ATHABASCA UNIVERSITY

# THE EFFECTIVENESS OF VARIABLE PAY PLANS IN CANADIAN PUBLIC COLLEGES

BY

NORMA SCHNEIDER

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## Dedication

I would like to dedicate this to my parents, whom I lost during this study, for encouraging me to continuously learn and push my limits, and to my husband, Andy, and daughter, Chloe, for being my biggest champions.

## Abstract

This mixed methods study set out to examine whether variable pay plans for senior college executives are effective in motivating and retaining talented executives. Furthermore, it explored a variety of theories related to variable pay and assessed whether public service motivation theory applied to executives in public colleges in Canada. This study examined the breadth and depth of current practice through Phase 1 quantitative research, followed by a qualitative research phase that drew on the knowledge and opinions of seven college leaders to further explain the how and why of the quantitative results. The quantitative questionnaire was sent to 237 college executives across Canada, which resulted in 68 responses. The study offered some meaningful contributions to the literature surrounding theories pertaining to variable compensation—agency theory, reinforcement theory, expectancy theory, and public service motivation theory—concluding that the Canadian college system is most aligned with public service motivation theory.

Executives who receive variable pay scored slightly higher by mean in all motivation measures—extrinsic, intrinsic, total, and retention; however, on the combined variables, the differences between those who receive variable pay and those who do not was not statistically significant. Through the qualitative interviews, executives demonstrated that some are more motivated by variable pay than others, so the results likely vary from college to college. Since post-secondary education is governed provincially in Canada, inequities exist from province to province with varied levels of government involvement in executive compensation. Overall, the researcher concluded that the colleges with variable pay will likely realize some benefit, both in terms of more motivated executives

and executives who are more likely to continue in their roles, but the benefit will not be significant and will vary based on the motivations of those in the executive positions. Few, if any, will consider variable pay a deciding factor for choosing jobs but instead will consider total pay and pay equity.

*Keywords*: variable pay, performance pay, public service motivation theory, executive compensation, motivation, retention

Table of Contents

List of Tables

# List of Figures

## Chapter 1. Introduction

Located in Alberta, NorQuest College was originally established in 1965 as a government-owned vocational institution and was re-established as a board-governed public institution in 1998 (NorQuest College, June 2009). The college's mandate, as approved by the Alberta Government's Ministry of Advanced Education, outlines the full scope of the college's programming—from foundational education, including literacy and English as a second language programming, to applied degrees and applied research (NorQuest College, 2010). The mandate further outlines the college's responsibilities in stewarding education within a designated geographic region, collaborating with other post-secondary institutions, and contributing to a strong Alberta economy by developing the workforce employers require (see Appendix A).

The college has undergone significant structural changes in the past nine years. A new president and chief executive officer, with a series of successful leadership roles in the not-for-profit and government sectors, began her tenure in July 2010, replacing a lifelong academic, who led the organization for the previous 12 years. Under the new president's leadership, the college undertook three organizational redesigns, which resulted in the replacement and hiring of vice presidents and other executives, the amalgamation of various service areas, and the realignment of academic faculties (see Appendix B for the most current functional organizational chart). Within the nine months of the first of three organizational structure implementations, the college consulted with its internal and external stakeholders, rewrote its vision, mission, and values, and developed a new, bold strategic plan (see Appendix C).

In June 2011, the board of governors approved its first accountability agreement for its only employee, the president and chief executive officer, for the 2011–2012 fiscal year (Shulko, 2011). The agreement outlined specific targets the president was required to achieve in implementing the organization's business plan and for which she was accountable to the board of governors. In building the business plan for 2012–2013, the president and vice presidents began the process of building a new annual agreement, renamed a contribution agreement, to support the proposed business plan. In addition to the president's agreement, each vice president also required an agreement to support the president's agreement and to clarify those aspects of the business plan for which each vice president was held accountable.

The new emphasis on accountability, together with a desire to attract and retain highly talented leaders for the organization, led to the development of a compensation philosophy. The adopted policy framework, as outlined by Lim (2011a), contained three commitments: (1) the college will target its employees' salaries at the 50th percentile of its peer comparator group; (2) the college will conduct regular market analyses for the identified peer comparators; and (3) the college will begin the process of introducing compensation based on performance and contribution for those employees outside the collective bargaining groups. The third commitment posed a challenge for the organization, because it had never entertained this type of variable pay structure. Variable pay is used interchangeably with pay for performance and represents compensation that is contingent on performance or results achieved (Lim, 2011b). Although some research exists pertaining to the efficacy of variable pay in private organizations (see, for example, Parsons and Reitenga [2014]), and although it has gained some traction in public

organizations (Young, Beckman, & Baker, 2012), little research exists for the structure or implementation of variable pay in the public sector and, more specifically, for post-secondary educational organizations (Barragato, 2002).

**Statement of the Problem**

In an effort to improve attraction, retention, and performance, shareholders employ various strategies, including variable pay plans for their top executives (Robbins & Judge, 2008; Young, Beckman, & Baker, 2012). Although variable pay plans are popular in over 70% of private companies (Bevilacqua & Singh, 2009; Robbins & Judge, 2008), variable pay plans in the public sector have not gained the same traction (Barragato, 2002; Young, Beckman, & Baker, 2012). Additionally, scholars disagree regarding the efficacy of variable pay plans regardless of the type of organization (Glassman, Glassman, Champagne, & Zugelder, 2010; Young, Beckman, & Baker, 2012). Some argue that variable pay significantly improves individual performance (Bucklin & Dickinson, 2001; Hollowell, 2004; Lawler & Worley, Winning support for organizational change: designing employee reward systems that keep on working, 2006; Robbins & Judge, 2008), whereas others render it ineffective (Barragato, 2002; Bok, 2002; Collins, 2001; Perry, Mesch, & Paarlberg, 2006; Pink, 2009; Stiffler, 2006). There is little evidence, however, that aligns executive compensation with organizational performance (Hollowell, 2004). Furthermore, these statistics are not typically collected for public organizations (Frey, Homberg, & Osterloh, Organizational Control Systems and Pay-for-Performance in the Public Service, 2013), let alone the post-secondary sector.

Governments have increased their focus on organizational performance of the Canadian public college system, as evidenced by the province of Alberta's introduction of a Results-Based Budgeting Act (Government of Alberta, 2012). As a result, colleges must employ strategies such as the introduction of variable pay to meet the challenge of motivating executives to maximize organizational performance. Parsons and Reitenga (2014) discovered a correlation between variable compensation and motivation to perform in U.S. universities. Although there was a significant correlation in private universities, there was a lack of correlation in public universities. The problem is a lack of consistent empirical evidence to substantiate the efficacy of variable pay in public colleges to support their efforts. Furthermore, there is a lack of evidence pertaining to higher education and, more specifically, for Canadian public institutions. Therefore, the focus of this study was to determine whether there is a positive relationship between variable pay for executives in Canadian public colleges and their retention and motivation to increase individual performance.

