A Study of the Relationships Between Empowerment, Decision-Making Style and Job Satisfaction in Female Middle Managers within Ontario's University Registrarial Units

Lee Ann C. McKivor
The University of Western Ontario
Supervisor
Dr V. Schwean
The University of Western Ontario

Graduate Program in Education

A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Education

© Lee Ann C. McKivor 2016

Follow this and additional works at: https://ir.lib.uwo.ca/etd

Part of the University Extension Commons

Recommended Citation
https://ir.lib.uwo.ca/etd/3891

This Dissertation/Thesis is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Electronic Thesis and Dissertation Repository by an authorized administrator of Scholarship@Western. For more information, please contact tadam@uwo.ca.
Abstract

An emerging body of literature has sought to explore the role of variables such as decision-making styles and structural empowerment in predicting job satisfaction in various populations and contexts. This study aimed to advance this knowledge by questioning the predictive ability of structural empowerment and decision-making styles in female registrarial middle managers in Ontario universities. It was hypothesized that when female registrarial middle managers feel empowered, dependent on their decision-making style, they experience high job satisfaction.

An online survey tool comprised of the Conditions for Workplace Effectiveness Questionnaire (CWEQ-I), the General Decision-Making Scale (GDMS), and the Job Satisfaction Survey (JSS), each employing Likert-like scales, was distributed to 17 university registrars at Ontario institutions. To enhance clarity for participants, some of the wording used was changed in the questionnaire (i.e., “current state of the hospital” changed to "the current state of the university").

20 Ontario universities were contacted with 85% indicating their willingness to participate in facilitating the data collection process. From the 17 participating institutions, a total of 29 survey responses were returned with 22 (28.95%) being valid based on the researcher’s criteria. A 28.95% response rate impacts the level of confidence in the findings.

A correlational research design was used to examine the resulting data. Pearson Product Moment correlations revealed a highly significant correlation between structural empowerment and job satisfaction. Two factors on the decision-making scale showed non-significant negative correlations with job satisfaction – avoidant and spontaneous. A multiple regression analysis demonstrated that structural empowerment predicted 77% of the variance in job satisfaction. Decision-making styles contributed an additional 7%. To further substantiate and build on this research, future studies with larger sample sizes are needed.

The outcomes of this study are hoped to provide a basis of understanding that can be used by registrarial offices to develop both professional support systems and areas for focused training for this important group of managers, namely women in registrarial middle
management positions. The results of this study can provide opportunities to develop specific staff retention initiatives in addition to ‘progression through the ranks’ career paths for female middle management leaders within university registrarial units.

Keywords

General Decision-Making Scale, GDMS, Conditions for Workplace Effectiveness, CWEQ-I, Job Satisfaction Survey, JSS, Registrar, Middle Manager, Female, Women, Professional Bureaucracy, Registrarial, Empowerment, Job Satisfaction
Acknowledgments

Erma Bombeck once said, “it takes a lot of courage to show your dreams to someone else”. It definitely did take courage. My journey to complete this Ed.D. was a dream that I have shared with many, and many have helped me to make it come true. My sources of strength can be peeled away like an onion, with the inner core coming from my family. Ellie and Brian have been there for me for the past many years while I sat alone at my computer each night rather than spending time with them; they were both there when my computer showed me the black screen of death during my final draft writing. Our house echoed with “you can do it mom” even in those darkest times. It would be impossible to adequately reflect how much I need to acknowledge their part in this process. Thank you Brian for helping me to become Dr. McKivor. I hope your dad would be proud. And thank you Ellie for providing me with inspiration, I love you kid.

My next layer comes from my colleagues at work – thank you WSS2140! Over the years, I have taken many days away from my professional life to complete aspects of my schooling; never did I hear a complaint from my colleagues or teammates. Equally, Glen Tigert, my University Registrar, provided constant encouragement to complete the task of furthering my education (especially as I neared the end).

Finally, my supervisor, Dr Schwean, thank you for giving me a safe space to have a complete breakdown (perhaps on multiple occasions…). Without you, I could never have pushed to complete this research in the timeframe needed. I admire your patience with me, especially when the word “statistics” was broached.
# Table of Contents

Abstract ................................................................................................................................. i  
Acknowledgments ................................................................................................................ iii  
Table of Contents ................................................................................................................ iv  
List of Tables ......................................................................................................................... vii  
List of Appendices ............................................................................................................... viii  

Chapter 1 ................................................................................................................................. 1  
1 Introduction ......................................................................................................................... 1  
   1.1 Statement of Topic ........................................................................................................ 1  
   1.2 Statement of Research Question ................................................................................ 3  
   1.3 Theoretical Construct Definition .............................................................................. 4  
      1.3.1 Empowerment ..................................................................................................... 4  
      1.3.2 Decision making style ......................................................................................... 6  
      1.3.3 Job satisfaction ................................................................................................... 7  
   1.4 Purpose and Importance of the Study ....................................................................... 8  
   1.5 Epistemological Paradigm ......................................................................................... 9  
   1.6 Ethical Protocols ....................................................................................................... 9  
   1.7 Methodological Overview ......................................................................................... 10  
   1.8 Limitations of the Study ......................................................................................... 11  

Chapter 2 ................................................................................................................................. 14  
2 Literature Review .............................................................................................................. 14  
   2.1 A Bureaucratic Organization ...................................................................................... 16  
   2.2 The Changing Role of the Middle Manager .............................................................. 16  
   2.3 Women in Leadership .............................................................................................. 18
2.4 The Relationships between Empowerment, Decision Making and Job Satisfaction .......................................................... 19

2.5 Summary .................................................................................................................................................. 21

Chapter 3 .................................................................................................................................................. 23

3 Methodology .......................................................................................................................................... 23

3.1 Population and Sampling ......................................................................................................................... 23

3.2 Measures .............................................................................................................................................. 25

3.2.1 Empowerment, CWEQ-I............................................................................................................. 26

3.2.2 Decision making, GDMS........................................................................................................... 30

3.2.3 Job satisfaction, JSS.................................................................................................................. 33

3.3 Procedure ............................................................................................................................................ 35

3.4 Research Design .................................................................................................................................. 38

3.5 Analysis Plan ....................................................................................................................................... 39

Chapter 4 .................................................................................................................................................. 41

4 Results .................................................................................................................................................... 41

4.1 Demographic Data ................................................................................................................................. 41

4.2 Data Analytics ................................................................................................................................... 43

4.2.1 Descriptive statistics .................................................................................................................... 43

4.2.2 Correlational analysis .................................................................................................................. 43

4.2.3 Multiple regression analysis ....................................................................................................... 44

Chapter 5 .................................................................................................................................................. 46

5 Discussion ............................................................................................................................................. 46

5.1 Selecting Female Registrarial Middle Managers .................................................................................. 48

5.2 Defining the Middle Manager ............................................................................................................ 48

5.3 Decision Making Style ....................................................................................................................... 50

5.4 Structural Empowerment .................................................................................................................. 51
5.4.1 Implications ................................................................. 56
5.5 Limitations of the Study .................................................... 59
5.6 Conclusions ................................................................. 61
References ............................................................................ 64
Appendices ........................................................................... 79
Curriculum Vitae ............................................................... 115
List of Tables

Table 1 *Enrolment by Ontario University: Fall Term Headcounts by Institution 2014/2015* ................................................................................................................................................. 100

Table 2 *Current Naming Conventions for Ontario’s University Registrarial Units* ........ 101

Table 3 *Current Naming Conventions for Ontario’s University Governing Bodies* ........... 102

Table 4 *Number of Registrarial Management Direct Reports* ................................................. 103

Table 5 *Comparative Cronbach Alpha Reliability Coefficients for the CWEQ-I* ............... 104

Table 6 *Means, Standard Deviations, and Reliabilities for the JSS* ........................................ 105

Table 7 *Participant Demographics (N = 22)* ........................................................................ 106

Table 8 *Total Average Mean Scores* .......................................................................................... 108

Table 9 *Test for Collinearity* ...................................................................................................... 109

Table 10 *Descriptive Statistics for Job Satisfaction, Empowerment and Decision Styles* .... 110

Table 11 *Summary Table JSS Dominant Decision-Making Styles* ......................................... 111

Table 12 *Correlations* .................................................................................................................. 112

Table 13 *Multiple Regression model prediction of job satisfaction* ......................................... 113

Table 14 *Means and Standard Deviations of Current and Historic Studies, CWEQ-I* .......... 114
List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Western University Ethics Approval</td>
<td>79</td>
</tr>
<tr>
<td>Appendix B</td>
<td>The University of Toronto Ethics Approval</td>
<td>80</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Email to Registrars, 14 July, 2015</td>
<td>81</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Reminder Email to Registrars, 27 July, 2015</td>
<td>82</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Invitation Email to Registrars, 9 November, 2015</td>
<td>83</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Webpage for Participants</td>
<td>85</td>
</tr>
<tr>
<td>Appendix G</td>
<td>Participant Information and Consent</td>
<td>87</td>
</tr>
<tr>
<td>Appendix H</td>
<td>Summary Outline of Study</td>
<td>89</td>
</tr>
<tr>
<td>Appendix I</td>
<td>Survey Tool</td>
<td>90</td>
</tr>
<tr>
<td>Appendix J</td>
<td>Participant Debriefing Form</td>
<td>98</td>
</tr>
</tbody>
</table>
Chapter 1

1 Introduction

According to the Council of Ontario Universities (COU), there are 20 degree granting universities in Ontario (see Table 1 for more information on individual enrolment per university as defined by the COU). For these institutions to be recognized in Ontario as publicly funded, there must be a primary reliance on the cooperation between the government of Canada and the government of Ontario. Public funding of higher education involves direct public funding of institutions for teaching, investment or the actualization of future benefits, and research, combined with the tuition funding of students. Since the 1980’s, universities have more than doubled their enrollment capacity (Association of Universities and Colleges of Canada, 2011, p. 5). In line with this increase and increased financial pressures placed on each publically funded institution, members of university administration are asking management teams to do more with less.

Universities are continually striving to find legitimate ways to become more effective in their existing processes while also striving to develop initiatives to meet the continually growing demands for increased programming and services. Eventually, resource reductions may affect the value of the services and programming provided. Middle managers within our institutions are straddling a position within a demanding paradox of needing more results while being provided with fewer resources. Realities, such as the number of hours in a day and the physical and mental limitations of the staff that facilitate the administrative processes of the university, are all apparent to the management level dealing directly with front line staff. Equally, in collaboration with their direct supervisors, this same middle management tier is part of the strategic decision making hierarchy within the institution and privy to the importance of the overall strategic goals of each university.

1.1 Statement of Topic

As student enrollment numbers in higher education are increasing, so too are the student and societal expectations for service, opportunity, efficiency, challenge, and learning
typically associated with a university education. Within each institution, the unit lead by the University Registrar is often referred to as the Office of the Registrar (see Table 2 for Ontario institutional naming conventions) and is a core administrative branch of the university. Fugazzotto (2009) states that “the registrar position represents one of the oldest roles in higher education” (p. 41) and as such, is a core element of our higher education system. Although the positions and associated duties of registrarial offices vary depending on the size of the institution (Smith, 2012), typically this division of centralized administration within the university maintains responsibility for student records and registration (Smith, 2012). Registrarial offices are often complex organizations where responsibility for the activities associated with admissions, convocation, examinations, university policy, and tuition and scholarship may also be managed.

For the purpose of this study, members of the registrarial middle management level of administration, within the traditionally hierarchical organization of most academic higher education institutions, report directly to the university registrar. Identified to be receiving decision making information from top tier managers, while also being responsible to lead the teams that enact the decisions, middle managers face pressures to meet the expectations of all parties invested in education (Clegg & McAuley, 2005; Denham, Ackers & Travers, 1997; Ekaterini, 2011; Holden & Roberts, 2004, Klagge, 1998).

By presenting the results of this study as scholarly research, the implications and recommendations will complement existing institutionally based Human Resource supports that Ontario university registrars may already be utilizing when looking to improve overall operational efficiencies and effectiveness within this important area of university administration. This study emanated from the researcher’s reflection on her own extensive exposure within the registrarial hierarchy of a university, from observations made over the course of her 19 year career in higher education administration, and from her desire to continually advance positive change within her profession.
1.2 Statement of Research Question

This thesis will seek to address the relationships between feelings of structural empowerment, decision making style, and job satisfaction in female registrarial middle managers in Ontario universities. Based on an exploration of previous scholarly research, current studies have not yet explored the relationships between these variables in this population. This study will represent the first step in the exploration of how the variables of empowerment, decision-making style, and job satisfaction relate to one another in this population. Depending on the findings of the current study, it may be sensible to continue to explore through more complex statistical methods the relationships among the three variables.

A middle manager may be more likely than their upper level colleagues to be in tune with the current issues and challenges within the organization (Dutton, Ashford, Regina, O’Neill, Hayes & Wierba, 1997). In academic middle management positions, such as a head of department, historically an authority and importance is tied to the role and related to the faculty member’s position in teaching and researching within academia. In non-academically based middle management positions like those within registrarial units, it is important to recognize that these individuals also serve a unique and important role within our institutions.

Wholly administratively based leadership positions deserve study to generate data that may assist individuals in upper levels of university leadership in understanding the common characteristics, strengths, weaknesses, and impacts affecting our universities’ non-academic middle management tier. This researcher’s relative study of empowerment, decision-making style, and job satisfaction in female registrarial middle managers will provide unique data not normally available. Previous studies, although undertaken within higher education institutions, were rarely about these roles within the organization (Bryman, 2007; Bryman & Lilley, 2009; Smerek & Peterson, 2007). Those studies that have been internally reflective have normally focused on university middle management positions within an academic context; in particular, studies focused on individuals serving in the role of head of department (Boer, Goedegebuure & Meek, 2010; Clegg &
1.3 Theoretical Construct Definition

1.3.1 Empowerment.

Empowerment, as defined by The World Bank (2011), is:

The process of enhancing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Central to this process are actions which both build individual and collective assets, and improve the efficiency and fairness of the organizational and institutional context which govern the use of these assets. (para. 1)

The empowerment tool utilized in this study is the *Conditions for Workplace Effectiveness Questionnaire I* (CWEQ-I) developed by Dr. H. Laschinger and used to measure the concept of structural empowerment. To enhance clarity for participants, some of the wording used was changed in the questionnaire (i.e., “current state of the hospital” changed to “the current state of the university”). For the purpose of this study, empowerment is defined by Laschinger (2012) in relation to the 1977 and 1993 works of Kanter. Based on Kanter’s theory, Laschinger (2012) defines power as “the ability to mobilize information, resources, and support to get things done in an organization” (para. 1). Hauk, Quinn Griffin, and Fitzpatrick (2011) further argue that “Kanter’s theory is based on the assumption that workplace behaviors and attitudes are determined by social structures within the workplace” (p. 19). Laschinger and Finegan (2005) determined that structurally empowering conditions in a workplace ultimately influence job satisfaction and organizational commitment. Smith, Capitulo, Quinn Griffith, and Fitzpatrick (2012) supported their hypothesis that a strong inverse relationship exists between structural empowerment and anticipated turnover.

Structural empowerment, in relation to the middle managers within this study, will be defined as the extent to which they feel they have access to these empowering structures in their work settings. Laschinger (2012) outlines Kanter’s argument that formal power
and informal power ensure access to two organizational structures that make an empowering work environment: (a) the structure of opportunity and (b) the structure of power. The structure of opportunity supports organizational advancement and developmental opportunities relative to knowledge and skills while power is a dynamic structure that is created through formal and informal structures within the workplace establishment (Laschinger, 2012). Laschinger (2012) argues that formal power results from job characteristics that are visible within the organization, support discretion, and are central to organizational goal accomplishment (Patrick & Laschinger, 2006; Laschinger, 2012). Informal power refers to the personal networks and alliances within the organization, such as relationships with peers, coworkers, and superior and subordinates within the organization (Patrick & Laschinger, 2006; Laschinger, 2012).

Laschinger (2012) contends that the structure of power in an organization is generated from three main foundations: (a) access to information; (b) access to support; and, (c) access to the resources required for realizing organizational goals. Additionally, Patrick and Laschinger (2006) describe the workplace setting as being divided into four dimensions: (a) perceived access to opportunity; (b) support; (c) information; and, (d) resources within the workplace. Importantly, empowerment will be analyzed by focusing on the structures within the university organization rather than the middle manager’s individual qualities. When a leader’s formal authority is shared through empowerment techniques, leaders will realize increased organizational performance through speedier decision making and increased communication (Kanter, 1993; Parker & Price, 1994).

Spreitzer (1995) discusses empowerment in relation to its development and validation in the workplace. Empowerment is multifaceted and exists within an individual’s relationship with their work role or environment. However, empowerment is a “continuous variable; people can be viewed as more or less empowered, rather than empowered or not empowered” (Spreitzer, 1995, p. 1444). Managers with a sense of empowerment have a heightened potential to contribute effective and innovative behavior because work processes “cannot be solely structured by formal rules and procedures” (Spreitzer, 1995, p. 1448).
1.3.2 Decision-making style.

To properly analyze characteristics of decision-making style in relation to empowerment and job satisfaction, a tool developed by Scott and Bruce (1995) and outlined in their article *Decision-Making Style: the Development and Assessment of a New Measure*, was selected. According to Shabbir, Atta, and Adil (2014), decision-making is “the study of identifying and choosing alternatives based on the values and preferences of the decision maker to resolve the problems” (p. 54). Individuals make decisions each and every day that have a higher or lower degree of complexity (Sohail, 2013). Scott and Bruce (1995) focused on “the characteristics of the decision maker that might influence decision outcomes” (p. 818) rather than prioritizing situational decision characteristics or the decision task itself.

Harren (1979) explains that a decision-making model is a conceptual framework for understanding how decision makers process information and arrive at conclusions. For the purpose of analyzing decision-making style in relation to empowerment and job satisfaction, the decision-making model serves to be a “description of a psychological process in which one organizes information, deliberates among alternatives, and makes a commitment to a course of action” (Harren, 1979, p. 119). The style of decision-making attributed to a manager is based on their individual characteristics; factors such as routes to problem solving to find solutions are inherent rather than objectively defined (Sohail, 2013).

Scott and Bruce (1995) originally identified four decision-making styles defined within behavior terms as: (a) a rational decision-making style characterized by a comprehensive search for and logical evaluation of alternatives; (b) an intuitive style exemplified by reliance on hunches and feelings; (c) a dependent style distinguishable by a search for advice and direction from others; and, (d) an avoidant style portrayed by attempts to avoid decision-making (p. 820). What emerged from their study findings was a fifth category of decision-making style classified to be spontaneous where the decision maker has a desire to process through decision-making as quickly as possible (Scott and Bruce, 1995, p. 828).
1.3.3  **Job satisfaction.**

Job Satisfaction is an important component in job-related accomplishments and increases the competence of an employee in an organization (Dehkordi, Kamrani, Ardestani & Abdolmanafi., 2011). Equally, when investigating job satisfaction, there is a relationship between levels of job satisfaction with outputs, productivity, and organizational commitment (Dehkordi, et al., 2011). Job satisfaction is most clearly defined as the degree to which one likes their job (Rae, 2013; Sypniewska, 2014). The job satisfaction tool utilized in this study is The Job Satisfaction Survey (JSS) developed by Dr. Paul Spector (Spector, 2001). The survey tool gauges employee opinions about their job and aspects of their job (Spector, 2001). Spector (2001) developed his tool to analyze, “the nine facets…Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards (performance based rewards), Operating Procedures (required rules and procedures), Coworkers, Nature of Work, and Communication” (para. 1). The measurable components within this scale support the researcher’s intent to contextualize the relationship of job satisfaction to human service organizations; Spector’s scale originally targeted human service and public and nonprofit sector organizations (Spector, 1985). The role of university registrarial middle managers is often defined by needing to provide a service within the publically funded academic environment.

