predictors of employee turnover, contextual and interpersonal reasons for turnover, rationale for employees to stay with current employers, and how employee attitudes and desires to remain with an organization can change over time (Holtom et al., 2008, p. 232). Additionally, research has been conducted on the organizational and individual costs of voluntary employee turnover. While voluntary employee turnover mainly has a negative connotation, the effects of voluntary turnover can be both good and bad. Poor performers, for example, can voluntarily leave the organization because they find themselves to be incompatible with a high-performance culture. This type of turnover would result in the opportunity to replace a poor-performing employee with one who is a "hard-to-replace performer" (Hom, Mitchell, Lee, & Griffeth, 2012, p. 834).

Conversely, the costs associated with the voluntary turnover of hard-to-replace performers can be negative. Turnover can have a very negative effect on organizations, and leadership turnover has a bigger effect than does employee turnover (Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006). These negative effects can and do include a sharp decrease in organizational efficiency (Shaw, Johnson, and Lockhart, 2005), added stress on coworkers (Harrison, Newman, and Roth, 2006), turnover contagion among coworkers (Felps et al., 2009), significant organizational changes, hiring and training costs of new employees (Holtom et al., 2008), and a decrease in overall unit performance (Shaw, Gupta, & Delery, 2005). Furthermore, the costs of turnover are manifest long before the discontented employee leaves the organization.

Harmful precursors to voluntary turnover include increased lateness and absenteeism, decreased citizenship behavior and team morale, and other behavioral deficiencies (Harrison, Newman, & Roth, 2006).

The high cost associated with most voluntary turnover has led researchers to seek the causes for an employee choosing to leave a given organization. Researchers espouse several theories about causes of voluntary turnover. Some researchers believe voluntary turnover is caused by inadequate psychological resiliency in the presence of workplace stress (Avey, Luthans, & Jensen, 2009). Other researchers believe employee that poor employee health and well-being are the most important factors leading to stress, absenteeism, and voluntary turnover (Grawitch, Trares, & Kohler, 2007; Schaufeli, Leiter, & Maslach, 2009; Meyer & Maltin, 2010). Still other researchers focus on more specific issues such as work-family conflict (Ajuha, Chudoba, Kacmaar, McKnight, & George, 2007), the provision of necessary work resources to sufficiently execute job responsibilities (Schaufeli, Bakker, & Van Rhenen, 2009), and employee perceptions of organizational change (Rafferty & Griffin, 2006). Undoubtedly, each of these factors is a contributor to voluntary turnover to some degree, and a few research teams have developed more comprehensive theories about complex social and psychological interactions that are directly applicable to voluntary turnover. The most common, and perhaps the most applicable, of the comprehensive theories that apply to voluntary turnover are social exchange theory (SET) (Emerson, 1976), self-determination theory (SDT) (Deci & Ryan, 2008), and leader-member exchange theory (LMX) (Schriesheim, Castro, & Cogliser, 1999). While each of these sociology theories directly relates to

voluntary turnover, the most comprehensive and inclusive is self-determination theory, which is centered on explaining employee satisfaction.

Continual research about voluntary employee turnover attests to the high cost of voluntary turnover and the potential gains from its prevention. Organizational leadership teams from around the world have employed concepts derived from voluntary employee turnover research to improve employee satisfaction and decrease rates of turnover. Unfortunately, research into and applications of practical voluntary employee turnover prevention strategies have not successfully penetrated all industries. For example, research and application of theories of voluntary employee turnover are very limited, perhaps nonexistent, in administrative offices of colleges and universities. This absence of research and theoretical application is also evident in university offices of admissions. This study seeks to bridge the gap between current turnover research and the application of voluntary in university offices of admission by determining if self-determination theory provides a sufficient explanation for professional admissions employee satisfaction.

Background of the Study

While I was employed by a land-grant university as an office of admissions enrollment specialist. I became aware of the high rates of voluntary employee turnover during my years of employment and through my various interactions with institutional employees from other offices and departments. My experiences and the experiences of those who frequently work with members from the office of admissions led me to assume that the average time of employment for somebody in my current professional position is relatively short. After three years of admissions employment, I was ready to seek a new

position. A three-year employment life expectancy is a relatively short period of time for a salaried employee. In my three years of employment, I witnessed almost the complete disintegration of the original admissions team I joined, and I anticipate almost every one of the original 12-person admissions team will be gone within the next year. Of course, the high turnover rate within that land-grant office of admissions might be an isolated incident, but my other professional responsibilities have shown me it is not. One reason for this high level of turnover among the professional staff in that office of admissions is the nature of many of these admissions positions. The positions with the highest amount of turnover tend to be entry-level positions that frequently serve as professional stepping stones to better positions within higher education. This trend is also evident in other higher education institutions of which I am aware.

I am the current president of the Idaho Association of Collegiate Registrar and Admissions Officers (IACRAO), and I have been eye-witness to the high rates of turnover from other offices of admissions throughout the state of Idaho. My three-year IACRAO membership has made me one of its senior members. The continual effort of the leadership board of IACRAO to update the member directory is almost an act in futility because admissions officers come and go at an alarmingly frequent rate. The general consensus from people who work in admissions is that the work is hard, the pay is low, the travel is extensive, and the job results in "burnout" within only a couple of years. Of those individuals who are no longer members of IACRAO due to changes in employment, almost every individual left the office of admissions career track to pursue an entirely different postsecondary career. Some people left higher education altogether. Continued interactions with these departed IACRAO members have made it clear that

most of the former admissions employees are grateful to have left the world of admissions behind.

I seek to better understand professional employee satisfaction as it relates to voluntary turnover intentions among professional admissions staff. The small salaries might not be easily remedied, but I believe there are inexpensive, easy-to-implement, sustainable, and substantial means by which an office of admissions can improve employee satisfaction and delay voluntary employee turnover. The current study is my effort to determine if conditions leading to high rates of turnover can be improved, leading to the increased satisfaction, engagement, and performance of professional admissions employees. While substantial reduction of voluntary turnover might not be realistic, considering the entry-level nature of most professional positions within an office of admissions, improving the duration and quality of employment for an additional one to three years would likely yield very positive results for the office, the institution, and the individual.

Statement of the Problem

While voluntary turnover within offices of admissions will persist because of the nature of their many entry-level positions, professional admissions employees need not leave as quickly as presently appears to be the case. Furthermore, professional employee satisfaction, engagement, and performance can be improved during the duration of employment even for those employees in entry-level positions. Thus, the problem this study addresses is the lack of a strong theoretical and pragmatic approach for extending the duration of employment in higher education offices of admission. The approach for resolution of this problem is to identify and apply a theory that adequately describes

employee satisfaction in offices of admissions. Once a theory has been identified and professional employee satisfaction is better understood, leadership within offices of admissions can better address the needs of their employees to increase their satisfaction, engagement, and overall performance while promoting longer periods of employment.

Statement of Purpose and Research Questions

The purpose of this study was to better understand the turnover intentions of professional university admissions employees on a national level, identify to what extent motivation mediates employee satisfaction in an office of admissions, determine if selfdetermination theory provides a theoretical explanation for admissions employee satisfaction, and use the theoretical underpinnings of self-determination theory to describe employee satisfaction in a way that may lead to a delay in voluntary admissions turnover. The research questions are as follows:

- 1. What are the turnover intentions of employees in offices of admissions at American land-grant universities?
- 2. To what extent does employee intrinsic and extrinsic motivation correspond to turnover intentions as a measure of employee satisfaction?
- 3. To what extent does self-determination theory provide a theoretical explanation for professional employee satisfaction in university offices of admissions?
- 4. If self-determination theory is found to be applicable, how does selfdetermination theory describe university admissions employee satisfaction to the extent that satisfaction can be improved and turnover intentions can be reduced?

Definitions

The following definitions are provided to ensure uniformity and understanding of these terms throughout the study. Following a detailed literature review, the researcher developed all definitions not accompanied by a citation. These definitions are consistent with the definitions proposed in related studies on employee satisfaction and selfdetermination theory.

Admissions employees – Admissions employees are professional admissions staff at an institution of higher education involved in the recruitment of prospective students and the processing of applications for admissions. Clerical staff are not included.

Autonomy – Autonomy is the first human need described by self-determination theory and is the ability to be self-directing in professional decisions. "The need for autonomy is satisfied when, at the deepest levels of reflection, individuals believe that what they are doing is freely chosen and consistent with their core values" (Meyer & Maltin, 2010, p. 328).

Competence – Competence is the second human need described by self-determination theory and is the basic human need to achieve additional knowledge, task responsibility, and skill mastery. Competence in this study does not represent a particular set of skills or knowledge attainment; rather, competence represents the continued opportunity for professional growth and development.

Employee retention – Employee retention is an employer's ability to retain employees within the organization instead of those employees choosing to leave to work for another organization.

Entry-level admissions employees – Admissions employees in entry-level positions are most frequently recruitment officers responsible for recruiting prospective students to attend the institution they represent. Most entry-level admissions employees travel extensively, have low salaries, and staying in their positions for less than three years. Extrinsic motivation – Extrinsic motivation is human motivation that stems from external motivators such as wealth, prestige, or recognition and is not directly related to inner values and beliefs.

Interrole conflict – Interrole conflict is the broad term used to describe incompatible and overlapping responsibilities within one's life. Work-family conflict is a frequently cited interrole conflict during which work responsibilities limit or negatively impact one's ability to meet familial obligations.

Intrinsic motivation – Intrinsic motivation is human motivation that stems from one's inner values and beliefs.

Involuntary employee turnover – Involuntary employee turnover occurs when an organization decides to terminate an employee irrespective of the employee's personal desire to remain with the organization.

Land-grant institution of higher education – Land-grant institutions of higher education are colleges and universities that were established as a direct result of the Morrill Acts of 1862 and 1890. Land-grant institutions are found in each state and territory of the United States of America. The land-grant institutions considered in this study exclude tribal colleges and institutions in United States territories.

Office of admissions – An office of admissions is traditionally the office most responsible for the recruitment of prospective students at institutions of higher education.

Typically, offices of admissions include recruiters, application processors, and technical specialists.

Relatedness – Relatedness is the third human need described by self-determination theory and is the connection between people and purposes. A person can experience relatedness when interacting with coworkers and can also feel relatedness when personal values and goals are aligned with organizational values and goals.

Self-determination theory (SDT) – Pioneered by Richard Ryan and Edward Deci in the 1980s, self-determination theory describes the basic human needs of autonomy, competence, and relatedness. Self-determination theory has been shown in many social sectors to describe employee satisfaction, performance, level of engagement, and turnover intentions.

Turnover intention – Turnover intention is an employee's preconceived belief that he or she would like to remain with or leave an organization. If an employee has low turnover intentions, the employee is not likely to voluntarily leave the organization. High turnover intention, however, is an indication the employee will likely leave the organization.

Voluntary employee turnover – Voluntary employee turnover occurs when an employee chooses to leave an organization. The decision to leave the organization is controlled by the employee and results in an organizational decision to terminate the employee.

Assumptions

- There is high voluntary turnover in offices of admissions.
- Office of admissions employees in land-grant institutions are representative of most offices of admissions in the United States.

- Participants will be willing to complete a questionnaire regarding their satisfaction in working in an office of admissions and their turnover intentions.
- Self-determination theory may be applicable to a university office of admissions setting.

Limitations

- The list of potential respondents from land-grant university offices of admissions will likely be inaccurate and incomplete due to high turnover.
- The rate of return on questionnaires will likely be low because of busy recruitment travel schedules.
- Respondents may respond to questions quickly and with little thought because of their schedules.

Delimitations

- The subjects of the study are office of admissions employees from United States land-grant universities.
- The list of land-grant universities for the study does not include tribal or territorial institutions.
- Self-determination theory has been selected as the theory to be applied in an office of admissions setting. Other relevant theories will not be considered.

Biases

As a current office of admissions employee, I may be biased in my perceptions of admissions employee satisfaction, engagement, and potential turnover intentions. As such, the methodology of this study was determined and questionnaires were selected to reduce my personal input. I readily admit to the belief that admissions employees are not treated as well as they could be to the detriment of satisfaction, performance, and employment longevity, but this belief is founded upon my personal observations of offices of admissions from Idaho higher education institutions. The use of selfdetermination theory and its accompanying questionnaires aids in mitigating the impact of these biases to the study.

Methodology

The target population is admissions employees of land-grant universities in the United States. Land-grant universities have a similar institutional context, closely related missions, and similar history, making this target population desirable for statistical analysis despite disparate locations across the country (Lucas, 1994, pp. 153). For the purposes of this study, tribal land-grant colleges and universities will not be considered.

Delimitations of the study arise primarily from the large sample size. A respondent pool of prospective participants from all 50 states lends itself to a quantitative study. A comprehensive qualitative study involving that many respondents would quickly exceed the time constraints of a dissertation. Additionally, a representative sample of respondents could be interviewed in a qualitative analysis, but the information provided, while interesting, would largely be beyond the scope of the current study, which is to determine if self-determination theory is applicable in an office of admissions setting. Once the relationship between self-determination theory and office of admission employee satisfaction is determined by this study, additional grounded theory studies can be conducted using mixed-methods approaches to expand upon the use of selfdetermination theory as an explanation for high levels of turnover intention.

Further evidence for the need to limit the qualitative component of the present study is the professional lifestyle of prospective respondents. Admissions employees frequently have business travel that removes them from their home offices for weeks at a time. Copious amounts of work are conducted from the drivers' seats of rental cars while employees wait for recruitment events to begin. Identifying times for interviews or including mandatory open-ended questions would lengthen the data collection process to a degree that would not be fit for the schedules of most admissions employees and decrease response rates. Data collection via online surveys was compatible with nontraditional work schedules of potential respondents.

The primary challenge of the current study was the identification of employees from land-grant university offices of admissions. This study is broad in scope but narrow in focus. Professional staff from land-grant offices of admissions and the directors of those offices were the only people considered as prospective respondents. While certain aspects of this research may be generalizable to other entry-level positions in higher education, such as positions within student affairs, financial aid, or housing, the scope of this research is not intended to be generalizable beyond admissions officers from landgrant universities.

Research for the current study followed a two-tier approach with the first being quantitative and deductive and the second, more limited tier being inductive and exploratory. The rationale for the dominant deductive tier assuming a purely quantitative approach is simply an issue of this study's size and scope. The general information provided through quantitative means sufficiently reveals the overall state of employee satisfaction and intention to leave the field of admissions. Therefore, a quantitative

approach was employed to solicit data and seek answers to the present study's research questions in the first tier.

The second tier of research included the application of self-determination theory to offices of admissions. Once the relationship between self-determination theory was found to be applicable to offices of admissions, then the emphases on employee autonomy, competence, and relatedness provided immediate suggestions for improving employee satisfaction and delaying turnover in offices of admissions. With the foundation created by the present study, future studies can be conducted to derive an inductive grounded theory of admissions employee satisfaction. More about the research approach and methodology of this study will be discussed in Chapter III.

Significance of the Study

Every article about voluntary turnover cited in this study was written under the belief or came to the conclusion that voluntary employee turnover can be reduced. The reduction of voluntary employee turnover reduces the costs associated with employees leaving the organization and reduces or delays many of the costs of hiring and training new employees. The organization that retains more hard-to-replace, high-performance employees can expect to be more efficient, productive, consistent, and effective than an organization that routinely and prematurely loses employees to voluntary turnover. The present study is significant as it has the potential to increase the satisfaction of office of admissions employees and promote better performance during the first years of a career in higher education administration. The lives of admissions employees, their families, and their coworkers can be improved. Moreover, the better admissions officers perform their assigned duties, the more students will enroll in college and pursue postsecondary

education. The mental, physical, emotional, economic, and societal benefits of postsecondary education are well documented and will not be elaborated upon here, but the successful delivery of these benefits to first-generation and underprivileged prospective college students who are most likely to be impacted by the attention of admissions officers can be improved by admissions employees who find greater satisfaction and pride in their work as they remain with offices of admissions for longer periods of time.

Study Organization

This study is divided into five chapters explaining each portion of the research. Chapter I is a general overview of the study. Chapter II details the known literature on the subject of employee turnover and contributions made by self-determination theory researchers. Chapter III is a detailed explanation of research methods and data collection. Chapter IV is a report on the data analysis. Chapter V provides a summary and conclusion on the study findings.

CHAPTER II

LITERATURE REVIEW

Voluntary employee turnover research has merited substantial attention from researchers in the past 30 years. This literature review focuses on some of the highlights of recent turnover research. The review is primarily research from the last 10 years and includes older studies only if they have been routinely referenced by recent researchers as being foundational to the study of employee satisfaction and self-determination theory. Turnover issues pertinent to the present study include costs, potential causes, workplace stress, psychological resilience, interrole conflict including work-family conflict, and resolving these issues to improve rates of turnover. After the overview of general turnover research, self-determination theory research will be expounded upon in detail. Self-determination research includes studies on intrinsic/extrinsic motivation, the need for autonomy, the need for competency, and the need for relatedness. The literature review has generated several hypotheses relevant to this study's research questions, and the hypotheses will be placed in the sections from which they were generated.

Employee Turnover

Holtom, Mitchell, Lee, and Eberly (2008) provided an overview of past turnover research and discussed the importance of attracting and retaining employees. "From a managerial perspective, the attraction and retention of high-quality employees is more important today than ever before. . . . In response, managers have implemented human resources policies and practices to actively reduce avoidable and undesirable turnover" (p. 232). Subsequent scholarly study of the past decade on human resource programs and the reduction of turnover has centered on four new trends that differ from turnover

research of the past. For example, instead of focusing research on the traditional subject of employee personality traits that might lead to voluntary turnover, researchers have begun to analyze behavioral precursors to turnover, such as lateness, absenteeism, and workplace motivation. This distinction between personal traits and behavioral actions may seem slight, but the difference between a person's characteristics leading to turnover and his or her demonstrated behavior in the workplace is a big shift in thinking. An "increased emphasis on contextual variables with an emphasis on interpersonal relationships" like leader-member exchange and office citizenship behaviors is another major trend in turnover research (p. 232). In short, turnover research of the last decade has become more compartmentalized into the various components of turnover research instead of the broad swathe of personalities and work conditions that result in voluntary employee turnover.

Costs of Turnover. Shaw, Johnson, and Lockhart (2005) considered organizational performance losses at JC Penny retail stores as a function of employee turnover. The authors found that voluntary employee turnover hurt organizational performance by damaging the social fabric and reducing the overall social capital of an organization. In fact, voluntary employee turnover was found to be the catalyst that can lead to greater social costs than previously understood. Shaw, Johnson, and Lockhart linked turnover to a decrease in social capital that can cause problems of its own. "Social capital losses explain variation in store performance that exceeds variation attributable to turnover and in-role performance losses" (p. 603). Therefore, low employee satisfaction and voluntary employee turnover have been shown to be the first links in a chain reaction of negative organizational effects that impact performance.

Shaw, Gupta, and Delery (2005) came to the conclusion that the negative costs of turnover do taper off after a critical mass of turnover is reached. Turnover-induced performance losses stop increasing after a certain rate of voluntary turnover is reached. They found that "voluntary turnover was significantly related to workforce performance levels, but not in a simple linear fashion" (p. 63). Specifically, the costs of voluntary turnover in terms of performance and profits did not continue to increase as more and more employees chose to leave an organization. The negative consequences of such rapid turnover "were attenuated as voluntary turnover rates rose" (p. 63). The relationship of unit-level employee performance and rates of voluntary turnover was found to be parabolic and not linear. There comes a point when more employees leaving an organization within a certain time period ceases to negatively impact organizational performance, but reaching that point of turnover-induced performance numbness can be very costly.