**Research Question**

Using a mixed methods approach, this research examined whether variable pay plans for senior college executives were effective in motivating and retaining talented executives. Furthermore, it explored whether public service motivation theory applies to executives in public colleges in Canada. In particular, the research sought to inform senior leadership of practices at Canadian public colleges as they consider implementing variable pay plans. The researcher reviewed and reported the efficacy of variable pay plans for public colleges within the geographic area of Canada and identified those aspects of variable pay plans attributable to improved retention and motivation. The

independent variable included variable pay, while the dependent variables included retention, intrinsic motivation, and extrinsic motivation. Canadian college presidents and vice presidents or those in equivalent executive positions were the primary subjects of this research.

Lim (2011a), in a working paper prepared for NorQuest College, concluded that diverse opinions exist within the college regarding the efficacy of variable pay. Half the respondents in his consultation demonstrated significant support for the concept, while half demonstrated little or no support (Lim, 2011a). The following propositions, derived from the research questions based on the organization's desired results, intend to provide greater understanding and clarity for the organization: (1) a variable pay plan improves intrinsic or extrinsic motivation, and (2) a variable pay plan retains top talent.

The mixed methods approach in this study included an initial quantitative research component that identified current practice and a subsequent qualitative research component that utilized the knowledge and opinions of college leaders to interpret the results. In the quantitative component, participants, who included college presidents and vice presidents, indicated their perceptions based on their level of agreement or disagreement with statements using a Likert-type scale. Following the quantitative component, the results guided the researcher in the development of qualitative research questions intended to interpret the quantitative findings.

The study was limited to public colleges in Canada versus the whole post-secondary system for two reasons. First, universities and colleges are governed under separate legislation. Second, there is variability in the use of pay for performance in the college sector. The study contains further limitations and risks. Since the number of

institutions was limited, the return rate for the surveys had to be adequate to conduct a thorough analysis. A mixed methods approach requires multiple steps and knowledge of both quantitative and qualitative approaches to be thorough (Cronholm & Hjalmarsson, 2011). Moreover, the study was susceptible to researcher bias given the role of the researcher as a vice president of a college. In chapter three, these limitations and risks, including mitigation strategies, are discussed more fully.

## Hypotheses

Considering the research question, the following hypotheses, relative to senior public college executives, were investigated:

H1: Those who receive variable pay are less intrinsically motivated than those who do not receive variable pay.

H2: Those who receive variable pay are less likely to be retained in their current role than those who do not receive variable pay.

H3: There is no significant difference in extrinsic motivation between those who receive variable pay and those who do not.

## Definition of Key Terms

**Agency theory.** Agency theory explains organizational governance with the shareholder as the principal and the chief executive officer as the agent, where principals engage agents to act on their behalf and for which they transfer some decision-making authority. The principals in non-profit organizations are generally donors, boards of directors, and government agencies, whereas the agents are usually the managers who carry out performance objectives with their teams as directed by the principal (Barragato, 2002).

**Expectancy theory.** Motivation is the product of expectancy, instrumentality, and valence. Expectancy refers to the relationship between effort and performance; instrumentality refers to the relationship between performance and outcomes; and valence refers to an individual's placing a positive value on the result of his performance (Vroom, 1964; Lambright, 2010).

**Motivation.** Motivation refers to the propensity for an individual to act in a certain manner given a certain intrinsic or extrinsic stimulus (Pepper & Gore, 2015).

**Organizational performance.** Organizational performance refers to the "aggregate performance of all of the employees in the organization as well as factors that are clearly outside the control of employees (mergers and acquisitions, investment of funds in research or new facilities, etc.)" (Bucklin & Dickinson, 2001, p. 49).

**Performance management.** Performance management is a "continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization" (Aguinis, 2013, p. 2).

**Public college.** A public college is a post-secondary educational institution that receives financial support from the public through the elected government and is controlled or managed by a board whose members are elected or appointed by or under the scrutiny of a public authority. Public colleges are given authority to grant degrees, diplomas, and other credentials by a public act of the provincial legislature or through a government-mandated quality-assurance mechanism (1990–2013 CICIC, 2013).

**Public service motivation theory.** In this theory, public employees are motivated by an altruistic and sincere desire to help others without reward, referred to as prosocial behaviour, through the provision of public services (Perry & Hondenghem, 2008).

**Reinforcement theory.** This theory suggests a direct relationship between a desired target behaviour and its consequences; therefore, "pay can be used to create consequences for desired behaviors such as high performance that will reinforce the behaviors" (Perry, Engbers, & Jun, 2009, p. 41).

**Retention.** Retention refers to the efforts employed to influence an individual to remain with the organization (Al-Emadi, Schwabenland, & Wei, 2015).

**Top talent.** Top talent refers to individuals who consistently demonstrate superior performance (Brundage & Koziel, 2010).

**Variable pay.** Variable pay is used interchangeably with pay for performance and represents compensation that is contingent on performance or results achieved (Lim, 2011b).

## Chapter Summary

As Canadian public colleges continue to evolve and seek to become more effective and competitive, they need to explore strategies and mechanisms that have proven successful in private enterprises. One such mechanism is the use of variable compensation for executives to improve retention and motivation to increase individual performance. However, introducing such mechanisms requires research and analysis to determine efficacy, especially since colleges are the stewards of public investment. This study will provide insights into the efficacy of variable compensation in the Canadian public college sector to help colleges make informed decisions regarding its introduction and implementation.

## Chapter 2. Review of the Literature

Over 70% of American companies employ variable pay plans (Bevilacqua & Singh, 2009; Robbins & Judge, 2008) based on the premise that if individuals are rewarded for their performance, they will be motivated to apply extra effort (Bregn, 2013). However, despite their popularity, variable pay plans garner disparate opinions among scholars regarding their efficacy (Glassman, Glassman, Champagne, & Zugelder, 2010). Although some scholars propose that variable pay plans significantly improve performance, others render them ineffective as a sole motivator for achieving individual results. While most studies pertain to the application of variable pay plans in the private sector, the public sector has increasingly introduced these plans into its systems (OECD, 2008), with over 80% of OECD (Organization for Economic Co-operation and Development) countries adopting some form of pay for performance (Lah & Perry, 2008). Despite this increase in popularity, most of the published research with respect to variable pay concentrates on the private versus the public sector.

### Related Theories

Four theories dominate the discussion regarding the motivational effects of variable pay—agency theory, reinforcement theory, expectancy theory, and since this study pertains to public colleges, public service motivation theory. Each of these theories attempts to explain the positive, neutral, or negative correlation between the use of variable compensation and its motivational effects. However, applying variable pay in a public organization and further delineating to the public higher education context may diminish the applicability of popular related theories.

**Agency theory.** Agency theory (Gerhart, Rynes, & Fulmer, Pay and performance: Individuals, groups, and executives, 2009) occurs most frequently in discussions pertaining to the effectiveness of variable pay, especially at the executive level. This theory explains organizational governance with the shareholder as the principal and the chief executive officer as the agent, where principals engage agents to act on their behalf and for which they transfer some decision-making authority. The principals in non-profit organizations are generally donors, boards of directors, and government agencies, whereas the agents are usually the managers who carry out performance objectives with their teams as directed by the principal (Barragato, 2002).