Ekaterini (2011) studied 21 managerial competencies (divided into five categories) and the way these competencies related to effectiveness and job satisfaction. Self respect, confidence, assertiveness, and acting within principles were found to be key skills of middle managers if job satisfaction was to result (Ekaterini, 2011). Equally, open and honest communication was found to be a key factor in promoting positive environments and relations. Job satisfaction and its effects are the result of complex interactions between individuals and organizations (Spector, 1985); therefore, communication, support, opportunities, and interactions with colleagues all play valuable roles. Within our organizations, we must also recognize that job satisfaction directly impacts productivity and quality of work (Sypiewska, 2014).
1.4 Purpose and Importance of the Study

Maintaining an appropriate level of knowledgeable and productive middle management staffing is essential for our higher education institutions to be nimble, responsive, and productive. Unfortunately, employee turnover is often a frustrating reality associated with the management of personnel in higher education (Buck & Watson, 2002). When management departures are unexpected, valuable time and resources are diverted to recruiting, selecting, and training replacements (Buck & Watson, 2002). Stability within the university’s administrative tiers is a “powerful competitive strategy” (Herman, 1997) especially when middle management leaders have become knowledgeable in the intricacies of the policies and procedures relevant to their own institution.

Gilbert (2011) outlines how it is essential for organizations to develop innovative ways through which to stimulate staff. Gilbert (2011) also asserts that “with the high costs of employee turnover, peaking at up to 150 percent of the employee’s annual salary, engagement and retention initiatives done properly will have a significant impact on the organization” (para. 5). The results of this study will help highlight areas where supports for engagement and retention practices can be focused. Dehkordi, et al. (2011) state that “one of the indicators that shows the superiority of one organization over another is the extent to which the human resources are loyal and committed to the organization” (p. 812).

For the purposes of this study, it is hypothesized that decision-making style can impact feelings of structural empowerment. It is also hypothesized that when female registrarial middle managers feel themselves to be within an empowering environment, they experience high job satisfaction. Literature reviewed for this study has shown significant correlation between high job satisfaction and dedication to the institution (De Gieter, Hofmans, & Pepermans, 2011; Folami, Asare, Kwesiga & Bline, 2014; Kabungaidze, Mahlatshana & Ngirande, 2013). When management employees remain committed to their institution, they understand the needs of the student population, unique attributes of the teaching faculty, and nuances of how to optimize their own staffing resources (Herman, 1997). Refinement to focus this study on female middle managers will provide an opportunity to generate valuable information that can assist upper tier university
leadership in gauging where positive investment in this essential middle management level may be necessary.

1.5 Epistemological Paradigm

During this study, the researcher analyzed the relationships between empowerment, decision-making style, and job satisfaction in female middle managers in registrarial units within Ontario Universities. Within the researcher’s current professional capacity of Associate Registrar – Student Records & Exam Services at Western University, the researcher identifies as a middle manager with a direct reporting line to the university registrar. The researcher is immersed in the environment where participants were solicited; in fact, if not doing the research herself, the researcher would be a valid participant in this study. As with many professionals, the researcher is adept at wearing various hats within her professional life. It was important during the study for the researcher to be conscious of her distinctly dual role at Western University as a student and researcher and as professional manager within a registrarial unit in the role of Associate Registrar - Student Records & Exam Services.

1.6 Ethical Protocols

Female middle managers from across Ontario universities were eligible to participate in this study. The researcher conducting this study is a member of staff at Western University and as such, might have had contact with the participants either at her own institution or at other institutions. Equally, the researcher’s educational background has been a topic of conversation within the workplace and may have potentially encouraged or dissuaded colleagues from participating in data collection. To mitigate this possibility, the researcher limited conversations with colleagues about her research work and academic program. Opportunities to ensure confidentiality were considered by the researcher when designing the research tool and also when confirming a distribution method. Confirmation of voluntary participation stated at multiple points in the data gathering process also provided assurance for managers.
Gate-keeping, as outlined by Miller and Bell (2008), was also a factor to consider when identifying eligible participants. According to Miller and Bell (2008), gate-keeping refers to those individuals with the direct authority to influence others for the purposes of research responses (p. 62). This was a key hurdle to tackle when outlining how to identify research participants. For this study, research participants were directed to the researcher by their hierarchical leader or registrar, rather than being contacted by the researcher directly. To address the concerns of gate-keeping, or having any participants feel undue pressure, each registrar was asked to forward the researcher’s study information to the potential candidates and provide a direct link to the survey. Information was also provided at multiple points in the process to continually reaffirm that participation was completely voluntary and would not be reported back to a hierarchical supervisor. It was also reinforced that the data were aggregated (i.e., data is gathered and expressed in a summary form for purposes of analysis and as such, cannot be traced to an individual participant).

### 1.7 Methodological Overview

A survey tool was generated through Qualtrics software (available through Western University). Qualtrics is a software program that enables users to do online data collection and analysis in a secure and autonomous manner. The survey combines established aspects of measurement for empowerment, decision-making style, and job satisfaction. Registrars at each of Ontario’s universities were contacted by email and invited to forward the researcher’s request for participation in the data collection process to their eligible middle managers. Western University was included in this study; the only communication between the researcher and her registrar relating to the data gathering process for Western’s middle managers took place within the parameters of the general communications issued to all Ontario registrars. In total, 20 Ontario universities were identified for this study. Excluding Western University, and anticipating that registrars at other institutions may refrain from participating, would have negatively impacted the amount of data available for analysis and subsequent generalization to the entire population.

It was intended that information be gathered only from individuals identifying as female.
For the purpose of this study, a middle management position was defined as: (a) an individual reporting directly to the university’s registrar and (b) an individual leader representing a unique area of business within Office of the Registrar. Eligible candidates may or may not have had staff reporting directly to them; however, the manager was still to be considered an integral part of the registrar’s leadership team.

Ethnicity and socio-economic status variables were not collected because they were not seen to be determining factors as part of the research question. To analyze elements relevant to the parameters of the study, individuals were asked to identify the length of time in their current position and with the institution, number of direct staff reports within their team, age within a nine year time span (i.e. 30-39, 40-49, 50-59), and highest degree or level of school completed. Incumbents seconded to positions for a timeframe of less than one year, or individuals not normally serving in the middle management position identified, were excluded from participating.

1.8 Limitations of the Study

It was determined to use COU multi-year data for identifying the selected 20 Ontario universities. The Ontario Ministry of Advanced Education and Skills Development (MAESD) also indicates that Ontario has 20 publically funded institutions (Queen’s Printer for Ontario, 2012-2016, 2016); however, links on the MAESD find a university directory lists information for 22 institutions. Royal Military College and Dominican College were not considered as part of this study due to their specific enrollment targets (military and philosophical and theological respectfully) in addition to their absence from the listings generated through the MAESD. The MAESD is the provincial branch of the government of Ontario (prior to June 2016 titled the Ministry of Training Colleges and Universities [MTCU]) responsible for administration of laws relating to postsecondary education and skills training. Similarly, several Ontario institutions have affiliated or confederated institutions associated with their main campus’ that may or may not have their own registrar or registrarial-like unit. For the purpose of this study, only the constituent or main campus university registrar and his or her associated offices were targeted, thereby following the COU multi-year data figure of 20 institutions. Registrars
of satellite or affiliated campuses who fell under the bureaucratic umbrella of the main campus were not included in this study.

Some studies identify the position of university registrar as a middle management one within the hierarchy of administration at a university (Fugazzotto, 2009; Lepley, 2007). The hierarchy of a university can be complex due to the bicameral, multi-level structure of most institutions. A university registrar can be positioned as a mid-level manager when viewing information that contains presidents, provosts, or vice-provosts. For this study, the administrative nature of a registrar’s office provided the preferred primary pool of candidates; therefore, the university registrar is positioned as the uppermost level of the hierarchy. Individuals within the Registrar’s Office are not normally in faculty teaching positions, nor is the responsibility of the Registrar’s Office typically directly engaged in the teaching and research activities of a university. A hierarchical structure that included Deans of Faculties would also not provide an accurate reflection of the administrative level of staff targeted in this study.

By defining a middle management position to be a direct report to the registrar, salary grading and job descriptions were not considered. Organizational structure and job titling may imply similarities or differences in responsibilities and hierarchical levels where none in fact exist. Positions titled to be Directors or Associate Registrars at one institution may in fact be similar or drastically different than positions titled to be Managers in another institution. From the description of a middle manager used in this study (i.e., middle managers are part of the registrar’s strategic leadership team while also playing an important role in front line staff supervision), a university registrar had the opportunity to categorize his or her managers based on their own interpretation of the criterion provided.

A potential limitation relating to the use of multiple regression analysis for the data collected is that it can only ascertain relationships between variables. As a correlational methodology, it does not address causal mechanism. As a result, the relationships between the variables can be discussed as a finding of this study, but the reasons or processes behind the creation of those relationships cannot.
Finally, a potential limitation relating to the number of valid responses impacts the level of confidence in the findings. Ensuring that sample size is appropriate by formulating an engaging first contact email with registrars helps ensure that eligible participants are contacted and the researchers' work is presented as engaging and significant to the population. Also encouraging registrars to respond to the initial email by identifying how many middle-management individuals were employed within their offices is vital to determine potential response bias. Dillman, Smyth, and Christian (2014) identify that electronic surveys relying on email transition are rapidly becoming popular methods for researchers’ data collection processes. Many elements influence the successful launch of an electronic survey such as: design, length, display, and device optimization (Dillman, et al., 2014). Equally, ensuring that engaging opening and closing screens are included in the survey assists the researcher when soliciting participation (Dillman et al, 2014). Taking this advice, the researcher attempted to meet the criteria described to assist in maximizing participation.
Chapter 2

2 Literature Review

To understand the distinctive role occupied by female registrarial middle managers, it is important to understand the history behind the unique and complex structure of Ontario’s higher education institutions. To begin, the Flavelle Commission report of 1906 is one of the key documents in the history of Ontario education ("Higher education in Ontario," 1997, p. 139). The 1906 Commission concluded that a successful structure for an institution required that the management or direct operational overseeing of institutional business should be separated from political powers ("Higher education in Ontario," 1997, p. 139). This separation was accomplished by two recommendations. Firstly, the Commission recommended that the delegation of government authority over the institution be provided to a corporate board ("Higher education in Ontario," 1997, p. 139), titled as the Board of Governors within many Ontario institutions (see Table 3 for Ontario institutional naming conventions). Secondly, the concept of bicameralism was introduced which supported the idea that in addition to the administrative oversight role of a governing body, the responsibility of academic matters should be designated to a university senate ("Higher education in Ontario," 1997, p. 139-140). As a result, management leaders within registrarial offices have allegiance to administrative affairs governed by a board, while also serving in conjunction with University Secretariat as the gate keepers for many academic policies and procedures under the accountability of the Senate.

Bass (1997) acknowledged that “educational institutions today receive criticism from all sides” (p. 128). External influences are becoming increasingly prevalent drivers of the shape and strategic goals of our institutions while government agencies and employers also weigh in heavily on institutional expectations. Additionally, administrative duties performed within registrarial offices often involve internal interactions with academic faculty. As institutions become more corporate in their functional ethos to respond to changing influences, the role that many academic faculty feel they play in the decision-making process is diminishing (Metcalf, Fischer, Gingras, Jones, Rubenson & Snee,
This perception of decreased responsibility can greatly influence the interactions between central administration and teaching or researching faculty members. The perception that control in decision-making is steadily decreasing among faculty in relation to demand for education, specialist training, and research services of various kinds creates internal tensions (Metcalf, et al., 2011).

Interestingly, Canadian faculty respondents who participated in the information gathering process for an international survey project, The Changing Academic Profession (CAP), identified their role as professoriate as being involved in only the following decision-making situations in higher education institutions:

- Faculty are the most influential decision-makers as collective bodies in areas of core academic activities
- Faculty are the most influential individually in setting internal research priorities and establishing international linkages
- Academic unit managers (faculty members in administrative roles) determine overall teaching load of faculty
- Students are the most influential in evaluation of teaching (Metcalf, et al., 2011, p. 170)

The 2006-2011 CAP study was aimed at examining the changes experienced by academics from 20 participating countries. The goal was to consider differences and similarities between countries, types of higher education institutions, different subjects, and types of academic jobs (The Open University, 2010). Research questions included (a) to what extent is the nature of academic work challenging?; (b) what are the external and internal drivers of these changes?; and, (c) how do the academic professions respond to changes in their external and internal environment? (The Open University, 2010). Of note, the role of the manager within a central administration unit is not acknowledged within the CAP report. However, middle managers within administrative units are oftentimes the ones responsible for the innovations championed by their own units on behalf of the university (Kettunen, Hautala, Kantola, 2009). Equally, Rudhumbu (2015) contends that academic middle managers play a critical role in both educational change and curriculum change, two areas clearly impacted by the views of the faculty.
2.1 A Bureaucratic Organization

The university decision-making structure has evolved to be akin to a professional bureaucracy (Fugazzotto, 2009; Lungu, 1985; Page, 1951). Universities often contain the classic bureaucratic elements of an elaborately detailed hierarchical structure that includes organizational charts, position titles, and clear lines for career track progression (Page, 1951). German sociologist Max Weber noted that bureaucratic forms of organization routinize the process of administration just as machines routinize production. Weber defines bureaucracy as “a form of organization that emphasizes precision, speed, clarity, regularity, reliability and efficiency achieved through the creation of a fixed division of tasks, hierarchical supervision and detailed rules and regulations” (cited by Morgan, 2006, p. 17).

However, unlike traditionally controlled machine-like bureaucracies where a top down leadership style is prevalent, professional bureaucracies are comprised of areas such as an operating core, a middle management tier, a technical branch, and a support staff structure (Fugazzotto, 2009). These layers all have different and sometimes opposing levels of influence which oftentimes render straight line decision-making a challenge. Rather than being designed with systems that have clearly prescribed relationships between various roles and offices and a precise definition of jobs to maximize fulfillment of goals and interchangeability of personnel (Page, 1951), a university structure does not adhere to standardized approaches or permit patterned responses to challenges. Academic institutions require that individuals within administrative units be agile, collaborative, and reactive. It is within this environment that registrarial middle managers must negotiate between executive level leadership and front line staff. Equally, administrative registrarial middle managers must remain conscious of the needs of external customer groups like faculty and academic units (Fugazzotto, 2009).

2.2 The Changing Role of the Middle Manager

Over time, the role of the middle manager within higher education has changed (Goode, 2000; Kallenberg, 2007; Kanter, 1989). As they are now typically defined, middle managers act as a hinge connecting the strategic ideologies of senior management and the
on-the-ground workings of the front line staff. Their positioning highlights the necessity for incumbents to adhere to core institutional values, be bureaucratic in nature when needed, yet also act as “repositories of organizational wisdom” (Clegg & McAuley, 2005, p. 19). If middle managers are recognized for their unique positioning within higher education organizations, rather than concentrating on historic bureaucratic relationships, they are ideally placed to support a more productive and “humane place in which to practice” (Clegg & McAuley, 2005, p. 31).

Holden and Roberts (2004) argue that uncertainty is evident in the role of the middle manager. In coping with their ever changing work environment, middle managers oftentimes feel pressured. Realities like trends towards an increase in atypical employment arrangements, devolvement of responsibility for human resource management, increase in performance management policies and expectations, in addition to various other initiatives, have resulted in added burdens for middle managers (Holden & Roberts, 2004). Equally, Kanter (1989) states that:

Managerial work is undergoing such enormous and rapid change that many managers are reinventing their profession as they go. With little precedent to guide them, they are watching hierarchy fade away and the clear distinctions of title, task, department, even corporation, blur. Faced with extraordinary levels of complexity and interdependence they watch traditional sources of power erode and the old motivational tools lose their magic. (p. 85)

Although oftentimes hierarchical chains of command are still easily identified, lines of authority in newly thinned out organizations are blurred (Holden & Roberts, 2004). Many organizations, including Ontario universities, have responded to social, cultural, and technological pressures by restructuring and removing layers of middle management (Dopson, Risk & Stewart, 1992). Dopson et al. (1992) state that “middle managers now work in a more turbulent environment that has frequently radically changed their role and function” (para. 28).

In reality, with fewer middle managers, those who remain carry increased workloads which are more complex and demanding (Dopson et al., 1992). Nielsen and González
postulate that engaged middle managers play a crucial role in supporting institutional objectives while maintaining staff well-being, as well as contributing to the engagement of their own staff (p. 139). Job satisfied leaders are creative, explorative of new ideas and growth, and help retain institutional competitiveness (Nielsen & González, 2015). This literature underscores the importance of determining the relationships between empowerment, decision-making style, and job satisfaction for female registrarial middle managers in Ontario’s universities to facilitate the development of initiatives that will support and ultimately encourage retention of these key people within our higher education organizations.

2.3 Women in Leadership

The focus of this study is specific to women in registrarial middle management positions. Generally, women have made significant gains in overall employment and more specifically, gains in management opportunities within the past few decades (Andrew, Coderre & Denis, 1988; Burke & Karambayya, 2004; Dyke, 2012). The Government of Ontario (2014) has identified that “the increased participation of women in the workforce is one of the most significant social trends in the past 30 years” (para. 1). Statistics Canada (2013) denotes that in 2011, women comprised 48% of the employed labour force in Canada. However, as the position within the workforce climbs an upward leadership trajectory, fewer women are represented (Andrew, et al., 1998; Sohrab, Karambayya & Burke, 2011). Dyke (2012) explains that “when Carleton University’s Centre for Research and Education on Women and Work (CREWW) launched the Management Development Program for Women in 1992, roughly one-third of Canadian middle managers were women” (para. 2).

Blackmore and Sachs (2007) describe how middle management is the first step in the journey to executive leadership. Middle managers “manage up the line” (Blackmore & Sachs, 2007) to reach the typically male dominated executive level leadership positions while initially managing downward to the typically female dominated front line positions. Finegan and Laschinger (2001) state that:
Women, unlike men, enter job ghettos with little hope for advancement or economic security. Even within the same organization, men tend to hold positions of greater authority. When women enter an occupation that has been a traditional stronghold for men, they face unique pressures. (p. 491)

As middle managers, women tend to display different strength characteristics than their male counterparts (Blackmore & Sachs, 2007). In their book, *Performing and Reforming Leaders: Gender, Educational Restructuring, and Organization* (2007), Blackmore and Sachs propose that 1. women see “leadership and management as being about problem solving” (p. 175); 2. women who are in middle management positions demonstrate a propensity toward using “competitive relations to manage reward systems within and between organizations” (p. 177); and, 3. women tend to embrace change whereas their male counterparts remain hesitant; men are “single focused” (p. 97) whereas women “tend to take it on board” (p. 197). Through these different traits and behaviors, women are becoming the informed and multi-tasking layer of our management teams. If university organizations hope to retain their skilled and knowledgeable middle managers and support them on an upward career path, it is important to understand how empowerment, decision-making style, and job satisfaction relate for female middle managers.

### 2.4 The Relationships between Empowerment, Decision-making and Job Satisfaction

The hypothesis of this study is that when female registrarial middle managers feel structurally empowered, and their decision-making style is sensitive to work-related demands and context, they experience higher job satisfaction. Through a study of previous literature, this researcher has found that increased job satisfaction promotes dedication to the institution and employee retention (De Gieter, Hofmans, & Pepermans, 2011; Folami, Asare, Kwesiga & Bline, 2014; Kabungaidze, Mahlatshana & Ngirande, 2013). Human resource dedication and satisfaction promote commitment and productivity in an organization and ultimately in all of society (Dehkordi, et al., 2011). In Brown’s 2003 unpublished doctoral dissertation (as cited in Dehkordi et al., 2011), findings supported the contention that “organizational commitment is the personal
attitude, which ties the identity of an individual to a certain organization and determines the participation rate of that individual in such an organization” (p. 813). Dehkordi et al. (2011) found through their study that there is a meaningful and positive relation of job satisfaction to the total grade of psychological empowerment. Equally, Dehkordi et al. (2011) concluded that the relation between the elements of empowerment and organizational commitment is positively and meaningfully connected.

Abraiz, Tabassum, Raja, and Jawad (2012) determined that there exists a positive effect on job satisfaction and responsibility (p. 399), where responsibility encompasses decision-making. Empowerment involves delegating to individuals the autonomy to make decisions (Wong, Humborstad, & Perry, 2011). Appelbaum, Louis, Makarenko, Saluja, Meleshko, and Kulbashian (2012) concluded through their research that when employees feel that they are providing insufficient input at a decision-making level, they experience low levels of job satisfaction that results in lower levels of employee commitment. Appelbaum et al. (2012) determined that “lack of employee commitment and engagement affects the employee’s intention to quit” (p 413). A key recommendation resulting from the study addresses the importance of enacting “empowerment practices” (p. 414) within the workplace – empowerment being defined as the ability to make “decisions about personal/collective circumstances” (p. 414) and “access information and resources for decision making” (p. 414). Significant association between control orientation and the decision-making style scales, like the General Decision-Making Style used in this study, support the suggestion that decision-making style is reflective of individual cognitive style (Scott & Bruce, 1995).