Kacmar, Andrews, Van Rooy, Steilberg, and Cerrone (2006) elaborated on the costs of voluntary employee turnover. They analyzed the effects of turnover on performance, using a sample of 262 Burger King Restaurants. In terms of customer wait time, crew efficiency, number of sales, and, ultimately, profit, turnover was shown to be the mediating factor leading to statistically significant decreases in efficiency, sales, and profits. When the employee leaving the organization is at the manager level, the losses in efficiency, sales, and profit are even greater. The authors made the observation, "We found that a stable workforce allowed units to be efficient, and that efficiency led to stronger performance. In food services, an industry characterized by relatively standardized operations, a stable workforce makes a firm more competitive" (p. 141).

The benefits of a stable workforce can be measured and have a direct impact on the workforce's competitive advantage. These results can reasonably be magnified when applied to more complicated workplaces such as a university office of admissions.

Holtom et al. (2008) also explained the costs associated with turnover in great detail. First, voluntary turnover can have a positive effect on organizational performance in situations when poorly performing employees choose to leave, but recent research has determined that "people who are more intelligent or who perform better in their jobs . . . are more likely to leave" than are their less capable coworkers (pp. 235-236). Consequently, the negative costs of voluntary turnover have been shown to be much more probable than the positive outcomes of a poorly performing employee leaving the organization.

Negative costs of turnover are also experienced by the individual leaving the organization. Holtom et al. (2008) considered the costs of turnover on the exiting employee:

Employee turnover has important implications for the individual leaving the job. Significant energy is expended on finding new jobs, and adjusting to new situations. In addition, giving up known routines and interpersonal connections at one's previous place of employment can be very stressful. (p. 233)

Other costs associated with voluntary turnover, as cited by Holtom et al. (2008), include those associated with "recruitment, selection, temporary staffing and training" (p. 236). Also of importance to the organization that loses a high-performing employee are the costs "from losses of customer service continuity or critical implicit knowledge" that can "vary from [costing] a few thousand dollars to more than two times the person's

salary" (p. 236). The authors concluded that these monetary, social, and skill losses can be much more costly than some organizational leaders recognize.

Voluntary turnover has been shown to be directly associated with organizational costs. Organizational costs include decreased profits, employee morale, and customer service. Voluntary turnover has also been shown to be contagious, and the loss of some employees can start a chain-reaction throughout the organization, magnifying the costs of turnover. Even though the turnover contagion does appear to have limits, the negative impact of several employees leaving an organization has been shown to be costly. Furthermore, high quality employees have been shown to be more likely to leave an organization in pursuit of better employment if their needs are not being met.

Causes of Turnover. Voluntary turnover research has evolved over the past 10 years, and the costs of turnover have been analyzed and estimated in greater precision than in previous decades. Research conducted on the causes of turnover has also advanced. The causes of voluntary turnover have been expanded to the areas of generational differences, precursors to turnover, interrole conflict, economic considerations, turnover contagion among coworkers, organizational changes, changes in organizational commitment, stress, psychological well-being, employee burnout, and work-family conflict as a specific type of interrole conflict. Each cause of voluntary employee turnover and associated research will be elaborated upon in the order listed.

Cennamo and Gardner (2008) discussed generational differences that lead to turnover. They investigated the "differences between three generational groups currently in the workforce (Baby Boomers, Generation X, and Generation Y), [*sic*] in work values, job satisfaction, affective organisational commitment and intentions to leave" (p. 891).

These differences are especially important in an office of admissions where it is typical to have members of all generational groups in a single office. Interestingly, "where individual and organisational values showed poor fit there were reduced job satisfaction and organisational commitment, and increased intentions to turnover across all three generational groups (p. 891). Therefore, generational distinctions tend to dissolve when the key issues of turnover are considered across generational boundaries. While each generation had statistically significant differences in work values, job satisfaction, and organizational commitment, generational difference in the factors did not lead to voluntary employee turnover. The same factors that drive one generation to leave an organization will drive another generation to leave.

There exist many precursors to voluntary turnover aside from generational differences. Harrison, Newman, and Roth (2006) studied several of the most common precursors to voluntary turnover. The authors compared the predictive power of traditional precursors to turnover (lateness and absenteeism) to that of job satisfaction and organizational commitment to determine which factors were the most reliable precursors to turnover. "In view of the current work, [the authors] forward that, along with general cognitive ability, a sound measurement of overall job attitude is one of the most useful pieces of information an organization can have about its employees" (pp. 320-321) as it "provides [an] increasingly powerful prediction of more integrative behavioral criteria (focal performance, contextual performance, lateness, absence, and turnover combined)" (p. 305). Thus, an employee's job attitude combined with her or his cognitive ability has greater turnover predictability than the broader behavioral criteria of lateness and absenteeism often cited as the primary precursors to turnover.

Harrison, Newman, and Roth's (2006) study also provided insight into additional precursors to turnover, such as interpersonal ties. Perhaps the most important precursor beyond job attitude is intra-office relationships. There is "evidence that workers with fewer interpersonal ties were more likely to quit. Hence, contextual performance promotes the formal and informal connections that reduce an employee's likelihood of quitting" (p. 307). The connections between employees lead to greater job embeddedness, which decreases the likelihood of voluntary turnover and can improve an employee's attitude.

In their conclusion, Harrison, Newman, and Roth (2006) summarized their study of precursors to voluntary turnover by suggesting that voluntary turnover can be predicted by gauging an employee's job attitude as positive or negative and gauging the quality of relationships with coworkers before there is an established pattern of lateness or absenteeism. "A general, positive, job attitude leads individuals to contribute rather than withhold desirable inputs from their work roles" (p. 320). Lateness and absenteeism as behavioral precursors to turnover actually serve as a release valve for the negative emotions experienced in the months and years preceding voluntary turnover and can lengthen the time an employee remains with an organization. Preventative measures in the form of "morale-building or relationship-enhancing actions" can be employed by the host organization to reduce turnover by increasing job embeddedness (p. 307).

In another study of the precursors to voluntary turnover, Hom and Kinicki (2001) suggested interrole conflict and economic considerations as means by which employers might gauge employee intentions to leave. Interrole conflict results from the various roles of an employee's life intermingling one with another in a detrimental way, leading to

personal and professional dissatisfaction. For example, interrole conflict can be said to occur when an employee's professional life spills over into other personal realms of responsibility, such as family life, religious responsibilities, and social obligations.

Hom and Kinicki suggested that interrole conflict constructively interferes with the economy because of employee turnover. The authors questioned whether a favorable job market can lead to the prevalence of more desirable job opportunities and also encourage professional job dissatisfaction among those experiencing interrole conflict. To test this hypothesis, Hom and Kinicki conducted a national survey among retail store personnel. They found interrole conflict and corresponding job avoidance to be indirectly related to voluntary turnover and the national unemployment rate to be directly related to employees leaving retail stores. "Though not necessarily disliking their job content, leavers experiencing interrole conflict are conceivably unhappy with work schedules or business travel, which prevent them from satisfying outside diversions or duties" (p. 20). This interrole conflict can lead to discontent at work and the traditional job avoidance behaviors also cited by Harrison, Newman, and Roth (2006). Unlike Harrison, Newman, and Roth, however, Hom and Kinicki discovered "job avoidance facilitates rather than dissipates the exit inducing effects of poor attitudes" (p. 19). Good economic conditions were also shown to exacerbate voluntary turnover by promoting external job prospects to employees dissatisfied with interrole conflicts. The authors proposed "nontraditional work schedules or arrangements (flextime, part-time work) for valued employees interested in nondomestic roles not just for employees having household obligations" (p. 19). Interrole conflict, the economy, and their combined impact should also be considered

viable precursors to employee turnover and are components of overall employee satisfaction.

The precursors and other potential causes of voluntary employee turnover already mentioned have been shown by Felps et al. (2009) to be contagious among coworkers. The authors' findings are pertinent to the current study:

The central theoretical claim made here is that when an employee's coworker engages in behaviors antecedent to leaving a job, these activities sometimes spill over onto others in such a way that the affected others are more likely to leave. Put more precisely, a coworker's search for job alternatives or actual quitting can spread, through a process of social contagion, to affect another employee's quitting behavior. Like the contagion of illness, the process involves the transmission of something from one individual to another. . . We believe that the primary mechanism in turnover contagion is people's pervasive tendency to compare themselves to others. (p. 546)

The results of research performed by Felps et al. (2009) indicate a linkage between precursors of turnover and an organization's social environment. Job attitudes and satisfaction, embeddedness, lateness, absenteeism, interrole conflict, and economic prospects are not only important to individuals but to larger groups as well. Peer turnover influence underscores the need to hire people conducive to office culture and organizational values. Notably, "personality variables such as conscientiousness, extraversion, and agreeableness have demonstrated a strong, positive relationship with on-the-job embeddedness. . . . Thus, reducing voluntary turnover through selection is one clearly actionable approach" (p. 558). Further attempts to improve group job

embeddedness can include off-the-job opportunities in local communities that will make leaving the organization more difficult. Regardless of the approach, understanding the social context of voluntary turnover is a critical finding of Felps et al.

Another cause of turnover that has been shown to be socially contagious was discovered by Rafferty and Griffin (2006). They analyzed how perceptions of organizational change impact turnover intentions. Their study provided three categories for change that are applicable to the current study. The three perceptions of change are "the frequency of change, the planning involved in change, and the impact of change" (p. 1159). A high frequency of change can lead to employee whiplash that decreases worker satisfaction and worker performance. If employees are not involved in the planning process of change, they may feel less autonomous in their positions and less able to make meaningful professional contributions. While some changes can be frequent and other changes have to occur without any employee input or planning, other changes can simply have a large impact that drives employees away from the organization. Rafferty and Griffin explained that perceptions of change are greatly influenced by position seniority within the organization, placing those in the lowest levels of authority in the most susceptible positions in terms of perceiving change as negative (p. 1160). Consequently, the lower the employee position on the organizational chart, the more likely the employee is to leave the organization based on organizational change. More broadly, the contagion of turnover intention is influenced by organizational changes that further decrease job embeddedness.

As job embeddedness and organizational commitment have been shown to reduce the negative turnover effects of most causes of voluntary turnover, Bentein, Vandenberg,

Vandenberge, and Stinghamber (2005) studied organizational commitment changes over time and their relationship to voluntary turnover. They placed various types of organizational commitment into categories. Affective commitment is the emotional connection between an employee and an organization or an employer. Normative commitment is the employee's personal belief that he or she should stay with an organization. Continuance commitment addresses the employee's perceptions of what he or she would be leaving should he or she leave the organization. The authors sought to understand how these types of organizational commitment change over time. Specifically, their results indicate the continued importance of combatting turnover intentions through organizational commitment interventions over time:

Most important, this study indicates that no matter the [organizational commitment at the outset of the study], the average individual experienced an increase in the intention to leave over the 6 months covered by data collection. The current findings suggest, therefore, that reducing turnover must be a sustained effort over time. Our study shows that a partial reduction in turnover might be achieved by a one-time elevation of initial levels in [affective commitment] and [normative commitment], thereby causing a one-time reduction of the level of [turnover intention]. (pp. 478-479)

This evolution of employee commitment to organizations is an important voluntary turnover consideration. Addressing causes of turnover through reactions to the precursors of voluntary turnover should be a sustained effort over time to yield results as the employee ages with the organization.

Furthermore, Hom, Mitchell, Lee, and Griffeth (2012) provided definitions for different types of stayers and leavers within an organization that can be beneficial in discussing levels of organizational commitment. Stayers and leavers are divided into two groups. Stayers can be enthusiastic stayers or reluctant stayers because they would prefer to leave if possible. Leavers can be enthusiastic leavers who strongly desire to leave or reluctant leavers who would otherwise stay if life situations were different. Hom, Mitchell, Lee, and Griffeth also stressed that these states of employee commitment can change over time: "enthusiastic leavers can also become enthusiastic stayers" (p. 847).

The causes of turnover are varied among employees and are not static within individual employees over time, but several causes of turnover have been identified in the research cited above. Factors leading to employee turnover may include interrole conflict, organizational changes, turnover contagion among coworkers, and individual preferences and tendencies that result in people being stayers or leavers. While the causes of turnover can vary from employee to employee, these studies indicate patterns to voluntary turnover, leading to measurable causes.

Workplace Stress and Psychological Resiliency. Precursors to, causes of, and possible remedies for voluntary employee turnover to this point in the literature review have largely failed to address other commonly cited reasons for leaving organizations. Workplace stress and psychological resiliency are also possible causes of employee turnover. Lazarus (1966) explained that stress occurs when an individual perceives that the demands of an external situation are beyond his or her perceived "ability to cope" with them (pp. 143-144). In more recent years, the pervasive nature of workplace stress has become a more dominant organizational consideration as a result of technological

advances, misuse of managerial authority, an expectation of increased access to employees after hours, and the geographic spread of businesses, necessitating increased travel. "The American Psychological Association (APA) reports that job stress costs U.S. companies about \$300 billion a year in absenteeism, productivity loss, turnover, and health care costs" (Grawitch, Trares, and Kohler, 2007, pp. 275). Indeed, workplace stress is a key consideration when studying employee satisfaction and voluntary employee turnover.

Grawitch, Trares, and Kohler (2007) and Avey, Luthans, and Jensen (2009) studied employee stress, health, and well-being in relation to job satisfaction and turnover intentions. Grawitch, Trares, and Kohler (2007) studied psychological resiliency, employee well-being, and their linkages to decreased performance and eventual turnover. The authors found that employee perceptions of health and well-being, including mental and emotional health, are important factors in stress, absenteeism, employee outcomes, and voluntary turnover. The authors argued that employee perceptions of their health and well-being are interrelated and include five factors: employee involvement, employee growth and development, employee recognition, work-life balance, and employee health and safety (p. 279). Employee involvement proved to be the biggest indicator in employee perception of well-being in their study. "Perhaps most importantly, all five of the healthy workplace satisfaction variables demonstrated significant predictive validity [of emotional exhaustion, mental well-being, affective commitment, and turnover intention]" (p. 289).

Avey, Luthans, and Jensen (2009) studied the pervasive nature of workplace stress. "The World Health Organization has declared occupational stress to be a

worldwide epidemic. Certainly the impact of an increasingly pressured work environment is evident throughout American industry" (p. 677). Subsequent studies cited by the authors on occupational stress following the World Health Organization's declaration explained common terminology to denote different facets of stress and employee wellbeing. Psychological Capacity (PsyCap) refers to a person's predisposition to "efficacy, optimism, hope, and resilience" and is a compilation of the most dominant stress terminology (p. 678). The authors referenced studies linking workplace stress and decreased employee performance that, in many instances, leads to voluntary turnover. Avey, Luthans, and Jensen hypothesized and confirmed the hypothesis that organizations can effectively develop and improve the PsyCap of employees to make employees more resilient to workplace stress. Moreover, their study confirmed the already discussed results of Harrison, Newman, and Roth (2006) that a positive job attitude is a vital factor in perceptions of workplace stress:

As hypothesized, this study found a significant negative relationship between the newly recognized PsyCap of employees and their perceived symptoms of job stress. This finding contributes to the understanding that today's employees need to draw from heretofore unrecognized and largely untapped positive resources, such as psychological capital, to help them combat the dysfunctional effects of stress, such as turnover. (p. 686)

To facilitate employees in tapping into positive resources and improving PsyCap, organizations can assume several approaches. Workplace stress programs can improve positivity and PsyCap by assisting employees in establishing social support and relationships with coworkers, offering wellness programs for physical and mental health,

and allowing greater schedule flexibility. Moreover, organizations can utilize what Avey, Luthans, and Jensen (2009) term to be "cognitive-behavioral approaches, which seek to change employee cognitions and reinforce active coping skills" to "reduce anxiety symptoms, [enhance] coping strategies, and [improve] the perceived quality of work life" (p. 687). Summarily, the study by Avey, Luthans, and Jensen revealed the distinct relationship between an employee's PsyCap and turnover intentions and an organization's ability to effectively improve an employee's PsyCap through targeted human resource programs. These programs can reduce turnover through improving perceptions of workplace stress. "By fostering psychological capital, [human resource] managers may provide a new human resource development approach to help employees build the critical resources needed in today's stress-filled workplace" (p. 680).

In discussions of employee well-being and psychological resiliency, another commonly used term is "burnout." "Currently, burnout is a well-established academic subject on which thousands of publications have appeared and about which numerous congresses and symposia are held. We estimate that currently over 6,000 books, chapters, dissertations, and journal articles have been published on burnout" (Schaufeli, Leiter, and Maslach, 2009, p. 204). After estimating the numerous studies conducted on employee burnout, Schaufeli, Leiter, and Maslach (2009) provided a succinct observation:

[It] can be concluded that developments in science (the recent emergence of positive psychology) and organizations (increased attention for positive organizational behavior of employees) strengthen the positive turn in burnout research that is the rephrasing of burnout as an erosion of engagement. Seen from this perspective, the future of burnout lies in the realization that it constitutes the

negative pole of a continuum of employee well-being, of which work engagement constitutes the opposite positive pole. (p. 216)

An individual's psychological resiliency can play a significant role in voluntary turnover intentions. Depending on physiological and emotional health and on occupational stressors, employee burnout could potentially impact any employee. Employers can reduce the potential for burnout by fostering the complete physiological health of employees. Furthermore, employers can allow for flexibility within the workplace to reduce stress.

Work-Family Conflict. The Hom and Kinicki (2001) study already mentioned introduced the concept of interrole conflict. Hom and Kinicki claimed: "Though not necessarily disliking their job content, leavers experiencing interrole conflict are conceivably unhappy with work schedules or business travel, which prevent them from satisfying outside diversions or duties" (p. 20). A study conducted by Ajuha et al. (2007) on a specific type of interrole conflict, work-family conflict, caused by extensive business travel, workplace stress, and employee commitment burnout is particularly applicable to the current study of turnover within an office of admissions. Typically, a professional employee within an office of admissions is required to travel for extended periods of time, accumulates large quantities of emails and other office work while on the road, and experiences strong decreases in organizational commitment that lead to burnout. The study conducted by Ajuha et al. "examines the antecedents of turnover intention among information technology road warriors. Road warriors are [information technology] professionals who spend most of their workweek away from home at a client site" (p. 1).

Ajuha et al. (2007) highlighted three components of an information technology road warrior's job responsibilities that have been shown to greatly increase an employee's turnover intentions – work-family conflict, loss of organizational commitment, and significant stress. Work-family conflict arises from frequently being away from home. "Models of [work-family conflict] suggest that conflict arises when demands of participation in one domain of life are incompatible with demands of participation in another, and that this conflict can affect the quality of both work and family life" (p. 4). Other studies have proposed that travel, including commuting, is "the single most stressful aspect of a worker's job because it [leads] to family tension" (p. 5). Similarly, the authors found that work-family conflict was a significant contributor to high rates of turnover among information technology road warriors (p. 6).

A second factor resulting in higher rates of road warrior turnover is the loss of organizational commitment due to lack of direct and frequent contact with the employing organization and coworkers. Organizational commitment and employee social relationships have already been shown in this literature review to directly impact turnover intentions, and frequent time away from the host organization as a road warrior decreases the social forces leading to increased job embeddedness.