Applying agency theory to the public college sector places the president as the agent, and the board as the principal. Since the board is appointed by the government, which is elected and funded by the public, utilizing the concept of principal creates confusion outside of private enterprise. Therefore, as Barragato (2002) points out, applying agency theory in a public college presents a formidable obstacle, since the many shareholders may represent different interests with respect to the performance of the chief executive officer. Leaders in post-secondary institutions "look like agents for at least five different constituencies: (1) the board of directors for the operation of the institution, (2) faculty and administrators, (3) the student body, (4) the scientific community, and (5) the society and general public" (Tang, Tang, & Tang, 2000, p. 395). Whereas the private sector utilizes measures such as profitability and stock value, public colleges must additionally identify different measures of worth and improvement for their shareholders. Therefore, agency is problematic when studying the public sector (Galle & Walker, 2014).

**Reinforcement theory.** Scholars who have studied the efficacy of variable pay also ground their research in reinforcement theory. Lawler and Worley (2006) posit that financial reward systems based on reinforcement theory result in organizations that perform well, because they realize the behaviours they reward. Perry, Engbers, and Jun (2009) also purport reinforcement theory as a means to explain the effectiveness of performance-related pay, because individuals will exert extra effort if they realize the effort will result in highly valued monetary rewards. Both sets of scholars acknowledge the use of reinforcement theory to explain the relationship between financial incentives and behaviour; however, both acknowledge its limitations based on the straightforwardness of its causal theory (Lawler & Worley, Winning support for organizational change: designing employee reward systems that keep on working, 2006; Perry, Engbers, & Jun, 2009).

**Expectancy theory.** This theory, developed by Vroom (1964), seeks to explain an individual's motivation to perform tasks (George & Jones, 2005) and suggests that an increase in pay will result in increased individual output (Ellig, 2013). Motivation is the product of expectancy, instrumentality, and valence (Lambright, 2010). Expectancy refers to the relationship between effort and performance; instrumentality refers to the relationship between performance and outcomes; and valence refers to an individual's placing a positive value on the result of his performance (Lambright, 2010). For example, in the study proposed, an executive believes that if he exerts enough effort, he will expect to achieve the level of performance expected by the college. The relationship between effort and performance is referred to as expectancy (Lambright, 2010). Next, the individual must believe that his performance will result in the outcome of receiving

variable pay. Finally, the individual must place positive value on the outcome of variable pay in the form of monetary compensation achieved as a result of his performance. Because of these reasons, expectancy provides a sound theoretical framework for determining the motivational effect of variable pay. However, this framework fails to consider the public service context of the executives under study.

**Public service motivation theory.** This theory pertains specifically to the context under discussion—the public college sector. The idea of public service motivation emerged from a study comparing the reward preferences of public versus private employees (Rainey, 1982). After completing his research involving 275 middle managers from four state agencies and four large businesses in the United States, Rainey (1982) concluded that the public employees were not motivated by financial incentives to the extent of their private counterparts; however, public employees were motivated by their fulfillment of service. He called for more development of the concept of service motivation.

During the 1980s, confidence in public service waned as a result of numerous government scandals, and politicians, such as President George W. Bush, began paying greater attention to the importance of rejuvenating the public service sector (Perry & Wise, 1990). In this context, Perry and Wise (1990) answered Rainey's call for further development of the concept of service motivation with a review of public service followed by a proposed public service motivation definition, construct, and model. They suggest that three motives drive public servants: 1) rational motives derive from a sense of public duty and include participation in policy development, personal identification with, and commitment to a public program or advocacy for special interests; 2) norm-

based motives stem from “a desire to serve the public interest” (p. 368), loyalty of duty, and social equity; and 3) affective motives, grounded in emotions, include feelings of patriotism and a need for social justice.

Driven by these motives, Perry and Wise (1990) put forward that public service motivation, defined as “an individual’s predisposition to respond to the motives grounded primarily or uniquely in public institutions and organizations” (p. 368), implies particular behaviours, which they offer in three propositions: 1) individuals with high public service motivation are more likely to seek employment opportunities in public organizations; 2) in public organizations, individuals with high public service motivation perform better; and 3) public organizations that employ individuals with high public service motivation are less reliant on utilitarian incentives, such as pay for performance, to motivate individuals to perform. They call for further research to validate these propositions. Next, they call for research to develop measures for public service motivation. And finally, they call for research to address the application of theory to the recruitment and retention of public service employees.

Six years later, Perry (1996) conducted reliability testing and validation for the development of a measurement scale for the public service motivation construct. Approximately 375 public servants, employed in a variety of roles, participated in the study. Perry’s resultant multi-dimensional construct, grounded in public administration theory, includes the following four dimensions: 1) attraction to policy making, 2) commitment to the public interest, 3) compassion, and 4) self-sacrifice. With a measurement scale in place, researchers began their own tests of these dimensions. Twenty years after Perry first introduced the three propositions, he, along with

Hondeghem and Wise, reviewed all the research pertaining to public service motivation during that period to ascertain resultant learnings (Perry, Hondeghem, & Wise, 2010). They summarized the learnings regarding the three propositions as follows: 1) there continues to be a positive correlation between public service motivation and the attraction and retention of public employees; 2) there continues to be a positive correlation between public service motivation and individual performance on self-reported data; and 3) although public service motivation is generally less reliant on extrinsic motivators, as a result of mixed research results and reviews, the direct correlation is not fully supported (Perry, Hondeghem, & Wise, 2010).

**Motivational Effects of Variable Pay**

Hollowell studied over 1500 companies to identify a direct correlation between highly-incentive-based compensation plans for chief executive officers (CEOs) and the long-term profitability of the firms that employed them. He found that CEOs whose compensation plans were highly variable were motivated to perform at higher levels than their lower-incented counterparts. In Kanungo and Mendonca's (1988) examination of the cost-benefit analysis of implementing variable pay, organizations achieved actual effectiveness greater than even their intended effectiveness. Even at the individual level, the effectiveness of variable pay is under-reported, and as a result, human resource professionals underestimate its importance as a motivator (Rynes, Gerhart, & Minette, 2004).

In addition to money, individuals are motivated by other factors such as challenge, engagement, autonomy, and mastery (Shaw & Gupta, 2007). Organizations should not depend solely on pay for performance to motivate behaviour (Bevilacqua &

Singh, 2009). Nor should variable pay be implemented in isolation but combined with regular feedback (Bucklin, McGee, & Dickinson, 2008; Glassman, Glassman, Champagne, & Zugelder, 2010). Perry, Mesch, and Paarlberg (2006) found that financial incentives did improve individual performance in for-profit organizations, the degree to which was dependent on conditions within the organization. After extensively reviewing 62 articles that collectively examined over 2,600 research articles, these scholars found that social recognition, like feedback, also enhanced the effectiveness of variable compensation. However, incentives combined with social recognition and feedback produced the highest results. To summarize, although variable compensation is not the only motivator, or perhaps not always the primary motivator, it is an important motivator for most people (Rynes, Gerhart, & Minette, 2004).