Messmer (2005), when analyzing survey data of 1,400 chief financial officers commissioned by Robert Half International, notes that building employee satisfaction hinges on several factors; however, providing input in decision-making processes and avoiding micro-management through empowerment strategies are among the most important. Messmer (2005) states that the chance for employees “to take ownership of their work is a powerful motivating factor for many people” (p. 54). Managers should be “encouraged to demonstrate faith in their employees’ abilities and allow them to come up with their own solutions whenever practical” (Messmer, 2005, p. 54). Given the strength
of the cumulative literature on empowerment, decision-making, and job satisfaction, one would anticipate that registrarial middle managers who take ownership of their area of responsibility and actively engage in contextually sensitive decision-making will experience higher levels of job satisfaction. The current study will assess this hypothesis with a sample of registrarial middle managers in Ontario.

2.5 Summary

Ontario's universities operate as historically formed, bureaucratic structures with registrarial units providing the 'back-bone' for policy, record keeping, and student progression. Leaders within these units possess a great deal of institutional knowledge and act as liaisons between upper management and front line staff. With increased competition between institutions locally, nationally, and internationally, it is important to understand how to best support and retain this leadership tier within our registrarial units. Exploring the relationships between feelings of structural empowerment, decision-making style, and job satisfaction in female Ontario university registrarial middle managers will help accomplish this goal.

Maintaining an appropriate level of knowledgeable and productive middle management staffing is essential for our higher education institutions to be nimble, responsive, and productive. Researchers have previously studied the unique roles and challenges of women in the workplace (Acker, 2014; Billing & Alvesson, 1989; Christman & McClellan, 2008; Morley, 2005; Wentling, 2003; Wilkinson & Blackmore, 2008) within the context of a steadily increasing rate of female participation in the workforce (Billing & Alvesson, 1989; Cooper Jackson, 2001; Wentling, 2003). The latter (i.e., increased number of women) has impacted the very fabric of the workforce, which in turn, influences women’s career development (Blau & Ehrenberg, 1997). The existence of qualified women managers increases as women continue to amass work experience and become educated within the sphere of management and professional education (Wentling, 2003).

Despite the growth of women in the workforce and a strong body of literature exploring factors influencing job satisfaction, little attention has been directed toward examining
these factors in women employed in non-academic middle management positions within higher education. This study seeks to address this gap by investigating the relationships between empowerment, decision-making style, and job satisfaction in female registrarial managers in Ontario universities.
Chapter 3

3 Methodology

This researcher examined the relationships between empowerment (as measured by the Conditions for Workplac e Effectiveness Questionnaire I), job satisfaction (as measured by the Job Satisfaction Survey), and decision-making style (as measured by the General Decision-Making Style scale). Validated through and employed in a number of previous studies, all of the measures used to construct the distributed instrument have been shown to possess acceptable levels of construct validity.

3.1 Population and Sampling

The population and unit of analysis for this study were female registrarial middle managers within Ontario’s universities. For the purpose of this study, a middle management position was defined as: (a) an individual reporting directly to the university’s registrar; and, (b) an individual leader representing a unique area of business within Office of the Registrar. Eligible candidates may or may not have staff reporting directly to them; however, the manager was considered an integral part of the Registrar’s leadership team. Defining participants as an integral part of the leadership team ensures that although the leader may have a limited number of direct reports, if any direct reports at all, they are still considered to be part of the overall strategic planning team of the registrar and therefore, have the same authority associated with their position as a manager with larger number of direct report staff. Incumbents seconded to positions for a time frame of less than one year or individuals not normally serving in the middle management position identified were excluded from participating. Where institutions had satellite campuses or affiliated institutions, only middle managers reporting directly to the main constituent university registrar were considered. The middle manager was not to report to an outlier institutional registrar.

Approval was granted for the study through Western University Office of Research Ethics (Appendix A). Prior to data collection and Western University ethics approval, registrars at each of Ontario’s 20 universities were contacted to determine sample size (N
= 76 potential subjects; criterion for participation = a female leader reporting directly to the university’s registrar, or a female leader representing a unique area of business within the Office of the Registrar). University registrars were asked to identify their total number of direct reports and the number of these reports who would identify as female. Determining sample size was necessary to evaluate the feasibility of the study. Results in Table 4 indicate 72.38% of registrarial direct reports are identified as female by the respondent registrars. It is important to recognize that, as with most places of employment, universities experience staff turnover. Data reported in Table 4 thus represents a point-in-time.

Following the initial contact with all selected university registrars, one institution requested ethics approval be sought within that institution and subsequently granted (Appendix B) in order to release any staffing related information, including information of a normally publically accessible nature. Remaining university registrars did not request that the researcher seek approval through their individual institutions in the preliminary phase when gathering staff complement levels. Instead they complied by providing generic staffing information, and post Western University ethics approval facilitated the route for the researcher to approach individuals across the universities. Participants provided their own individual consent by completing the survey.

Western University, the researcher’s place of employment, was included in the 20 Ontario universities identified for this study. Excluding Western University, and anticipating that registrars at other institutions may refrain from participating, could have negatively impacted the amount of data available for analysis.

University registrarial management colleagues frequently attempt to determine provincial best practice. As part of daily work life, receipt of and response to information seeking emails is already common practice within the Ontario registrars’ remit. It was anticipated that this survey would be vetted for personal response by individual managers at each institution in the same manner information solicitation emails are commonly exchanged among the registrarial leadership group. These types of emails are routinely sent to ensure that one institution is not operating in a drastically different manner than the rest,
especially when looking to develop or amend institutional standards (i.e. has your institution implemented policies that may impact the transgender community?, what do you include on your transcript?, how does your Senate implement policies?).

To better understand the sample of survey respondents, individuals were asked to provide demographic information: the length of time in their current position (0-5 years; 6-10 years; 11-15 years; 16-20 years; 21+ years) and with the institution (0-5 years; 6-10 years; 11-15 years; 16-20 years; 21+ years); the size of their institution within an identified range (< 10,000 FTE; 11,000 – 15,000 FTE; 16,000 – 20,000 FTE; 21,000 – 24,000 FTE; 25,000+ FTE); number of direct staff reports within their team (0-5; 6-10; 11-15; 16-20; 21+); age within a nine year time span (20-29; 30-39; 40-49; 50-59; 60+); and, highest degree or level of school completed (elementary school level; high school level; college diploma; college degree; university undergraduate degree; university graduate degree). Compensation was not provided to participants: however, participants were informed that information relating to the study was available by request. To date, no respondent has requested additional information. Equally, registrars were not provided with an incentive to ensure participant involvement. One registrar expressed an interest in receiving the results of this study.

3.2 Measures

Psychometrically sound instruments (i.e., those with established reliability and validity) that quantified the constructs under study (i.e., decision-making style, empowerment, and job satisfaction) were used to collect the relevant data. The use of psychometrically sound instruments (i.e., the Conditions for Workplace Effectiveness Questionnaire-I, General Decision-Making Scale, and Job Satisfaction Survey) was chosen for the study as these measures have demonstrated reliability (i.e., repeatability), validity (i.e., how well it measures what it is intended to measure), and standardization (i.e., a standard set of questions administered and scored according to a common criteria and interpreted using group norms). The benefits and strengths of utilizing psychometrically sound instruments for data collection have been delineated by numerous scholars (e.g., Maxim, 1999; Victorino, 2012; Vogt, 2007) and were strong factors in selecting the methodology and measures for the current study.
Singh and Singh (2015) outline the strengths of quantitative data gathered through the use of psychometrically validated measures:

- More reliable and objective
- Statistics can be used to generalize findings
- Reduces and restructures a complex problem to a limited number of variables
- Permits the researcher to examine relationships between variables
- Allows the researcher to compare groups based on demographic characteristics (e.g., age, years of education, sex)
- Assumes sample is representative of the population
- Subjectivity of the research in methodology is controlled.

For the present research, measures that yielded ordinal data (i.e., data shown simply in order of magnitude) were utilized. These data were expressed as scaled scores which allowed the researcher to aggregate the individual survey questions for statistical analysis. Through the application of appropriate statistical techniques, these scaled scores allowed for a comparison of the degree to which research participants possessed the constructs under study (i.e., decision-making style, empowerment, job satisfaction) and probe the relationships that existed amongst the variables.

Data was collected using an online survey consisting of three distinct instruments: Conditions for Workplace Effectiveness Questionnaire I (CWEQ-I); Job Satisfaction Survey (JSS); and, General Decision-Making Style Scale (GDMS). Each of the instruments collects ordinal data where ranking of responses was utilized to provide an overall score (CWEQ-I, JSS) or, in the case of the GDMS, subcategory totals (GDMS). Each tool was utilized with permission.

3.2.1 Empowerment, CWEQ-I.

The empowerment tool utilized in this study was the CWEQ-I, developed by Laschinger (2012) and used in previous nursing studies to measure the concept of structural empowerment. The CWEQ-I was selected because it was designed to be valuable for quality improvement initiatives (Laschinger 2012). To enhance clarity for participants, some of the wording used was changed in the questionnaire to be registrariarily rather than hospital based (i.e., “current state of the hospital” changed to “the current state of the
university” or “receiving recognition by physicians” changed to “receiving recognition by faculties/departments”).

The CWEQ-I is a 60 item scale that assesses total structural empowerment. Study participants are required to respond to questions using a five point scale. The tool represented four subscales (opportunity, information, support, and resources), the job activities scale (JAS), the organizational relationship scale (ORS), and the global empowerment scale (GE). Subscales were designed based on the work of Kanter (1977, 1993). Using Kanter as a guide, Laschinger (2012) created her subscales and overall tool scale where formal and informal power refers to exposure to the two organizational structures of opportunity and structural power. These powers contribute to a total empowering workplace. Opportunity relates to career advancement and skill and knowledge development. Three sources contribute to the structure of power: 1) access to information; 2) access to support; and, 3) access to the resources required to attain organizational goals (Laschinger, 2012). Questions in each subscale relate to these theories: 1) opportunity = “how much of each kind of opportunity do you have in your present job? Tasks that use all of your own skills and abilities”; 2) information = “how much access to information do you have in your present job? The current state of the University”; 3) support = “how much access to support do you have in your present job? Specific information about things you do well”; 4) resources = “how much access to resources do you have in your present job? Having supplies necessary for the job”; 5) Job Activities Scale (JAS) = “in my work setting/job: the amount of variety in tasks associated with my job is” and; 6) Organizational Relationship Scale (ORS) = “how much opportunity do you have for these activities in your present job? Exchanging favors with peers” (Laschinger, 2012).

Contextualized, structural empowerment, relative to the middle managers within this study, encompassed the extent to which they felt they had access to these structures in their work settings. As such, the structural empowerment measure used in this study captures respondents’ perceptions of the availability of empowering structures rather than their individual qualities. When a leader’s formal authority is shared through empowerment techniques, leaders will realize increased organizational performance
through speedier decision-making and increased communication (Kanter, 1993; Parker & Price, 1994).

Total empowerment was calculated by totaling the subscale mean scores for opportunity, resources, information and support, the scale mean for the Job Activities Scale (JAS), and the scale mean for the Organizational Relationships Scale (ORS). Subscale score range was between 1 and 5 for all subscales with higher scores representing stronger access to each defined subscale category. A scale mean for the JAS results, measuring perceptions of formal power, was calculated by summing and averaging the items. Higher scores represent job activities that give higher formal power. A scale mean for the ORS results, measuring stronger networks of alliances in the organization, was calculated by summing and averaging the items. Higher scores represent job activities that give higher informal power.

Overall, total structural empowerment (6 subscale version) was calculated by summing the four subscales, the JAS, and the ORS. Representing a composite of all the subscales, total structural empowerment (six scale version) summing has the greatest utility in overall prediction; therefore, this method was selected for assessing job satisfaction. Through summing and averaging, the figures used to analyze the results were treated as continuous variables rather than ordinal. Based on Laschinger Research (2015), higher scores represent stronger perceptions of working in an empowered registrarial unit. Laschinger Research (2015) identifies that “Scores ranging from 6 to 13 are described as low levels of empowerment, 14 to 22 as moderate levels of empowerment, and 23 to 30 as high levels of empowerment” (para. 5).

Outlined below, a number of studies have been undertaken to establish the psychometric soundness of the CWEQ-I. Reported alpha reliability ranges in previous research are as follows: 1) subscale ranges from .81-.97 (Wilson & Spence Laschinger, 1994); 2) subscale ranges from .76 -.95 (Laschinger & Havens, 1996); 3) subscale ranges from .78 -.89, JAS = .67, ORS = .92 (Spence Laschinger & Havens, 1997); and 4) subscale ranges from .80 -.88, JAS = .69, ORS = .89 (Laschinger, Wong, McMahon & Kaufmann, 1999). Cronbach’s α reliability coefficients for the CWEQ-I utilized in this study are .75 - .92 for the subscales, JAS = .64, and ORS = .92 (Table 5). Construct validity was
demonstrated through the use of Confirmatory Factor Analyses for the CWEQ-I in the following studies: Chandler (1986); Kutzscher (1994); and, Sabiston (1994).

3.2.1.1 Wilson and Spence Laschinger (1994)

Wilson and Spence Laschinger (1994) examined the psychometric characteristics of the CWEQ-I by asking 161 potential participants from an acute-care teaching hospital in a large urban setting to complete and return a survey questionnaire. Subjects were randomly selected by the managers of six units, resulting in a survey response rate of 57%. Four instruments were used to collect data. A modified version of the CWEQ-I was used to assess staff nurses’ perceptions of power and opportunity in their positions. Content validity and face validity of the subscale “resources” was established by the use of Kanter’s theory for item construction and through expert consultation (Wilson & Spence Laschinger, 1994). Alpha reliability coefficients for the four subscales utilized (access to information, support, resources, and opportunity) ranged from 0.81 to 0.97.

3.2.1.2 Laschinger (1996)

Laschinger (1996) outlines how research work conducted in 1992 at The University of Western Ontario established face and content validity of the CWEQ-I through a panel of experts on Kanter’s theory. Alpha coefficients for the four subscales of support, information, resources and opportunity were noted to range from .76 to .88 across various institutional studies (Laschinger, 1996). The creation of two additional constructs, the job activities scale (JAS) and the organizational relationships scale (ORS), had face validity established by pilot testing both instruments with a group of staff nurses prior to use.

3.2.1.3 Haugh and Laschinger (1996)

Haugh and Laschinger (1996) examined the psychometric characteristics of the CWEQ-I in an exploratory comparative survey designed with the conceptual framework of Kanter’s theory of structural power. In a convenience sample of two levels of nurses working in three public health agencies during a time of program transition, a total 56 participants in two groups \( n = 46, n = 10 \) completed two questionnaires and a
demographic survey. Reliability analysis of empowering factors for the CWEQ-I produced Cronbach alpha coefficients ranged from .66 to .91 for group one, managers \((n = 10)\) and .73 to .90 for group two, public health nurses \((n = 46)\).

### 3.2.2 Decision-making, GDMS.

The GDMS was developed by Scott and Bruce (1995) due to a lack of empirical information relating to the characteristics of the decision maker that might influence decision outcomes. The decision-making process produces a final effect or outcome that may or may not prompt an action and may or may not have a result that is seen to be optimal.

Behaviorally phrased items were developed for the conceptual notions of: (a) rational decision-making that emphasizes “a thorough search for and logical evaluation of alternatives”; (b) intuitive decision-making that involves “a reliance on hunches and feeling”; (c) dependent decision-making that emphasizes “a search for advice and direction from others”; (d) avoidant decision-making characterized by “attempts to avoid decision-making”; and, (e) spontaneous decision-making characterized by “sense of immediacy and a desire to get through the decision-making process as soon as possible” (Scott & Bruce, 1995, pp. 820, 823).

The GDMS instrument (Scott & Bruce, 1995) used for this study contains 25 behaviorally phrased items measuring decision-making style. This scale is made up of five subscales: rational (five questions), intuitive (five questions), dependent (five questions), spontaneous (five questions), and avoidant (five questions). Example questions for domain psychometrics include: “I make decisions in a logical and systematic way” (rational); “I avoid making important decisions until the pressure is on” (avoidant); “I rarely make important decisions without consulting other people” (dependent); “When I make decisions, I tend to rely on my intuition” (intuitive); and, “I generally make snap decision” (spontaneous), (Scott & Bruce, 1995, pp. 825-826). A total of 37 items were originally worded and administered to one sample for a study on career transitions. Modifications were made to “expand the domain from career decisions to all important decisions” (Scott & Bruce, 1995, p. 821), and the instrument
was revised to reduce the number of items. The new instrument was administered to three
independent samples: sample 1 consisted of 1441 male military officers; sample 2
consisted of 84 MBA students; and, sample 3 consisted of 229 upper-level undergraduate
business students.

Responses to the revised instrument are recorded on a five point Likert-like scale ranging
from 1, strongly disagree to 5, strongly agree. For control orientation, Scott and Bruce
(1995) used two similar measures of control orientation in testing concurrent validity. A
5-item measure of mastery was administered to the military officers; a Cronbach’s α was
.76. A 10-item locus of control measure was administered to the students in two samples,
and the Cronbach α in the two samples were .66 and .78 respectively.

The validity of the decision-making scale was carried out on the basis of content validity.
Analysis of variance was used to compare mean scores for each scale across samples:
military officers, undergraduate students, and MBA students (Scott & Bruce, 1995).
Based on the findings of Scott and Bruce (1995), there existed “significant differences
among the groups on rational $F(3,762) = 8.161$, $p < .001$, avoidant $F(2, 565) = 46.22$, $p$
$= <.001$, intuitive $F(3, 760) = 20.58$, $p < .001$, and dependent, $F(3, 760) = 4.31$, $p < .01$,
decision-making styles” (p. 827). The two groups receiving the spontaneity scale
(undergraduate and MBA) were not significantly different on the spontaneous decision-
making style $F(1, 319) = .767$, n.s. (Scott & Bruce, 1995, p. 827).

A number of studies have examined the psychometric soundness of the GDMS, including
Loo (2000); Gambetti, Fabbri, Bensi and Tonetti (2008); and, Bruine de Bruin, Parker
and Fischhoff (2007), as outlined below. Additional studies include: Spicer & Sadler-
Smith (2005) in their study of two UK business schools; Baiocco, Laghi, and D'Alessio
(2009) in their study of adolescence decision-making; and, Schruijer and Curseu, (2012)
in their study of 102 middle level managers

3.2.2.1 Loo (2000)
Loo (2000) examined the psychometric characteristics of the GDMS using a sample of
223 management undergraduates from eight classes. Loo (2000) determined the
following Cronbach’s α for the five GDMS scales: rational = .81; intuitive = .79;
dependent = .62; avoidant = .84; and spontaneous = .83. Loo (2000) found that internal-consistency reliabilities were acceptable for all scales except for the dependent (0.62) scale which was low even for a five-item scale (p. 898). The pattern of correlations among the five styles revealed that the rational scale was positively correlated with the dependent scale (r = .31) and negatively correlated with both the avoidant (r = \( -0.33 \)) and spontaneous (r = \( 0.30 \)) scales, and the intuitive scale was positively correlated with both the spontaneous (r = .30) and dependent (r = .30) scales (Loo, 2000).

### 3.2.2.2 Gambetti, Fabbri, Bensi and Tonetti (2008)

Gambetti, et al. (2008) examined the psychometric properties of the Italian GDMS in a sample of 442 university students. The Italian GDMS version was a translation of the original English questionnaire, with item numbering maintained from the English version of the instrument. Gambetti, et al. (2008) verify that “the goodness of translation was verified by a back version from Italian to English, done by a native English speaker. Afterwards, the original and back versions were compared to refine the Italian form” (p. 846). Internal-consistency reliabilities, for the Italian GDMS, ranged from .70 to .84 across the five scales. Gambetti, et al. (2008) determined the following Cronbach’s α for the five GDMS Italian scales: rational = .70; intuitive = .76; dependent = .84; avoidant = .81; and spontaneous = .78 (p. 847).