[Road warriors] interact more frequently with clients than with members of their own organizations and may, in time, identify less with their employer, decreasing organizational commitment. Some [road warrior] interviewees were frustrated at not feeling connected with the company because of physical distance from both coworkers and supervisors. Their feelings of being alone were not cries for more supervision, as they valued their autonomy. Rather, [road warriors] wanted to

keep in touch with what their peers were doing and where the organization was headed in order to better understand how to move forward in the company. Not feeling fully connected with the company could lead to low commitment, which could affect turnover intention. In fact, organizational commitment has been found to be an influential and consistent predictor of turnover intention in both informational technology and other settings. (p. 4)

The study by Ajuha et al. (2007) demonstrated that increasing levels of workfamily conflict and decreasing levels of organizational connection led to higher stress in informational technology road warriors. These factors make road warriors abnormally prone to work exhaustion and burnout, but not all aspects of a road warrior's job responsibilities lend themselves to an ever-increasing desire to leave the organization. The authors make the claim that a road warrior's inherent job autonomy can also be a great source for positive psychological well-being and may potentially decrease rates of turnover if properly nurtured. Road warrior autonomy was demonstrated as "positively affecting organizational commitment and negatively affecting work exhaustion" (p. 10). Additionally, the authors proposed that road warrior managers and supervisors can foster autonomy and emphasize the temporary nature of their current situation to mitigate workfamily conflict, low organizational commitment and satisfaction, and job stress leading to turnover:

The findings of this study suggest that managers of [road warriors] should focus on providing autonomy to their workers and providing them enough flexibility to reduce the [work-family conflict] they feel as a result of the structure of their work situation. Managers should also be sure those who are promotable are told

they are promotable, as this may compensate for the [work-family conflict] stresses they experience as [road warriors], improve organizational commitment, and lower the risk of turnover. (p. 12)

The results of the study by Ajuha et al. (2007) are directly applicable to the present study of admissions officers, employee satisfaction, and turnover. Most admissions officers can easily be called "road warriors," and the authors' descriptions of their work environments and attitudes are almost identical to those of admissions officers. This study and findings, more than any other study cited in this literature review, is the most directly related to the current study. Their findings strongly suggest a linkage between high rates of turnover and factors that can be mitigated by conscious organizational intervention.

Remedies for Low Satisfaction and Turnover. This literature review has addressed some of the basic concepts of voluntary employee turnover, turnover costs, precursors, causes, and employee psychological factors related to voluntarily leaving an organization. Within the studies already reviewed, each researcher has made suggestions to reduce the likelihood of employees leaving an organization. These scholarly suggestions have shown promise in actually reducing turnover, but the targeted subject of voluntary turnover reduction efforts also deserves direction attention. Several studies have indicated that there are remedies for low satisfaction and turnover. These studies also attest to organizations having an obligation to delay or reduce voluntary employee turnover.

Chen, Yang, Shiau, and Wang (2006) used academic literature to identify themes over the course of time that might be useful in improving employee performance and

satisfaction in a higher education setting. Their study resulted in a single theme: organizations cannot take care of customers without first taking care of employees. For an organization to provide quality customer service, it must first address the needs of employees as the organization's internal customers. "As organisations focus on customer relationship management, they should not forget that employees are also internal customers. Organisations have satisfied their customers only if they have also satisfied their employees" (p. 497). Organizations should, therefore, seek the most productive, sustainable, and beneficial means available to help their employees be satisfied with their employment and perform at optimal levels, thus retaining them at higher rates.

Schaufeli, Bakker, and Van Rhenen (2009) studied practical remedies to the precursor symptoms of voluntary turnover. They found employee performance can improve and rates of turnover can decrease in an inversely proportional relationship. These researchers noticed that many turnover deterrent programs focus on only one or two precursors and do not take a holistic approach:

Virtually all models on occupational health and well-being focus exclusively on job stress and the resulting strain, thereby neglecting the potentially positive effects of work such as engagement. Hence . . . a balanced approach [is needed] that seeks to explain negative (burnout) as well as positive (work engagement) aspects of well-being by linking it to a strain and motivational process, respectively. (p. 893)

Schaufeli, Bakker, and Van Rhenen (2009) conducted a study of managers at a major telecom company to see if their holistic approach hypothesis positively impacted performance and engagement while simultaneously reducing turnover intentions. They

learned that as employee resources decreased and job or home demands increased, burnout was a common outcome. Perhaps more importantly, the authors discovered the provision of resources to be the key determinant in burnout. When "job resources increase, work engagement tends to increase as well, also after controlling for initial engagement" (p. 909). An increase in job resources stimulates an increase in work engagement, which can counteract an employee's descent towards voluntary turnover. Schaufeli, Bakker, and Van Rhenen ultimately suggested the opposite approach to those implemented by many human resources offices. Unlike many current approaches, the reduction of job demands and work stress is not the best route to voluntary turnover reduction. Instead, the authors' "results show that in order to increase engagement, reducing the exposure to job demands is not the best option; instead, the motivating potential of job resources should be exploited" (p. 913). Improving performance and decreasing turnover through increased employee engagement is not about altering job demands. On the contrary, requiring high levels of work and performance have been shown to be a precursor to turnover only when sufficient resources are not provided to successfully meet those responsibilities. Schaufeli, Bakker, and Van Rhenen (2009) demonstrated that rates of voluntary turnover can be reduced by providing adequate resources and by increasing employee engagement. Put simply, improving employee satisfaction is a primary way of reducing or delaying employee turnover.

Oldham and Hackman (2010) expanded on this notion of organizations consciously reducing rates of turnover when they provided an overview of job design research through history and identified job design characteristics through time. They "eventually settled on five 'core' job characteristics: skill variety, task identity, task

significance, autonomy, and job-based feedback" to classify the design of jobs (p. 463). Skill variety refers to the array of responsibilities and tasks that must be performed. Task identity is the ability to recognize the task in the greater perspective of the organization's processes and objectives. Task significance is simply the meaning given to the lives of others as a result of the particular job. The authors define autonomy as "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out" (p. 463). Job-based feedback is the recognition, correction, and information of task outcomes. Oldham and Hackman called these five job characteristics and their usefulness for evaluating job designs *Job Characteristic Theory*. Job Characteristic Theory is another clear indication that the proper actions of managers and organizations can simultaneously improve employee satisfaction and performance while decreasing voluntary turnover. The authors stated:

To summarize, the essence of [Job Characteristics Theory] is that the presence of certain attributes of jobs increases the probability that individuals will find the work meaningful, will experience responsibility for work outcomes, and will have trustworthy knowledge of the results of their work. People who have the knowledge and skill needed to perform the job well and who value opportunities for growth and learning will be internally motivated to perform such jobs, which over time should result in greater overall job satisfaction and higher quality work outcomes. (p. 465)

In summary, low employee satisfaction and voluntary turnover are costly for an organization because of loss of profits, efficiency, and morale and a contagion of

turnover among employees. Prior to an employee leaving an organization, several precursors to voluntary turnover exist, providing an advanced indication that the employee is losing satisfaction with employment. Causes of voluntary turnover are not generally attributable to generational differences and include employee attitude, relationships with coworkers, organizational changes, a decrease in organizational commitment, poor psychological resiliency and well-being, interrole conflicts, extended business travel, and eventual employee burnout. Researchers like Chen et al. (2006), Schaufeli, Bakker, and Van Rhenen (2009), and Oldham and Hackman (2010) affirm that it is possible to engage employees through meaningful work and the provision of necessary resources. Furthermore, it is possible to improve employee commitment and well-being while continually improving work performance over time through proper organizational attitudes and procedures. Finally, taking care of employees as internal customers is a fundamental responsibility of all organizations.

Based on the research cited here this author's personal experience working in and with offices of admissions, the conditions of an office of admissions are such that high levels of turnover intention could be expected. For example, the potential for extensive interrole conflict, extended business travel, lack of skill variety, and other factors have been shown in several of the studies cited above to result in high employee turnover intention. As a means of further explaining turnover intention as it relates to employee satisfaction, self-determination theory as a comprehensive employee engagement theory will be introduced and explained in the following section. Like the research just cited, self-determination theory rests on the premise that employee performance and

satisfaction can improve while voluntary turnover can decrease through adherence to the basic principles of need satisfaction and engagement.

Hypothesis 1: Offices of admissions employees have high levels of turnover intention.

Self-Determination Theory

Self-Determination Theory (SDT) is a theory of human satisfaction and motivation founded upon autonomy, competence, and relatedness. Developed by Edward Deci and Richard Ryan in 1985, SDT has afforded dozens of researchers the opportunity to study its application in diverse contexts over the past 30 years. The review of SDT will be divided into five categories: an SDT overview, SDT and motivation, SDT and autonomy, SDT and competence, and SDT and relatedness. An obvious gap in SDT research is its application to an office of admissions.

SDT Overview. Deci and Ryan (2008) reviewed the past two decades of research on SDT and provided an overview that deserves repeating in the current study. As the founders of SDT research, they have dedicated most of their professional careers since the early 1980s to studying human motivation as related to SDT. They suggest that human satisfaction and motivation are multi-faceted and are more dynamic than one might think. Deci and Ryan's decades of research and the SDT research of those like them have shown human motivation to consist of three types, which are influenced in type and strength of motivation by human needs for autonomy, competence, relatedness. Deci and Ryan consider human motivation to consist of three types including autonomous motivation, controlled motivation, and the absence of motivation or "amotivation." They suggest that these three types of motivation are "predictors of performance, relational, and well-being outcomes" (p. 182). Their study of motivation led

them to reflect on the "social conditions that enhance versus diminish these types of motivation" and eventually to "proposing and finding that the degrees to which basic psychological needs for autonomy, competence, and relatedness are supported versus thwarted" as the biggest causal factors affecting "both the type and strength of motivation" (p. 182). Human satisfaction, according to SDT, is the fulfilment of autonomy, competence, and relatedness. Autonomy is the ability to be self-directing. Competence means knowledge, task, and/or skill mastery. Relatedness is a connection with people and purposes that gives meaning to the task performed or the goal to achieve. SDT's relevance to the current study is the potential linkage between motivation, autonomy, competence, and relatedness to improved employee satisfaction and decreased employee turnover in an office of admissions.

Deci and Ryan (2008) described SDT's three types of motivation and their unique components. For example, autonomous motivation is intrinsic motivation and positive external motivation. Conversely, controlled motivation is composed of coerced, harsh, or even morally conflicting external motivation. These subtle distinctions are critical to understanding SDT. It is not merely the presence or absence of motivation that determines behavior and performance, but it is the source and strength of that motivation that really makes the difference between positive and negative results. Internal motivation is an alignment of one's inner desires with one's external responsibilities. External or controlled motivation can either be aligned with one's inner desires or be in opposition to those desires, but only alignment has been shown to produce optimal and sustainable results.

Autonomous motivation and controlled motivation lead to very different outcomes, with autonomous motivation tending to yield greater psychological health and more effective performance on heuristic types of activities. It also leads to greater long-term persistence, for example, maintained change toward healthier behaviors. (p. 183)

Ryan, Huta, and Deci (2006) further elaborated upon the advantages of intrinsic motivation versus controlled external motivation not in alignment with intrinsic goals and objectives. They conducted an experiment whereby the results indicated that the "attainment of intrinsic (relative to extrinsic) aspirations was again associated with higher well-being and more positive relationships" (p. 153). In contrast, people whose motivations were primarily extrinsic evidenced lower quality relationships than those more focused on intrinsically-driven motivation. Not only is performance enhanced with the proper motivational source, but the employees and the organization are healthier, too.

Meyer and Gagne (2008) verified the health advantages to psychological wellbeing attained by meeting a person's needs for autonomy, competence, and relatedness through intrinsic means. Perhaps more importantly, Meyer and Gagne provided strong evidence for "the universality of these needs, and research shows that lack of [employee] satisfaction leads to poorer performance and reduced physical and psychological wellbeing" (p. 61). The satisfaction of a person's needs for autonomy, competence, and relatedness preserves and fosters intrinsic motivation in certain settings. The increased motivation, enhanced performance, and greater satisfaction with life's circumstances do appear to be universally applicable and should apply to an office of admissions.

Vallerand, Pelletier, and Koestner (2008) systematically reviewed all available SDT articles since its original conception in the mid-1980s, looking for inconsistencies within study results. Despite the studies being differentiated by researcher, physical location, and time period, "findings in all articles underscore the fact that environments that provide autonomy support lead to qualitatively superior forms of motivation characterised by high levels of self-determination, in turn, are conducive to more adaptive cognitive, affective, and behavioural outcomes" (p. 257).

Another explanation for the increase in sustainable performance and satisfaction lies in the empowering nature of autonomy, competence, and relatedness fulfilment, as was illustrated by Seibert, Wang, and Courtright (2011). They studied empowerment, actions that increase it, and its impact on individuals and teams. While their terminology is different than that used in SDT, Seibert, Wang, and Courtright came to very similar results. For example, they found that psychological empowerment of individuals and teams is a result of fulfilling the needs of meaning, self-determination, competence, and impact. Meaning and impact correspond to SDT's notion of relatedness. Selfdetermination is another label for autonomy, and competence is the same in both constructs. Seibert, Wang, and Courtright called individual and team empowerment *Psychological Empowerment Theory*, but the contextual antecedents, individual characteristics, attitudinal consequences, and behavioral consequences are all nearly identical to SDT. Changes in motivational orientation also proved to be dependent upon environmental factors that either nourished or starved one type of motivation or another across all studies. The consistency of SDT findings across studies and across time cannot be understated.

Hypothesis 2: Turnover intention is directly related to the realization or neglect of the basic needs of autonomy, competence, and relatedness.

SDT and Motivation. Since intrinsic motivation and human satisfaction are the end objectives of SDT, many studies have been conducted to verify and expand upon the hypotheses of Deci and Ryan. Gagne and Deci (2005) researched a hypothesis directly related to motivation called the "Additivity Hypothesis." They studied whether or not one type of motivation, such as controlled motivation, can add to another type of motivation, like intrinsic motivation. The results were mixed. "[T]angible extrinsic rewards undermined intrinsic motivation whereas verbal rewards enhanced it, thus implying that intrinsic and extrinsic motivation can be both positively and negatively interactive rather than additive" (p. 332).

External tangible rewards that are perceived as reducing autonomy decrease intrinsic motivation and can even shift one's natural motivational state into more of an extrinsic than intrinsic state. Micromanaging, deadlines, evaluations, and even financial incentives decrease perceptions of autonomy and harm intrinsic motivation. Furthermore, these tangible extrinsic motivators of competition and evaluation "can be detrimental to outcomes such as creativity, cognitive flexibility, and problem solving which have been found to be associated with intrinsic motivation" (p. 334). External motivators that preserve or increase autonomy, such as inclusion in office decisions or providing options for task completion, increase intrinsic motivation at the expense of extrinsic motivation (p. 332).

Additional findings also emphasized the importance of "interesting, complex, and important jobs" to performance, job-satisfaction, and well-being, while "mundane and

boring tasks . . . may have a short-term performance advantage but [lead] to poorer adjustment and well-being" (p. 352). Hence, a challenging work environment that nurtures autonomy, competence, and relatedness is more likely to produce high performing, committed, satisfied, and sustainable employees and organizations.

Perry, Mesc, and Paarlberg (2006) confirmed that non-monetary forms of employee motivation can be highly effective for improving employee satisfaction, performance, and the affective commitment of employees. Their study was confined to the public sector, where financial incentives are difficult to bestow on employees as controlled motivation. The results clearly indicated the efficacy of non-monetary forms of employee motivation that coincide with SDT's claims that autonomy, competence, and relatedness nurture intrinsic motivation. The authors also found that job design, employee participation, enhanced decision-making opportunities, and certain types of goal setting to be very effective methods for improving job performance.

The question of which types of goal setting practices are conducive to intrinsic versus extrinsic motivation propelled Vansteenkiste, Lens, and Deci (2006) to conduct a study in which they used an SDT lens to view intrinsic goal-setting practices in an academic setting and to gauge their impact on learning. They found that intrinsic goal setting can lead to significantly higher production and performance than extrinsic goal setting or not setting goals. The authors listed and discussed intrinsic versus extrinsic goals:

Within SDT, intrinsic goals, such as community contribution, health, personal growth, and affiliation, are differentiated from extrinsic goals, such as fame, financial success, and physical appearance. Consistent with organismic

theorizing, the former goals are labeled intrinsic because they are satisfying in their own right and they provide direct satisfaction of basic psychological needs When people are focused on extrinsic goals, they tend to be more oriented toward interpersonal comparisons, contingent approval, and acquiring external signs of self-worth. Hence, extrinsic goal pursuits tend to be associated with poorer well-being and less optimal functioning than are intrinsic goal pursuits Consistent with these claims, several correlational studies have provided evidence that when people report strong aspirations for extrinsic, relative to intrinsic, life goals, they tend also to have lower life satisfaction, selfesteem, and self-actualization; higher depression and anxiety; poorer relationship quality; less cooperative behavior; and greater prejudice and social-dominant attitudes. (pp. 22-23)

Therefore, intrinsic goals are more effective and beneficial than extrinsic goals because the process of intrinsic goal setting involves greater discussion, involvement, and rational explanation than does the extrinsic goal-setting process. Intrinsic goal setting nurtures autonomy, improves competence, and gives the participants a greater sense of purpose and meaning behind the goals. Goal setting serves as nutriment to psychological well-being and aligns personal values and ideals with autonomous goals. The external goals then become intrinsic to the participants and goal setters.

Comparison of intrinsic and extrinsic orientations and perceptions of fulfillment were also analyzed by Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte, and Van den Broeck (2007), who came to conclusions similar to those of Gagne and Deci (2005) but expanded the results to include effects beyond the workplace. People whose intrinsic

motivations have been better nurtured through autonomy, competence, and relatedness show much better general mental health than those who hold an extrinsic value orientation, regardless of location of life role. The authors also "found that holding an extrinsic, relative to an intrinsic, work value orientation was detrimental to employees" job outcomes because these orientations thwarted the satisfaction of the basic psychological needs for autonomy, competence and relatedness at work" (p. 251).

Another important finding of their study was the incorrect assumption that a higher income mitigates a decrease in intrinsic motivation but that "income level did not moderate" the relations between extrinsic motivation and poorer mental health and satisfaction. For purposes of the present study, this finding also means that financial considerations, beyond basic need satisfaction, may not improve employee satisfaction and may not decrease voluntary turnover (p. 268). Essentially the authors ultimately conclude "after partialling out overall work value orientation, holding an extrinsic work value orientation negatively predicted dedication, job vitality and job satisfaction, and positively predicted short-lived satisfaction, work–family conflict, emotional exhaustion and turnover intention" (p. 266).

Gagne and Forest (2008) further analyzed external motivation and decreases in intrinsic motivation. SDT argues that external financial rewards can be more harmful than helpful in fulfilling the psychological and professional needs of employees. Gagne and Forest confirmed this assertion and categorized contingent financial incentives as controlled motivation that diminishes intrinsic motivation.

The concepts that set intrinsic motivation apart from its controlled counterpart, extrinsic motivation, also apply to other aspects of the workplace. Gagne (2009)

developed a new model to explain the likelihood of knowledge transfer within an organization and demonstrated the importance of developing intrinsic motivation to encourage unselfish knowledge transfer. Knowledge transfer, Gagne suggested, can be a strong indication of intrinsically motivated good citizenship behavior. Thus, increased intrinsic motivation should directly correspond to increased knowledge sharing. Gagne found that knowledge transfer and knowledge sharing can be promoted by consciously developing employee intrinsic motivation. "Because knowledge sharing behavior is likely to be motivated in a way similar to helping and prosocial behavior, which are difficult to motivate through rewards and pressure, it may be particularly important to focus on increasing autonomous motivation" (p. 573). Furthermore, intrinsically-oriented employee appraisals could also promote knowledge transfer motivation and promote relationship building, which has also been shown to decrease turnover intentions (p. 583).