At the other end of the spectrum are those who find variable pay plans ineffective as a means for motivating executives. Perry, Mesch, and Paarlberg (2006), in the same review previously noted, revealed that although variable pay demonstrated effectiveness in the private sector, it was ineffective in the public sector. Regardless of the sector, however, some scholars purport that variable pay fails to deliver its promise of increased performance because it is poorly communicated, it fails to help employees to align with the organization's strategy, and it can be inflexible (Stiffler, 2006). Furthermore, some scholars believe it is ineffective, regardless of its implementation. Pink (2009) denounced variable compensation as an effective tool for improving employee performance. Instead, he proposed that an employee's ability to direct his or her work, an employee's ability to learn and create new things, and an employee's ability to contribute to a greater purpose were the factors that inspired employee performance. By creating work environments

where employees could realize these three motivators, organizations maximize individual performance.

Pink (2009) grounded his model of employee motivation in the work of scientists Harlow and Deci, who proposed intrinsic motivation as the driver of human motivation. Deci (1975) further suggested that not only is variable pay ineffective as a motivator, but as an extrinsic reward, it undermines intrinsic motivation. Conversely, Shaw and Gupta (2007) showed that extrinsic rewards have no adverse effect on intrinsic motivation. Moreover, employees demonstrated that they could be highly motivated by both intrinsic and monetary means, and as Chang discovered in his study of 604 individuals from 30 companies, there exists a "significant correlation between these two values" (2011, p. 3943).

**The Public Sector Context**

Variable pay is most prevalent in the private sector, although some public sector organizations have introduced it as a means to compete for top talent and reward performance. For example, with the exception of Manitoba and Prince Edward Island, all provincial governments across Canada have implemented variable pay for their most senior bureaucrats (Atkinson, Fulton, & Kim, 2014). Although some public organizations use variable pay for the provision of tangible forms of recognition (Atkinson, Fulton, & Kim, 2014), others use it to incent high-performing employees (Al-Emadi, Schwabenland, & Wei, 2015). Regardless of the reason, much controversy surrounds the efficacy of variable pay to motivate employees in the public sector.

Post-secondary employees, especially those in colleges, often talk about the importance of their work and that they love working at a college because they feel the

work they do has a direct positive impact on students, and they are personally fulfilled by providing this service for the public. A body of literature around public service motivation suggests that motivation to work may be different in the public and private domains because public employees value intangible, non-monetary rewards and derive more motivation from intrinsic means (Cheng, 2014). Atkinson, Fulton, and Kim (2014), in a mixed methods study, first gathered quantitative data regarding variable pay schemes for deputy ministers, or the equivalent senior bureaucrats, at the provincial level across Canada and then conducted qualitative interviews with a select number of those individuals. They concluded that executive level public servants are not motivated by additional pay and such schemes have the potential to undermine public service values.

Perry et al. (2009) reviewed over 50 studies pertaining to variable pay and concluded that "performance-related pay in the public sector consistently fails to deliver on its promise" (p. 43). Belle and Cantarelli (2015), in their review, pointed to three reasons why implementing variable pay in the public sector fails: (1) public sector appraisal systems are typically inadequate; (2) public sector organizations are required to align with transparency policies, often legally or politically bound in ways that prevent them from offering large enough incentives to drive motivation, whereas private organizations rely on pay secrecy; and (3) public employees display less motivational response than their private counterparts. This led them to undertake a study of 296 managers in the Italian public sector to determine whether monetary incentives increased the effort of civil servants. They found experimental evidence to support their hypothesis that monetary rewards consistently failed to increase intended effort, even when participants were offered bonuses as little as 5% or as much as 50% of their current

salaries. And similar to the Canadian study, the researchers discovered a negative correlation between incentive pay and intrinsic motivation.

To understand why public sector employees lack the propensity to respond favorably to extrinsic rewards such as variable compensation, researchers such as Andersen and Palleson (2008) point to the work of Frey (1997). In his explanation of the psychological premises for the relationship between work motivation and compensation policies, Frey maintained that extrinsic rewards impair three psychological conditions. First, extrinsic rewards impair self-determination by shifting people's loci of control from the inside to the outside; therefore, they surrender their intrinsic motivations. Second, extrinsic rewards impair self-esteem by rejecting people's intrinsic motivations; therefore, they reduce their efforts. Third, extrinsic rewards impair expression possibility by suppressing people's abilities to express their intrinsic motivations to others; therefore, they give up inner motivations and acts in accordance with external motivators (Frey, Not Just for the Money: An economic theory of personal motivation, 1997). Frey used a crowding theory crowding out effect to explain the impact of extrinsic rewards on intrinsic motivation. If the reward is perceived to be controlling, the reward crowds out intrinsic motivation. However, if the reward is perceived to be supportive, the reward can actually crowd in intrinsic motivation (Frey, Not Just for the Money: An economic theory of personal motivation, 1997).

Andersen and Pallesen (2008) tested Frey's crowding in and out effects in their study conducted within the Danish university system, which sampled 162 research units with greater than 12 employees. They tested two propositions: 1) the greater the financial incentive to publish, the greater the number of publications the professors produced; and

2) the greater the feeling of support (or control), the greater the positive (or negative) impact on publication numbers. Both propositions were supported by their research; however, they further discovered that if high control was paired with high incentive, there was an exponentially higher negative effect, emphasizing the significant impact related to feelings of control on an individual s motivation.

Frey's work may explain the inconsistency in findings regarding the efficacy of variable pay in the public sector, since not all studies in the public and not-for-profit sectors concede to the ineffectiveness of variable pay to motivate public sector employees. Singh and Mishra (2013) conducted a survey of 155 executives in public sector enterprises in India five years after implementing a performance-related pay plan. Their results indicated that over half of the respondents were motivated by performance-related pay. In not-for-profit higher education organizations, Galle and Walker (2014) conducted an empirical study of executive pay at over 340 U.S. colleges and universities. They concluded that "[w]hile nonprofit managers may highly value mission, ideology, or prestige, powerful empirical evidence suggests that they also can be motivated by money" (Galle & Walker, 2014, p. 1895).

Stazyk (2013) tied his research more closely to Frey's work in his exploration of the relationship between variable pay and public service motivation. His study included a sample of 1539 public employees from 545 different jurisdictions from a wide demographic range with a variety of roles and compensation levels. The results provided no evidence to support the crowding out of public service motivation as a result of performance-related pay. Conversely, he found a high level of positive correlation between employees with the highest levels of public service motivation and

municipalities offering performance-related pay, which thereby puts into question the opposing correlation proposed by Frey (1997). The idea of public service motivation, as originally defined and developed by Perry and Wise (1990) and as discussed earlier, proposes that extrinsic rewards, such as variable pay, fail to motivate public sector employees with public service motivation. However, even they concede that there is inconsistent evidence to support their proposition (Perry, Hondeghem, & Wise, 2010). So, despite the large volumes of research conducted over a period of decades, scholars still disagree whether variable pay motivates public sector executives.