### 3.2.2.3 Bruine de Bruin, Parker and Fischhoff (2007)

Bruine de Bruin, et al. (2007) evaluated the reliability and validity of a set of seven behavioral decision-making tasks, measuring different aspects of the decision-making process. The tasks were administered to 360 individuals from diverse populations in the greater Pittsburg metropolitan area. Decision-making was measured using four scales, one of which was the GDMS. Correlations of the GDMS and the Adult Decision-making Competence (ADMC) scale, which assesses how well individuals make decisions, generated the following results: rational style (r = .22, p < .001); avoidant style(r = -.21, p < .001); dependent style: n.s.; intuitive style: n.s.; and spontaneous style (r = -.29, p < .001).
3.2.3 Job satisfaction, JSS.

Job satisfaction is an important component in job-related accomplishments and increases the competence of employees in an organization (Dehkordi, et al., 2011). Equally, when investigating job satisfaction, there is a relationship between levels of job satisfaction with outputs, productivity, and organizational commitment (Dehkordi, et al., 2011). Job satisfaction is most clearly defined as the degree to which one likes their job (Rae, 2013; Sypniewska, 2013).

The job satisfaction tool utilized in this study was the Job Satisfaction Survey developed by Spector (2001) to address the need for an instrument designed specifically for human services and public and nonprofit sector organizations. The survey tool gauges an employee’s attitude about their job and aspects of their job (Spector, 2001). Spector (1985) identified three criterions for developing the JSS:

1. Item content needed to be applicable to human services
2. Major aspects of job satisfaction needed to be included, in addition to subscales that were distinct in their content
3. Scale length was to be no more than 40 items

Scale development involved data summarized from 3148 respondents who constituted 19 separate samples (Spector, 1985). Individual participants were from a range of human service, public, and nonprofit organizations like (a) community mental health centers, (b) state psychiatric hospitals, (c) state social service departments, and (d) nursing homes (Spector, 1985). Based on Spector (1985), “the development of the JSS proceeded using attitudinal scale construction techniques for summated (Likert) rating scales” (p. 699).

The resulting JSS is a 36 item, nine-facet scale designed to assess employee attitudes about the job and aspects of the job. Each facet (pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication) is assessed with four items, and a total score is computed from all items. A summated rating scale format is used, with a score range of 1 to 6. A per item range Likert-like scale ranging from 1, strongly disagree, to 6, strongly agree, was utilized.

In the JSS, half of the items are written positive – negative and half are written negative – positive. Spector (1985) maintains that each item in the JSS scale is “an evaluative
statement, agreement with which would indicate either a positive or a negative attitude about the job” (p. 699). An example positively worded item is “I feel I am being paid a fair amount for the work I do” (Spector, 1985, p. 708) and a negatively worded item is “My superior is unfair to me” (Spector, 1985, p. 709). Negatively worded items must be reversed scored (Note: negatively worded items are 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23, 24, 26, 29, 31, 32, 34, 36). Scores on each of the nine facet subscales can range from 4 to 24, while scores for total job satisfaction, based on the sum of all 36 items, can range from 36 to 216. High scores on the scale represent job satisfaction (scores on the negatively worded items are reversed before summing with the positively worded items into facet or total scores). For an individual item, a score of 6, representing strongest agreement with a negatively worded item, is considered equivalent to a score of 1, representing strongest disagreement on a positively worded item; when calculated, 6 for a negatively worded item = 1 for a positively worded item.

Table 6 outlines Means, Standard Deviations, and Reliabilities for the JSS as detailed by Spector (1985). Spector (1985) reported coefficient α for each facet of the JSS ranging from .60 to .91 and a coefficient α of .91 for the composite on a sample of 3067. The validity of the JSS has been verified within various studies, including Bruck, Allen, and Spector (2002); Coté and Morgan (2002); and, Chou, Kroger, and Lee, (2010), as outlined below. Additional studies include: Auerbach, McGowan, Ausberger, Strolin-Goltzman, and Schudrich (2010); Chou, Fu, Kroger and Ru-yan (2011); Dewa, Dermer, Chau, Lowrey, Mawson and Bell (2009); Haggard, Robert and Rose (2011); and, Sauer, Canter and Shanklin (2010).

3.2.3.1 Bruck, Allen and Spector (2002)

Bruck, et al. (2002) studied the relationship between work-family conflict and job satisfaction. The relationship was examined using a six-dimensional measure of work-family conflict (using a multidimensional scale) and both global and summed facet measures of job satisfaction (using the JSS). Bruck, et al. (2002) found internal consistency reliabilities ranging from .45 to .86 for the JSS facets and a composite coefficient α of .91 in their study of 160 hospital employees.
3.2.3.2 Coté and Morgan (2002)

Coté and Morgan (2002) studied the association between emotion regulation, job satisfaction, and intentions to quit. Working college students were selected as participants because college students’ jobs are often in the service industry and frequently require dealings with bosses, coworkers, and customers (Coté & Morgan, 2002). Data was gathered from 111 participants at two points in time. Four weeks after initial data collection, participants returned to complete a second questionnaire. Coté and Morgan (2002) found a composite coefficient α of .91 in their first data collection process and .89 in their second data collection process.

3.2.3.3 Chou, Kroger and Lee (2010)

Chou, et al.(2010) studied the predictors of job satisfaction among staff in residential settings for persons with intellectual disabilities. 2624 staff including direct-care workers, non-direct care workers, and managers working in 77 residential settings were invited to take part in the study. A total of 1217 staff became the study sample and were asked to complete the JSS-Taiwan version (as it had been translated from the original English by the authors and two bilingual practitioners). Chou, et al. (2010) found a composite coefficient α of .94, with facet values ranging from .61 to .81.

3.3 Procedure

An application was submitted electronically through the ROMEO online management system to the Non-Medical Research Ethics Board at Western University on 16 August 2015. The application was considered by delegated review, and approval was granted 31 October 2015. Registrars at each of Ontario’s 20 universities were initially contacted by email 14 July 2015 in advance of the data collection process to ascertain the total number of direct reports and the total number of direct reports who would normally identify as female (Appendix C). For those institutions where responses were not yet received, a second email was sent 27 July 2015 (Appendix D). Finally, one further solicitation email was sent on 4 November 2015 to the four institutions where no response had yet been received. For the final four emails sent, two institutions remained silent and were therefore not included in further attempts to gather data. One institution requested to be
excluded from the study because the registrar felt that the institution’s structure was too complicated for her to identify appropriate potential participants. For the purpose of this study, the figure for total number of direct reports who would normally identify as female was gathered and analyzed for descriptive purposes recognizing that it is a point-in-time figure.

On 9 November 2015, the previously identified Registrars were contacted and invited to forward the researcher’s request for participation in the study to their eligible middle managers (Appendix E). The registrarial email provided a high level description of the study and the time frame expectations for completion of the survey (approximately 30 minutes). Within this first email, a link used to direct eligible participants to a secure web page where details relating to the study, information relating to confidentiality, and confirmation that participation is voluntary were all available (Appendix F). A printable Participant Information and Consent Form (Appendix G) and Summary Outline of the purposes of this study was available through the web link (Appendix H). Within the participant invitation text outlined on the website, it was clearly stated that each individual’s participation information would not be communicated to their registrar nor would their survey responses. The survey was launched by the researcher at 1PM for distribution and forward transmission by the university registrars to their eligible participants. It was anticipated that participants would incorporate completion of the study with their other work day tasks. In addition to the initial email launch of the data collection process, this researcher’s own university registrar actively encouraged his colleagues to participate in the study when he attended the Ontario University Registrars Forum in Toronto, 12 - 13 November 2015.

Qualtrics software was used to generate the survey tool and enabled the researcher to do secure online data collection. The eligible participants were invited to navigate directly to the Qualtrics site via a link in the initial registrar’s email. Responses being assigned randomly generated response ID’s linked directly from the email, a process which maintained participant anonymity. The integrity of the data collected was preserved because the only route to the web survey was through the original link. Prior to completing the survey, participants were directed to a private website utilizing a custom
domain (created through the ‘My Personal Web Space’ service available through Western University). By utilizing the link provided in the email to navigate to the private website, individuals were presented with information to help them make the decision as to whether or not to participate. Subsequently, navigating from the email to the Qualtrics link was undertaken by those individuals interested in participating; those individuals not interested in participating were not required to take further action. Eventual completion of the survey indicated a participant's informed consent.

The survey tool was comprised of 4 sections to facilitate participant data collection (Appendix I). Firstly, introductory information was collected to establish characteristics of the participants. No identifying information was requested or collected. Ethnicity and socioeconomic status variables were not collected because limiting factors that may have compromised a participant’s confidentiality was paramount. The researcher is also a leader in a university registrarial unit; collecting data relating to ethnicity may have provided the researcher with a route to identify participants. Singh, Taneja, and Mangalaria (2009) contend that “sufficient safeguards must be put in place from the outset to prevent compromising the identities of respondents and the security of the data”. Salary ranges would be expected to be relatively similar across all universities studied not withstanding geographic location of the university (i.e., University of Toronto is located in Toronto where standard of living expenses would vary considerably in relation to Lakehead University located in Thunder Bay).

However, to better understand the demographic characteristics of the participants, individuals were first asked to provide demographic information: identifying the length of time in their current position and with the institution; the size of their institution within an identified range; number of direct staff reports within their team; age within a nine year time span (i.e. 30-39, 40-49, 50-59); and, highest degree or level of school completed. Length of time in their position and with the university helps to establish a historical connection to their institution (Lewchuk, de Wolff and Clarke, 2011); size of their institution helps the researcher to determine that the participants were not all from one institution; number of direct reports illustrates the university registrar’s depiction of the leadership criteria; age of participant helps describe the population; and, highest level
of schooling positions the leaders’ academic achievements within their workplace university setting. The three leadership trait tools followed the introductory section and were ordered as CWEQ-I, GDMS, and JSS. This order was selected as it was viewed by the researcher to follow a natural progression from empowerment and decision-making to overall job satisfaction.

Within the Qualtrics site, each survey was presented separately; a multi-structure layout helped avoid respondents having to scroll through many questions and decreased their chance of missing the opportunity to provide information. Question sequence within each tool was maintained from the author’s original writing. After participants completed the three survey elements, they were directed to a debriefing page which explained the purpose of the study and the expected results (Appendix J). Candidates were also provided with a route to access the results of the study. Without distractions, completion of the survey process was anticipated to take no more than approximately 30 minutes for each respondent.

3.4 Research Design

A correlational research design was used to analyze the data. In a correlational design, variables are measured without manipulation and then analyzed to determine the extent of a relationship between two or more variables using statistical data. Although trends and patterns in the data are revealed, a correlational design does not establish causality.

Two correlational techniques were utilized in analyzing the relationships between variables in the current study. The first, the Pearson product-moment correlation coefficient, examined the strength of the linear association between each variable to another (i.e., decision-making style and empowerment; decision-making style and job satisfaction; empowerment and job satisfaction). The second, multiple regression analysis, facilitated an understanding of the relationship between several independent or predictor variables (i.e., decision-making style and empowerment) and a dependent or criterion variable (i.e., job satisfaction). This technique in essence allowed the researchers to probe “what is the best predictor of job satisfaction”?
3.5 Analysis Plan

Demographic data was examined to help understand the characteristics of the population. To assess the relationships of each variable relative to another, data analysis was completed using the Pearson Correlation procedure of the Statistical Package for Social Sciences (SPSS). The resulting statistic provided a measure of the linear correlation between two variables, expressed in a value between +1 and -1 inclusive (e.g. empowerment and job satisfaction). This researcher selected the Pearson product-moment correlation recognizing that the statistical procedure requires certain assumptions about the data to be a valid measure. The data gathered for the current study met these assumptions. The measurement scale of the variables was continuous and not subjected to manipulation. During analysis, ordinal data collected from each of the three survey tools was averaged as per the instructions from the original authors; therefore, the results were statistically analyzed as continuous variables.

The validity of the data was verified through skew and kurtosis analysis. An assumption of parametric statistics is that the data be normally distributed. The skewness of the dataset is a measure of the data set’s symmetry, or lack there-of. A normal distribution will have a skewness of 0. A data set is symmetric if it looks the same to the left and right of the center point when graphically represented. Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution (National Institute of Standards of Technology, n.d.).

A two-tailed $t$-test was conducted within the correlation analysis as an exploratory means taking into account the possibility of both a positive and negative effect by allotting half of the alpha to testing the significance in one direction and half of the alpha in the other. An alpha of either 0.01 or 0.05 was used as the level of significance for this study. Data was also analyzed to determine collinearity within the research tools.

Data was examined using multiple regression analysis. Multiple regression analysis permits the researcher to detect the effect of the independent variables of the five decision-making styles (rational, avoidant, dependent, intuitive and spontaneous) and empowerment on the dependent variable of job satisfaction. The purpose of using
multiple regression is to be able to ascertain more about the relationship between several predictor variables (Campbell, 2004); in this case, empowerment, and decision-making style (rational, avoidant, dependent, intuitive, spontaneous) and a criterion variables, job satisfaction.
Chapter 4

4 Results

The purpose of this research was to determine if there were relationships between empowerment, decision-making style, and job satisfaction in female registrarial middle managers within Ontario universities. Data was collected using an online survey of three instruments (a) Conditions for Workplace Effectiveness Questionnaire I (CQEW-I), (b) Job Satisfaction Survey (JSS), and (c) General Decision-Making Style scale (GDMS).

Prior to data collection, each of Ontario’s 20 university registrars were contacted. Of the initial 20, one requested to be excluded from the study and two provided no response to indicate an interest in participating. At the time of contact, the participating 17 university registrars identified 105 direct reports with indications that 76 (72.38%) direct reports would normally identify as female. A total of 29 survey responses were returned with 22 (28.95% response rate) being valid based on the researcher’s criteria. Surveys were determined to be valid if they were returned from an individual identifying as female and if at least 126 of the total 129 questions were complete. The researcher selected 126 questions as a validity point to ensure that participants were permitted to inadvertently miss a question, given the length of the survey tool. Data was examined through demographic data, statistical descriptive analysis, correlations, and multiple regression analysis.

4.1 Demographic Data

Participants were female registrarial middle managers within Ontario universities. For the purpose of this study, a middle management position was defined as (a) an individual reporting directly to the university’s registrar, and (b) an individual leader representing a unique area of business within the Office of the Registrar. Eligible candidates may or may not have had staff reporting directly to them; however, the manager was still considered an integral part of the registrar’s leadership team. Defining participants as an integral part of the leadership team ensures that although the leader may have a limited number of direct reports, if any direct reports at all, they are still considered to be part of
the overall strategic planning team of the registrar and therefore, have the same authority associated with their position as a manager with a larger number of direct report staff. Incumbents seconded to positions for a time frame of less than one year or individuals not normally serving in a middle management position were excluded from participating. Where institutions had satellite campuses or affiliated institutions, only middle managers reporting directly to the main constituent university registrar were considered for participation in the study. The middle manager was not to report to an outlier institutional registrar.

Table 7 presents demographic information of the valid respondents (N = 22). Subjects ranged in age from 20 to 59 years old, with 40.91% (n = 9) aged between 40 and 49 years. The majority of respondents (54.55%) indicated that they were from an institution with 25 000 or more full-time equivalent students, indicating that the distribution of responses is reasonable. Based on 2014/15 full time enrollment information provided by the Council of Ontario Universities (2016), 35% of the institutions contacted with survey information have over 25 000 students. Full-time equivalency (FTE) is determined by the number of terms a student is normally registered in an academic year; a full time student generates 1.0 FTE while a part time student generates an appropriate portion of the FTE load.

Within their workplaces, 45.45% of the respondents had been in their current position 0-5 years, 27.27% had been with their institution 21 or more years, and 54.55% had 0-5 direct staff reports. The majority of the respondents (45.45%) indicated that their highest level of schooling completed was a university postgraduate degree. Total average mean scores per tool were as follows: CWEQ-I, \( M = 3.430 \), highest possible score = 5; GDMS Rational, \( M = 4.386 \), highest possible score = 5; GDMS Intuitive, \( M = 3.236 \); GDMS Dependent, \( M = 3.355 \); GDMS, Avoidant, \( M = 1.855 \); GDMS Spontaneous, \( M = 2.100 \); and JSS, \( M = 4.390 \), highest possible score per facet = 6 (see table 8).
4.2 Data Analytics

4.2.1 Descriptive statistics.

Analysis of standard residuals (SRs) showed that the data contained no univariate outliers (SR Min = -1.521, SR Max = 1.39). Standardized testing demonstrated that there was no collinearity/multicollinearity present for the data analyzed, as the zero-order correlations between all variables were less than .90, and all variables possessed variance inflation factors (VIFs) well below the 10 cutoff recommended by Kline (2014) (see Table 9). The data likewise met the assumptions of independent errors (Durbin-Watson = 1.76) and non-zero variances (Job satisfaction: SD = 19.55; Empowerment: SD = 2.74; Rational: SD = .45; Intuitive: SD = .79; Dependent: SD = .66; Avoidant: SD = .63; Spontaneous: SD = .68).

Regarding the normality of the three tools used in this study (CWEQ-I, GDMS, JSS), the standardized skew and kurtosis coefficients were all within the range of +/- 2 (Onwuegbuzie & Daniel, 2002). This researcher acknowledges that +/- 2 may not be as stringent as that recommended by Kline (2014) in his textbook on structural equation modeling where he recommends a conservative cutoff of < |1|. Although Kline recommends this more stringent criterion, he does note, and it is generally agreed, that a range between +/- 2 is acceptable. With all standardized coefficients being within the acceptable range, the utilized tools were determined to be normally distributed (see Table 10). Data collection relating to decision-making style demonstrated 90.9% of the participants (N = 22) either identified within the rational decision-making style being their dominant style (n = 17) or with the rational decision-making style being one of their dominant decision-making styles (n = 3, see Table 11).

4.2.2 Correlational analysis.

Pearson product-moment correlation coefficients were computed to assess the relationships between empowerment, job satisfaction, and the decision-making styles of rational, intuitive, dependent, avoidant, and spontaneous. A significant positive correlation existed between the two variables of empowerment and job satisfaction (r =
There was no significant correlation between the individual decision-making style variables and empowerment (rational: $r = .393, n = 22, p = .070$; intuitive: $r = .173, n = 22, p = .441$; dependent: $r = .179, n = 22, p = .427$; avoidant: $r = -.418, n = 22, p = .053$; spontaneous: $r = -.262, n = 22, p = .239$); or the individual decision-making style variables and job satisfaction (rational: $r = .220, n = 22, p = .325$; intuitive: $r = .145, n = 22, p = .519$; dependent: $r = .153, n = 22, p = .496$; avoidant: $r = -.393, n = 22, p = .070$; spontaneous: $r = -.362, n = 22, p = .098$) (see Table 12). Avoidant and spontaneous decision-making styles were negatively correlated with empowerment (avoidant: $r = -.418, n = 22, p = .053$; spontaneous: $r = -.262, n = 22, p = .239$). Avoidant and spontaneous decision-making styles (avoidant: $r = -.393, n = 22, p = .070$; spontaneous: $r = -.362, n = 22, p = .098$) were approaching significance and were also negatively correlated with job satisfaction.

Therefore, support was found for the hypothesis that empowerment ($M = 20.58, SD = 2.74$) was significantly correlated to job satisfaction ($M = 159.05, SD = 19.55$), $r (20) = .80, p < 0.001$). In contrast, support was not found for the hypothesis that decision-making styles (Rational: $M = 4.39, SD = 0.44$, $r (20) = .39, p = .07$; Intuitive: $M = 3.24, SD = 0.79$, $r (20) = .17, p = .44$; Dependent: $M = 3.35, SD = 0.66$, $r (20) = .18, p = .43$; Avoidant: $M = 1.85, SD = 0.63$, $r (20) = -.42, p = .05$; Spontaneous: $M = 2.1, SD = 0.68$, $r (20) = -.26, p = .24$) were significantly related to empowerment ($M = 20.58, SD = 2.74$) or job satisfaction ($M = 159.05, SD = 19.55$). The relationships between empowerment and the five decision-making styles did not demonstrate a significant relationship. The five decision-making styles also did not contribute to significant relationships to job satisfaction. It is noteworthy however; that several of the correlations fell in the point 3 range suggesting that with a larger sample, these could have achieved significance.