Dysvik and Kuvaas (2010) also studied the effects of intrinsic motivation on employees' performance. Specifically, they focused on an employee type: the masteryoriented employee shown to be extremely high-performing but also prone to higher rates of voluntary turnover. The authors defined mastery-oriented employees as employees who seek to continuously improve their skills and enhance their effectiveness through the mastery of job-related tasks and training. Without an environment to satisfy masterymotivated employees' needs for self-improvement, job responsibilities can be viewed as boring and unfulfilling, leading to voluntary turnover. Their results clearly indicated that intrinsic motivation has a greater impact on turnover intentions than solely striving to satisfy an employee's need to be continually challenged professionally.

When assessed jointly, intrinsic motivation was the strongest predictor of turnover intention. Mastery-approach goals were positively related to turnover intention, but this relationship was moderated by intrinsic motivation. The relationship between mastery-approach goals and turnover intention was only positive for employees low in intrinsic motivation . . . The results suggest that intrinsic motivation holds a salient role for predicting turnover intention. For managers and organizations, then, emphasis should be placed on facilitating work environments supportive of intrinsic motivation in order to maintain employees' turnover intention at low levels. (p. 622)

Dysvik and Kuvaas (2010) suggested SDT as the theory to best explain and promote intrinsic motivation and decrease turnover intentions. Since SDT is comprised of autonomy, competence, and relatedness, mastery-approach goals and their focus on improving competence are already a component of SDT in the competence category. SDT suggests that all people need to have autonomy, competence (mastery), and relatedness needs met in order to successfully improve intrinsic motivation and thus improve performance and decrease turnover intentions. Dysvik and Kuvaas concluded their article:

When managers and organizations actually manage to facilitate fulfilment of the needs for autonomy, competence and relatedness among their employees, intrinsic motivation seems to reduce turnover intention both generally, and "buffer" turnover intention among employees with high levels of mastery-approach goals in particular. (p. 633)

The explanation of intrinsic motivation as an indication of employee satisfaction by SDT has not yet been applied to an office of admissions setting. Previous studies indicate a strong correlation between intrinsic motivation and employee satisfaction. The corollary has also been shown that there exists a strong correlation between extrinsic motivation and employee dissatisfaction. Therefore, if SDT's use of intrinsic and extrinsic motivation as an indication of employee satisfaction is applicable to offices of admissions, a similar correlation of motivation and satisfaction as indicated by turnover intention should be evident among admissions employees. Furthermore, the studies cited reveal the dynamic nature of motivation. Motivational states change over time, which would result in the necessity of considering the relationship between office of admissions employee and turnover intention being a function of time. Finally, the fulfillment of employee needs for autonomy, competence, and relatedness, as defined by SDT, should also be related to the motivational state, either intrinsic or extrinsic, of the employee and the perceived satisfaction as indicated by turnover intention.

Hypothesis 3: Intrinsic motivation decreases as a function of time employed in an office of admissions.

Hypothesis 4: Extrinsic motivation increases as a function of time employed in an office of admissions.

Hypothesis 5: Lower employee satisfaction indicated by higher turnover intention is directly related to being extrinsically motivated.

Hypothesis 6: *Higher employee satisfaction indicated by lower turnover intention is directly related to being intrinsically motivated.*

Hypothesis 7: Intrinsic motivation is associated with the fulfillment of the needs for autonomy, competence, and relatedness.

Hypothesis 8: Extrinsic motivation is associated with not fulfilling the needs for autonomy, mastery, and relatedness.

The next three subsections of this SDT portion of the literature review address autonomy, competence, and relatedness individually. Each of the three SDT components has been shown to improve performance while decreasing turnover intentions through development of employee intrinsic motivation. While there is certainly synergistic overlap among the three categories as there was overlap between mastery-approach goals and intrinsic motivation in the study by Dysvik and Kuvaas (2010), most of the subsequent studies in this SDT section have more or less attempted to isolate autonomy, competence, and relatedness, respectively.

SDT and Autonomy. Deci and Ryan (2008) theorized in their original SDT research that autonomy is crucial to nurturing the intrinsic motivation of individual employees that results in higher employee satisfaction and performance. Leach, Wall, Rogelberg, and Jackson (2005) also studied autonomy but in team settings. They analyzed the effectiveness of self-managing teams and stated that greater autonomy in teamwork allows for greater development of team knowledge, skills, and abilities (KSAs). Their study included a sample of 41 teams with a total of 174 team members. The autonomy experienced by each team resulted in a form of collective KSA development that improved employee satisfaction and productivity while reducing strain "because autonomy allows team members discretion over when and how to deal with job demands, thus decreasing strain" (p. 3). The presence of increased autonomy encourages

the full use of an employee's skills while encouraging the development of new skills to cope with new challenges and to respond to the demands placed upon them by team members (p. 6). Leach et al. concluded their study with practical recommendations that are pertinent to the current study:

In terms of practical recommendations for enhancing performance and reducing strain, the present findings support the view that increasing autonomy for teams could be a worthwhile strategy from both a team and individual perspective. Given team autonomy is associated with KSAs, this may be a major lever through which to improve such skills. In other words, through hands-on experience of managing work activities, it is plausible that ineffective behaviors are abandoned, and more effective KSAs acquired, as members begin to realize how their actions (or lack thereof) relate to the goals for which their team is responsible (e.g., meeting production targets, quality standards). The particular value of autonomy as a means of increasing KSAs is likely to be because it enables active learning and rehearsal of effective skills in the workplace. (p. 18)

Recent research on autonomy extends beyond the improvement of employee performance and the development of KSAs. The reduced strain experienced by those who have greater levels of autonomy reduces interrole conflict. Indeed, several studies link interrole conflict and professional autonomy. Behson (2005) suggested:

Organizations that foster environments that allow its employees discretion and autonomy in how they get their work done, encourage supervisors to be supportive of work–family issues, and do not penalize employees for devoting attention to family should be more likely to benefit from increased employee

satisfaction and decreased employee stress, work–family conflict, and turnover intentions. (p. 495)

Kossek, Lautsch, and Eaton (2005) analyzed the boundaries between work and family that were mediated by perceptions of flexibility and came to a conclusion similar to that of Behson (2005). They specifically considered telecommuting, perceptions of job control, and boundary management strategies to determine if greater perceptions of work flexibility (autonomy) decreased turnover intentions. "Employees who perceived greater psychological job control had significantly lower turnover intentions, family–work conflict, and depression" (p. 348). These same employees had higher performance as a result of "greater perceptions of employer support" (p. 351). These findings are echoed by Beauregard and Henry (2009).

Thompson and Prottas (2005) explored informal office support for interrole conflict and how autonomy may play a role. They concluded that formal programs for reducing work-family conflict are not as influential as the worker/organizational culture. Furthermore, the authors found autonomy to play a significant role in both organizational culture and the reduction of interrole stress.

The findings of our study provide strong evidence for the importance of job autonomy in the lives of employees. We found that employees with higher levels of job autonomy, defined as discretion over how the job is to be performed, were more likely to be satisfied with their job, family, and life in general; experienced more positive spillover between job and home; were less likely to be thinking about looking for a new job; and were less likely to feel stressed or experience either form of work–family conflict. (p. 115)

Boxall and Macky (2007) conducted a literature review of studies beyond interrole conflict and analyzed organizations' use of employee autonomy and its impact on organizational performance. Commonly known as "High Performance Work Systems," the literature review by Boxall and Macky showed that organizations that grant greater employee autonomy have subsequently achieved higher performance objectives. To illustrate this finding, the authors cited an example in the automobile industry. Faltering American automobile manufacturers had recently undergone a major transformation of production practices by adopting Japanese automobile manufacturing practices. "This meant moving away from the low-discretion, control-focused work systems associated with Fordist operations management towards work systems which increased the involvement of production workers and raised their skills and incentives" (p. 263). The increased autonomy of high-involvement work environments like those found in the Japanese automobile industry was shown to result in better performance and lower overall costs. "High-involvement work practices typically include greater decisionmaking autonomy on the job, as well as off line in quality circles or other types of problem-solving groups" (p. 264). Boxall and Macky also made a connection between autonomy and job satisfaction (p. 268).

Khodyakov (2007) studied an extreme case of employee autonomy and linked the greater autonomy to inter-employee dependence, trust, and sustainable organizational control. He conducted a qualitative study of the Orpheus Chamber Orchestra, a conductorless yet highly successful and widely respected orchestra. Khodyakov found that an increase in autonomy resulted in benefits other than the fostering of intrinsic motivation. Contrary to what some may think about a leaderless orchestra in the

traditional sense, the Orpheus has demonstrated that environments high in autonomy can result in a form of shared governance in a process not unlike that described by Fullan (2008) as "connecting peers with purpose" (p. 41).

Orpheus deliberately chose not to have a single formal leader and to employ the chamber approach to create an environment where all musicians could participate in creative decision making. Participation promotes trust because musicians work together for the common good and learn about each other's personalities. In turn, trustworthy relationships among musicians help them reduce the artistic risks of performing without a formal leader by forming close ties that allow for greater flexibility and mutual support. (Khodyakov, 2007, p. 7)

Orpheus' autonomous atmosphere resulted in the coexistence of trust and control that warded off chaos while enhancing intrinsic motivation and creativity through interdependence. Khodyakov (2007) demonstrated that even in instances of extreme employee empowerment, as in the conductorless Orpheus orchestra, trust and control shared by organizational members generate greater creativity than in more traditional orchestra hierarchical systems. "The group is able to develop a distinctive sound that is warm and beautiful not only because of musicians' professionalism and commitment but also because of their infectious, obvious joy in what they do" (p. 13).

The following year, Boxall and Macky (2008) published a related article in which they gave further evidence for high-involvement work practices leading to high performance work systems. The authors affirmed that "there exists a system of work practices that leads in some way to superior organisational performance" (p. 4). Of these work practices that lead to superior performance, increased autonomy through

decentralization was shown to be a significant contributor. "At the heart of highinvolvement work reforms are practices that attempt to reverse the Taylorist process of centralising decision making and problem solving in the hands of management" by empowering employees through greater autonomy (p. 9).

Meyer and Maltin (2010) also studied the effects of autonomy on organizational performance and employee satisfaction. Including findings from several studies already cited, Meyer and Maltin used the well-known connection between employee affective commitment and employee well-being to evaluate the impact autonomy has on affective commitment. One of the greatest benefits of this study is a concise definition of the need for autonomy that will be useful for the current study. "The need for autonomy is satisfied when, at the deepest levels of reflection, individuals believe that what they are doing is freely chosen and consistent with their core values" (p. 328). Meyer and Maltin found a positive association between the satisfaction of an employee's need for autonomy and affective commitment.

In regard to autonomy, other studies have shown high levels of professional autonomy lead to decreased end-of-day fatigue (Trougakos et al., 2014), increased creativity (Florida & Goodnight, 2005; Dewett, 2007; Liu, Chen & Yao, 2010; Zhang & Bartol, 2010; Ma, Cheng, Ribbens, & Zhou, 2013), enhanced desire to contribute to office discussions (Tangirala & Ramanujam, 2008), heightened levels of intrinsic motivation (Zhang & Bartol, 2010), and knowledge-sharing behavior (Ma, Cheng, Ribbens, & Zhou, 2013). Essentially, research on workplace autonomy from only the past ten years would comprise several volumes of books and is largely beyond the scope of the current study. The most pertinent discoveries of workplace autonomy for the present

study are its effect as a member of the SDT trinity of nutriments that combine to influence performance, employee satisfaction, and voluntary turnover intention. Given the highly regimented work life of admissions employees, it is reasonable to suggest that admissions employees are not having their needs for autonomy being met. According to the SDT studies on autonomy cited above, low levels of employee autonomy are a contributor to low levels of employee satisfaction and high levels of turnover intention. Understanding admissions employee perceptions of workplace autonomy will be vital to the application of SDT to an office of admissions setting.

Hypothesis 9: Office of admissions employees perceive low levels of professional autonomy.

SDT and Competence. The second component of SDT is competence, which for the purposes of the current study, is analogous to mastery. In this regard, competence and autonomy are closely related in that there exists a perception of control over one's life situation and an ability to persevere and gain strength as a result of personal choice and effort. Perhaps one of the most studied facets of competence is professional training. Blau et al. (2008), for example, questioned organizational and professional training benefits to employees. The research of training programs by Blau et al. "has shown that organizational-focused training and development activities can lead to higher employee job satisfaction" (p. 126).

Hurtz and Williams (2009) further examined organizational practices that influence continued participation in employee professional training. After considering factors such as autonomy, training program quality, discretionary employee resources such as time and support, and previous training experiences, They suggested that an

employee's decision to participate in professional development training is most impacted by knowledge of the training availability. If an employee is made aware of an opportunity to receive training, that employee is much more likely to participate. This opportunity for training also implies an organization's willingness to allow the employee to participate. Hurtz and Williams also discovered that an employee's resources in terms of time and political capital must be sufficient to attend training. It is not, therefore, enough for an organization to provide training opportunities and to promote their availability to an employee; the organization must also be willing to foster an environment that is conducive to temporarily relaxing employee responsibilities in favor of advanced training opportunities.

Bradley (2010) further studied the correlation between competence and autonomy and concluded that autonomy, or job control, "predicted change in mastery, an effect that was mediated by active learning . . . The demands-mastery relationship was moderated by job control, such that under conditions of high but not low control, increasing job demands were associated with gains in mastery" (p. 97). Conversely, low levels of autonomy and high levels of demand were negatively related to employee mastery of tasks and feelings of competence (pp. 99, 115). Therefore, autonomy can lead to competence and each can improve the other.

Foster, De Grip, and Fouarge (2011) concurred with previous studies on professional training and autonomy. They found that general training programs promote job satisfaction and extended their research to include employee turnover intentions. They conducted a study of pharmacy assistants and monitored their employment satisfaction and turnover intentions over the course of varied levels of professional

training. Study results indicated that perceptions of training and of the employees' need to be competent and gain mastery were positively associated with employee satisfaction and negatively associated with turnover intentions. They referred to pharmacy organizations as "firms" in their summary:

[It] is important to know that firm climate that supports the development of employees enhances the level of job satisfaction among employees. As a consequence of higher levels of job satisfaction, employees will be highly motivated to stay with the organization. This implies that firms should develop general training programs that promote job satisfaction in order to reduce turnover. Supporting employees in increasing their overall employability creates a lively employer-employee relationship based on reciprocal behavior. (p. 2416)

Latif, Jan, and Shaheen (2013) largely agreed with these previous studies on employee training but qualified their statements. Specifically, they found that training was important to job satisfaction and cutting down turnover and its associated costs but that training needed to be communicated and "sold" by leadership to be most effective. When employee training was most effective, organizational leadership had to be fully committed to its implementation and confident of its effectiveness. Employee training that was stimulated by a leadership-driven culture of employee development "creates a motivation for increased discretionary behavior and a satisfaction with career development that ultimately leads to increased job satisfaction. Jobs with high scope and associated potential development lead to enhanced motivation, job satisfaction and performance" (p. 159). Such training also improved organizational commitment, employee performance, and employees' ability to cope with stressful situations (p. 161).

Other benefits included decreased costs associated with turnover, such as expensive hiring processes to replace employees who voluntarily left the organization. Expending resources on training now provides immediate productivity and satisfaction results and decreases the need to employ even more resources later. Latif, Jan, and Shaheen (2013) also determined that organizational leadership must actively support and promote ongoing employee training for it to be most effective.

In summary, gaining high levels of mastery and achieving feelings of competence are needs that, if met, have been shown in the studies above to improve employee satisfaction and performance and reduce voluntary turnover. An organizational culture conducive to employee training and the devotion of resources to aid employees in professional development is key to the success of competency improvement. When a culture of competency improvement is coupled with an atmosphere of autonomy, the benefits of training and high levels of employee discretion combine to magnify the benefits to employees and to the organization. According to SDT, these synergistic effects of competency and autonomy are even stronger when employee needs for relatedness are also realized. As SDT's need for competence is applied to an office of admissions setting, it becomes apparent that an admissions employee's need for competence might not be realized because job responsibilities do not evolve over time. Therefore, satisfaction of the need for competence as a function of time would be beneficial in explaining employee satisfaction as it relates to turnover intention. According to SDT, a perceived satisfaction of competence is directly associated with a perception of job satisfaction and decreased turnover intention. Should office of admissions employees not experience satisfaction of their need for competence as a

function of time, SDT could be found to be a more applicable explanation for office of admissions employee satisfaction.

Hypothesis 10: Office of admissions employees are not having their needs for competence realized as a function of time spent employed by their office.

SDT and Relatedness. The third and final component of SDT is the need for relatedness. Relatedness refers to connections of two different types. First, relatedness is the interpersonal connection between people in the form of relationships and social belonging. Second, relatedness is the connection between oneself and the purposes and values of an organization or a cause. According to SDT, people must relate to one another and have a purpose with which they personally identify for the need of relatedness to be fulfilled.

The need to connect with others in meaningful ways was studied by Mossholder, Settoon, and Henagan (2005), who made a connection between interpersonal work relationships and turnover intentions. The authors referred to the existence of office-wide relationships as network centrality and the selfless, beneficial interactions of those relationships as citizenship behavior. "Both network centrality and interpersonal citizenship behavior were significantly related to turnover over the five-year study window, and their effects went above and beyond the effects of job satisfaction" (p. 613). The presence of mutually beneficial relationships with coworkers contributes to employee embeddedness within the organization and also provides "social grounding" that "dampens the effect of real or perceived shocks that may give rise to turnover" (p. 613). Thus, the fulfillment of the need for meaningful relationships improves employee

satisfaction, dampens the more negative aspects of the workplace, and reduces turnover intentions.

Kim, Cable, and Kim (2005) examined the importance of meaningful relationships to conveying organizational values. According to SDT, the need for relatedness is both a connection to other people and a connection to shared values or purposes. The authors' research connects the importance of interpersonal relationships and the alignment of organizational values. The alignment of personal values and organizational values is simply a relationship between the employee and the organization. This connection is frequently referred to as "person-organization fit." Kim, Cable and Kim (2005) explained that another reason socialization is important, besides connecting the new employee with other people, is that socialization helps connect people to the organization through a process of value alignment. "In general, [the] results suggest that employees perceive greater values congruence with an organizational culture when they receive a common message and positive social models regarding an organization's values" (p. 238). The common message can be partially conveyed through the socialization process.

Allen (2006) also studied the socialization process. New hire socialization practices have also been shown to relate to turnover intentions and employee longevity within the organization, and Allen noted that a large percentage of voluntary employee turnover occurs shortly after the employee is hired. This early loss of employees exacerbates the costs associated with the employee recruitment, selection, and training process as there is little time to reap the rewards of these expenditures. Allen noted that "one of the primary potential drivers of withdrawal among organizational newcomers is

inadequate socialization" (p. 237). New hire socialization practices, therefore, are attempts to embed the newly hired employee into the organization through the development of meaningful relationships. There are many different tactics for achieving this end, but simply the acknowledgment of the connection between socialization and turnover is of the most importance to the present study.

Patrick, Knee, Canevello, and Lonsbary (2007) studied the need to connect with others in meaningful ways and the impact of this connection on turnover intentions. They considered the fulfillment of all three components of SDT as variables in interpersonal relationship quality in three studies. They found in the first study that an individual's need fulfillment in each SDT category was a strong predictor of relationship quality. The second study revealed the reverse to be true as well. In both studies, the greatest predictor of relationship quality was the SDT need for relatedness. The third study further explained the results from the previous two studies by considering the overall motivational state of the parties in the relationship. Those individuals who were more intrinsically motivated, as is promoted by SDT need fulfillment, experienced better relationships that were less likely to be negatively impacted by disagreements and stress than relationships of individuals who were more extrinsically motivated. The relationships of those with SDT need fulfillment displayed significant improvement in the following ways:

For attachment variables, need fulfillment was negatively associated with both avoidant and anxious attachment. Regarding relationship functioning and wellbeing variables, need fulfillment was positively associated with relationship satisfaction and commitment and with reporting more understanding responses to

conflict. Need fulfillment was also associated with perceiving less conflict and with reporting less defensive responses to conflict. (p. 439)

Kouzes and Posner (2007) discussed the importance of shared values between employee and organization. The need for relatedness of values and purpose, if realized, results in several benefits. As personal and organizational values are aligned and realized, employees experience greater satisfaction, and the organization enjoys higher productivity.