**Retention**

As organizations compete for top talent, finding mechanisms to retain that talent is paramount. Furthermore, finding these mechanisms is critical for public organizations that struggle to compete with private organizations in overall compensation. The introduction of variable pay could help level the playing field and serve as a motivator to retain high-performing executives. If public organizations such as colleges continue to rely on cost-of-living merit increases, then they will "struggle to attract and retain the best and brightest" (Buchenroth, 2006, p. 31). Since organizations attract individuals whose values align with the organization, so too must compensation systems align with organizational values (Clugston, Howell, & Dorfman, 2000). Clugston, Howell, and Dorfman (2000), surveyed 175 recent university graduates who were seeking employment to explain the relationship among intrinsic or extrinsic motivation, positive or negative affect, and compensation preference. They concluded that individuals with intrinsic motivation and positive affect were attracted to organizations offering variable pay plans. But once these highly positive and motivated individuals were attracted, they

still had to be retained. And over 90% of organizations believe they are unable to retain most of their top performers (Sturman, Trevor, Boudreau, & Gerhart, 2003).

The evidence to support the premise that employees are motivated to stay with organizations because of their variable pay plans is both sparse and inconsistent. Rynes, Gerhart, and Minette (2004) reviewed employee survey results and demonstrated inconsistencies in how employees respond to the motivational effects of variable pay plans in the surveys versus their behaviours. They showed that employees are much more highly motivated by variable pay than they indicate in surveys. They further stated that variable pay plans are most important to "high academic achievers, high-performing employees, and individuals with high self-efficacy and high needs for achievement—just the types of people most employers claim to be looking for!" (Rynes, Gerhart, & Minette, 2004, p. 386).

Shaw and Gupta's (2007) research further supports this assertion. They found that good performers stayed with organizations with performance-based pay plans, while average performers stayed with organizations with seniority-based pay plans. Eriksson and Villeval (2008) explored the relationship between the type of pay plan employees self-selected and their level of effort. Their results revealed that highly skilled employees expended the most effort because they were motivated by their chosen variable pay plans, whereas lower-skilled employees most often chose fixed wage plans and failed to exhibit the same level of motivation. Despite these convincing results, not all research findings were consistent.

Masibigiri and Nienaber (2011) conducted a qualitative study of Generation X public servants with the purpose of exploring factors that affected their retention. They

chose to study this group because of the prevalence of this generation in the current workforce and the propensity for this group, more than any other generation, to leave their organizations when dissatisfied. Their findings were not as strong, identifying flexible compensation among the second set of most prevalent factors affecting the retention of this group.

**Chapter Summary**

Scholars who study theories such as agency theory, reinforcement theory, expectancy theory, and public service motivation theory seek to explain how individuals are motivated to perform and why they choose to remain or abandon their executive roles. These scholars disagree regarding the relationship between variable pay and motivation. They also disagree regarding the relationship between variable pay and the ability to retain top talent. Moreover, no clear consensus exists for any of the topics explored. The review of literature further reinforces that despite its popularity, variable pay garners a variety of opinions regarding its efficacy, with no clear consensus. Therefore, further study, especially in the Canadian public sector, will provide increased understanding for colleges as they consider employing variable pay to motivate and retain top talent in senior leadership roles.

# Chapter 3. Research Method

This study used a mixed methods design involving the mixing of quantitative and qualitative approaches in the research process, a design that has gained popularity in recent years (Cronholm & Hjalmarsson, 2011; Lund, 2011; Muskat, Blackman, & Muskat, 2012; Symonds & Gorard, 2010; Terrell, 2011). Muskat, Blackman, and Muskat (2012) identify five rationales for conducting mixed methods research. They include triangulation, complementary, initiation, development, and expansion. Triangulation is viewed as one of the greatest strengths of mixed methods research as it attempts to bring together the best of both worlds—qualitative and quantitative research (Cronholm & Hjalmarsson, 2011; Symonds & Gorard, 2010). With quantitative research telling us "if" and qualitative research telling us "how or why" (Terrell, 2011), many researchers seek to discover both through mixed methodology. Or, as stated by Bryman, Becker, and Sempik: "The chief rationale for using this combination of sources of data is that it was felt that a complete picture could not be generated by any one method alone" (2008, p. 264). Still others conclude that utilizing a mixed methods approach potentially leads to more robust results (Muskat, Blackman, & Muskat, 2012).

## Rationale for a Mixed Methods Design

In the case of the research problem posited, applying a mixed methods design, although complex, yielded significant rewards. The reality of the problem dictates that both quantitative and qualitative aspects are inextricably tied when resolving the problem. For example, quantitative means can determine the degree of correlation or causality—absolute, conditional, or contributory (Zikmund, Babin, Carr, & Griffin, 2010)—in the relationship between variable pay, motivation, and retention, whereas qualitative means

can help explain the reason for any relationship or lack thereof. Either means compromises its utility without the other. The mixed methods approach allows the researcher to seek the truth with the freedom to utilize the most appropriate tools yet demands research discipline characterized by employing a stated purpose supported by sound rationale. Because of its focus on solving problems for the purpose of changing real-world practice and its supporting methodologies, which include subjective, objective, and intersubjective perspectives (Onwuegbuzie, Johnson, & Collins, 2009), the mixed methods approach and its pragmatic worldview represents the strongest choice for solving the proposed research problem.

The research design contains an exploration of the breadth of current practice through Phase 1 quantitative research, and then an exploration of the depth of the problem through the interpretation of results, followed by Phase 2 qualitative research, which utilized the knowledge and opinions of college leaders. In Phase 1, questions were designed to confirm or reject null hypotheses pertaining to validating the construct of the independent variable, variable pay; validating the constructs of the dependent variables, motivation and retention; and finally, determining the presence or absence of a relationship between variable pay and motivation and retention. The first phase analysis studied the relationships between variable pay and each dependent variable and examined the effects of each level of variable pay and each dependent variable. In Phase 2, the results of the above analyses guided the qualitative research phase and provided the required context (Petty, Thomson, & Stew, 2012) of the public college system. A conceptual research model (see Appendix D) was developed to provide a framework for