### 4.2.3 Multiple regression analysis.

The enter method in multiple regression analysis was used to test if empowerment and decision-making styles (rational, intuitive, dependent, avoidant, spontaneous) together predicted participants' job satisfaction. Results of the regression indicated that empowerment and decision-making styles explained 84% of the variance in job
satisfaction ($R^2 = .84$, $R^2_{\text{Adjusted}} = .59$, $F(6, 21) = 6.08$, $p = .002$). Within the regression model, empowerment significantly predicted job satisfaction ($\beta/beta = 5.50/5.77$, $t(15) = 4.73$, $p < .001$), accounting for 77% of the variance. Although decision-making styles did not significantly predict job satisfaction (rational: $\beta/beta = -11.08/-1.250$, $t(15) = -1.34$, $p = .20$; intuitive $\beta/beta = 1.40/0.056$, $t(15) = .32$, $p = .757$; dependent $\beta/beta = 1.78/0.060$, $t(15) = .37$, $p = .716$; avoidant $\beta/beta = -3.33/-0.107$, $t(15) = -.51$, $p = .620$; spontaneous $\beta/beta = -6.95/-0.242$, $t(15) = -1.30$, $p = .214$), they contributed an additional 7% to the prediction of job satisfaction; see Table 13).
Chapter 5

5 Discussion

Participants for this study were female registrarial middle managers within our Ontario universities. As defined by Bass (1997), there is an important function of education; it must provide for change (p. 130). Inherent in the discussion outlined in this study, university leadership must adapt to the changes levied from internal and external forces. As professional organizations, of which universities are an exemplar, the concept of the middle manager (Clegg & McAuley, 2005) must be understood for its relational strengths and weaknesses in supporting success within the traditional bureaucratic higher education structure. Universities have been described within this study to be professional bureaucracies where overarching control over strategic direction is not commonplace (Fugazzotto, 2009). Registrarial units are integral to the functioning of a university, and the middle management tier within registrarial offices participates in both upper level decision-making and front line staff direction (Fugazzotto, 2009).

This research investigated the relationships between feelings of structural empowerment, decision-making style, and job satisfaction in female registrarial middle managers in Ontario universities. The relationship between empowerment and decision-making style was explored in relation to job satisfaction. The decision-making style scale utilized was designed to distinguish between five decision styles: (a) rational, (b) avoidant, (c) dependent, (d) intuitive, and (e) spontaneous. Data was collected using an online survey of three instruments (a) Conditions for Workplace Effectiveness Questionnaire I (CQEW-I), (b) Job Satisfaction Survey (JSS), and (c) General Decision-Making Style scale (GDMS). The three survey instruments were distributed on behalf of the researcher by email invitation to eligible participants (N = 76; criteria for participation: individuals identifying as female reporting directly to the university registrar, or individuals identifying as female representing a unique area of business within the registrar’s leadership team) by the participating university registrars. A total of 29 survey responses were returned with 22 (28.95% response rate) being valid based on the researcher’s criteria. Surveys were determined to be valid if they were returned from an individual
identifying as female and were complete with at least 126 of the 129 questions being answered.

To assess empowerment, the CWEQ-I, consisting of 60 questions, was used. The 60 questions represented four subscales (opportunity, resources, information, and support), the job activities scale (JAS), the organizational relationship scale (ORS), and the Global Empowerment Scale (GE). Representing a composite of all the subscales, total structural empowerment (six scale version) summing has the greatest utility in overall prediction; therefore, this method was selected for assessing job satisfaction. Participants responded using a five point scale. Questions 1 - 40 were scored where 1 = none, 3 = some, 4 = a lot. Questions 41 - 58 were scored where 1 = none, 5 = a lot, and questions 59 - 60 were scored where 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree, 5 = strongly disagree. Total structural empowerment was calculated by totaling the subscale mean scores for opportunity, resources, information and support, the scale mean for the job activities scale, and the scale mean for organizational relationships scale. Total structural empowerment calculations were performed based on the tool scoring information provided with the tool (Laschinger, 2012). The Global Empowerment Scale was not utilized in the calculation. The GE represents a validation index and is not identified as a component of scale summing (6 scale version) within the scoring instructions (Laschinger, 2012).

The GDMS consisted of 25 questions representing the five decision-making styles of rational, avoidant, dependent, intuitive, and spontaneous. Participants responded using a five point scale where 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree. An individual’s dominant style was determined by calculating the average within each subscale style category.

The JSS consisted of 36 questions. Participants responded using a six point scale. Questions were scored where 1 = disagree very much, 2 = disagree moderately, 3 = disagree slightly, 4 = agree slightly, 5 = agree moderately, and 6 = agree very much. A total score was calculated utilizing all responses. Within the JSS, half of the items are
written positive – negative and half are written negative – positive; negatively worded items were reversed scored.

5.1 Selecting Female Registrarial Middle Managers

Middle managers were defined for this study to be individuals reporting directly to a university registrar. Of the middle management tier at the 17 participating Ontario universities, the majority (72.38%) were identified by their university registrars as female. This study looked at the importance of the relationships between empowerment, decision-making style, and job satisfaction in female registrarial middle managers. Registrarial middle managers serve in a significant role in our higher education institutions, and identifying that the majority of these roles are filled by women is an important acknowledgement. Morley (2013) notes that “worldwide, the enrollment of women in higher education now exceeds that of men” (p. 1). Women’s increased participation in studies at the higher education level has not mirrored their activity in educational leadership. Proportionally, large number of academics and higher level academic leaders continue to be men (Morley, 2013). With higher level leadership comprised of men, women are fulfilling the roles of middle management. Cooper Jackson (2001) and Blackmore and Sachs (2007) identify that when women manage within a field, in this case higher education, it is typical to find that proportionally more women will comprise the reporting level below their own managerial level. Acknowledging and tackling the issue of women’s lack of senior leadership opportunity is inherent in studying female registrarial middle managers. Identifying factors that predict job satisfaction helps to inform a support and retention path for middle managers whose institutional knowledge and skill can eventually propel them to upper level leadership. Developing supports for women within university registrarial units is paramount to the success of our Ontario institutions.

5.2 Defining the Middle Manager

Based on the literature review, non-academic professional employees in higher education, such as registrarial middle managers, have received little attention in previous scholarly literature. Any earlier studies the researcher discovered relating to middle managers
within a university setting focused on academic roles such as a head of department (Clegg & McAuley, 2005; Boer, Goedegebuure & Meek, 2010; Kalargyrou, Pescosolido & Kalargiros, 2012; Kalargyrou & Wood, 2012; Kallenberg, 2007). A 45.54% majority of respondents in this study ($n = 10$) indicated that their highest level of schooling completed was a university post graduate degree. Overall, 86.36% ($n = 19$) of respondents indicated that they had completed either a bachelor’s level or post graduate level university education. A 72.38% majority of the middle managers in this study were identified by their registrars as female, versus 27.62% identified as male. The 72.38% majority of women in registrarial mid-leadership positions represent educated professionals who, like individuals serving in the role of head of department, deserve respect within the hierarchy of a university due, in part, to their academic achievements.

Female middle managers display dedication to their university with 45.45% ($n = 10$) indicating that they have been with their institution 16 or more years ($n = 4, 16 – 20$ years; $n = 6, 21+$ years). These figures support the information presented in this study that registrarial units form a historic core within our Ontario universities - leaders within these units possess a great deal of institutional knowledge based on the extended span of their careers.

It has previously been argued that middle managers serve an important function by acting as a bridge connecting the strategic thinking of senior leaders and the more focused workings of the front line staff. 45.45% of respondents indicated that they have between 0 – 5 direct reports ($n = 10$). This finding indicates that almost half of the participants have conservative front line staff supervisory responsibilities, if any. Within this study, middle managers were also identified to be an integral part of the university registrar’s leadership team. The middle manager with fewer direct reports could be a reflection of the overall size of the registrarial unit where 5 individuals represent a significant team. In this case, the middle manager does serve in an important bridging role. Further study is needed to determine the impacts of middle managers leading by example rather than direct supervisory responsibility and therefore, influencing individuals not within their own realm of direct responsibility.
5.3 Decision-making Style

The majority of female middle managers within this study (77.27%) endorsed a rational decision-making style (n = 17) – only 9.09% (n = 2) did not have a rational decision-making style appear as either dominant in their responses or as an equal part of their combined dominant responses (rational: $M = 4.38$, intuitive: $M = 3.24$, dependent: $M = 3.35$, avoidant: $M = 1.85$, spontaneous: $M = 2.10$). Scott and Bruce (1995) contend that a person with a rational decision-making style approaches a decision rather than avoid it. In making decisions, individuals perform “a thorough search for and logical evaluation of alternatives” (p. 820) when presented with individual problems. This style of decision-making is vital if one is to be successful in a leadership role. Jordan (1973) states that “the function of administration is to mobilize resources to achieve purpose as efficiently as possible” (p. 3). By mobilizing resources, the rational decision-making leader is confronting problems.

When outlining their five practices of exemplary leadership, Kouzes and Posner (2012) suggest that listening, observing, interpreting, and asking questions are fundamental to a successful leader. A rational decision-maker embodies these traits. University environments represent complex organizations, and a rational decision-maker searches for information within the organization and then facilitates a logically evaluated solution. To be successful, a middle management leader needs the skill to draw on the knowledge of others (Clark, 2010). Successful leaders and decision-makers identify what needs to be done and how best to achieve the goals outlined (Clark, 2010).

Growing literature supports the contention that upper level leaders in our educational institutions are asking their middle management tier to do more with less and to be nimble in an ever-changing academic landscape (Blackmore & Sachs, 2007, Nedd, 2006). A rational decision maker will take on responsibility for decisions affecting them while also typically maintaining a level of deliberation (Scott & Bruce, 1995, p. 180). Remaining cognoscente of university strategic initiatives, while also being responsible for determining methods to complete tasks on the front lines, are key leadership skills for middle managers. As rational decision makers, middle managers own the challenges presented and determine inclusive solutions that will be adopted by all. With decision-
making style being defined within this study as a learned habitual response or a habit-based tendency demonstrated by an individual when confronted with a problem or given a specific decision context (Scott & Bruce, 1995, p. 180), it is confirming that the majority of leaders in this study were rational decision makers.

In contrast, participants in this study demonstrated low levels of avoidant \( (M = 1.85) \) and spontaneous \( (M = 2.10) \) styles of leadership. Individuals prone to avoiding making decisions or to make quick decisions would typically not be anticipated to be successful in a middle management position that supports analytical evaluation, discussion, liaison, and communication.

### 5.4 Structural Empowerment

In this study, empowerment refers to the ability to organize information, resources, and support to get things done in the university setting (Laschinger, 2012). Structural empowerment is the degree to which middle managers believe they have access to these structures in their work environments (Laschinger, 2012).

To measure structural empowerment, the CWEQ-I was utilized in this study. Moderate trending toward high Mean scores for the subscale measures, JAS, and ORS, averaged just above the mid-point of the five point scale (opportunity \( M = 3.64 \); information \( M = 3.52 \); support \( M = 3.28 \); resources \( M = 3.39 \); JAS \( M = 3.14 \); ORS \( M = 3.61 \)). These scores are at the higher end of the range of previous studies (Table 14). In structural empowerment, it was demonstrated that female registrarial middle managers felt that they were more empowered than participants in previous studies (Wilson & Spence Laschinger, 1994; Spence Laschinger & Havens, 1997; Sarmiento, Spence Laschinger & Iwasiw, 2004). Joo and Lim (2013) state that “as the depth and speed in change of today’s business environment accelerates due to globalization, technological innovation, and the knowledge-based economy, jobs have become more complex, challenging, and empowering” (p. 324). Inherent in the discussion outlined in this study, universities are also facing the challenges associated with these ever-changing demands. Data analyzed in this study provides support to acknowledge that our Ontario institutions are already fostering structurally empowering environments. To remain aligned with societal
changes and demands, enhancing mentoring opportunities, succession planning support, and access to knowledge about institutional strategies and goals is essential for the continued empowerment of registrarial middle managers (Patrick & Laschinger, 2006).

A significant positive relationship existed between the two variables of empowerment and job satisfaction ($r = .801, n = 22, p < 0.001$). The strength of the correlation allows us to draw a meaningful conclusion about the relationship between these two variables. These findings support the theory presented by Kanter (1977) that structural organizational factors play an important role in an individual’s response to work situations and subsequently work effectiveness (Spence Laschinger & Havens, 1997).

Previous studies have confirmed that empowerment is substantiated by individuals who are inspired and motivated to make meaningful contributions and who have the confidence their contributions will be recognized and valued (Joo & Lim, 2013; Laschinger, Wilk, Cho, & Greco, 2009; Orgambídez-Ramos, Gonçalves, Santos, Borrego-Alés & Mendoza-Sierra, 2015).

5.5 Job Satisfaction

The job satisfaction tool utilized in this study was the Job Satisfaction Survey developed by Spector (2001) to address the need for an instrument designed specifically for human services and public and nonprofit sector organizations. The tool measures nine facets related to job satisfaction: pay, promotion, supervision, fringe benefits, contingent rewards (performance based rewards), operating procedures (required rules and procedures), coworkers, nature of work, and communication. Total job satisfaction is calculated by summing the nine facets. Results for this study ($M = 159.05, SD = 19.55$) indicate that registrarial middle managers presented with job satisfaction moderately higher than is detailed in the norms outlined for similar participants identified by Spector (2011) and based on results provided to him from researchers utilizing the JSS tool (Higher Education in the USA: $M = 137.2, SD = 8.1$, N of samples = 14, Total sample size = 3764; Public sector USA: $M = 138.3, SD = 27.9$, N of samples = 72, Total sample size = 24750; Canada: $M = 134.3, SD = 136.3$, N of samples = 6, Total sample size = 581; Spector, 2011). Data analyzed in this study demonstrated that 77.27% of respondents were satisfied in their job (score range 144 – 216), 27.72% were ambivalent
(score range 108 – 144) while none were dissatisfied (score range 36 – 108). The MIN value (125) and MAX value (183) were midway within the ambivalent and satisfied scoring ranges, respectively. These results indicate that typically, current female registrarial middle managers in Ontario are job satisfied, perhaps more so than individuals in similarly grouped professions or demographics.

The midlevel female managers in this study are generally responsible for liaising with upper level leaders, guiding lower level employees, and ensuring that the strategic goals of the institution are facilitated through the direct support of tasks associated with front line responsibilities (e.g. course registration, convocation, grade administration, student financial situations). Morris and Laipple (2015) determined in their national study of 1515 university administrators that women reported feeling more successful in accomplishing goals than did men. Equally, Morris and Laipple (2015) found that their female respondents reported feeling “more skilled than men in a number of areas of social behavior including inspiring others and addressing poor performance” (p. 250). The registrarial middle management level is characterized by the need to liaise and accomplish tasks; women in the current study are fulfilling these needs and are job satisfied.

The satisfaction findings supports broad linkages between levels of job satisfaction with outputs, productivity, and organizational commitment (Dekhordi, et al., 2011) that are characteristics of the middle manager role, and are contributing to the currently successful operation of our institutions. Based on the Times Higher Education World University Rankings for 2015/16, seven Ontario universities are ranked in the top 300 of the 800 schools listed, with three Ontario institutions within the top 200 (Baty, 2015). Although defining a university as successful should be far more encompassing than positioning it on the Times Higher Education World University Rankings, it is a measure of success that is acknowledged within the field of higher education. Upper level placement of an institution demonstrates that administration is supporting positive results for our Ontario universities.
Spector (1985) notes that “the attitudinal nature of satisfaction implies that an individual would tend to approach (or stay with) a satisfying job and avoid (or quit) a dissatisfying job” (p. 695). To maintain the threshold of education currently existing in Ontario, or to bolster an institution’s presence in worldwide rankings, retaining and supporting female registrarial middle managers is important.

### 5.6 Relationship of Structural Empowerment, Decision-Making Style, and Job Satisfaction

An overarching goal of this study was to illuminate to what degree decision-making styles and structural empowerment played in predicting job satisfaction amongst female registrarial middle managers in Ontario.

Correlational analysis found a significant relationship between empowerment and job satisfaction ($r = .801$, $n = 22$, $p < .001$). There was no significant correlation between the individual decision-making style variables and empowerment (rational: $r = .393$, $n = 22$, $p = .070$; intuitive: $r = .173$, $n = 22$, $p = .441$; dependent: $r = .179$, $n = 22$, $p = .427$; avoidant: $r = -.418$, $n = 22$, $p = .053$; spontaneous: $r = -.262$, $n = 22$, $p = .239$). There was also no significant correlation between the individual decision-making style variables and job satisfaction (rational: $r = .220$, $n = 22$, $p = .325$; intuitive: $r = .145$, $n = 22$, $p = .519$; dependent: $r = .153$, $n = 22$, $p = .496$; avoidant: $r = -.393$, $n = 22$, $p = .070$; spontaneous: $r = -.362$, $n = 22$, $p = .098$). Within this study, a majority of the participants were within the rational style of decision-making. Further study of a larger population, that would potentially contain a greater distribution of individual decision-making styles, may reveal significant relationships amongst variables that are non-significant in the current study.

Avoidant and spontaneous decision-making styles were negatively correlated with empowerment (avoidant: $r = -.418$, $n = 22$, $p = .053$; spontaneous: $r = -.262$, $n = 22$, $p = .239$). Although the relationships between these variables was non-significant (avoidant: $r = -.393$, $n = 22$, $p = .070$; spontaneous: $r = -.362$, $n = 22$, $p = .098$), it is noteworthy that they were approaching significance. A larger sample size would have the potential to confirm or reject the notion that individuals with components of both avoidant and
spontaneous decision-making styles are less likely to be empowered or job satisfied. In this study, the majority of women were job satisfied. There is a need to study job retention rates within registrarial female middle managers to explore whether avoidant and spontaneous decision-makers are neither empowered or job satisfied and therefore move, or are moved, from their middle management positions. The literature presented in support of this study indicates that expectations placed on middle managers within our universities are high. Morris and Laipple (2015) contend that “dedicated administrators put in long hours in the office and may give up many evenings and weekend hours to university events” (p. 242). Expanded studies further examining the relationships between decision-making style and retention could further probe potential factors contributing to the negative correlations discovered in this study between avoidant and spontaneous decision-making styles, and empowerment and job satisfaction, respectively.

Seventy seven percent of the variance in job satisfaction was attributed to structural empowerment with decision-making predicting a further 7%. In combination, the two influenced 84% of job satisfaction and proved to be a powerful predictor of that construct. The findings of this study support Kanter’s theory of structural empowerment which purports that organizational factors within the institution (e.g. psychological competencies, growth development, and engagement) are contributors to organizational attitudes – including job satisfaction. Sarmiento, Laschinger and Iwasiw (2004) determined in their study of the nurse educator population that “Kanter’s belief that employee’s access to the information, opportunity, support and resources necessary for their work [had] positive effects on employees such as…greater amounts of job satisfaction” (p. 140). Results of this study provide further evidence for Kanter’s theory within a population of female registrarial middle managers.

A further 7% of the variance in job satisfaction was predicted by decision-making style. Decision-making style was not as significant as structural empowerment; never-the-less, decision-making style does contribute some additional explanatory information (from 77 to 84%). An individual’s ability to make decisions is part of everyday phenomena that takes place in work and professional lives (Sohail, 2013). Sohail (2013) asserts that “the survival, success and enhancement of an individual and organization depends on right
and timely decision-making, thus it can be said that decision-making is a process of selecting the best course of action out of many alternatives available” (p. 191).

An individual’s decision-making style relates to their own characteristics, both motivational and personal, in addition to the environmental surroundings and the specific details about the situation (Sohail, 2013). Utilizing the GDMS, Sohail (2013), in her study of 140 women university teachers in Malaysia, determined that the majority of highly qualified women university teachers have a rational decision-making style; inexperienced teachers have differing styles. In this researcher’s study, the majority of female registrarial middle managers also use a rational decision-making style. These middle managers have been positioned in this study to be experienced based on their number of years within the institution (64% have been with the institution over 11 years) and level of education achieved (86% have obtained a level of higher education).