In our own research, we've carefully examined the relationship between personal and organizational values. Our findings clearly reveal that when there's congruence between individual values and organizational values, there's significant payoff for leaders and their organizations. Shared values do make a significant difference in work attitudes and performance. They foster strong feelings of personal effectiveness. They promote high levels of company loyalty. They facilitate consensus about key organizational goals and stakeholders. They encourage ethical behavior. They promote strong norms about working hard and caring. They reduce levels of job stress and tension. They foster pride in the company. They facilitate understanding about job expectations. They foster teamwork and esprit de corps. (p. 62)

Indeed, the SDT need fulfillment of relatedness can produce numerous benefits for the employee and for the organization. Relatedness between employees and alignment of purpose with that of the employing organization have been shown to improve employee satisfaction, dampen undesirable aspects of work responsibilities, and decrease turnover intentions. Combined with the satisfaction of the need for autonomy and the

need for competence, relatedness completes the human needs proposed by SDT. Ultimately, SDT has been shown in many contexts and with diverse populations of people to improve intrinsic motivation and bring about positive benefits to the employee and the organization. Included in this lengthy list of benefits are increased employee satisfaction and decreased turnover intentions. The positive associations stemming from intrinsic motivation have yet to be applied in a setting comparable to a university office of admissions.

For example, when people are intrinsically motivated they play, explore, and engage in activities for the inherent fun, challenge, and excitement of doing so. Such behaviors have an *internal perceived locus of causality* (deCharms,1968), which means they are experienced as emanating from the self rather than from external sources, and are accompanied by feelings of curiosity and interest.

(Niemiec & Ryan, 2009, pp. 134-135, italics in original)

Hypothesis 11: Office of admissions employees are not having their needs for relatedness being realized.

Summary and Analysis: State of the Literature

The literature review has revealed several core themes of employee satisfaction as they relate to voluntary employee turnover, and SDT appears to provide an accurate description of employee satisfaction, engagement, and performance. Research in this regard has been thorough and expansive. What is lacking, however, is the study of employees in university offices of admissions and the application of SDT to professional admissions employees. While definitions of satisfaction can vary greatly from one professional admissions employee to the next, turnover intention is a gauge of

satisfaction with a generally consistent definition. The turnover research clearly demonstrates a direct link between employee turnover intention and employee satisfaction. As a result, turnover intention can be used effectively as an approximation and representation of employee satisfaction in this nationwide study of employees in university land-grant offices of admissions. The literature review of SDT has shown that meeting the needs of autonomy, competence, and relatedness leads to higher employee satisfaction or dissatisfaction of the needs for autonomy, competence, and relatedness is directly related to university admissions employee satisfaction as indicated by turnover intention, SDT may provide an explanation of employee satisfaction for university office of admissions employees.

Hypothesis 12: Turnover intention as an indicator of employee satisfaction is related to the realization or neglect of the basic needs of autonomy, competence, and relatedness.

CHAPTER III

METHODOLOGY

The purpose of this study is to better understand the turnover intentions of professional university admissions employees on a national level, identify the extent that motivation mediates employee satisfaction in an office of admissions, determine whether or not self-determination theory provides a theoretical explanation for admissions employee satisfaction, and use the theoretical underpinnings of self-determination theory to describe employee satisfaction in a way that can lead to a delay in voluntary admissions turnover. The research questions included:

- What are the turnover intentions of employees in American land-grant universities? Hypothesis 1: Offices of admissions employees have high levels of turnover intention.
- 2. To what extent did employee intrinsic and extrinsic motivation correspond to turnover intentions as a measure of employee satisfaction?
 Hypothesis 2: Turnover intention is directly related to the realization or neglect of the basic needs of autonomy, competence, and relatedness.
 Hypothesis 3: Intrinsic motivation decreases as a function of time employed in an office of admissions.

Hypothesis 4: Extrinsic motivation increases as a function of time employed in an office of admissions.

Hypothesis 5: Lower employee satisfaction indicated by higher turnover intention is directly related to being extrinsically motivated.

Hypothesis 6: *Higher employee satisfaction indicated by lower turnover intention is directly related to being intrinsically motivated.* *Hypothesis 7: Intrinsic motivation is associated with the fulfillment of the needs for autonomy, competence, and relatedness.*

Hypothesis 8: Extrinsic motivation is associated with not fulfilling the needs for autonomy, mastery, and relatedness.

 To what extent does self-determination theory provide a theoretical explanation for professional employee satisfaction in university offices of admissions? *Hypothesis 9: Office of admissions employees perceive low levels of professional autonomy.*

Hypothesis 10: Office of admissions employees are not having their needs for competence realized as a function of time spent employed by their office.Hypothesis 11: Office of admissions employees are not having their needs for relatedness being realized.

Hypothesis 12: Turnover intention as an indicator of employee satisfaction is related to the realization or neglect of the basic needs of autonomy, competence, and relatedness.

4. If self-determination theory is found to be applicable, how does selfdetermination theory describe university admissions employee satisfaction to the extent that satisfaction can be improved and turnover intentions can be reduced?

Participants/Sampling

In conducting a study designed to apply an existing theory to such a general population as employees in university offices of admissions from across the United States, identifying the appropriate participants and sample size is crucial. Land-grant universities provide an appropriate, nationwide sample comprised of admissions

employees from diverse backgrounds. Land-grant university offices of admissions operate in institutions with similar missions, institutional ages, and office sizes and are located in every state in the country. Exploratory internet searches of university office of admissions websites indicated that land-grant university offices of admissions typically have an office size of around ten employees. Because there are over 70 land-grant universities, the prospective respondent pool had over 700 persons. The actual prospective respondent pool consisted of 964 persons, which contact information came from the land-grant university admissions websites. The number of study participants who completed the questionnaire was 288 persons resulting in a 30 percent response rate. This large sample size and the validated reliability of the instruments used in the current study resulted in a quantitative analysis during the deductive tier of the study. Quantitative analyses collect data "from many participants at many research sites" by "sending or administering instruments to participants" – a fundamental requirement, given the national scope of the present study (Creswell and Clark, 2007, p. 29).

Instrumentation

The current study used four instruments. The first three instruments were discovered during the literature review and have been used in previous studies on turnover and SDT. The fourth instrument was created for this study and consisted of demographic information specific to employees in university offices of admission. Each of the four instruments is described following a brief discussion of data validity and reliability. Complete instruments can be found in Appendices A - D.

Use of existing and established instruments greatly enhances the data validity and reliability for the current study. Creswell and Clark (2007) discussed several of the major

validity concerns for quantitative research. For the purposes of the current study, when Creswell and Clark make reference to a "test," the word "survey" or "questionnaire" could be substituted:

In quantitative research, validity does not reside with the participants as much as with the accumulated evidence that supports the intended interpretation of test scores for a proposed purpose. This evidence is based on test content, theoretical and empirical analysis of the response processes of test takers, an analysis of the internal structure of a test, the relation of test scores to variables external to the test, and the intended and unintended consequences of test use. (p. 31)

Thus, the instruments used to obtain quantitative data along with the analysis process used to interpret the data are vital to the validity of the results of a quantitative study. This study used instruments obtained from related studies on employee turnover, self-determination needs satisfaction, and employee motivation. The questionnaires were obtained with permission from the self-determination theory research website www.selfdeterminationtheory.org, which is a collection of self-determination theory articles and research. (See Appendix H.) The instruments, the data interpretation processes, and possible linkages between different scales have been previously shown to be valid. The scales employed in self-determination theory and turnover intention research, specifically, have been used several times in various studies spanning two decades (Deci et al., 2001; Dysvik, 2010; Dysvik & Kuvaas, 2008; Ilardi et al., 1993; Kasser, Davey, & Ryan; Kuvaas, 1992; Kuvaas, 2006; Kuvaas, 2008; and Tremblay et al., 2009). The current study enhances the use of these instruments by combining them to determine employee relationships in university offices of admissions.

Three scales were employed in this study in addition to demographic questions specific to employees in university offices of admissions. The first scale measured the respondents' levels of autonomy, competence, and relatedness in a work setting by asking seven questions for each category; the questions were distributed throughout the questionnaire. (See Appendix A.) A seven-point Likert scale was used for each question, and the raw scores of each respondent were added together resulting in one score for autonomy, one score for competence, and one score for relatedness. The higher the score in each category, the greater the perceived needs fulfillment for autonomy, competence, and relatedness in the workplace. This first scale has been used in at least three previous self-determination studies and has been shown to be reliable (Kasser et al., 1992, Ilardi et al., 1993; Deci et al., 2001).

The second scale measured the respondents' general motivational state as being primarily intrinsic or extrinsic, based on a seven-point Likert scale. (See Appendix B.) The scale was "divided into three-item six subscales, which correspond to the six types of motivation postulated by SDT (i.e., intrinsic motivation, integrated, identified, introjected and external regulations, and amotivation)" (Tremblay et al., 2009, p. 216). Using a formula provided by Ryan and Connell (1989), the second scale was converted into a single number that measured the respondents' level of intrinsic or extrinsic motivation on the self-determination index. A positive motivation score indicates the respondent is intrinsically motivated, and a negative score indicates external motivation. Scores for intrinsic motivation (IM), integrated regulation (INTEG), identified regulation (IDEN), introjected regulation (INTRO), external regulation (ER), and amotivation (AMO), were

combined using the following equation to obtain the overall motivation score for each respondent:

Motivation = $3 \times IM + 2 \times INTEG + 1 \times IDEN + (-1 \times INTRO) + (-2 \times EXT) + (-3 \times AMO)$

"Previous research has shown that the self-determination index displays high levels of reliability and validity" (Tremblay et al., 2009, p. 216). Previous research using this scale was conducted by Fortier, Vallerand, and Guay (1995); Green-Demers, Pelletier, and Menard (1997); and Pelletier, Dion, Slovinec-D'Angelo, and Reid (2004).

The third scale employed in this study was simpler than the previous two scales as it directly asked four questions about an employee's intentions to leave the organization. (See Appendix C.) This scale was developed by Kuvaas (2008) and has since been used in several studies (e.g., Dysvik & Kuvaas, 2008; Kuvaas & Dysvik, 2010). The higher the respondent's score, the more likely he or she was to leave the organization. For consistency in this study, however, the original five-point Likert scale was adjusted to mirror the seven-point Likert scale used in the other two scales.

The final demographic questions addressed control variables that were specific to employees in university offices of admission or might demonstrate statistically significant relationships to employee satisfaction, motivation, and turnover intentions. (See Appendix D.) These questions included the length of time employed by an office of admissions, age, gender, whether the employee has an office located in the main university office of admissions or is a regional representative, position category within the office of admissions, in how many offices of admissions the respondent has worked,

and the employee's intentions upon his or her acceptance of the current position. Responses for each demographic question were multiple choice or yes/no.

Procedures

Once the survey instruments were combined into a single questionnaire, human subjects committee approval was sought and granted. (See the front of this study.) The questionnaire was then sent to land-grant university office of admissions employees across the country. The survey was administered online through the survey software company SurveyMonkey (www.surveymonkey.com) for its online convenience across computer platforms, constant availability to prospective respondents, and its ability to collect anonymous responses. An initial, personalized email was sent to the employees in land-grant university offices of admissions explaining the general purpose of the study and how the results were going to be used. (See Appendix E.) A reminder email was sent two weeks after the initial email was sent, and a second reminder email was sent one week after the first reminder email to total three emails seeking respondents for the study. (See Appendices F-G.) Respondents had a total of four weeks to respond to the survey. Survey responses were automatically compiled electronically on SurveyMonkey's secure website and were downloaded into a Microsoft Excel spreadsheet for further statistical analysis using IBM SPSS software. The data were kept secure on a personal laptop and were never shared electronically.

Design/Analysis

This research followed a two-tiered approach consisting of a deductive tier and a limited inductive tier. The deductive research component was conducted prior to inductively creating suggestions for improving employee satisfaction and decreasing

turnover. After survey data were collected from employees in land-grant university offices of admissions and specific information regarding employee motivation, autonomy, competence, relatedness, and turnover intentions was obtained in the first tier of research, the foundation was partially established for future research to accomplish a grounded theory. The second tier of the current study followed an inductive and exploratory approach to generate some suggestions for university offices of admissions employees and leadership based on SDT research findings.

The deductive tier of this study was quantitative and was conducted using several survey instruments previously used in related SDT and turnover research (Kasser et al., 1992; Ilardi et al., 1993; Deci et al., 2001; Kuvaas, 2006; Kuvaas, 2008; Dysvik & Kuvaas, 2008; Tremblay et al., 2009; and Kuvaas & Dysvik, 2010). Quantitative research, by definition, possesses the characteristics desired by a study of this type. For example, the intent of quantitative research is to "test a theory deductively to support or refute it" by testing "specific variables that form hypotheses or questions" (Creswell & Clark, 2007, p. 29). The variables of this study included the SDT needs of employee autonomy, employee competence, and employee relatedness. Employee turnover intentions were also a variable and served as an indicator of employee satisfaction, which is consistent with SDT research practice. The remaining variables included employee motivation, time employed by an office of admissions, employee position expectations upon being hired, gender, age, employee position type, and the admissions employee's office location (see Figure 1). The relationships between these variables enable the identification of a link between SDT and an office of admissions.

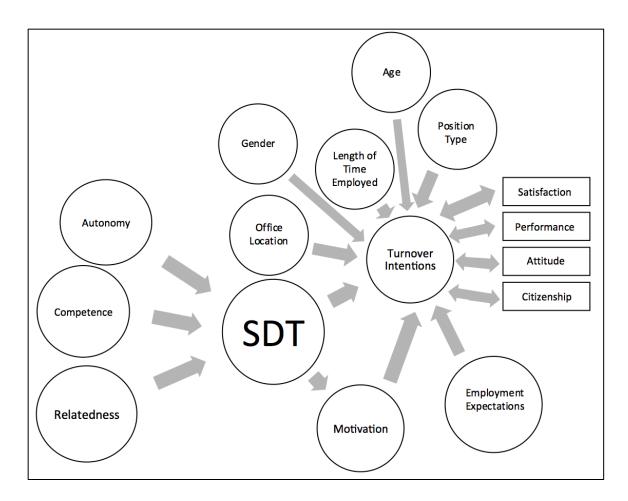


Figure 1. Research design. This figure illustrates the causal relationships between independent and dependent variables with their associated outcomes.

The inductive tier of research for this study was only lightly addressed. The relationship between university office of admissions employees and SDT that was shown during the deductive tier of the current study allowed for the inductive application of the results of heretofore unrelated SDT studies to employees in university offices of admissions in the second tier. In every study cited in the literature review, for example, SDT was shown to describe employee satisfaction. This explanation can be of great benefit to future studies involving offices of admissions and the reduction of voluntary turnover. Thus, the first tier of research utilized a quantitative approach to deductively

determine whether SDT explained admissions employee satisfaction, and the second tier of research inductively applied SDT conclusions from other studies to employees in university offices of admissions for the improvement of employee satisfaction, engagement, and performance while likely delaying turnover.

Data were analyzed using SPSS statistics software. Relationships between each of the variables and their combined impact on employee satisfaction and turnover intention were determined using causal modeling. Analysis of individual variables and their relationships to turnover intention provided additional constructs from which an expanded self-determination theory for office of admissions employees may be derived in future studies.

Measures

The independent variables in this study were admissions employee perceptions of autonomy, competence, and relatedness, employee motivational state, employee office location, employment expectations, gender, length of time employed, age, and employee position type. The independent variables were a combination of variables utilized in related SDT studies and variables specific to university office of admissions employees such as office location. Employee satisfaction, performance, attitude, and citizenship behaviors were latent variables that may have an impact on overall employee satisfaction and turnover intentions but were not readily measurable across a nationwide audience. The dependent variable in the present study was employee turnover intention. If employee needs for autonomy, competence, and relatedness were shown to have a positive relationship with an autonomous motivational state and were negatively related

to turnover intentions, then the postulates of SDT would likely be a good foundation from which to build a grounded theory of admissions employee satisfaction.

Turnover intention was selected as the dependent variable representing employee satisfaction because concepts of satisfaction can vary greatly from one employee to the next, and turnover intentions tend to be less ambiguous and more readily understood from employee to employee. Furthermore, the relationship between SDT and turnover intentions have been shown to exist in several previous studies, and seeking to better understand the relationship between SDT and turnover intentions aligned the present study with pre-existing SDT research. This alignment of research has several advantages, not the least of which is the ability to repurpose existing SDT survey instruments for the present study.

Autonomy, competence, and relatedness needs fulfillment. Employees' perceptions of workplace autonomy, competence, and relatedness were tested utilizing the Basic Psychological Needs Scale (Kasser et al., 1992) adapted to the work domain. (See Appendix A.) This questionnaire is a 21-item self-report measure of an employee's perceived fulfillment of the needs for autonomy, competence, and relatedness (e.g., "I am free to express my ideas and opinions on the job"). Respondents marked answers on a Likert scale ranging from 1 ("not at all true") to 7 ("very true"). A score was attained from the responses for each of the three categories of autonomy, competence, and relatedness by using six questions for each category. Among the six questions for each category were three questions asked in reverse form. Accounting for the reverse questions, each subscale indicated needs fulfillment by providing a score ranging from 6 to 42 with the higher score reflecting higher need fulfillment. Furthermore, the raw scores

of certain questions needed to be reversed for accurate summation towards a final score in each category. For example, questions 1, 5, 8, 11, 13, 17, and 20 were questions measuring perceptions of autonomy in the workplace. Of these autonomy questions, questions 5, 11, and 20 were reverse-scored prior to being added to the scores of remaining questions 1, 8, 13, and 17 for a total autonomy score for each respondent. Adjusting the raw data from the competence and relatedness question sets followed an identical process to that of autonomy. The higher the score in each category, the greater the perceived needs fulfillment was for autonomy, competence, and relatedness. Results of past studies (Deci et al., 2001; Ilardi et al., 1993) revealed that this scale is a valid and reliable measure of perceptions of workplace autonomy, competence, and relatedness.

Employee motivational state. Admissions employees' intrinsic and extrinsic motivation state was assessed using the Work Extrinsic and Intrinsic Motivation Scale (Tremblay et al., 2009). (See Appendix B.) This questionnaire consisted of a 12-item self-report measure designed to help employees explain why they do their current work (e.g., "I do this work for the income it provides me"). Respondents marked answers ranging from 1 to 7. By utilizing a simple formula provided for the scale, respondents were assigned an aggregate number through the mathematical calculation already explained that indicates to what extent the employee is self-determined in the workplace. Previous research (e.g., Fortier, Vallerand, & Guay, 1995; Green-Demers, Pelletier, & Me'nard, 1997; Pelletier, Dion, Slovinec-D'Angelo, & Reid, 2004) has shown that this self-determination index is reliable and is a valid indicator of motivational state.

Turnover intentions. University admissions employee turnover intentions were gauged using the Turnover Intentions Scale (Kuvaas, 2006). (See Appendix C.) The

researcher modified the original Turnover Intentions Scale from a five-point Likert scale to a seven-point scale for alignment with the other measures employed in the present study. The scale is comprised of five questions asked to determine an employee's turnover intentions (e.g., "I will probably look for a new job in the next year"). The higher the respondent's score, the more likely the respondent would be to leave the organization. The Turnover Intentions Scale has been utilized in multiple other studies and has been shown to be a reliable indicator of turnover intention by additional work done by Kuvaas and associates in subsequent years (Kuvaas, 2008; Dysvik & Kuvaas, 2008; Kuvaas & Dysvik, 2010).