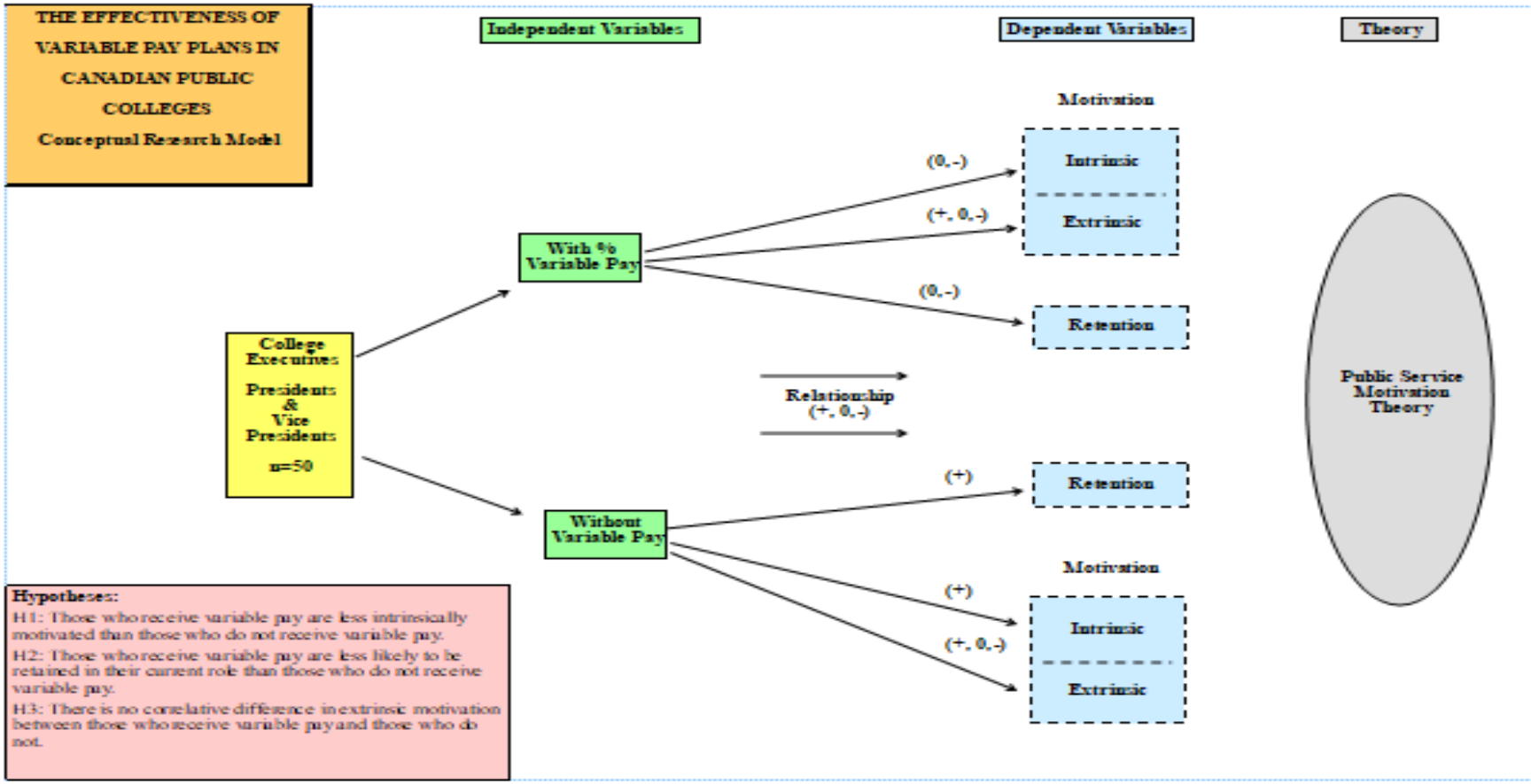


*Figure 1* Conceptual Research Model

the study and to guide its development and process. As illustrated, the collected data were separated into two groups—those who received variable pay and those who did not. Then the variables of retention, intrinsic motivation, and extrinsic motivation were compared between the groups to accept or reject the hypotheses. Finally, the results were compared to various motivational theories, most specifically public service motivation theory, to test the theory and to determine the contributions of this study to research regarding public service motivation theory.

**Phase 1: Quantitative Questions**

Phase 1 aimed to answer the following questions:

Q1: What proportion of total compensation is attributable to variable pay?

Q2: What factors are considered to determine if variable pay is awarded?

Q3: Do variable pay plans retain college executives in their roles? How and why?

Q4: Do variable pay plans improve individual motivation? How and why?

A questionnaire was prepared using a survey tool, SurveyMonkey, and administered via the Web and delivered via email (see Appendix G). The researcher prepared a list of presidents and academic vice presidents (the highest-ranking academic position reporting to the president, who may be referred to as the provost or chief academic officer) and emailed each the survey along with directions and appropriate ethics review information with a return date within three weeks. The opportunity sample was derived by those who chose to participate, with a target to exceed 50 participants. Participants responded to their own experiences and compensation plans rather than those of others. The results were recorded and analyzed using IBM SPSS Version 24 software. The participant responses were reviewed for position, years of experience, and location to ensure appropriate representation.

**Phase 2: Qualitative Questions**

Q1: How do you explain the level of participation of Canadian public colleges in variable pay plans?

Q2: Why does your organization use variable pay?

Q3: How is your variable pay determined? Are these factors within your influence? Are they within your control?

Q4: How does variable pay influence your retention in your present role? Why?

Q5: How and why does the presence of variable pay motivate you to work differently?

Q6: How does variable pay maximize motivation in college executives?

Q7: How does variable pay impact the public college system?

See Appendix H for the specific interview questions posed to interviewees.

**Measurement**

**Participants.** The participants included those individuals in executive positions in English-speaking Canadian public colleges as described by each province or territory's ministry responsible for higher education. There are 71 English-speaking colleges across the country. See Appendix E for a full listing by province or territory. The rationale for limiting access to anglophone colleges was that the researcher is fluent in English only, and those regions that contain francophone institutions also contain an adequate number of anglophone colleges to protect against exclusion of any geographic region. A survey questionnaire was sent to each president and each vice president for a total estimated participant pool of 285. The sample for the qualitative research phase was randomly drawn from willing participants. In selecting the qualitative sample, stratification—a process for identifying and ensuring that certain characteristics were represented in the sample (Fowler, 2002; Slattery, et al., 2011)—was

employed based on executive position and location. This allowed for a purposeful sample that was representative of those in presidential versus vice presidential positions, those with diversity of experience, and geographic dispersion.

**Construct validity.** Chen (2010) states that "validity is an essential element of any research or evaluation is axiomatic" (p. 205). Achieving that validity requires the employment of a variety of validity concepts in the early stages of research design. Before theories can be authenticated, researchers must first verify that the variables used in the research are valid, the relationships between variables are valid, and the ability to generalize findings is valid; these tests of validity are represented as three concepts—construct validity, internal validity, and external validity (Borsboom, Mellenbergh, & van Heerden, 2004). Second, the researcher must prove that the research is reliable, meaning it is repeatable or consistent (Trochim & Donnelly, 2008).

Construct validity aims to prove the legitimacy of the variables or constructs proposed in the research, and validation is accomplished through a strong linkage between the construct and the responses to the measures (Teglasi, Nebbergall, & Newman, 2012). In other words, it verifies that a test measures what it should measure by focusing on what distinguishes the constructs (Borsboom, Mellenbergh, & van Heerden, 2004). This is achieved by using validated questions and confirmed through a factor analysis. Internal validity measures the relationship between variables and must prove both that the intervention resulted in a desired effect (Chen, 2010) and the desired effect was not caused by other means (Albright & Malloy, 2000). This is achieved by using validated questions and is measured using Cronbach's alpha. External validity attempts to prove that the resultant effect of the intervention as determined in the sampling is capable of generalization to other settings (Chen, 2010). This is achieved by collecting data from a random

sample. All three concepts focus on relationships. Construct validity focuses on the relationship between the construct proposed and the reality of what is measured; internal validity focuses on the relationship between the constructs; external validity focuses on the relationship between the research and the external environment (Borsboom, Mellenbergh, & van Heerden, 2004).