5.6.1 Implications.

Administration is often required to do more with less. This study has explored the relationships between empowerment, decision-making style, and job satisfaction in female registrarial middle managers. Upper level university leadership committed to investing in measures that support structural empowerment and specific decision-making styles can ultimately influence a middle manager’s level of job satisfaction. Elnaga and Imran (2014) state that “employees can be more committed towards the company by having good appreciation, engagement with growth, recognition and trust” (p. 19). As senior leaders, university registrars have the authority to influence organizational structures. Senior leadership has access to the opportunities and resources needed to create work environments that induce job satisfaction (Laschinger, Finegan, Shamian & Wilk, 2004; Nedd, 2006). Elnaga and Imran (2014) outline specific paths to empowerment including: defining expected outcomes and transferring accountability for those outcomes; communicating clearly and completely; supplying information, resources and materials necessary to obtain success, while minimizing barriers; and, ensuring an autonomous and trusting environment within which to work. Elnaga and Imran (2014) outline how empowering practices can influence job satisfaction through:
1) open communication, no information is kept secret; 2) consistent training that provides increased knowledge - knowledge builds decision-making and problem solving skills; 3) transferring the power associated with decision-making to the impacted individuals; and, 4) providing recognition and encouragement.

University registrars can encourage empowerment and facilitate access to the organizational structure of opportunity (possibilities for growth and movement, as well as increased knowledge and skills) by supporting middle managers participation in central decision-making bodies like a university senate or board of governors. Once managers are a part of these central university decision-making bodies, membership on subcommittees can also be encouraged. Understanding the university hierarchical governing structure through their own participation in senate or the board of governors, and networking with others within the university community while on these bodies, provides managers with invaluable opportunity.

Frequently university-wide task forces are convened relating to policies or practices that impact a registrarial unit; registrarial middle managers participation as designates on these committees would have a positive influence on expanding knowledge bases (Nedd, 2006). Gaining knowledge will also provide decision-makers with a solid basis on which to provide possible solutions. Participation in cross-functional teams can serve a similar function – increasing social connections, developing communication channels, increasing technical knowledge, and introducing avenues for movement. Smart and Barnum (2000) outline that support for cross functional teams “reflects the growing complexity of today’s work, where no single individual or job function possesses sufficient knowledge or skill for developing or maintaining innovative products and services” (p. 19).

Providing a route for middle managers to explore options and have robust, analytical conversations suits a rational decision-making style while also encouraging feelings of structural empowerment. Smart and Barnum (2000) outline multiple positive outcomes that can be transferable to female middle management staff when institutions introduce cross functional teams. The authors describe benefits that include “enhanced communication and decision-making through rich sharing of information” (Smart & Barnam, 2000, p. 19) and “increased productivity with higher levels of involvement,
commitment, motivation, and subsequent accountability among workers” (Smart & Barnum, 2000, p. 19).

Equally, furthering the defined “middle” position of female registrarial middle managers as not only the individuals participating in strategic decision-making with higher level leaders but also as the leadership layer for front line staff, provides a path to encourage mentorship opportunities and leading by example. These routes would advance skills and knowledge in the organization in addition to fostering empowerment (Cooper Jackson, 2001; Morley, 2012; Nedd, 2006). Mentorship programs can be woven into the ethos of staff training (Catherine Ehrich, 1995). Catherine Ehrich (1995) outlines that fulsome professional mentorship opportunities benefit the mentor, the mentored, and the organization. Mentorship can be a “complex interpersonal relationship” (Catherine Ehrich, 1995) which must be acknowledged by the institution in order to provide participants with the time and the route to sufficiently facilitate a successful mentorship practice. Catherine Ehrich (1995) outlines a multistep model for establishing a successful mentorship program that is transferable to a university institution: 1) establish a policy that sets clear guidelines and transparently conveys expectations; 2) disseminate the policy information to ensure open communication is upheld and credibility to the initiative is established; 3) invest time and resources in a thorough training model for mentors; 4) once trained, it is vital that mentors establish clear lines of communication with their pool of potential mentees – miscommunication about the intentioned outcomes of the relationship must be established; 5) publication of the professional mentorship program must be far-reaching and interested individuals are required to share career goals and aspirations (mentors must prepare appropriately to respond to a mentee’s individual needs); 6) implementation of the policy – begin the mentoring relationship; and, 7) evaluate the process and encourage a continued metamorphosis of the mentor/mentee relationship.

For female registrarial middle managers to be satisfied in their work life, institutional leaders must provide robust support structures, adequate resources and logical paths to gain and share information. Equally as important, female middle managers must view these supports as accessible within their already demanding roles; senior university
leadership must be attuned to the needs of middle managers and react accordingly (Nedd, 2006), while middle managers must be accountable for their own career path within the organization (Wentling, 2003). Morley (2013) identifies that leadership programs or “capacity development” (p. 10) support women’s career goals. Multiple professional development opportunities exist within North America that support gender specific programming (Morley, 2012) and seek to boost representation of women in leadership roles within higher education (e.g. The Office of Women in Higher Education’s Inclusive Excellence Group’s National Leadership Forum for Women, Women in Higher Education Leadership Summit). Morely (2012) and Nedd (2006) both speak to the benefit of access to women-centered professional development. This development supports social connections, growth, and movement possibilities.

Finally, Nedd (2006) acknowledges that empowering strategies can sometimes be as simple as offering positive, on-the-spot verbal recognition or public acknowledgement for positively shared accountability. The facet of access to support within structural empowerment delineates receiving feedback and guidance from subordinates, peers, and superiors (Laschinger, 2012). Lawler, Benson, and McDermott (2012) outline how the formalized process of performance feedback, in comparison to on-the-spot recognition, is effective when based on workplace goals that are jointly set and are shaped by institutional and departmental strategies. Providing and receiving feedback solidifies a route for middle managers to confirm institutional strategies (Lawler, Benson & McDermott, 2012). Translating the strategies of the university and of the registrarial office to objectives personified in individual behaviors guides an individual’s formal and informal knowledge.

5.7 Limitations of the Study

This research faced several limitations. Firstly, it was hoped that results of this research would generalize to the entire population of female registrarial middle managers in Ontario. The total number of valid responses to this study was 22 from a possible 76. A 28.95% response rate is lower than desired by the researcher and as a result, impacts the level of confidence that we can place in the findings. However, Chung (2014) notes that “clearly, a 100% response rate is ideal because the population is studied, but a 50% or
20% response rate may be equally informative. This is because the ability to generalize is based not on response rate, but on the similarity of the responders to the greater population” (p. 421). It was not within the scope of the current study to undertake a comparative analysis of the demographic characteristics of nonresponders verses responders to illuminate potential similarities and differences (Chung, 2014). Future research endeavors could look to expand the population under study by seeking participants from each Canadian province and territory. This researcher confined her participant pool to Ontario because education is a mandate of the provincial level of government; however, information gathered through national representation could also facilitate provincial/territorial correlational analysis.

More intensive recruitment initiatives may increase online survey responses. This researcher emailed registrars to provide access to the study participant pool. More frequent email reminders, or emails copied to a registrar’s administrative assistant, is a route to increase online survey response (Nulty, 2008). Offering an incentive for successful completion of the survey is also recommended if further research is undertaken (Nulty, 2008). An incentive may include a reward provided through a random selection or confirmation that the results gathered as a result of the study will be disseminated to each institution and potentially used to the benefit of the participants (Nulty, 2008).

Secondly, the small sample size also posed challenges to the level of confidence that could be placed in the findings. It is generally accepted that as the sample size increases, the confidence in one’s estimate also increases. As a result, a larger sample size gives not only more reliable results but greater precision and power. In the current study, the strength of the correlation between empowerment and job satisfaction allows us to draw a meaningful conclusion about the relationship between these two variables. However, this was not the case with the various decision-making styles, although it is important to note that negative correlations approaching significance were found between job satisfaction and avoidant and spontaneous decision-making styles. A larger sample may have produced more conclusive results. Replication studies that increase sample size are needed.
Thirdly, each university in Ontario is structured differently, although arguably all have a professional bureaucratic structure at their basis. The researcher attempted to gather data from women in similar positions of leadership to target the middle tier of management. However, the decision to forward the original email of November 9, 2015 requesting individual’s participation was made by each university registrar based on their understanding of the researcher’s criteria. Further study is suggested that would include comparisons of job descriptions to determine accountabilities and expected outcomes for each participant’s role.

Lastly, data gathered in this study was based on measurement tools that used five and six point Likert-like scales. Ogden and Lo (2012) contend that although commonly used in research, the Likert scale is “not without its flaws” (p. 351). In their study, Ogden and Lo (2012) demonstrate both disparities between results gathered using Likert scale responses and summative results of free text data. Their findings indicated that the role of a participant’s frame of reference can differentially impact how they interpret details based on what is salient to them (p. 360). This researcher determined that given the scope of participants and the results desired, an online Likert-like scale survey was most appropriate. The tools administered (CWEQ-I, GDMS, JSS) are each psychometrically sound and have been used extensively in research related to empowerment, decision-making, and job satisfaction. Future research involving targeted interviews would provide the possibility to explore in greater detail subject perceptions and experience relative to the variables under study.

5.8 Conclusions

The intention of this study was to determine the relationships between empowerment, decision-making style, and job satisfaction in female registrarial middle managers within Ontario universities. Broad views of empowerment (Field, 1997; Klagge, 1998; Sprietzer, 1995) were informative as a basis upon which to build hypotheses, as were theories relating directly to the empowerment of middle managers (Patrick & Laschinger, 2006; Holden & Roberts, 2004). However, Kanter (1989; 1993), whose theory is pivotal to this study, describes structural empowerment as encompassing the structure of the work environment which is an important correlate of employee attitude and behaviors in
organizations. Access to power and opportunity structures also relate to the behaviors and attitudes of employees in organizations (Nedd, 2006). Kanter (1993) suggested that within the workplace, people exhibit different behaviors depending on whether certain structural supports (power and opportunity) are in place. Previous studies have used Kanter's theory to demonstrate that perceived empowering work environments were related to an employees' attitude such as an increased feeling of autonomy and a gained organizational commitment (Finegan & Laschinger, 2001). The results of this study indicate that feelings of empowerment exhibit a significant relationship to job satisfaction and indeed, account for a significant amount of the variance in job satisfaction.

Decision-making style is reflective of cognitive style (Scott & Bruce, 1995, p.829). Within this study, five decision-making styles (rational, avoidant, dependent, intuitive and spontaneous) were explored in relation to each respondent’s behavioral characteristics or style. The vast majority of participants in the current study exhibited a propensity toward engaging in a rational decision-making style. Within the rational decision-making style, individuals tend to take a multi-step process for making choices between alternatives. The process of rational decision-making favors logic, impartiality, and examination over subjectivity and insight. Interestingly, Sohail (2013) determined in her study that the majority of highly qualified women university teacher participants also predominately demonstrated a rational decision-making style based on the GDMS.

It is noteworthy that correlational examination of decision-making styles with job satisfaction showed an inverse relationship; in other words, spontaneous and avoidant decision-making styles were negatively correlated with job satisfaction suggesting that job satisfaction decreases as a function of these styles. Although the correlations were not statistically significant, they were approaching significance. As noted earlier, a replication of the study with a larger sample may provide further illumination as to the role these decision-making styles play in job satisfaction. Interestingly, decision-making styles, in combination, did contribute to the overall variance (roughly 7%), further strengthening the already robust model.
Holden and Roberts’ (2004) and Clegg & McAuley (2005) discuss the changing role of middle managers within organizations where individuals are being asked to provide leadership to more complex tasks, manage additional duties, and retain detailed knowledge. The reality that middle managers serve in a precarious position between higher decision-making management tiers and front line staff is a unifying focus of several existing bodies of research (Clegg & McAuley, 2005; Denham, et al., 1997; Ekaterini, 2011; Holden & Roberts, 2004; Klagge, 1998). Within the continually changing, externally influenced environment of higher education, being responsible for enacting strategic planning goals can be a challenge. As our academic institutions implement change management initiatives to respond to the shift in societal expectation, the role of the middle manager becomes more complex. Identifying the relationships between empowerment, decision-making, and job satisfaction of female registrarial middle managers can influence the success of our academic institutions, especially when steps are taken to continue to encourage and support empowered female leaders.
References


Goode, J. (2000). Is the position of women in higher education changing? In M. Tight (Ed.), *Academic Work and Life: What it is to be an Academic, and How this is Changing* (pp. 243-284). doi:10.1016/S1479-3628(00)80103-3


doi:10.1080/1360080X.2015.1019125


Appendices

Appendix A: Western University Ethics Approval

Western University Non-Medical Research Ethics Board
NMREB Delegated Initial Approval Notice

Principal Investigator: Dr. Vicki Schwan
Department & Institution: Education, Western University

NMREB File Number: 107081
Study Title: As exploration of the relationship between three leadership traits in female Ontario university registrarial middle managers
Sponsor:

NMREB Initial Approval Date: October 31, 2015
NMREB Expiry Date: October 30, 2016

Documents Approved and/or Received for Information:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Comments</th>
<th>Version Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments</td>
<td>Instruments</td>
<td>2015/04/05</td>
</tr>
<tr>
<td>Listing of University Registrars</td>
<td></td>
<td>2015/10/01</td>
</tr>
<tr>
<td>Summary Outline</td>
<td></td>
<td>2015/10/01</td>
</tr>
<tr>
<td>Sample webpage available to candidates</td>
<td></td>
<td>2015/10/01</td>
</tr>
<tr>
<td>References</td>
<td></td>
<td>2015/10/01</td>
</tr>
<tr>
<td>Sample email to registrar</td>
<td></td>
<td>2015/10/01</td>
</tr>
</tbody>
</table>

Letter of Information & Consent
Revised Western University Protocol
Version Date: 2015/10/01

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Ethics officer, on behalf of Vicki Schwan, NMREB Chair or delegated board member

Ethics Officer to Contact for Further Information: Erika Biehle, Nicole Kaniki, Grace Kelly, Mina Makhlouf, Vicki Tran

This is an official document. Please retain the original in your files.

Western University, Research, Support Services Bldg., Rm. 3150
London, ON, Canada N6G 1G9 t. 519.661.3038 f. 519.850.2465 www.uwo.ca/research/ethics
Appendix B: The University of Toronto Ethics Approval

September 29, 2015

Lee Ann McKivor
University of Western Ontario
London, ON

Re: An Exploration of the Relationship Between Three Leadership Traits in Female Ontario University Registrarial Middle Managers

Dear Ms. McKivor,

Please accept this letter as permission from the Office of the Vice-President, Human Resources & Equity to access staff at the University of Toronto for the purpose of your research project as outlined in your proposal received September 22, 2015.

If, during the course of your research, any significant changes occur to the information provided in your proposal, particularly in regards to your access to staff, you will be responsible for notifying our office.

Thank you for completing the Confidentiality Agreement. We remind you that maintaining the confidentiality of staff throughout your project is of utmost importance and take this as your assurance that individuals used in your research will not be presented in any way which will allow for their identification and that information provided will only be used in the manner outlined in your proposal.

We wish you luck in undertaking your research.

Yours sincerely,

Angela Hildyard
Vice-President, Human Resources & Equity

Cc: Stephanie Roy, Office of the Vice-Provost, Faculty and Academic Life
Cherilyn Nobleza, Office of the Vice-President, Human Resources & Equity
Appendix C: Email to registrars, 14 July, 2015

From: Lee Ann Christina Mckivor  
Sent: July 14, 2015 10:26 PM  
To:  
Subject: Direct reports to Registrar

Hello
I am a Doctor of Education student at Western University. My upcoming thesis research focuses on registrarial units within Ontario. In preparation for my data collection, I was hoping to be provided with:
1. the total number of direct reports to your Registrar
2. the number of these reports who would identify as female

As an example, At Western University, we have the following structure:

Registrar  
  - Associate Registrar Student Records & Exam Services  
  - Associate Registrar Student Financials  
  - Associate Registrar Student Central  
  - Associate Registrar / Director Undergraduate Admissions and Recruitment  
  - Associate Registrar / Director of Administration & Student Services Support  
  - Consultant - Statistical Analysis and Reporting  
  - Transfer Credit Specialist  

7 of the incumbents of these 7 positions identify as female.

Many thanks  
Lee Ann McKivor
Appendix D: Reminder email to registrars, 27 July, 2015

From: Lee Ann Christina Mckivor [mailto:…@uwo.ca]
Sent: Monday, July 27, 2015 2:59 PM
To:
Subject: Registrarial Direct Reports

Hello
I had previously contacted your institution on the 14th of July 2015 seeking assistance with the data collection process for my upcoming thesis (please see original email copied below).

At a future point I will again be looking for your assistance to help forward information to your eligible management team members. My research question seeks to explore the relationship between empowerment, decision making and job satisfaction in female registrarial middle managers.

Until I reach out to you again, I wonder if you could assist me with gathering the data identified in my preliminary email.

Many thanks
Lee Ann McKivor
Ed.D. candidate
…@uwo.ca

Hello
I am a Doctor of Education student at Western University. My upcoming thesis research focuses on registrarial units within Ontario. In preparation for my data collection, I was hoping to be provided with:
1. the total number of direct reports to your University Registrar
2. the number of these reports who would identify as female

As an example, At Western University, we have the following structure:

Registrar
- Associate Registrar Student Records & Exam Services
- Associate Registrar Student Financials
- Associate Registrar Student Central
- Associate Registrar / Director Undergraduate Admissions and Recruitment
- Associate Registrar / Director of Administration & Student Services Support
- Consultant - Statistical Analysis and Reporting
- Transfer Credit Specialist

7 of the incumbents of these 7 positions identify as female.

Many thanks
Lee Ann McKivor
Appendix E: Invitation email to registrars, 9 November, 2015

From: Lee Ann McKivor [mailto:…@qemailserver.com]
Sent: November-09-15 1:00 PM
To: Registrarial Middle Managers

Dear Registrar or Designate,
I am writing to ask for your help with the Registrarial Middle Managers Survey that I am conducting at Western University. Many of you have kindly provided me with initial information, and I am now hoping you will help with my data collection process.

As University Registrar (or Designate) for your institution, I am hoping that you can help me by forwarding this information to individuals in your organization that may be able to assist me in data collection by completing a short survey. A web link survey for the individuals to use is identified at the bottom of this email. A web link for detailed information relating to my research and to the survey itself is also available for candidates at the bottom of this email.

My research looks to answer the question: “What is the relationship between empowerment, decision making and job satisfaction in female registrarial middle managers within Ontario Universities”.

Criteria for participation:

For the purposes of this data collection exercise, I would ask you to forward this email to only those individual managers in your unit who identify as female.

A middle management position is defined as:

An individual reporting directly to you in your role as University Registrar
An individual representing leadership for a unique area of business within the Office of the Registrar.

Eligible candidates may or may not have a staff reporting directly to them; however the managers should still be considered an integral part of the Registrar’s leadership team.

The survey is relatively short and should take no more than 15 minutes to complete. Initial candidate contact and subsequent data collection will take place 9th November 2015 until 30th November 2015. Data analysis will begin in December 2015.

The survey is confidential and individual’s participation is voluntary. At this point, I would ask if you would consider forwarding this email as appropriate.

You are welcome to confirm by return email if you are interested in receiving a copy of the survey analysis once complete.
Many thanks
Lee Ann McKivor
Ed.D. Candidate
Western University

**Eligible candidates, please follow this link for information about the Survey and the Research being conducted:** http://publish.uwo.ca/~lwilso23

1. **Eligible candidates, please follow this link to the Survey:** Take the Survey
   Or copy and paste the URL below into your internet browser:
   https://uwo.eu.qualtrics.com/SE?Q_DL=cXP2P7fuUmp73w1_1BsRwNt8USY5tt3_MLP
   P_egPpwEASj1K4Zxj&Q_CHL=email
   Follow the link to opt out of future emails:
   Click here to unsubscribe
Appendix F: Webpage for participants

An exploration of the relationship between three leadership traits in female Ontario university registrarial middle managers

Thank you for your interest in my data collection process. This page is intended to provide you with additional details surrounding the Registrarial Middle Managers Survey that I am conducting at Western University.

Although participation is entirely voluntary, I am hoping that you will help me in the data collection process by completing a short survey based on your role as a middle manager within a university registrarial capacity.