Demographic questions. Additional questions were created specifically for the present study to determine potential relationships applicable directly to university office of admissions employees. (See Appendix D.) Seven demographic questions were asked (e.g., "Which of the following most closely describes your position"). The relationship between these independent demographic variables and the factors measured by the other scales provided a closer examination of SDT's applicability to an office of admissions setting.

Methods Summary

The ultimate goal of the current study was to lay the foundation for a grounded theory of employee satisfaction within university offices of admissions, using a twotiered process. This study addressed the first (deductive) tier and lightly addresses the second (inductive) tier. The literature review has revealed Self-Determination Theory to be a plausible theory for explaining the turnover intentions of university admissions employees. The dependent variable in this study was employee satisfaction as indicated

by turnover intention. Independent variables included the need satisfaction of autonomy, competence, and relatedness, employee motivational state, employment expectations upon being hired, office location, length of time employed, position type, gender, and age. Data were collected and analyzed electronically using online and commercial software. Causal modeling analyses produced previously unrecognized relationships between the variables of this study and expanded upon Self-Determination Theory principles. The inductive tier of research generally applied the results of previously unrelated self-determination studies to offices of admissions. Finally, the limitations and scope of the study restricted the inductive tier of research to merely establish grounded suggestions for high admissions turnover with the expectation that additional inductive research will be needed to establish an actual grounded theory in the future.

CHAPTER IV

RESEARCH FINDINGS

University offices of admissions are broad entrances through which many young professionals enter careers in higher education administration. As a partial result of the entry-level nature of many admissions positions and the demanding responsibilities associated with recruiting prospective students, voluntary employee turnover among admissions employees can appear to be higher than in other postsecondary administrative offices. However, the findings of this study clearly indicate that voluntary employee turnover is not as expected. In fact, voluntary turnover among employees in university offices of admissions did not appear to be that common. Furthermore, the improvement of professional employee satisfaction, engagement, and performance might not be as directly related to voluntary employee turnover in land-grant university offices of admissions as many of the conclusions cited in the literature review would suggest.

The purpose of this study was to better understand the turnover intentions of university professional admissions employees on a national level, identify the extent to which motivation mediates employee satisfaction in an office of admissions, and to determine if self-determination theory provides a theoretical explanation for admissions employee satisfaction. The research questions include:

- 1. What are the turnover intentions of employees in offices of admissions at American land-grant universities?
- 2. To what extent does employee intrinsic and extrinsic motivation correspond to turnover intentions as a measure of employee satisfaction?

- 3. To what extent does self-determination theory provide a theoretical explanation for professional employee satisfaction in university offices of admissions?
- 4. If self-determination theory is found to be applicable, how does selfdetermination theory describe university admissions employee satisfaction to the extent that satisfaction can be improved and turnover intentions can be reduced?

University office of admissions employee turnover intention and work satisfaction data were collected from land-grant universities across the United States, using an online survey instrument. The surveys were administered through direct email correspondence to prospective respondents. A total of 964 emails were sent to unique respondents at three distinct times over the course of six weeks; 307 surveys were attempted, and 288 surveys were completed in their entirety, resulting in a 29.9% response rate for completed questionnaires. The collected data included respondent perceptions of autonomy, competence, relatedness, motivation, turnover intentions, employment expectations, and demographic information. The demographic data will be described before the research questions is addressed individually.

Demographic Analyses

Respondents possessed a variety of demographic profiles. Respondents were spread fairly evenly across the range of years working in university offices of admissions. The greater number of respondents (24.3%) had worked in an office of admissions from five through nine years. The smallest number of respondents (9.0%) worked in an office of admissions for four years. (See Table 1.)

Table 1.

Length of time employed by a university office of admissions

Answer Options	Response Percent	Response Count
1 year	14.2%	41
2 years	12.2%	35
3 years	11.5%	33
4 years	9.0%	26
5-9 years	24.3%	70
10-15 years	13.9%	40
16 years +	14.9%	43

Respondent age was skewed toward younger professionals. Over 60% of

respondents were under the age of 35, and less than 3% of respondents were over 60.

(See Table 2.) The greatest number of respondents (30.6%) were between 26 and 30

years of age.

Table 2.

Respondent ages

Answer Options	Response Percent	Response Count
20-25	17.4%	50
26-30	30.6%	88
31-35	13.9%	40
36-40	8.7%	25
41-45	11.1%	32
46-50	4.9%	14
51-60	10.8%	31
60+	2.8%	8

More females (62.5%) completed the survey than did males (36.8%). (See Table 3.) These gender statistics may or may not be indicative of an employee gender imbalance in university offices of admissions.

Table 3.

Respondent gender

Answer Options	Response Percent	Response Count
Male	36.8%	106
Female	62.5%	180
Rather not say	0.7%	2

Demographic information specific to employees in university offices of admissions was also collected. This information was an important consideration for potential influence on turnover intentions. For example, an employee's primary work location has been shown in the literature to have an impact on turnover intentions (Ajuha et al., 2007). The greatest number of respondents (77.4%) were permanently located on their respective main campuses compared to those who were regional representatives (22.6%). (See Table 4.)

Table 4.

Respondent office location

Answer Options	Response Percent	Response Count
Yes, I am a regional representative.	22.6%	65
No, I am located on the main campus.	77.4%	223

Job function within a university office of admissions can influence employee turnover intentions. The position held by the greatest number of employees within any university office of admissions is typically new student recruiter. The greatest number of respondents (50.9%) reported they were new student recruiters with the second largest number of employees in most university offices of admissions was the supervisor responsible for some type of recruitment area. The second largest number of respondents (22.6%) reported that they were recruitment supervisors. Other admissions staff positions can vary; respondents in smaller numbers reported holding other types of positions in university offices of admissions. (See Table 5.)

Table 5.

Respondent office of admissions position type

Answer Options	Response Percent	Response Count
New student recruiter	50.9%	146
Application processing	4.9%	14
Office technology support	0.3%	1
Supervisor of recruitment staff with personal recruitment territory	22.6%	65
Office supervisor without specified recruitment territory	20.2%	58
Clerical	1.0%	3

Since this study considered turnover intentions and movement from one institution to another throughout the course of one's career. The number of university offices of admissions in which respondents had worked is also of value to the present study. More than half of all respondents (56.6%) have worked in only one office of admissions; over 90% have worked for three offices or fewer. Less than 5% had worked at 4 offices or more. (See Table 6.) Table 6.

Number of offices of admissions in which respondents have been employed

Answer Options	Response Percent	Response Count
1	56.6%	162
2	25.9%	74
3	10.8%	31
4	3.5%	10
5	1.7%	5
6	1.0%	3
7	0.0%	0
8	0.0%	0
9	0.3%	1
10+	0.0%	0

The final university admissions office demographic question attempted to gauge the respondents' employment intentions upon being employed. More than half of respondents (55.8%) reported that they intended to work fewer than five years in their current positions. Several respondents (18.2%) reported that they intended to remain in their current positions for 10 or more years. (See Table 7.)

Table 7.

Respondent initial employment intentions

Answer Options	Response Percent	Response Count
1 year	4.9%	14
2 years	14.7%	42
3 years	28.1%	80
4 years	8.1%	23
5 - 7 years	22.5%	64
8 - 10 years	3.5%	10
10+ years	18.2%	52

Data Analyses

The data analysis portion of this study consisted of two phases. The first phase was the data adjustment phase during which the raw data were converted into an aggregate score for each independent variable or coded for the demographic responses. The second phase was a regression analysis using SPSS software. Each phase will be discussed in this section.

Data adjustment. The questionnaire was comprised of various instruments to measure the relationships between several independent and dependent variables. The main instruments were an SDT instrument, a motivation instrument, and a turnover intentions instrument in addition to the demographic questions. Adjustments to the data from each instrument were needed before the data could be collectively analyzed in SPSS. Fortunately, each instrument has been previously used in related studies on selfdetermination theory or voluntary turnover. The raw data from each instrument, therefore, were adjusted according to the processes outlined in the previous research for which the instruments were utilized. The data adjustment process for each instrument was explained in Chapter III.

The SDT instrument measured an employee's perceptions of autonomy, competence, and relatedness in the workplace. The specific questions addressing autonomy, competence, and relatedness were noted in previous studies; adding up the raw scores from each category produces a single autonomy, competence, and relatedness score. Each respondent, therefore, had one score for autonomy, competence, and relatedness.

Like the SDT instrument, the motivation instrument measured six types of motivation that were combined through mathematical means into a single motivation score for each respondent. While the details of each category of motivation are interesting, only the combined motivation score is of relevance to this study. Adjusting the data obtained from the turnover intentions instrument was much simpler than the process for the motivation instrument. The turnover intentions instrument asked only four questions and did not include any reverse scoring or complicated mathematical equations. The raw scores from the turnover intentions instrument were simply added together to result in a single turnover score for each respondent. The higher the turnover score, the more likely the respondent was to voluntarily leave the organization.

The demographic data also underwent a form of data adjustment, but the adjustment was simply to assign distinct numbers to certain responses for data coding purposes. For example, a gender response of "Male" was assigned a number 1, by which it could be represented in SPSS. "Female" was assigned the number 2. Likewise, each demographic data category was assigned a corresponding number for analyses purposes.

By following the process outlined for each instrument, the raw data adjustment process for the present study resulted in five scores for each respondent. Each respondent had an autonomy, competence, relatedness, motivation, and turnover score in addition to all adjusted demographic data. These five scores were entered into SPSS for regression analysis.

Regression analysis. After the data were adjusted according to the recommended processes outlined by each instrument's requirements, the data were entered into SPSS for further regression analyses. Three types of regression analyses were performed with

associated ANOVA calculations in addition to the overall descriptive statistics for the data. The descriptive results will first be discussed followed by the multivariate regression analysis of all independent variables on turnover intention, SDT on motivation, and the independent variables of motivation and employee expectations on turnover intentions.

The descriptive statistics for the data are highly informative. Perhaps of greatest interest are the average years worked (6.08 years), average age (32.69 years), average number of offices of admissions in which the respondents have been employed (1.73 offices), and employment expectations upon being hired for the present position (4.73 years). (See Table 8.) Remember that the autonomy, competence, relatedness, motivation, and turnover intention scores are the adjusted scores and that the demographic scores have also been coded to numerically represent text responses.

Table 8.					
Descriptive statistics.					
	N	Minimum	Maximum	Mean	Std. Deviation
Autonomy Score	288	9.00	49.00	33.8889	7.47130
Competence Score	288	16.00	42.00	33.7604	5.47865
Relatedness Score	288	14.00	56.00	44.2569	8.40006
Motivation Score	288	-48.00	67.00	16.9444	20.46797
Turnover Intention Score	288	5.00	35.00	17.4653	9.42006
Years Worked	288	1.00	16.00	6.0833	4.93653
Age	288	20.00	60.00	32.6875	10.61257
Gender	288	.00	2.00	1.6181	.50082
Location	288	1.00	2.00	1.2257	.41877
Position	287	1.00	6.00	2.4495	.92558
Number of Offices Worked	286	1.00	9.00	1.7308	1.11492
Expectations	285	1.00	10.00	4.7368	2.85523

The regression analyses were three-fold and indicated statistically significant relationships between independent and dependent variables for the present study. The ANOVA calculation for each regression analysis makes it possible to compare the variability within and between respondents and to know if the results are statistically similar or different. If ANOVA results indicate that the differences between respondents are not statistically different (p<0.05), then the variance can be mostly attributed to the independent variables. On the contrary, should the ANOVA results show a statistically significant difference between the respondents, the variance is not explained by the independent variables and the data are not of high enough quality to be utilized. ANOVA results indicated the regression data to be statistically significant (p=0.00). (See Table 9.) Area analysis of the independent variables of employee autonomy, competence, relatedness, motivational state, years worked, age, gender, location, position type, offices worked, and expectations upon assuming current working position and the dependent variable of turnover intention was conducted.

Table 9).			
Regress	sion 1 mode	el summary		
			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.694 ^a	.482	.461	6.92313

A regression analysis is the most beneficial form of analysis for the present study for its ability to address "the total contribution of all the independent variables together; the comparative importance of different variables, and the role of a particular independent variable separate from the effects of the other independent variables" (Vogt, 2007, p. 147). Each independent variable was paired with its associated dependent

variable and the regression analysis was conducted. Independent variables for this study are employee autonomy, competence, relatedness, motivational state, years worked, age, gender, location, position type, offices worked, and expectations upon assuming current working position. The dependent variables include turnover intention and motivational state, depending on the regression analysis performed. It is true that other factors could impact turnover intentions and motivational states, but it is only the relationship between the variables listed that is needed to determine if SDT provided an adequate explanation for admissions employee satisfaction. Each independent variable was analyzed by itself, in conjunction with the other independent variables, and their combined impact on the dependent variables was analyzed using SPSS. The regression analysis indicated which independent variables have the most effect on turnover intentions and motivation when compared to each other. The multivariate regression analyses performed included a regression of all independent variables on turnover intention, a regression of autonomy, competence, and relatedness as the primary components of SDT on motivation, and a regression of the independent variables of motivation and employee expectations on the dependent variable of turnover intention.

The first regression analysis of all eight independent variables on turnover intention had an Adjusted R Square value, $R^2 = .461$, indicating that the variance explained by the independent variables on turnover intention to be reasonable for a study of this type. (See Table 9.) Furthermore, ANOVA results indicate a statistically significant, p = .000, combined effect on the dependent variable (see Table 10). Individually, the independent variables of autonomy (p = .000), competence (p = .000), motivational state (p = .001), employee office location (p = .037), and employee

expectations (p = .000), were statistically significant. Notably, the third category of SDT, relatedness, was not found to be statistically significant (p = .667). Also, the number of years worked in admissions was not found to impact turnover intentions (p = .813), indicating that greater turnover is not necessarily seen in the newer members in the admissions career field. (See Table 11.)

Table	10.					
Regression 1 ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11965.257	11	1087.751	22.695	.000 ^b
	Residual	12845.185	268	47.930		
	Total	24810.443	279			

Tabl	e 11.					
Regi	ression 1 coefficients					
				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	53.466	4.153		12.875	.000
	Autonomy Score	317	.077	249	-4.126	.000
	Competence Score	488	.112	282	-4.373	.000
	Relatedness Score	028	.067	025	417	.677
	Int/Ext Score	-4.297	1.308	166	-3.285	.001
	Years Worked	.032	.133	.017	.237	.813
	Age	049	.062	055	791	.429
	Gender	029	.885	001	033	.974
	Location	2.185	1.043	.097	2.095	.037
	Position	538	.506	053	-1.062	.289
	Offices Worked	.075	.409	.009	.183	.855
	Expectations	848	.169	256	-5.017	.000

In the second regression test performed on this dataset, the independent variables of autonomy, competence, relatedness, and years worked were analyzed against the dependent variable of motivational state. The Adjusted R Square value, $R^2 = .193$, is very low, indicating that the variance explained by the independent variables on turnover intention to be not significant. (See Table 12.) ANOVA results, however, indicate a statistically significant (p = .000) combined effect on the dependent variable. (See Table 13.) Autonomy (p = .027) and competence (p = .000) were statistically significant while relatedness (p = .456) and years worked (p = .896) were not. (See Table 14.) These results indicate that SDT is not being completely applicable to a university office of admissions setting because relatedness does not appear to be a significant contributor to admissions employee satisfaction.

Table 1	2.			
Regress	sion 2 mode	el summary		
			Adjusted D	Std. Error of the
			Adjusted R	
Model	R	R Square	Square	Estimate
1	.452 ^a	.204	.193	.333

Table 1	13.					
Regres	sion 2 ANOV	ΥA				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.024	4	2.006	18.134	.000 ^b
	Residual	31.306	283	.111		
	Total	39.330	287			

Table	14.					
Regre	ssion 2 coefficients					
				Standardized		
	Unstandardized Coefficients			Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	166	.130		-1.272	.204
	Autonomy Score	.008	.004	.158	2.220	.027
	Competence Score	.025	.005	.365	5.009	.000
	Relatedness Score	002	.003	051	746	.456
	Years Worked	.001	.004	.007	.131	.896

The third regression test performed analyzed the independent variables of motivational state and employment expectations against the dependent variable of turnover intention. The Adjusted R Square value, $R^2 = .278$, is low, indicating that the variance explained by the independent variables on turnover intention is insignificant. (See Table 15.) ANOVA results indicate a statistically significant (p = .000) combined effect on the dependent variable. (See Table 16.) Both motivational state (p = .000) and employment expectations (p = .000) were found to be statistically significant. (See Table 17.) The relationship between motivational state and turnover intentions in this regression analysis was found to be aligned with SDT predictions, indicating at least a partial applicability of SDT to a university office of admissions setting. As with the second regression performed, the low R Square value casts doubt on this third and final regression analysis.

Table 15.

Regression 3 model summary. The analysis of independent variables of motivational state and employment expectations against the dependent variable of turnover intention.

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.532 ^a	.283	.278	8.02259

ble 16	5.					
gressi	ion 3 ANOVA					
Mode	I	Sum of Squares	df	Mean Square	F	Sig.
woue			2			.000 ^b
				3584.172	55.688	.000
1	Regression	7168.343	2	0004.172	00.000	
1	Regression	18150.057	282	64.362		

Table	e 17.					
Regre	ession 3 coefficients					
				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	30.522	1.345		22.687	.000
	Int/Ext 0 1 scoring	-9.256	1.305	361	-7.092	.000
	Expectations	-1.132	.168	342	-6.717	.000

Conclusion

The combined statistical analysis indicated several statistically significant relationships and a few relationships that SDT predicted would be significant but were not. Autonomy and competence were shown to have a statistically significant relationship with turnover intentions. Motivational state was also shown to have a statistically significant relationship with turnover intention. These two findings are aligned with those proposed by SDT research. Other analysis results contradicted those predicted by SDT research, namely relatedness was shown to not have a statistically significant relationship with turnover intention or motivational state. Furthermore, the low Adjusted R Square value for the second and third regression analyses calls the statistically significant results from the analysis into question. The variance may or may not indicate a significant relationship despite the reported ANOVA results. These results are not those predicted by SDT research.

CHAPTER V

DISCUSSION AND CONCLUSIONS

The purpose of this study was to better understand the turnover intentions of professional admissions employees on a national level, identify the extent to which motivation mediates employee satisfaction in a university office of admissions, determine if self-determination theory provided a theoretical explanation for university admissions employee satisfaction, and use the theoretical underpinnings of self-determination theory to describe employee satisfaction in a way that can lead to a delay in voluntary admissions turnover among employees in university offices of admissions. The data analysis indicated that self-determination theory provided a partial explanation for admissions employee satisfaction. Results of the study do provide insights into the four research questions posed at the beginning of the research. This information is important to not only guide office of admissions leadership in adopting and administering employee retention initiatives, but also in the creation of possible new mechanisms to delay employee turnover. Each research question will be discussed in this chapter followed by conclusions and recommendations for employees in university offices of admissions and for future research.

Conclusions

Research Question 1: What are the turnover intentions of employees in offices of admissions at American land-grant universities? This question considered the turnover intentions of employees from American land-grant universities. The data show that turnover intentions of admissions employees are not very high at all. The small number of offices worked and the average ages of the majority of study participants suggest

admissions employees from land-grant universities tend to remain with their employers and within the admissions career field for a significant number of years. More research needs to be conducted, but the data hint that voluntary turnover in offices of admissions is not as high as previously thought. The data suggest that offices of admissions employees from land-grant universities generally do not have high turnover intentions. In fact, most respondents intend to stay in their current position for several years upon achieving employment in their current positions and actually meet or exceed their initial employment expectations. While voluntary employee turnover may be a problem that was unique to specific offices of admissions, the aggregate results indicate this is not the case nationwide.