To validate the constructs, the researcher demonstrated translation validity in the form of face or content validity and criterion-related validity in the form of predictive, concurrent, convergent, or discriminant validity (Trochim & Donnelly, 2008). Convergent validity was employed as a means of criterion-related validity. Utilizing the intrinsic and extrinsic motivation portions of a validated and tested questionnaire developed by Van Herpen, Van Praag, and Cools (2005) that employs Cronbach's alpha, a correlation table was utilized to demonstrate a convergence of variable compensation with extrinsic motivation and a divergence with intrinsic motivation. Both the intrinsic and extrinsic questions were administered to all participants to ensure the legitimacy of the correlations and thus the validity of this approach. Utilizing the work of Sjöberg and Sverke (2000), validated and tested questions regarding retention measured people's propensity to leave their organizations. Furthermore, a factor analysis validated the extrinsic motivation, intrinsic motivation, and retention measures. Finally, the researcher employed pattern matching as a means of estimating how accurately the responses related to the expected results (Trochim & Donnelly, 2008).

**Control variables.** Four individual-level demographic variables were statistically controlled: executive role, length of service, gender, and location. Executive role was dummy-coded (President=1 and Vice President=0). Length of service was coded by number of years in an executive role. Since there was some evidence to suggest differences between genders (Dohmen & Falk, 2011), gender information was collected and dummy-coded (Man=1,

Woman=0). Since post-secondary education is legislated provincially in Canada, location was collected and coded by province or by region where numbers were small (two regions were identified—the Maritime provinces and the Territories).

**Independent variables.** The term "variable pay" is used interchangeably with "pay for performance" and represents compensation that is contingent on performance or results achieved (Lim, 2011b). It is measured by the percentage of compensation it represents. Variable pay was the independent variable determined by first dummy-coding the presence of a variable pay plan (Yes=1, No=0), then the percentage of variable pay was coded by the percentage of total compensation it represented. This question only appeared for those who answered "Yes" to the previous question.

**Dependent variables.** Motivation refers to the propensity for an individual to act in a certain manner given a certain intrinsic or extrinsic stimulus (Pepper & Gore, 2015). Utilizing the work of Van Herpen, Van Praag, and Cools (2005), extrinsic motivation was measured by seven items, the reliability of which was estimated with Cronbach's alpha at .77; two items were modified slightly to focus on opportunity rather than promotion, because presidents have no internal positions to which they may be promoted. Intrinsic motivation was measured by six items ($\alpha$=.84). Finally, retention refers to the efforts employed to influence an individual to remain with the organization (Al-Emadi, Schwabenland, & Wei, 2015). Retention was measured to determine the turnover intention of executives. Utilizing the work of Sjöberg and Sverke (2000), retention was measured using a three-item scale ($\alpha$=.83). See Appendix F for a full listing of questions with noted modifications.

**Reliability.** To demonstrate reliability, the researcher employed two of the four reliability estimates proposed by Trochim and Donnelly (2008). First, for the quantitative portion of the

study, a factor analysis tested for internal consistency. Second, for the qualitative portion of the study, the interviews were conducted by one interviewer. To achieve inter-rater or inter-observer reliability, the interviews were coded by both the interviewer and NVivo software, with the results compared for consistency. Applying these approaches contributed to the reliability of the data.

**Research analysis and interpretation**

In Phase 1, the analysis and interpretation included a description of the response rates for the questionnaires administered. The analysis pointed out whether or not the responses were representative of the proportions earlier identified in terms of executive role, experience, and geographic location. Since no gross inequities existed, scaling was not required to prevent response bias.

The analysis of the variables and measures included common measures such as mean, median, mode, and standard deviation. Multivariate analysis of means was used to verify the relationship between variables. The purposes of the analysis were to draw conclusions from the sample data and to aggregate for ascertaining their larger meaning. Furthermore, the researcher proposed how the results were intended to affirm or reject the original hypotheses and provided an explanation of the final disposition. In the end, the researcher described how the analysis and results were used to inform question development for the qualitative research phase. Although the qualitative questions were drafted prior to the quantitative phase, the questions were refined to validate the results, including the number and type of questions. See Appendix G for the survey questionnaire.

Phase 2, the qualitative phase in the study, focused on explaining the results of the first quantitative phase. The qualitative phase focused on understanding the context and meaning

(Petty, Thomson, & Stew, 2012; Sinkovics & Alfoldi, 2012) and was exploratory in nature. This study utilized interpretive inquiry and consisted of comprehensive interviews with a sample of seven participants from across Canada. This approach enabled an in-depth analysis of the quantitative results by drawing themes from data collected through the interviews. Although mixed methods often introduce the qualitative first to narrow the topic for the quantitative phase, the reverse order was chosen so executives in the qualitative phase could provide deeper understanding of the quantitative results.

The researcher asked participants in Phase 1 to volunteer for the Phase 2 interviews. Volunteer participants were contacted via email to confirm participation. The target was six or more interviews to ensure representation of the variables. So should the appropriate number or representation of the dependent variables not been achieved, the researcher would have used other random means to target potential candidates and contacted them directly. The interviews were conducted over the telephone by the researcher. Using QSR International's NVivo software, the analysis included exploring the data, coding and labelling the data, identifying themes, connecting and interrelating themes, and constructing a narrative. See Appendix H for interview questions.

**Researcher Bias**

Because the researcher fits the profile of those participating in the study, the opportunity for bias was real, and therefore had to be acknowledged and, wherever possible, mitigated. The first bias was in relation to predispositions. Since the researcher is presently a vice president in a public college and participates in a variable pay plan, she could have predisposed opinions regarding the effect of variable pay on motivation and retention. This bias was addressed in the research design by triangulating the results through a mixed methods approach, as was proposed

for this research. The second bias related to co-workers who had a reporting relationship as potential interviewees in the study, therefore, the president from the college that employs the researcher was excluded from the qualitative portion of the study. The third bias related to the selection of participants for the qualitative portion. Since the researcher knows many individuals in the roles of president and academic vice president across the country, she could have been drawn to choose individuals who were aligned in thinking. This bias was mitigated as only one participant was previously known to the researcher.

**Limitations of the Research Design**

Despite its many advantages, mixed methods research is not without its challenges. Cronholm and Hjalmarsson (2011) summarize three important considerations when contemplating a mixed methods research approach: "time and resources, pre-knowledge of the methods, and the question of convincing researchers of the value with mixed methods" (p. 94). The purists, who thrive on the perceived objectivity and accuracy of quantitative methodology, continue to question the quality of mixed methods (Symonds & Gorard, 2010). Therefore, the data collection and analysis were thorough and extensive to achieve the highest level of objectivity. Furthermore, the researcher's own biases were addressed throughout the analysis. Many researchers still fail to provide an adequate rationale or justification for its use, leaving room for critics to call the approach into question (Bryman, Becker, & Sempik, 2008). The rationale provided at the beginning of this chapter addresses the reasons for employing mixed methods as the best possible means for addressing the research question.

However, researchers experience the greatest challenges in conducting the research itself. Researchers require an understanding of both quantitative and qualitative research methodologies and the skills to analyze, understand, and interpret their results (Terrell, 2011), as well as how the

methodologies interconnect in a mixed methods design. The researcher sought the knowledge and skills of seasoned scholars through the review of publications, peer-reviewed journal articles, and personal consultations. Logistically, collecting both qualitative and quantitative data was challenging for a single researcher (Lund, 2011), therefore the workload was spread over a time period to achieve a manageable level.