My research looks to answer the question: “What is the relationship between empowerment, decision making and job satisfaction in female registrarial middle managers within Ontario Universities”.

Criteria for participation:
Results will focus on individuals who identify as female.

1. A middle management position is defined as:
   A. An individual reporting directly to you in your role as University’s Registrar
   B. An individual representing leadership for a unique area of business within the Office of the Registrar.

2. Eligible candidates may or may not have a staff reporting directly to them; however the managers should still be considered an integral part of the Registrar’s leadership team.

The questionnaire will be relatively short and should take no more than 15 minutes to complete. The survey will be open between November 9th, 2015 and November 30th, 2015.

The survey is confidential and your participation is voluntary. Data will be gathered and stored using Western University’s Qualtrics Research Survey tool. Qualtrics is an Application Service Provider (ASP) with a Software-as-a-Service (SaaS) platform for creating and distributing online surveys and related research services. The platform records response data, performs analysis, and reports on the data. All services are online and require no download software; only modern JavaScript-enabled browsers are required (no Java/JVM or Flash). The information will be accessible only by the investigators of the study. Your name and/or electronic information will not be associated in any way with the information you provide.
To begin the survey, simply click on the link provided in the email you received from your Registrar.

By clicking the link, you are welcome to begin the survey. If you begin the survey and have to stop for any reason other than not wishing to answer the remaining questions, you can resume where you left off if you return to the survey within one week. After that, you will need to begin again. I would ask that you complete the survey for final submission on one occasion only. I would also ask that you do not share this link with others. You may refuse to participate and you are free to decline to answer any questions for whatever reason. You are also free to withdraw from the study at any time.

At the end of the survey, you will be provided with a route for requesting a copy of the completed survey analysis.

Click here for a printable version of a Summary Outline of this study.

Click here for a printable version of your letter of Information and Consent

Many thanks
Lee Ann McKivor
Ed.D. Candidate
Western University
Appendix G: Participant Information and Consent

This letter is intended for you to keep.

Principal Investigator
Vicki Schwean, Ph.D
Dean – Faculty of Education
Professor, Faculty of Education
University of Western Ontario
...@uwo.ca

Co-Investigator
Lee Ann McKivor, M.Ed
Ed.D Candidate
Faculty of Education
University of Western Ontario
...@uwo.ca

Thank you for your interest in this data collection process.

You have been invited to participate in this research study because you have been identified as matching the criteria below.

Criteria for participation:

1. An individual who identifies as female.

2. In a middle management position, defined as:
   - An individual reporting directly to you in your role as University’s Registrar
   - An individual representing leadership for a unique area of business within the Office of the Registrar.

3. An eligible candidate who may or may not have a staff reporting directly to them; however the managers should still be considered an integral part of the Registrar’s leadership team.

This study will explore the relationship between empowerment, decision making, and job satisfaction in female registrarial middle managers in Ontario. Ontario’s universities operate with registrarial units providing the 'back-bone' for policy, record keeping, and student progression. Leaders within these units carry a great deal of institutional knowledge and act as liaisons between upper management and front line staff. With increased competition between institutions locally, nationally, and internationally, it is important to understand how to best support and retain this leadership tier within our registrarial units.
Middle managers and specifically, female middle managers, provide the framework for this study. Maintaining an appropriate level of knowledgeable and productive middle management staffing is essential in order for our higher education institutions to be nimble, responsive and productive. The results of this study will help highlight areas where supports for engagement and retention practices can be focused.

Participation is entirely voluntary and there are no known or anticipated risks or discomforts associated with participating in this study. I am hoping that you will help me in the data collection process by completing a short survey based on your role as a middle manager within a university registrarial capacity.

The questionnaire is relatively short and should take no more than 30 minutes to complete. The survey will be open between November 9th, 2015 and November 30th, 2015.

Data will be gathered and stored using Western University’s Qualtrics Research Survey tool. Qualtrics is an Application Service Provider (ASP) with a Software-as-a-Service (SaaS) platform for creating and distributing online surveys and related research services. The platform records response data, performs analysis, and reports on the data. All services are online and require no download software; only modern JavaScript-enabled browsers are required (no Java/JVM or Flash). The information will be accessible only by the investigators of the study. Your name and/or electronic information will not be associated in any way with the information you provide.

By completing and submitting the survey your consent is implied. If you begin the survey and have to stop for any reason other than not wishing to answer the remaining questions, you can resume where you left off if you return to the survey within one week. I would ask that you complete the survey for final submission on one occasion only. I would also ask that you do not share the survey link with others. You may refuse to participate and you are free to decline to answer any questions for whatever reason. You are also free to withdraw from the study at any time.

No compensation will be provided for completing this survey however, at the end of the survey, you will be provided with a route for requesting a copy of the completed survey analysis.

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) XXX-XXX, email …@uwo.ca.
Appendix H: Summary Outline of Study

Summary Outline of Study
An exploration of the relationship between three leadership traits in female Ontario university registrarial middle managers

The intention of this study is to determine the relationship between empowerment, decision making and job satisfaction in female registrarial middle managers within Ontario universities.

The role of the middle managers within higher education organizations is changing. Individuals are being asked to guide more complex tasks, manage additional duties and retain detailed knowledge. The reality that middle managers serve in a precarious position between higher decision making management tiers and front line staff is well supported in literature. Within the continually changing, externally influenced environment of higher education, being responsible for enacting strategic planning goals can be a challenge and may be influenced by the traits identified for study in this project. As our academic institutions implement change management initiatives to respond to the shift in societal expectation, the role of the middle manager becomes more complex.

For the purpose of this study, empowerment is defined as an important correlate of employee attitude and behaviors in organizations. Perceived access to power and opportunity impacts the behaviors and attitudes of employees in our universities. Exhibiting differing human behaviors within the workplace is also a key factor in decision making. Within this study, decision making will be explored in relation to each respondent’s behavioral characteristics or style and not in relation to the situation or the task. Equally, job satisfaction is expected to be relative to empowerment and perceived decision making authority and autonomy. Results will focus on female middle managers in order to better explore their roles in our higher education institutions.

The answers provided in this study will be used to assess how the perceived empowerment, decision-making abilities, and job satisfaction of female registrarial middle managers can greatly influence the success of our academic institutions.

If you have any questions about the intent of this study or about your ability to participate please do not hesitate to contact us. If you have any questions about your rights as a research participant, you can contact the Director of the Office of Research Ethics at the University of Western Ontario at ...@uwo.ca or (519) XXX-XXXX.

We very much appreciate your consideration to participation in this research.

Sincerely,

Lee Ann McKivor, M.Ed
Ed.D Candidate
Faculty of Education
University of Western Ontario
...@uwo.ca

Vicki Schwean, Ph.D
Dean – Faculty of Education
Professor, Faculty of Education
University of Western Ontario
...@uwo.ca
Appendix I: Survey Tool

Q1 For the purpose of this study, a middle management position is defined as:

a) an individual reporting directly to the University Registrar, and

b) an individual leader representing a unique area of business within the Office of the Registrar

Eligible candidates may or may not have staff reporting directly to them; however the manager should still be considered an integral part of the Registrar's leadership team

Do you consider yourself to be eligible for this study?

Yes
No

Q2 Please indicate the gender with which you identify most

Female
Male
Neither of the above

Q 3 Please indicate the length of time you have been in your current position
0-5 years
6-10 years
11-15 years
16-20 years
21+ years

Q4 Please indicate the length of time you have been with your institution
0 - 5 years
6 – 10 years
11  15 years
16  20 years
21+ years
Q5 Please indicate the size of your institution
<10 000 FTE
11 000 – 15 000 FTE
16 000 – 20 000 FTE
21 000 – 24 000 FTE
25 000+ FTE

Q6 Please indicate your number of direct staff reports
0-5
6-10
11-15
16-20
21+

Q7 Please indicate your age within the ranges below
20-29
30-39
40-49
50-59
60+

Q8 Please indicate your highest level of schooling completed (or the closest equivalent)
Elementary School Level
High School Level
College Diploma
College Degree
Undergraduate University Degree
Postgraduate University Degree

Q9 How much of each kind of opportunity do you have in your current job?
Challenging work
The change to gain new skills and knowledge on the job.
Access to training programs for learning new things
The chance to learn how the university works
Tasks that use all of your own skills and
<table>
<thead>
<tr>
<th>Q10</th>
<th>How much access to information do you have in your present job?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The current state of the university</td>
</tr>
<tr>
<td></td>
<td>The relationship of the work of your unit to the university</td>
</tr>
<tr>
<td></td>
<td>How other people in positions like yours do their work</td>
</tr>
<tr>
<td></td>
<td>The values of top management</td>
</tr>
<tr>
<td></td>
<td>The goals of top management</td>
</tr>
<tr>
<td></td>
<td>This year's plans for your work unit</td>
</tr>
<tr>
<td></td>
<td>How salary decisions are made for people in positions like yours</td>
</tr>
<tr>
<td></td>
<td>What other departments think of your unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q11</th>
<th>How much access to support do you have in your present job?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Specific information about things you do well</td>
</tr>
<tr>
<td></td>
<td>Specific comments about things you could improve</td>
</tr>
<tr>
<td></td>
<td>Helpful hints or problem solving advice</td>
</tr>
<tr>
<td></td>
<td>Information or suggestions about job possibilities</td>
</tr>
<tr>
<td></td>
<td>Discussion of further training or education</td>
</tr>
<tr>
<td></td>
<td>Help when there is a work crisis</td>
</tr>
<tr>
<td></td>
<td>Help in gaining access to people who can get the job done</td>
</tr>
<tr>
<td></td>
<td>Help in getting materials or supplies needed to get the job done</td>
</tr>
<tr>
<td></td>
<td>Rewards and recognition for a job well done</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q12</th>
<th>How much access to resources do you have in your current job?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Have supplies necessary for the job</td>
</tr>
<tr>
<td>Q13</td>
<td>In my work setting/job</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
<td>The amount of variety in tasks associated with my job is</td>
</tr>
<tr>
<td></td>
<td>The rewards for unusual performance on the job are</td>
</tr>
<tr>
<td></td>
<td>The rewards for innovation on the job are</td>
</tr>
<tr>
<td></td>
<td>The amount of flexibility in my job is</td>
</tr>
<tr>
<td></td>
<td>The amount of approvals needed for non-routine decisions are</td>
</tr>
<tr>
<td></td>
<td>The relation of tasks in my job to current problem areas of the university is</td>
</tr>
<tr>
<td></td>
<td>The amount of participation in educational programs is</td>
</tr>
<tr>
<td></td>
<td>The amount of participation in problem solving task forces is</td>
</tr>
<tr>
<td></td>
<td>The amount of visibility of my work-related activities within the institution is</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q14</th>
<th>How much opportunity do you have for these activities in your present job?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Collaborating on student issues with faculties/departments</td>
</tr>
<tr>
<td></td>
<td>Receiving helpful feedback from faculties/departments</td>
</tr>
<tr>
<td></td>
<td>Being sought out by faculties/departments for student information</td>
</tr>
<tr>
<td></td>
<td>Receiving recognition by faculties/departments</td>
</tr>
<tr>
<td></td>
<td>Having faculty/departments ask your opinion</td>
</tr>
<tr>
<td>Question</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Being sought out by superiors for ideas about the Office of the Registrar management issues</td>
<td></td>
</tr>
<tr>
<td>Having the Registrar ask your opinion</td>
<td></td>
</tr>
<tr>
<td>Receiving early information of upcoming changes in work from the Registrar</td>
<td></td>
</tr>
<tr>
<td>Chances to increase your influence outside of your unit e.g., nomination to influential committees by the Registrar</td>
<td></td>
</tr>
<tr>
<td>Seeking out ideas from others within your team, e.g. unionized staff, secretaries, management level team members</td>
<td></td>
</tr>
<tr>
<td>Getting to know others in your team as people</td>
<td></td>
</tr>
<tr>
<td>Seeking out ideas from workers outside of your team but within the registrarial unit</td>
<td></td>
</tr>
<tr>
<td>Being sought out by peers for information</td>
<td></td>
</tr>
<tr>
<td>Receiving helpful feedback from peers</td>
<td></td>
</tr>
<tr>
<td>Having peers ask your opinion on student issues</td>
<td></td>
</tr>
<tr>
<td>Being sought out by peers for help with problems</td>
<td></td>
</tr>
<tr>
<td>Exchanging favours with peers</td>
<td></td>
</tr>
<tr>
<td>Seeking out ideas from colleagues, other than registrarial</td>
<td></td>
</tr>
</tbody>
</table>

Q15

Overall, my current work environment empowers me to accomplish my work in an effective manner
Overall, I consider my workplace to be an empowering environment
Q16

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I double-check my information sources to be sure I have the right facts before making a decision.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I make decisions in a logical and systematic way.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>My decisions making requires careful thought.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>When making a decision, I consider various options in terms of a specific goal.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I explore all of my options before making a decision.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>When making decisions, I rely upon my instincts.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>When making decisions I tend to rely on my intuition.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I generally make decisions that feel right to me.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>When I make a decision it is more important for me to feel the decision is right than to have a rational reason for it.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>When I make a decision, I trust my inner feelings and reactions.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I often need the assistance of other people when making important decisions.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I rarely make important decisions without consulting other people.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>If I have the support of others it is easier for me to make important decisions.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I use the advice of other people in making my important decisions.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I like to have someone to steer me in the right direction when I am faced with important decisions.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I avoid making important decisions until the pressure is on.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I postpone decision making whenever.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
I often procrastinate when it comes to making important decisions.

I generally make important decisions at the last minute.

I put off making many decisions because thinking about them makes me uneasy.

I generally make snap decisions.

I often make decisions on the spur of the moment.

I make quick decisions.

I often make impulsive decisions.

When making decisions, I do what seems natural at the moment.

Q17

I feel I am being paid a fair amount for the work I do.
There is really too little chance for promotion on my job.
My supervisor is quite competent in doing his/her job.
I am not satisfied with the benefits I receive.
When I do a good job, I receive the recognition for it that I should receive.
Many of our rules and procedures make doing a good job difficult.
I like the people I work with.
I sometimes feel my job is meaningless.
Communications seem good within this organization.
 Raises are too few and far between.
 Those who do well on the job stand a fair chance of being promoted.
 My supervisor is unfair to me.
 The benefits we receive are as good as most other organizations offer.
 I do not feel that the work I do is appreciated.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>My efforts to do a good job are seldom blocked by red tape.</td>
<td></td>
</tr>
<tr>
<td>I find I have to work harder at my job because of the incompetence of people I work with</td>
<td></td>
</tr>
<tr>
<td>I like doing the things I do at work.</td>
<td></td>
</tr>
<tr>
<td>The goals of this organization are not clear to me.</td>
<td></td>
</tr>
<tr>
<td>I feel unappreciated by the organization when I think about what they pay me.</td>
<td></td>
</tr>
<tr>
<td>People get ahead as fast here as they do in other places.</td>
<td></td>
</tr>
<tr>
<td>My supervisor shows too little interest in the feelings of subordinates.</td>
<td></td>
</tr>
<tr>
<td>The benefit package we have is equitable.</td>
<td></td>
</tr>
<tr>
<td>There are few rewards for those who work here</td>
<td></td>
</tr>
<tr>
<td>I have too much to do at work.</td>
<td></td>
</tr>
<tr>
<td>I enjoy my coworkers.</td>
<td></td>
</tr>
<tr>
<td>I often feel that I do not know what is going on with the organization</td>
<td></td>
</tr>
<tr>
<td>I feel a sense of pride in doing my job.</td>
<td></td>
</tr>
<tr>
<td>I feel satisfied with my chances for salary increases.</td>
<td></td>
</tr>
<tr>
<td>There are benefits we do not have which we should have.</td>
<td></td>
</tr>
<tr>
<td>I like my supervisor.</td>
<td></td>
</tr>
<tr>
<td>I have too much paperwork.</td>
<td></td>
</tr>
<tr>
<td>I don't feel my efforts are rewarded the way they should be</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my chances for promotion.</td>
<td></td>
</tr>
<tr>
<td>There is too much bickering and fighting at work.</td>
<td></td>
</tr>
<tr>
<td>My job is enjoyable.</td>
<td></td>
</tr>
<tr>
<td>Work assignments are not fully explained.</td>
<td></td>
</tr>
</tbody>
</table>

Copyright Paul E. Spector 1994, All rights reserved
Appendix J: Participant Debriefing Form

DEBRIEFING FORM

An exploration of the relationship between three leadership traits in female Ontario university registrarial middle managers

Thank you for your participation in this study. The purpose of this study is to determine the relationship between empowerment, decision making and job satisfaction in female registrarial middle managers within Ontario universities.

What we predicted as researchers was that when individuals feel empowered, they experience greater decision making capacity and are therefore more satisfied in their jobs. For the purpose of this study, empowerment is defined as an important correlate of employee attitude and behaviors in organizations. Perceived access to power and opportunity impacts the behaviors and attitudes of employees in our universities. Exhibiting differing human behaviors within the workplace is also a key factor in decision making. Within this study, decision making will be explored in relation to each respondent’s behavioral characteristics or style and not in relation to the situation or the task. Equally, job satisfaction is expected to be relative to empowerment and perceived decision making authority and autonomy. Although results will focus on female middle managers, for comparative purposes, data is also being collected from individuals identifying as male.

The answers you provided in this study will be used to assess how the perceived empowerment, decision-making abilities, and job satisfaction of female registrarial middle managers can greatly influence the success of our academic institutions.

Here are some references if you would like to read more.


If you are interested in receiving information relevant to the outcome of this study, please feel free to contact us.