Research Question 2: To what extent does employee intrinsic and extrinsic motivation correspond to turnover intentions as a measure of employee satisfaction? The second research question examined the relationship between employee motivational state and turnover intentions. The study results indicated that the relationships between turnover intention among admissions employees, autonomy, and competence were significant. However, the relationship between relatedness and turnover intention was not significant. The connections between admissions officers and other people in their offices or within their university communities may not have an impact on turnover intentions. This finding indicates that the types of people employed by offices of admissions might be unique from study participants in past self-determination theory research. Perhaps the general extroverted nature of admissions employees in some way mitigated the need for relatedness to be realized in a formal way by employees in university offices of

admissions – they know how to relate to others and create meaningful interpersonal connections as a function of their personalities and professional roles.

The data analyses suggest that motivational state is not a function of age or length of time worked in a university office of admissions. Office of admissions employees on average do not have declining levels of intrinsic motivation as they age. Similar to the need for relatedness, perhaps university admissions employees enter the field of higher education recruitment and as a means of satisfying their personal needs for intrinsic motivation. Assisting students to achieve college entrance is the foundational responsibility of almost all admissions employees. These highly intrinsic responsibilities serve to keep the motivational state of the employee more or less constant throughout an admissions career.

An admissions employee who is intrinsically motivated is much less likely to intend to leave. Conversely, an admissions employee who is extrinsically motivated is much more likely to harbor intentions to leave. Perhaps persons who pursue long careers in university offices of admissions tend to naturally possess or to rapidly develop the capacity for intrinsic motivation by the work they perform. This may not be particularly surprising to those familiar with employment in a university student services setting where assisting students achieve their goals provides reward enough to overshadow salaries that are frequently lower than in other industries. Stated simply, the motivational state of the admissions employee has a significant impact on turnover intentions.

Self-determination theory may explain the motivational state for admissions employees. The needs for autonomy and competence are indeed related to admissions employee motivational state, and the need for relatedness is not. It appeared that the need

for relatedness is either already satisfied in most admissions employees or it is simply not necessary. This result is certainly not revolutionary, but the absence of the need to connect meaningfully with other people is unexpected. Perhaps the need for relatedness is being met as a given function of the work performed in an office of admissions and by the personalities of individuals who pursue such work. Overall, employee motivational state and the satisfaction of the needs of autonomy and competence are likely to improve employee satisfaction and delay voluntary turnover among employees in university offices of admissions.

Research Question 3: To what extent does self-determination theory provide a theoretical explanation for professional employee satisfaction in university offices of admissions? These results suggest that self-determination theory offered a partial explanation for university office of admissions employee satisfaction, but selfdetermination theory as it is currently defined was not completely applicable to an office of admissions setting. The statistically significant relationship between autonomy, competence, and motivational state on turnover intentions was congruent with selfdetermination theory claims of employee satisfaction. Conversely, the absence of relatedness as a key factor on turnover intention and on motivational state was incongruent with current SDT theory. Additionally, the low Adjusted R Square values for the second and third regression analyses called those more specific independent/dependent variable relationships into question. The results of this study clearly indicate that admissions employees did, in fact, have their needs for autonomy, competence, and relatedness realized. As with the other findings of this study, relatedness is strangely absent from statistically significant correlations to turnover intentions, but

this need is likely being met by other means than those outlined in the study. As the needs for autonomy and competence are realized, admissions employees were much more likely to remain in their current positions for as long or longer than they initially intended upon being hired.

Research Question 4: If self-determination theory is found to be applicable, how does self-determination theory describe university admissions employee satisfaction to the extent that satisfaction can be improved and turnover intentions can be reduced? Selfdetermination theory partially described admissions employee satisfaction and can be used justify encouraging greater levels of autonomy and professional development in university admissions employees. Similarly, employees in university offices of admissions that foster competence and continual responsibility evolution may have significantly higher employee satisfaction and lower turnover intentions than employees in offices that are more static. Finally, employees in offices of admission are either already doing very well at meeting the need for relatedness, or those needs are being met by other means. The data suggest relatedness to be a non-issue for employees in university offices of admissions. Both scenarios are likely to be simultaneously applicable as is indicated in the higher levels of turnover intention in admissions employees who are located away from their main campuses as regional recruiters.

Another meaningful conclusion of the study was offices of admissions were shown to be places where employee satisfaction can be very high. The prevailing attitude that should be acknowledged and encouraged by university office of admissions leadership is the positive and satisfying nature of the work performed in and by their offices. Several respondents indicated an oppressive or negative work climate in their

survey responses, but the data show that this type of work environment is not standard for university offices of admissions. Most university offices of admissions appear to be places of deep personal and professional satisfaction where employees are given great autonomy, have the chance to develop a wide range of new skills, and where interpersonal relations are good. Office of admissions leaders who might claim the work is inherently stressful, top down, and draining are largely inaccurate, according to the data in this study. Admissions employees who find themselves in an office like the one just described might be wise to seek a different university office of admissions for employment if the negative attitudes of office leadership do not change. The data from this study show that university offices of admissions are mostly positive, energetic, and satisfying places in which to work.

Finally, a comparison of respondent work tenure, employee age, and number of offices in which employees have worked suggests that nearly half of the university office of admissions professional workforce were new employees with four or fewer years of experience in the office, 30 years old or younger, and working in their first office of admissions. The entry-level nature of most professional positions within a land-grant office of admissions skews the workforce demographic towards younger, less-experienced, and less-traveled employees.

Conclusions Summary

For self-determination theory to be completely applicable to employees in university offices of admissions, three essential relationships predicted by selfdetermination theory were needed to align the results of this study with those from selfdetermination theory research. First, autonomy, competence, and relatedness needed to

have a statistically significant relationship with turnover intentions, but only autonomy and competence were found to be statistically significant. Second, autonomy, competence, and relatedness needed a statistically significant relationship with motivational state, but this was not found in the case for employees in university offices of admissions. Third, motivational state needed to have a statistically significant relationship with turnover intentions, and the results of this study did verify the prediction. In summary, the predictions of self-determination theory are partially applicable to a university office of admissions setting.

Recommendations for University Offices of Admissions

Additional suggestions for offices of admissions were implicitly derived from the data analysis. One such suggestion would be to hire professional admissions employees who already have intrinsic motivation for the work of recruitment. For example, an applicant who graduated from the university for which she or he would be recruiting and who had a demonstrably positive experience while in college would be much more likely to have intrinsic recruitment motivation than an applicant who came from an outside university with little emotional connection to the hiring institution. Employees with personal connections to the university for which they are recruiting are more likely to be intrinsically motivated and to experience higher employee satisfaction. As such, an anecdotal conclusion of this study is to not have regional recruiters who are located away from their main campuses, but house all admissions employees on their main campuses in one group.

Another suggestion for university offices of admissions is to promote a wide array of responsibilities for recruitment officers as their length of tenure increases. The

literature review and data indicated that competence is an important factor influencing employee satisfaction and voluntary turnover. Many of the primary responsibilities of admissions officers, such as making high school presentations or walking a prospective student through the application process, can be mastered within one or two years. If additional responsibilities are not routinely given to admissions employees, the satisfaction derived from becoming competent with another aspect of the position will be lost. Therefore, variation and evolution in responsibility among admissions employees is crucial to the satisfaction of admissions employees and their desire to stay.

A third suggestion for offices of admissions would be to not restrict professional autonomy by giving too many top-down recruitment guidelines, presentations, and objectives. Autonomy was shown in this study to have a statistically significant influence on employee satisfaction and turnover intention. On the whole, university offices of admissions employees who participated in this study showed that their office leadership granted their employees autonomy in the workplace. The data also suggested that not every university office of admissions granted employees flexibility in how they fulfilled their office responsibilities. The statistically significant relationship between autonomy and turnover intention indicated lower levels of autonomy were related to higher turnover intentions. After employees in a university office of admissions hire new employees who are intrinsically motivated and provides them with varied responsibility over time, the office leaders should not stifle the satisfaction that stems from intrinsic motivation and competence by imposing rigid restrictions on how the employees carry out their responsibilities. Ideally, the employees should almost always be allowed the opportunity to express their individuality in the office and on the road.

Finally, university leadership should recognize that the employees in offices of admissions are inexperienced and young. Leadership should not treat offices of admissions in the same way they would a more seasoned office on campus. Recognizing the entry-level nature of most positions in university offices of admissions will help institutional leadership work more effectively with admissions employees and aid them in setting institutional enrollment goals and in outlining recruitment initiatives. An office of admissions is generally an ideal location to nurture and shape the future of higher education administration, and increased patience and sensitivity will possibly be required.

Suggestions for Future Research

Self-determination theory is based on the foundation of autonomy, competence, and relatedness, but relatedness was clearly shown to be absent in the present study. Therefore, the first suggestion for future research would be a study to determine in what manner admissions employees are fulfilling their professional need for relatedness. Is relatedness a need that is developed after being employed by an office of admissions? Is it possessed prior being hired, perhaps a personality trait of persons seeking employment within university offices of admissions? Furthermore, are there needs of admissions employees that go beyond autonomy, competence, and relatedness?

This study should also be duplicated over different types of offices of admissions and over different offices within postsecondary institutions. Only land-grant universities were considered for this study, and the assumption that offices of admissions from landgrant universities serve as an adequate representation of all offices of admissions might not be entirely valid. Groupings of liberal arts universities, two-year colleges, comprehensive four-year universities, and private colleges should be considered for

future studies. The results of additional research of this kind would be beneficial in understanding what constitutes admissions employee satisfaction and which practices are most likely to delay voluntary turnover. Additionally, this same study should be replicated over various offices within these postsecondary institution types. It is perhaps by comparing the results from land-grant offices of admissions and land-grant offices of the registrar, for example, that will lead to more definitive conclusions about the relatedness needs of admissions employees. These results can serve as a foundation of future grounded theory studies on university admissions employee satisfaction and motivation.

Additional studies could be conducted seeking to understand generational differences and how those differences affect turnover intentions. This information could potentially be extrapolated from the data collected for the current study. These results would add another layer of explanation to explaining employee satisfaction in university offices of admissions.

A related study could be conducted to determine where employees go when they leave the university admissions setting. Do the employees stay within the university, move to another university, or leave higher education administration altogether? Studies of this type would likely be difficult to perform for the length of time required to do the research and the challenge of tracking employees after leaving their offices of admissions. Knowing where the employees go and their motivations for leaving could be valuable information leading to a robust grounded theory of university admissions employee satisfaction.

A final suggestion would be to confirm the self-determination theory assumption that turnover intentions are a good indicator of employee satisfaction. This may not be accurate. A future study comparing the turnover intentions with the turnover realities might prove useful in gauging the applicability of self-determination theory's assumption of employee satisfaction.

Self-determination theory offers partial explanation for employee satisfaction within university offices of admissions. Using the length of time respondents reported being employed by an office of admissions and the total number of offices of admissions in which respondents reported having worked, the conclusion can be reached that turnover is not abnormally high among employees in university offices of admissions. However, turnover can be delayed by allowing employees to have greater autonomy in their work and by striving to provide them with opportunities for professional growth in terms of responsibility and variety of job tasks. Most admissions employees are intrinsically motivated and find much professional satisfaction in their employment. Leaders in and over offices of admissions should seek to realize the needs for autonomy and competence in their staff and continue to foster good relationships between staff members. These findings are not new, but they are newly applied to employees in university offices of admissions and serve as a catalyst for future studies seeking to explain university office of admissions employee satisfaction.

REFERENCES

- Ajuha, M. K., Chudoba, K. M., Kacmaar, C. J., McKnight, D. H., & George, J. F. (2007).
 IT road warrior: Balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions. *MIS Quarterly*, *31*(1), 1-17.
- Allen, D. G. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? *Journal of Management*, 32(1), 237-256.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693.
- Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human Resource Management Review*, 19(1), 9-22.
- Behson, S. J. (2005). The relative contribution of formal and informal organizational work-family support. *The Journal of Vocational Behavior*, *66*(1), 487-500.
- Bentein, K., Vandenberg, C., Vandenberge, R., & Stinglhamber, F. (2005). The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology*, 90(3), 468-482.
- Blau, G., Andersson, L., Davis, K., Daymont, T., Hochner, A., Koziara, K., & Holladay,
 B. (2008). The relation between employee organizational and professional development activities. *Journal of Vocational Behavior*, 72(1), 123-142.
- Boxall, P., & Macky, K. (2007). High-performance work systems and organizational performance: Bridging theory and practice. *Asia Pacific Journal of Human Resources*, 45(1), 261-270.

- Boxall, P., & Macky, K. (2008). Research and theory on high-performance work systems: Progressing the high involvement stream. *Human Resource Management Journal*, 19(1), 3-23.
- Bradley, G. M. (2010). Work-induced changes in feelings of master. *The Journal of Psychology: Interdisciplinary and Applied*, 144(2), 97-119.
- Cennamo, L., & Gardner D. (2008). Generational differences in work values, outcomes and person-organization values fit. *Journal of Managerial Psychology*, 23(8), 891-906.
- Chen, S. H., Yang, C. C., Shiau, J. Y., & Wang, H. H. (2006). The development of an employee satisfaction model for higher education. *The TQM Magazine*, 18(5), 484-500.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, *49*(3), 182-185.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P.
 (2001). Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country. *Personality and Social Psychology Bulletin, 27*(8), 930-942.
- Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management*, *37*(3), 197-208.
- Dysvik, A., & Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation and employee outcomes. *International Journal of Training and Development, 12*(3), 138-157.

- Felps, W., Mitchell, T. R., Hekman, D. R., Lee, T. W., Holtom, B. C., & Harman, W. S. (2009). Turnover contagion: How coworkers' job embeddedness and job search behaviors influence quitting. *Academy of Management Journal*, 52(3), 545-561.
- Florida R., & Goodnight, J. (2005). Managing for creativity. *Harvard Business Review*, 7(1), 1-9.
- Fortier, M. S., Vallerand, R. J., & Guay, F. (1995). Academic motivation and school performance: Toward a structural model. *Contemporary Educational Psychology*, 20(1), 257–274.
- Foster, F., De Grip, A., & Fouarge, D. (2011). Does perceived support in employee development affect personnel turnover? *The Journal of Human Resource Management*, 22(11), 2403-2418.
- Gagne, M. (2009). A model of knowledge-sharing motivation. *Human Resource* Management, 48(4), 571-589.
- Gagne, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(1), 331-362.
- Gagne, M., & Forest, J. (2008). The study of compensation systems through the lens of self-determination theory: Reconciling 35 years of debate. *Canadian Psychology*, 49(3), 225-232.
- Grawitch, M. J., Trares, S., & Kohler, J. M. (2007). Healthy workplace practices and employee outcomes. *International Journal of Stress Management*, *14*(3), 275-293.
- Green-Demers, I., Pelletier, L. G., & Menard, S. (1997). The impact of behavioural difficulty on the saliency of the association between self-determined motivation

and environmental behaviours. *Canadian Journal of Behavioural Science*, 29(1), 157–166.

- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes?
 Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49(2), 305-325.
- Holtom, B. C., Mitchell, T. R., Lee, T. W., & Eberly, M. B. (2008). Turnover retention research: A glance at the past, a closer review of the present, and a venture into the future. *The Academy of Management Annals*, 2(1), 231-274.
- Hom, P. W., & Kinicki, A. J. (2001). Towards a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44(5). 975-987.
- Hom, P. W., Mitchell, T. R., Lee, T. W., & Griffeth, R. W. (2012). Reviewing employee turnover: Focusing on proximal withdrawal state and an expanded criterion. *Psychological Bulletin*, 138(5), 831-858.
- Hurtz, G. M., & Williams, K. J. (2009). Attitudinal and motivational antecedents of participation in voluntary employee development activities. *Journal of Applied Psychology*, 94(3), 635-653.
- Ilardi, B. C., Leone, D., Kasser, R., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, 23(1), 1789-1805.

- Kacmar, M. K., Andrews, M. C., Van Rooy, D. L., Steilberg, R. C., & Cerrone, S.(2006). Sure everyone can be replaced...but at what cost? Turnover as a predictor of unit-level performance. *Academy of Management Journal*, 49(1), 133-144.
- Kasser, T., Davey, J., & Ryan, R. M. (1992). Motivation, dependability, and employeesupervisor discrepancies in psychiatric vocational rehabilitation settings. *Rehabilitation Psychology*, 37(1), 175-187.
- Khodyakov, D. M. (2007). The complexity of trust-control relationships in creative organizations: Insights from a qualitative analysis of a conductorless orchestra. *Social Forces*, 86(1), 1-22.
- Kim, T. Y., Cable, D. M., & Kim, S. P. (2005). Socialization tactics, employee proactivity, and person-organization fit. *Journal of Applied Psychology*, 90(2), 232-241.
- Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2005). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work-family effectiveness. *Journal of Vocational Behavior*, 68(1), 347-367.
- Kouzes, J., & Posner, B. (2007). *The leadership challenge* (4th ed.). San Francisco, CA: Jossey-Bass, Inc.
- Kuvaas, B. (2006). A test hypotheses derive from self-determination theory among public sector employees. *Employee Relations*, *31*(1), 39-56.
- Kuvaas, B. (2008). An exploration of how the employee-organization relationship affects the linkage between perception of developmental human resource practices and employee outcomes. *Journal of Management Studies*, 45(1), 1-25.

- Kuvaas, B., & Dysvik, A. (2010). Exploring the relative and combined influence of mastery- approach goals and work intrinsic motivation on employee turnover intention. *Personnel Review*, 39(5), 622-638.
- Latif, K. F., Jan, S., & Shaheen, N. (2013). Association of training satisfaction with employee development aspect of job satisfaction. *Journal of Managerial Sciences*, 7(1), 159-178.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.
- Leach, D. J., Wall, T. D., Rogelberg, S. G., & Jackson, P. R. (2005). Team autonomy, performance, and member job strain: Uncovering the teamwork KSA link. *Applied Psychology: An International Review*, 54(1), 1-24.
- Liu, D. L., Chen, X. P., & Yao, X. (2010). From autonomy to creativity: A multilevel investigation of the mediating role of harmonious passion. *Journal of Applied Psychology*, 96(2), 294-309.
- Lucas, C. J. (1994). American higher education: A history. New York, NY: St. Martin's Press.
- Ma, Y. R., Cheng, W. B., Ribbens, B. A., & Zhou, J. M. (2013). Linking ethical leadership to employee creativity: Knowledge sharing and self-efficacy as mediators. *Social Behavior and Personality*, 41(9), 1409-1420.
- McElroy, J. C., Morrow, P. C., & Rude, S. N. (2001). Turnover and organizational performance: A comparative analysis of the effects of voluntary, involuntary, and reduction-in-force turnover. *Journal of Applied Psychology*, 86(6), 1294-1299.

- Meyer J. P., & Gagne, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology*, 1(1), 60-62.
- Meyer, J. P., & Maltin, E. R. (2010). Employee commitment and well-being: A critical review, theoretical framework and research agenda. *Journal of Vocational Behavior*, 77(1), 323-337.
- Mossholder, K. W., Settoon, R. P., & Henagan, S. C. (2005). A relationship perspective on turnover: Examining structural, attitudinal, and behavioral predictors. *Academy of Management Journal*, 48(4), 607-618.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(1), 133-144.
- Oldham, G. R., & Hackman, J. R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, *31*(2-3), 463-479.
- Patrick, H., Knee, C. R., Canevello, A., & Lonsbary, C. (2007). The role of need fulfillment in relationship functioning and well-being: A self-determination theory perspective. *Journal of Personality and Social Psychology*, 92(3), 434-457.
- Pelletier, L. G., Dion, S. C., Slovinec-D'Angelo, M., & Reid, R. (2004). Why do you regulate what you eat? Relationship between forms of regulation, eating behaviors, sustained dietary behavior change, and psychological adjustment. *Motivation and Emotion*, 28(1), 245–277.

- Perry, J. L., Mesch, D., & Paarlberg, L. (2006). Motivating employees in a new governance era: The performance paradigm revisited. *Public Administration Review*, 66(4), 505-514.
- Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, *91*(5), 1154-1162.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization. *Journal of Personality and Social Psychology*, 57(1), 749 – 761.
- Ryan, R. M., Huta, V., & Deci, E. L. (2006). Living well: A self-determination theory perspective on Eudaimonia. *Journal of Happiness Studies*, 9(1), 139-170.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893-917.
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, 14(3), 204-220.
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 981-1003.
- Shaw, J. D., Delery, J. E., Jenkins, Jr, G. D., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. *The Academy of Management Journal*, 41(5), 511-525.
- Shaw, J. D., Gupta, N., & Delery, J. E. (2005). Alternative conceptualizations of the relationship between voluntary turnover and organizational performance. *Academy of Management Journal*, 48(1), 50-68.

- Shaw, J. D., Johnson, J. L., & Lockhart, D. E. (2005). Turnover, social capital losses, and performance. Academy Management Journal, 48(4), 594-606.
- Stumpf, S. A., & Dawley, P. K. (1981). Predicting voluntary and involuntary turnover using absenteeism and performance indices. *The Academy of Management Journal*, 24(1), 148-163.
- Tangirala, S., & Ramanujam, R. (2008). Exploring nonlinearity in employee voice: The effects of personal control and organizational identification. *Academy of Management Journal*, 51(6), 1189-1203.
- Thompson, C. A., & Prottas, D. J. (2005). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology*, 10(4), 100-118.
- Tremblay, M. A., Blanchard, C. M., Taylor, S, Pelletier, & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational psychology research. *Canadian Journal of Behavioral Sciences*, 41(4), 213-226.
- Trougakos, J. P., Hideg, I., Cheng, B. H., & Beal, D. J. (2014). Lunch breaks unpacked:The role of autonomy as a moderator of recovery during lunch. *Academy of Management Journal*, 57(2), 405-421.
- Vallerand, R. J., Pelletier, L. G., & Koestner, R. (2008). Reflections on selfdetermination theory. *Canadian Psychology*, 49(3), 257-262.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31.

- Vansteenkiste, M., Neyrinck, B, Niemiec, C. P., Soenens, B, De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology*, 80(1), 251-277.
- Wells, D. L., & Muchinsky, P. M. (1985). Performance antecedents of voluntary and involuntary managerial turnover. *Journal of Applied Psychology*, 70(2), 329-336.
- Zhang, X. M., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128.

Appendix A

Autonomy, Competence, and Relatedness Questions

When I am at Work

The following questions concern your opinions about your job during the last year. (If you have been on this job for less than a year, this concerns the entire time you have been at this job.) Please indicate how true each of the following statements is for you given your experiences on this job. Remember that your supervisor will never know how you responded to the questions. Please use the following scale in responding to the items.

1 2 3 4 5 6 7

not at all	somewhat true	very true
true		

I feel like I can decide how my job gets done.	1	2	3	4	5	6	7
I really like the people I work with.	1	2	3	4	5	6	7
I do not feel very competent when I am at work.	1	2	3	4	5	6	7
People at work tell me I am good at what I do.	1	2	3	4	5	6	7
I feel pressured at work.	1	2	3	4	5	6	7
I get along with people at work.	1	2	3	4	5	6	7
I pretty much keep to myself when I am at work.	1	2	3	4	5	6	7
I am free to express my ideas and opinions on the job.	1	2	3	4	5	6	7
I consider the people I work with to be my friends.	1	2	3	4	5	6	7
I have been able to learn interesting new skills on my job.	1	2	3	4	5	6	7

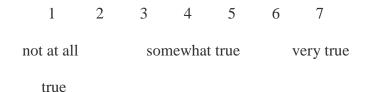
When I am at work, I have to do what I am told.	1	2	3	4	5	6	7
Most days I feel a sense of accomplishment from working.	1	2	3	4	5	6	7
My feelings are taken into consideration at work.	1	2	3	4	5	6	7
On my job I do not get much of a chance to show how capable I am.	1	2	3	4	5	6	7
							_
People at work care about me.	1	2	3	4	5	6	7
There are not many people at work that I am close to.	1	2	3	4	5	6	7
I feel like I can pretty much be myself at work.	1	2	3	4	5	6	7
The people I work with do not seem to like me very much.	1	2	3	4	5	6	7
When I am working I often do not feel very capable.	1	2	3	4	5	6	7
There is not much opportunity for me to decide for myself how	1	2	3	4	5	6	7
to go about my work.							
People at work are pretty friendly towards me.	1	2	3	4	5	6	7

Appendix B

Intrinsic/Extrinsic Motivation Questions

Why Do You Do Your Work?

The following questions concern your opinions about your job during the last year. (If you have been on this job for less than a year, this concerns the entire time you have been at this job.) Please indicate how true each of the following statements is for you given your experiences on this job. Remember that your supervisor will never know how you responded to the questions. Please use the following scale in responding to the items.



This is the type of work I chose to do to attain a certain lifestyle.	1	2	3	4	5	6	7
I do this work for the income it provides me.	1	2	3	4	5	6	7
I don't seem to be able to manage the important tasks related to	1	2	3	4	5	6	7
this work.							
I do this work because I derive much pleasure from learning new	1	2	3	4	5	6	7
things.							
I do this work because it has become a fundamental part of who	1	2	3	4	5	6	7
I am.							
I do this work because I want to succeed at this job, if not, I	1	2	3	4	5	6	7
would be very ashamed of myself.							

I do this work because I chose this type of work to attain my	1	2	3	4	5	6	7
career goals.							
I do this work for the satisfaction I experience from taking on	1	2	3	4	5	6	7
interesting challenges.							
I do this work because it allows me to earn money.	1	2	3	4	5	6	7
I do this work because it is part of the way in which I have	1	2	3	4	5	6	7
chosen to live my life.							
I do this work because I want to be very good at this work,	1	2	3	4	5	6	7
otherwise I would be disappointed.							
I don't know why I do this work, we are provided with	1	2	3	4	5	6	7
unrealistic working conditions.							
I do this work because I want to be a "winner" in life.	1	2	3	4	5	6	7
I do this work because it is the type of work I have chosen to	1	2	3	4	5	6	7
attain certain important objectives.							
I do this work for the satisfaction I experience when I am	1	2	3	4	5	6	7
successful at doing difficult tasks.							
I do this work because this type of work provides me with	1	2	3	4	5	6	7
security.							
I don't know, too much is expected of us.	1	2	3	4	5	6	7
I do this work because this job is a part of my life.	1	2	3	4	5	6	7

Appendix C

Turnover Intentions Questions

How True is Each of the Following Statements?

The following questions concern your opinions about your job during the last year. (If you have been on this job for less than a year, this concerns the entire time you have been at this job.) Please indicate how true each of the following statements is for you given your experiences on this job. Remember that your supervisor will never know how you responded to the questions. Please use the following scale in responding to the items.

1 2 3 4 5 6 7

not at all somewhat true very true

I often think about quitting my present job.	1	2	3	4	5	6	7
I may quit my present job during the next 12 months.	1	2	3	4	5	6	7
I will probably look for a new job in the next year.	1	2	3	4	5	6	7
I do not see many prospects for the future in this organization.	1	2	3	4	5	6	7
I will likely actively look for a new job within the next three	1	2	3	4	5	6	7
years.							

Appendix D: Demographic Questions

How long have you worked for an office of admissions?

- o 1 year
- o 2 years
- o 3 years
- o 4 years
- o 5-9 years
- o 10-15 years
- o 16 years +

What is your age?

- o 20-25
- o 26-30
- o 31-35
- o 36-40
- o 41-45
- o 46-50
- o 51-60
- o 60+

Are you male or female?

- o Male
- o Female

o Rather not say

Are you a regional admissions representative meaning you permanently live away from the main campus location?

- Yes, I am a regional representative.
- No, I am located on the main campus.

Which of the following most closely describes your position?

- New student recruiter
- Application processing
- Office technology support
- o Supervisor of recruitment staff with personal recruitment territory
- o Office supervisor without specified recruitment territory
- o Clerical

In how many offices of admissions have you worked? If you left an institution and were later rehired for a different position at the original institution, please count it as two different offices.

- o 1
- o 2

What were your employment intentions upon accepting your current position? Did you initially intend to work for the office of admissions for...

- o 1 year
- o 2 years
- o 3 years
- o 4 years
- \circ 5 7 years
- \circ 8 10 years
- \circ 10+ years

Appendix E

Questionnaire Initial E-mail

«Name»,

Good afternoon! My name is Steve Keller, and I'm finishing up a doctorate degree from Idaho State University in Pocatello, Idaho (<u>www.isu.edu</u>). As an office of admissions employee myself, I'm conducting research for my dissertation that is designed to improve employee satisfaction for admissions employees.

I would like to ask for your help by completing the following questionnaire about how you feel at work as an admissions employee. **It should only take between 5 and 10 minutes.** By finishing the questionnaire, you will be helping me finish a long road to my doctorate degree and will help me be a better leader in my own office of admissions. Your responses are totally anonymous and will be combined with the responses from admissions counselors across the United States. By taking this questionnaire you acknowledge you are taking it out of your own free will and that it will in no way effect employment status or contain personally-identifiable information.

https://www.surveymonkey.com/r/FCTKYTP

If you're sitting on the fence about whether to participate or not, please do. It really will only take 5-10 minutes, and you'll be helping out a fellow admissions employee. If you have questions about the survey, don't hesitate to contact me directly. Also here are two links to prove to you this study is legitimate.

My Ed.D. program website at Idaho State University -

http://www.ed.isu.edu/spel/SPEL_Educational_Leadership.shtml

My University of Idaho webpage where I am currently an admissions employee -

www.uidaho.edu/steve

Thanks for all of your help!

Steve Keller

Doctoral Candidate

Idaho State University

kellstep@isu.edu

208-933-2308

Appendix F

Questionnaire Reminder E-mail

«Name»,

Good morning! My name is Steve Keller, and I'm finishing up a doctorate degree from Idaho State University in Pocatello, Idaho. As an office of admissions employee myself, I'm conducting research for my dissertation that is designed to improve employee satisfaction for admissions employees. This is my first reminder email. **If you are one of the many people who have already completed this quick survey, thank you very much for all of your help. PLEASE DO NOT TAKE THE SURVEY AGAIN.** It is an anonymous survey, and I don't know who has taken it and who hasn't, so this email is going out to everybody, again.

For those of you who haven't already taken the survey, I would like to ask for your help by completing the following questionnaire about how you feel at work as an admissions employee. **It should only take between 5 and 10 minutes.** By finishing the questionnaire, you will be helping me finish a long road to my doctorate degree and will help me be a better leader in my own office of admissions. Your responses are totally anonymous and will be combined with the responses from admissions counselors across the United States. By taking this questionnaire you acknowledge you are taking it out of your own free will and that it will in no way effect employment status or contain personally-identifiable information.

https://www.surveymonkey.com/r/FCTKYTP

If you're sitting on the fence about whether to participate or not, please do. It really will only take 5-10 minutes, and you'll be helping out a fellow admissions employee. **Please complete the questionnaire by 04/22/2016.**

If you have questions about the survey, don't hesitate to contact me. Also here are two links to prove to you this study is legitimate.

My Ed.D. program website at Idaho State University – http://www.ed.isu.edu/spel/SPEL_Educational_Leadership.shtml

My University of Idaho webpage where I am currently an admissions employee – <u>www.uidaho.edu/steve</u>

Thanks for all of your help!

Steve Keller

Doctoral Candidate

Idaho State University

kellstep@isu.edu

208-933-2308

Appendix G

Questionnaire Final Reminder E-mail

«Name»,

First, I would like to thank the hundreds of generous people who have already completed the survey for my dissertation. You have been so incredibly helpful. Thank you very much.

For those of you who haven't had a chance to complete the survey, yet, this is the final reminder to complete the questionnaire for my dissertation on office of admissions employee satisfaction. **It should only take between 5 and 10 minutes.** By completing the questionnaire, you will be helping me finish a long road to my doctorate degree and will help me be a better leader in my own office of admissions. Your responses are totally anonymous and will be combined with the responses from admissions counselors across the United States. By taking this questionnaire you acknowledge you are taking it out of your own free will and that it will in no way effect employment status or contain personally-identifiable information.

https://www.surveymonkey.com/r/FCTKYTP

Please complete the questionnaire by this Friday (4/22/2016) at midnight (mountain daylight time).

If you have questions about the survey, don't hesitate to contact me. Also here are two links to prove to you this study is legitimate.

My Ed.D. program website at Idaho State University -

http://www.ed.isu.edu/spel/SPEL_Educational_Leadership.shtml

My University of Idaho webpage where I am currently an admissions employee -

www.uidaho.edu/steve

Thanks for all of your help!

Steve Keller

Doctoral Candidate

Idaho State University

kellstep@isu.edu

208-933-2308

Appendix H

Self-determination Theory Scale Limited Use License Agreement

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2. Use of Website. User shall use the Website solely for non-commercial purposes and in accordance with the terms and conditions of this Agreement. User covenants and agrees that User shall not solicit or advertise on the Website's forums or comments section on behalf of itself or any third party nor shall the User use obscene, offensive or inappropriate language or images on the Website's forums, discussion boards and comment sections. User also agrees to abide by the terms and guidelines posted on the Website with respect to participation in the Website's forums, discussion boards and comment sections, which may be modified and changed from time to time in the Organization's sole discretion.

3. Registration and Compliance. User agrees to and affirms that User will supply the Organization with all requested registration information, accurately and completely, and will not misrepresent their identity or their corporate or institutional affiliations. Specifically, User must report any commercial affiliation which may result, either directly or indirectly, in the Materials being used for a commercial or for-profit purpose. Any misrepresentation, as determined in the Organization's sole discretion, shall be deemed a breach of this Agreement and grounds for immediate termination of this Agreement in accordance with its terms and without notification. Upon the Organization reasonable request, User agrees to promptly report, in writing, the current or intended future use of the Materials in order for the Organization to verify the User's compliance with this Agreement.

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Limitation on Liability. In no event shall the Organization or its affiliates be liable for any direct, indirect, special, incidental, punitive, exemplary or consequential damages, including, without limitation, loss of profits, revenue, goodwill, use, data, anticipated savings or other economic advantage even if advised of the possibility of such damages and notwithstanding the foreseeability thereof. User acknowledges that this limitation of liability is an essential term between the User and the Organization and that the Organization would not provide the Materials or access to the Website to User without this limitation.

Indemnification. User agrees to indemnify, defend and hold harmless the Organization and its employees, officers, agents and affiliates from and against any losses, expenses, liabilities, costs, fees (including reasonable attorneys' fees) and damages, arising out of or resulting from any claim or action relating to User's use of the Materials or the Website or any violation by User of any term or condition of this Agreement.

Ownership of Intellectual Property. The Parties acknowledge and agree that the Organization owns all right, title and interest in and to the Materials (and all any and all patent rights, copyrights, rights in mask works, trade secrets, trademarks, trade dress and all other forms of intellectual property protection applicable) and shall at all times remain owned solely and exclusively by the Organization, its successors and assigns. The Parties acknowledge and agree that any updates or modifications to the Materials shall be the sole and exclusive property of the Organization, whether developed by the Organization or any other person. No title to the Material or ownership of the Materials Software or any part thereof is hereby transferred to User. User shall notify the Organization immediately and in writing if User becomes aware of any actual or suspected unauthorized use of the Materials, in whole or in part, by any third party.

Confidentiality. During the term of this Agreement, User may gain access to and/or become exposed to certain trade secrets and other confidential and proprietary information of the Organization, in the form of, without limitation, ideas, data, programs, methods, solutions, strategies techniques, methods, practices, know-how and processes and other tangible and intangible information, including by reason of accessing the Website and the Materials ("Confidential Information"). User agrees to (a) keep all such Confidential Information confidential and undisclosed to any third party, (b) use such information solely in connection with its use of the Materials as expressly licensed under this Agreement, solely for research and other non-commercial purposes and (c) (c) surrender or destroy such Confidential Information, and any copies or embodiments thereof, when requested to do so by the Organization. User's obligations under this Section 9 shall survive termination of this Agreement.

Equitable Remedies. User acknowledges and agrees that irreparable harm would occur in the event that any of the agreements and provisions of this Agreement were not performed fully by User in accordance with their specific terms or conditions or were otherwise breached, and that money damages may not be an inadequate remedy for a breach of this Agreement because of the difficulty of ascertaining and quantifying the amount of damage that will be suffered by the Organization in the event that this Agreement is not performed in accordance with its terms or conditions or is otherwise breached. It is accordingly hereby agreed that the Organization shall be entitled to seek an injunction (temporary or permanent) or other equitable relief to restrain, enjoin and prevent breaches of this Agreement by User and to enforce specifically such terms and provisions of this Agreement, such remedy being in addition to and not in lieu of, any other rights and remedies to which the Organization is otherwise entitled to at law or in equity. The Parties agree that the covenants set forth in this Agreement are reasonable in all circumstances for the protection of the legitimate interests of the Organization and shall be enforced to the fullest extent permitted by law.

11. Governing Law; Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the conflicts of laws principles thereof. The Parties agree that any action or claim arising out of or relating to this Agreement or a breach thereof, shall be brought and maintained only in the federal and state courts located in Orange County, Florida and, if applicable, the courts of appeals therefrom. The Parties each consent to the exclusive jurisdiction and venue of such courts and waive any right to object to such jurisdiction or venue and will accept as due and adequate service of process served pursuant to the notice provisions herein.

12. Relationship of the Parties. Nothing in this Agreement shall be construed as creating a partnership, joint venture or any other form of express or implied legal association or relationship between the Parties capable of imposing any liability upon one Party for the act or failure to act of the other Party.

13. No Third Party Beneficiaries. No provision of this Agreement is intended nor shall be interpreted to provide or create any third party beneficiary rights, and all provisions hereof shall be personal solely between the Parties.

14. Waiver, Amendment or Modification. The waiver, amendment or modification of any provision of this Agreement or any right, power or remedy hereunder shall not be effective unless in writing and signed by the Party against whom enforcement

of such waiver, amendment or modification is sought. No failure or delay by either party in exercising any right, power or remedy with respect to any of the provisions of this Agreement shall operate as a waiver thereof.

15. No Assignment. All the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors, assigns and legal representatives; provided that in no event shall User assign or otherwise transfer this Agreement (or any of its rights hereunder) or any license granted hereunder or delegate any of its duties hereunder, in whole or in part, without the Orgainzation's prior written consent (which consent may be withheld in its sole discretion) and any attempt to do so shall be void and of no effect.

16. Severability. If any provision of this Agreement is held to be invalid or unenforceable for any reason, such provision will be conformed to prevailing law rather than voided, if possible, in order to achieve the intent of the parties and, in any event, the remaining provisions of this Agreement shall remain in full force and effect and shall be binding upon the parties hereto.

17. Construction. Unless the context of this Agreement otherwise clearly requires, (i) references in this Agreement to the plural include the singular, the singular the plural, the masculine the feminine, the feminine the masculine and the part the whole and (ii) the word "or" will not be construed as exclusive and the word "including" will not be construed as limiting.