Sincerely,

Lee Ann McKivor, M.Ed
Ed.D Candidate
Faculty of Education
University of Western Ontario
…@uwo.ca

Vicki Schwean, Ph.D
Dean – Faculty of Education
Professor, Faculty of Education
University of Western Ontario
…@uwo.ca
Table 1

Enrolment by Ontario University: Fall Term Headcounts by Institution 2014/2015

<table>
<thead>
<tr>
<th>Institution</th>
<th>Full time enrolment</th>
<th>Part time enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algoma University</td>
<td>1,189</td>
<td>8,638</td>
</tr>
<tr>
<td>Brock University</td>
<td>16,170</td>
<td>8,638</td>
</tr>
<tr>
<td>Carleton University</td>
<td>23,560</td>
<td>14,076</td>
</tr>
<tr>
<td>University of Guelph</td>
<td>25,233</td>
<td>14,401</td>
</tr>
<tr>
<td>Lakehead University</td>
<td>7,030</td>
<td>4,862</td>
</tr>
<tr>
<td>Laurentian University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Federated Universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Huntington University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Thorneloe University</td>
<td>6,822</td>
<td>2,465</td>
</tr>
<tr>
<td>• Federated Colleges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Collège universitaire de Hearst</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Algoma University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMaster University</td>
<td>26,134</td>
<td>3,979</td>
</tr>
<tr>
<td>Nipissing University</td>
<td>3520</td>
<td>2,501</td>
</tr>
<tr>
<td>Ontario College of Art and Design [OCAD]</td>
<td>3,555</td>
<td>1,172</td>
</tr>
<tr>
<td>University of Ontario Institute of Technology [UOIT]</td>
<td>8,977</td>
<td>720</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>35,538</td>
<td>7,732</td>
</tr>
<tr>
<td>• Saint Paul University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queen’s University</td>
<td>21,509</td>
<td>3268</td>
</tr>
<tr>
<td>Ryerson University</td>
<td>24,008</td>
<td>17,186</td>
</tr>
<tr>
<td>University of Toronto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• University of St. Michael’s College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• University of Trinity College</td>
<td>75,401</td>
<td>8,149</td>
</tr>
<tr>
<td>• Victoria University (inc. Emmanuel College)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trent University</td>
<td>6,915</td>
<td>1,202</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>33,066</td>
<td>2,867</td>
</tr>
<tr>
<td>• St. Jerome’s University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Western Ontario</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Brescia University College</td>
<td>34,012</td>
<td>3,574</td>
</tr>
<tr>
<td>• Huron University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• King’s University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilfrid Laurier University</td>
<td>16,495</td>
<td>2,694</td>
</tr>
<tr>
<td>University of Windsor</td>
<td>14,103</td>
<td>2,273</td>
</tr>
<tr>
<td>York University</td>
<td>44,839</td>
<td>9,135</td>
</tr>
</tbody>
</table>

Note. Adapted from Council of Ontario Universities,
<table>
<thead>
<tr>
<th>Naming convention</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Office of the Registrar</td>
<td>Algoma University</td>
</tr>
<tr>
<td></td>
<td>Brock University</td>
</tr>
<tr>
<td></td>
<td>Lakehead University</td>
</tr>
<tr>
<td></td>
<td>Laurentian University</td>
</tr>
<tr>
<td></td>
<td>McMaster University</td>
</tr>
<tr>
<td></td>
<td>Nipissing University</td>
</tr>
<tr>
<td></td>
<td>Ontario College of Art and Design [OCAD]</td>
</tr>
<tr>
<td></td>
<td>University of Ottawa</td>
</tr>
<tr>
<td></td>
<td>Ryerson University</td>
</tr>
<tr>
<td></td>
<td>University of Toronto</td>
</tr>
<tr>
<td></td>
<td>Trent University</td>
</tr>
<tr>
<td></td>
<td>University of Western Ontario</td>
</tr>
<tr>
<td></td>
<td>Wilfrid Laurier University</td>
</tr>
<tr>
<td></td>
<td>University of Windsor</td>
</tr>
<tr>
<td>Registrar’s Office</td>
<td>Carleton University</td>
</tr>
<tr>
<td></td>
<td>University of Ontario Institute of Technology [UOIT]</td>
</tr>
<tr>
<td></td>
<td>University of Waterloo</td>
</tr>
<tr>
<td></td>
<td>York University</td>
</tr>
<tr>
<td>Registrarial Services</td>
<td>University of Guelph</td>
</tr>
<tr>
<td>Office of the University Registrar</td>
<td>Queen’s University</td>
</tr>
</tbody>
</table>

*Note. Data gathered in 2015*
Table 3

*Current naming conventions for Ontario’s university governing bodies*

<table>
<thead>
<tr>
<th>Naming convention</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Governors</td>
<td>Algoma University</td>
</tr>
<tr>
<td></td>
<td>Brock University</td>
</tr>
<tr>
<td></td>
<td>Carleton University</td>
</tr>
<tr>
<td></td>
<td>Lakehead University</td>
</tr>
<tr>
<td></td>
<td>Laurentian University</td>
</tr>
<tr>
<td></td>
<td>McMaster University</td>
</tr>
<tr>
<td></td>
<td>Nipissing University</td>
</tr>
<tr>
<td></td>
<td>Ontario College of Art and Design [OCAD]</td>
</tr>
<tr>
<td></td>
<td>University of Ottawa</td>
</tr>
<tr>
<td></td>
<td>University of Ontario Institute of Technology [UOIT]</td>
</tr>
<tr>
<td></td>
<td>Ryerson University</td>
</tr>
<tr>
<td></td>
<td>Trent University</td>
</tr>
<tr>
<td></td>
<td>University of Guelph</td>
</tr>
<tr>
<td></td>
<td>University of Waterloo</td>
</tr>
<tr>
<td></td>
<td>University of Western Ontario</td>
</tr>
<tr>
<td></td>
<td>Wilfrid Laurier University</td>
</tr>
<tr>
<td></td>
<td>University of Windsor</td>
</tr>
<tr>
<td></td>
<td>York University</td>
</tr>
<tr>
<td>Governing Council</td>
<td>University of Toronto</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>Queen’s University</td>
</tr>
</tbody>
</table>

*Note. Data gathered in 2015*
## Table 4

*Number of Registrarial Management Direct Reports*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Overall Direct Reports</th>
<th>Identifying as female</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algoma University</td>
<td>15</td>
<td>12</td>
<td>80</td>
</tr>
<tr>
<td>Brock University</td>
<td>8</td>
<td>7</td>
<td>88</td>
</tr>
<tr>
<td>Carleton University*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Guelph**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lakehead University**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurentian University</td>
<td>4</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>McMaster University</td>
<td>9</td>
<td>8</td>
<td>89</td>
</tr>
<tr>
<td>Nipissing University</td>
<td>4</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>Ontario College of Art and Design [OCAD]</td>
<td>3</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>University of Ontario Institute of Technology [UOIT]</td>
<td>5</td>
<td>3</td>
<td>67</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>6</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Queen’s University</td>
<td>3</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>Ryerson University</td>
<td>10</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>University of Toronto</td>
<td>4</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>Trent University</td>
<td>6</td>
<td>5</td>
<td>83</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>8</td>
<td>7</td>
<td>88</td>
</tr>
<tr>
<td>University of Western Ontario***</td>
<td>7</td>
<td>6</td>
<td>86</td>
</tr>
<tr>
<td>Wilfrid Laurier University</td>
<td>5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>University of Windsor</td>
<td>2</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>York University</td>
<td>5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>Totals</td>
<td>105</td>
<td>76</td>
<td></td>
</tr>
</tbody>
</table>

*Note: *One institution requested to be removed from the study  
**Two institutions did not return a response  
***The researcher has removed herself from the figures
Table 5

*Comparative Cronbach’s alpha reliability coefficients for the CWEQ-I*

<table>
<thead>
<tr>
<th>CWEQ-1</th>
<th>Opportunity</th>
<th>Information</th>
<th>Support</th>
<th>Resources</th>
<th>JAS</th>
<th>ORS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>This study</td>
<td>.75</td>
<td>.75</td>
<td>.92</td>
<td>.81</td>
<td>.64</td>
<td>.92</td>
<td>.94</td>
</tr>
<tr>
<td>Laschinger, et al. (1997)</td>
<td>.78</td>
<td>.82</td>
<td>.89</td>
<td>.88</td>
<td>.67</td>
<td>.92</td>
<td>.94</td>
</tr>
<tr>
<td>Laschinger, et al. (1999)</td>
<td>.80</td>
<td>.86</td>
<td>.88</td>
<td>.81</td>
<td>.69</td>
<td>.89</td>
<td>.93</td>
</tr>
</tbody>
</table>


Table 6

Means, Standard Deviations, and Reliabilities for the JSS

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M</th>
<th>SD</th>
<th>Mean interitem correlation</th>
<th>Coefficient alpha</th>
<th>Test-retest reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>10.5</td>
<td>5.1</td>
<td>43</td>
<td>75</td>
<td>45</td>
</tr>
<tr>
<td>Promotion</td>
<td>11.5</td>
<td>5.1</td>
<td>40</td>
<td>73</td>
<td>62</td>
</tr>
<tr>
<td>Supervision</td>
<td>19.9</td>
<td>4.6</td>
<td>53</td>
<td>82</td>
<td>55</td>
</tr>
<tr>
<td>Benefits</td>
<td>13.1</td>
<td>5.0</td>
<td>40</td>
<td>73</td>
<td>37</td>
</tr>
<tr>
<td>Contingent rewards</td>
<td>13.4</td>
<td>5.1</td>
<td>44</td>
<td>76</td>
<td>59</td>
</tr>
<tr>
<td>Operating procedures</td>
<td>12.5</td>
<td>4.6</td>
<td>29</td>
<td>62</td>
<td>74</td>
</tr>
<tr>
<td>Coworkers</td>
<td>18.8</td>
<td>3.7</td>
<td>33</td>
<td>60</td>
<td>64</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>19.2</td>
<td>4.4</td>
<td>50</td>
<td>78</td>
<td>54</td>
</tr>
<tr>
<td>Communication</td>
<td>14.0</td>
<td>5.0</td>
<td>38</td>
<td>71</td>
<td>65</td>
</tr>
<tr>
<td>Total satisfaction</td>
<td>133.1</td>
<td>27.9</td>
<td>21</td>
<td>91</td>
<td>71</td>
</tr>
<tr>
<td>n</td>
<td>3067</td>
<td>3067</td>
<td>2870</td>
<td>2870</td>
<td>43</td>
</tr>
</tbody>
</table>

Spector, 1985, p. 700
### Table 7

**Participant Demographics (N = 22)**

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of time in current position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>10</td>
<td>45.5</td>
</tr>
<tr>
<td>6-10 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>11-15 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>16-20 years</td>
<td>3</td>
<td>13.63</td>
</tr>
<tr>
<td>21+ years</td>
<td>1</td>
<td>4.54</td>
</tr>
<tr>
<td><strong>Length of time with institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>6-10 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>11-15 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>16-20 years</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>21+ years</td>
<td>6</td>
<td>27.27</td>
</tr>
<tr>
<td><strong>Size of institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10,000 FTE</td>
<td>5</td>
<td>22.27</td>
</tr>
<tr>
<td>11,000 – 15,000 FTE</td>
<td>1</td>
<td>4.54</td>
</tr>
<tr>
<td>16,000 – 20,000 FTE</td>
<td>2</td>
<td>9.09</td>
</tr>
<tr>
<td>21,000 – 24,000 FTE</td>
<td>2</td>
<td>9.09</td>
</tr>
<tr>
<td>25,000+ FTE</td>
<td>12</td>
<td>54.54</td>
</tr>
<tr>
<td><strong>Number of direct staff reports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>12</td>
<td>54.54</td>
</tr>
<tr>
<td>6-10</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>11-15</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>16-20</td>
<td>2</td>
<td>9.09</td>
</tr>
<tr>
<td>21+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Age within identified range</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>1</td>
<td>4.54</td>
</tr>
<tr>
<td>30-39</td>
<td>3</td>
<td>13.63</td>
</tr>
<tr>
<td>40-49</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>50-59</td>
<td>8</td>
<td>36.36</td>
</tr>
<tr>
<td>60+</td>
<td>1</td>
<td>4.54</td>
</tr>
<tr>
<td><strong>Highest level of schooling completed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school level</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Level</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>High school level</td>
<td>2</td>
<td>9.09</td>
</tr>
<tr>
<td>College diploma</td>
<td>1</td>
<td>4.54</td>
</tr>
<tr>
<td>College degree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>University undergraduate degree</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>University postgraduate degree</td>
<td>10</td>
<td>45.45</td>
</tr>
</tbody>
</table>
## Table 8

*Total Average Mean Scores*

<table>
<thead>
<tr>
<th>Tool</th>
<th>Total M</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWEQ-I</td>
<td>3.430</td>
</tr>
<tr>
<td>GDMS</td>
<td></td>
</tr>
<tr>
<td>Rational</td>
<td>4.386</td>
</tr>
<tr>
<td>Intuitive</td>
<td>3.236</td>
</tr>
<tr>
<td>Dependent</td>
<td>3.355</td>
</tr>
<tr>
<td>Avoidant</td>
<td>1.855</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>2.100</td>
</tr>
<tr>
<td>JSS</td>
<td>4.390</td>
</tr>
</tbody>
</table>
Table 9

*Test for Collinearity*

<table>
<thead>
<tr>
<th>Tool</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWEQ-I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>.731</td>
<td>1.368</td>
</tr>
<tr>
<td>GDMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rational</td>
<td>.556</td>
<td>1.797</td>
</tr>
<tr>
<td>Intuitive</td>
<td>.607</td>
<td>1.647</td>
</tr>
<tr>
<td>Dependent</td>
<td>.734</td>
<td>1.363</td>
</tr>
<tr>
<td>Avoidant</td>
<td>.432</td>
<td>2.316</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>.558</td>
<td>1.791</td>
</tr>
</tbody>
</table>

*Note: Dependent variable - Job satisfaction*

*Reference*


Table 10

Descriptive Statistics of Job Satisfaction, Empowerment and Decision Styles.

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>Skewness Statistic</th>
<th>Skewness SE</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>159.05</td>
<td>19.55</td>
<td>-.349</td>
<td>.491</td>
<td>-1.172</td>
<td>.953</td>
</tr>
<tr>
<td>Empowerment</td>
<td>20.5803</td>
<td>2.74</td>
<td>.917</td>
<td>.491</td>
<td>-.559</td>
<td>.953</td>
</tr>
<tr>
<td>Decision Making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rational</td>
<td>4.39</td>
<td>.44</td>
<td>.546</td>
<td>.491</td>
<td>-1.627</td>
<td>.953</td>
</tr>
<tr>
<td>Intuitive</td>
<td>3.24</td>
<td>.79</td>
<td>-.119</td>
<td>.491</td>
<td>-.128</td>
<td>.953</td>
</tr>
<tr>
<td>Dependent</td>
<td>3.35</td>
<td>.66</td>
<td>.002</td>
<td>.491</td>
<td>-.076</td>
<td>.953</td>
</tr>
<tr>
<td>Avoidant</td>
<td>1.85</td>
<td>.63</td>
<td>.407</td>
<td>.491</td>
<td>.674</td>
<td>.953</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>2.10</td>
<td>.68</td>
<td>-.163</td>
<td>.491</td>
<td>-.903</td>
<td>.953</td>
</tr>
</tbody>
</table>

$N = 22$
Table 11

Summary Table JSS Dominant Decision Making Styles

<table>
<thead>
<tr>
<th>Participants</th>
<th>Rational</th>
<th>Intuitive</th>
<th>Dependent</th>
<th>Avoidant</th>
<th>Spontaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>4.000</td>
<td>3.400</td>
<td>3.600</td>
<td>3.400</td>
<td>2.800</td>
</tr>
<tr>
<td>P2</td>
<td>4.000</td>
<td>3.800</td>
<td>2.600</td>
<td>1.800</td>
<td>1.000</td>
</tr>
<tr>
<td>P3</td>
<td>5.000</td>
<td>3.600</td>
<td>2.600</td>
<td>1.200</td>
<td>1.600</td>
</tr>
<tr>
<td>P4</td>
<td>4.000</td>
<td>3.200</td>
<td>3.200</td>
<td>2.000</td>
<td>2.600</td>
</tr>
<tr>
<td>P5</td>
<td>4.250</td>
<td>2.800</td>
<td>3.200</td>
<td>1.800</td>
<td>1.200</td>
</tr>
<tr>
<td>P6</td>
<td>4.000</td>
<td>3.600</td>
<td>4.000</td>
<td>3.000</td>
<td>2.800</td>
</tr>
<tr>
<td>P7</td>
<td>4.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>P8</td>
<td>4.750</td>
<td>2.400</td>
<td>3.600</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>P9</td>
<td>4.250</td>
<td>5.000</td>
<td>3.800</td>
<td>1.000</td>
<td>3.200</td>
</tr>
<tr>
<td>P10</td>
<td>4.250</td>
<td>2.400</td>
<td>3.400</td>
<td>2.200</td>
<td>2.400</td>
</tr>
<tr>
<td>P11</td>
<td>4.000</td>
<td>3.200</td>
<td>3.000</td>
<td>2.000</td>
<td>3.200</td>
</tr>
<tr>
<td>P12</td>
<td>4.000</td>
<td>2.800</td>
<td>3.800</td>
<td>2.200</td>
<td>2.000</td>
</tr>
<tr>
<td>P13</td>
<td>5.000</td>
<td>2.000</td>
<td>3.600</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>P14</td>
<td>5.000</td>
<td>3.800</td>
<td>4.200</td>
<td>1.000</td>
<td>1.200</td>
</tr>
<tr>
<td>P15</td>
<td>5.000</td>
<td>2.800</td>
<td>3.000</td>
<td>1.000</td>
<td>1.200</td>
</tr>
<tr>
<td>P16</td>
<td>4.250</td>
<td>3.400</td>
<td>4.800</td>
<td>2.200</td>
<td>2.000</td>
</tr>
<tr>
<td>P17</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>2.000</td>
<td>2.200</td>
</tr>
<tr>
<td>P18</td>
<td>4.000</td>
<td>4.400</td>
<td>3.200</td>
<td>2.000</td>
<td>2.800</td>
</tr>
<tr>
<td>P19</td>
<td>4.750</td>
<td>3.600</td>
<td>3.000</td>
<td>1.000</td>
<td>2.000</td>
</tr>
<tr>
<td>P20</td>
<td>4.000</td>
<td>2.000</td>
<td>2.400</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>P21</td>
<td>5.000</td>
<td>3.200</td>
<td>2.800</td>
<td>2.000</td>
<td>2.600</td>
</tr>
<tr>
<td>P22</td>
<td>5.000</td>
<td>3.800</td>
<td>4.000</td>
<td>2.000</td>
<td>2.400</td>
</tr>
</tbody>
</table>

Note. Dominant style is in boldface; Shared dominant styles are in boldface italicized
Table 12

Correlations

<table>
<thead>
<tr>
<th>Empowerment</th>
<th>Job satisfaction</th>
<th>Decision making styles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Empowerment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>22</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Pearson Correlation</td>
<td>.801**</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>22</td>
</tr>
</tbody>
</table>

Note. ** Correlation is significant at the 0.01 level (2-tailed)
Table 13

Multiple Regression Model Prediction of Job Satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized β</th>
<th>Standardized β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>5.500</td>
<td>.770</td>
<td>4.725</td>
<td>.000</td>
</tr>
<tr>
<td>Rational</td>
<td>-11.075</td>
<td>-.250</td>
<td>-1.339</td>
<td>.200</td>
</tr>
<tr>
<td>Intuitive</td>
<td>1.402</td>
<td>.056</td>
<td>.316</td>
<td>.757</td>
</tr>
<tr>
<td>Dependent</td>
<td>1.776</td>
<td>.060</td>
<td>.371</td>
<td>.716</td>
</tr>
<tr>
<td>Avoidant</td>
<td>-3.328</td>
<td>-.107</td>
<td>-.506</td>
<td>.620</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>-6.949</td>
<td>-.242</td>
<td>-1.298</td>
<td>.214</td>
</tr>
</tbody>
</table>

$R = .842$
Table 14

Means and Standard Deviations of Current and Historic Studies, CWEQ-I.

<table>
<thead>
<tr>
<th></th>
<th>Opportunity</th>
<th>Information</th>
<th>Support</th>
<th>Resources</th>
<th>JAS</th>
<th>ORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current study</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.64</td>
<td>3.52</td>
<td>3.29</td>
<td>3.39</td>
<td>3.14</td>
<td>3.61</td>
</tr>
<tr>
<td>SD</td>
<td>.55</td>
<td>.59</td>
<td>.80</td>
<td>.72</td>
<td>.52</td>
<td>.66</td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td><strong>Wilson &amp; Spence Laschinger (1994)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.25</td>
<td>2.83</td>
<td>3.07</td>
<td>2.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.75</td>
<td>.79</td>
<td>.85</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>87</td>
<td>87</td>
<td>87</td>
<td>83</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spence Laschinger &amp; Havens (1997)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.59</td>
<td>2.59</td>
<td>2.75</td>
<td>2.79</td>
<td>2.85</td>
<td>3.17</td>
</tr>
<tr>
<td>SD</td>
<td>.70</td>
<td>.47</td>
<td>.75</td>
<td>.72</td>
<td>.57</td>
<td>.64</td>
</tr>
<tr>
<td>N</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td><strong>Sarmiento, Spence Laschinger &amp; Iwasi (2004)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.56</td>
<td>3.16</td>
<td>2.88</td>
<td>2.58</td>
<td>3.12</td>
<td>3.13</td>
</tr>
<tr>
<td>SD</td>
<td>.65</td>
<td>.75</td>
<td>.83</td>
<td>.66</td>
<td>.51</td>
<td>.60</td>
</tr>
<tr>
<td>N</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>


Curriculum Vitae

Name: Lee Ann McKivor

Post-secondary Education and Degrees:
- The University of Western Ontario, London, Ontario, Canada
  1990-1994, B.A.
- Fanshawe College, London, Ontario, Canada
  1994-1996, Diploma
- The University of Calgary, Calgary, Alberta, Canada
  2010-2013, M.Ed.
- The University of Western Ontario, London, Ontario, Canada
  2013-2016 Ed.D.

Related Work Experience:
- Associate Registrar – Student Records & Exam Services
  The University of Western Ontario
  2012-Present
- Manager – Exams, Progression & Graduation
  The University of Western Ontario
  London, ON
  2008-2012
- Acting Team Leader – Student Records
  The University of Western Ontario
  London, ON
  2006-2008
- Senior Student Financial Services Officer
  The University of Western Ontario
  London, ON
  2002-2006
- Team Leader, Faculties of Architectural Studies, Law & Medicine
  The University of Sheffield, Sheffield, UK
  1997-2002
- Management Trainee (Graduate School)