**Ethical Considerations**

As with any study that involves human subjects, this study had several ethical considerations. In addition to the ethical considerations described earlier regarding the selection of participants, there were further considerations. The first consideration was participant anonymity. In the quantitative phase, the surveys were completed and returned electronically with no collection of identifiable data. The researcher further de-identified the data through aggregation prior to analysis, which addressed the ability of the researcher to identify the participants. Although a master list of potential participants was maintained by the researcher, these data were not linked to the de-identified data. The master list was maintained in a secure electronic file that was password protected and accessible only by the researcher. In the qualitative interview stage, the data collected were void of identifiable details in the research findings. Any identifiable data were removed prior to any coding of data. These identifiable data were secured in the same manner as previously described. In some provinces or territories, only one institution was present, therefore, the data could be linked based on the control factor of geography. To safeguard for anonymity, those impacted provinces and territories were grouped, so no geographic region contained only one institution.

A second consideration was the security of data storage, which will be maintained for a period of five years. All electronic files were encrypted and stored at the researcher's home on a computer that is password protected and only accessible by the researcher. A backup file of the electronic data will be kept in a locked file cabinet in the researcher's home and is only accessible by the researcher. This locked file cabinet also contains relevant interview notes. At the end of the five-year period, all paper documents will be shredded personally by the researcher. Electronic backup devices will be physically destroyed, and electronic files stored on the computer will be deleted and removed from any recycle bin storage.

A third consideration was consent to participate. A consent statement accompanied each survey, with an agreement that required activation before the participant could complete the survey. For the qualitative phase, a consent statement was presented and signed by each participant prior to the commencement of the interview. The consents for both included a request for the data to be used for further studies. For any participant refusing to consent for their data to be used in further research, that data will be removed from the data set prior to any further studies.

## Chapter Summary

A mixed methods design tasks the researcher with the responsibility for collecting, analyzing, and validating data using two different methodologies—qualitative and quantitative. By employing the most appropriate methodologies from experts in the fields of quantitative and qualitative research, the researcher will ensure valid and reliable outcomes. The proposed mixed research design for this study contained an exploration to understand the breadth of current practice through Phase 1 quantitative research, then an interpretation of the results, utilizing the knowledge and opinions of college leaders, through Phase 2 qualitative research to offer depth to

that understanding. Although this approach generated challenges for the researcher, most notably the time required to conduct the two phases, the benefits of the proposed study in better understanding whether variable pay leads to increased motivation and retention and its potential contribution to practice outweighed the encumbrance of complexity.

# Chapter 4. Results

## Phase 1: Quantitative Findings

Phase 1 aimed to answer the following research questions:

Q1: What proportion of total compensation is attributable to variable pay?

Q2: What factors are considered to determine if variable pay is awarded?

Q3: Does the variable pay plan retain top talent?

Q4: Does the variable pay plan improve individual motivation?

A questionnaire was prepared and administered via the Web using SurveyMonkey, an online survey tool, because of its ease of use and its ability to collect the data in a manner that could be utilized by data analysis software. An invitation to participate was delivered via email to the population. The population consisted of presidents and academic vice presidents (the highest-ranking academic position reporting to the President, who may be referred to as the Provost or Chief Academic Officer). Each individual was emailed the questionnaire along with directions and appropriate ethics review information. The total population was 237. The results were recorded and analyzed using IBM SPSS Version 24 software.

A total of 68 responses were returned for the quantitative survey, which represented 28.69% of the total population. The number of responses was small (Hair, Black, Babin, & Anderson, 2010), but is all that could be obtained from the population, which presented challenges in validating data and achieving significant results through testing. Since the executive role is quite demanding, it is understandable that despite the applicability of the subject, the survey did not compete with the urgency of other priorities. As a result of the small sample, decisions were required regarding the inclusion and exclusion of data to achieve the most valid results.

From a demographic perspective, the sample represented a good cross-section of college executives across the country (see Table 1). More vice presidents than presidents participated, at a ratio of 70/30, which was similar to the total surveys sent, which were at a ratio of 65/35. Gender was balanced, with 52% female and 48% male in the sample. A number of the executives were new to their roles, with just over half (58%) of the respondents in their first five years of service, and 39% serving more than five but fewer than 20 years, leaving only 3% serving over 20 years.

Participants indicated from which province they hailed, and there was at least one respondent per category, with Alberta, British Columbia, and Ontario representing the highest number of participants. Because the numbers for some provinces were small, the results were grouped. Participation from the West (BC, AB, SK, MB, YK, NV) was higher than from the East (ON, PQ, NB, NS, PE, NF) at a ratio of 60/40, or 60% of the sample, even though the East constitutes more of the population of Canada at a ratio of 126/111, or 53% of the total population. The higher participation from the West could be a result of the researcher having more collegial relationships with the participant group in that region versus the East. In terms of variable pay, 41.2% of participants ($n$=28) received variable pay, and of those, 83% ($n$=19) received less than 20% of their total compensation as variable, with almost half of those receiving less than 10% variable pay ($n$=9). See Table 1 for further details.

Table 1

*Characteristics of Sample*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Executive Position | Vice President | 40 | 58.8 | 70.2 | 70.2 |
| | President | 17 | 25.0 | 29.8 | 100.0 |
| | Total Valid | 57 | 83.8 | 100.0 | |
| | Missing | 11 | 16.2 | | |
| | Total | 68 | 100.0 | | |
| Length of Service | >20 | 2 | 2.9 | 3.4 | 3.4 |
| | 10–20 | 7 | 10.3 | 11.9 | 15.3 |
| | 5–10 | 16 | 23.5 | 27.1 | 42.4 |
| | 0–5 | 34 | 50.0 | 57.6 | 100.0 |
| | Total Valid | 59 | 86.8 | 100.0 | |
| | Missing | 9 | 13.2 | | |
| | Total | 68 | 100.0 | | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Gender | Female | 31 | 45.6 | 52.5 | 52.5 |
| | Male | 28 | 41.2 | 47.5 | 100.0 |
| | Total Valid | 59 | 86.8 | 100.0 | |
| | Missing | 9 | 13.2 | | |
| | Total | 68 | 100.0 | | |
| Region | Eastern | 23 | 33.8 | 39.0 | 39.0 |
| | Western | 36 | 52.9 | 61.0 | 100.0 |
| | Total Valid | 59 | 86.8 | 100.0 | |
| | Missing | 9 | 13.2 | | |
| | Total | 68 | 100.0 | | |
| Receive Variable Pay | No | 40 | 58.8 | 58.8 | 58.8 |
| | Yes | 28 | 41.2 | 41.2 | 100.0 |
| | Total | 68 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| % of Base that is Variable | >20 | 1 | 3.6 | 4.3 | 4.3 |
| | >10<20 | 10 | 35.7 | 43.5 | 47.8 |
| | <10 | 9 | 32.1 | 39.1 | 87.0 |
| | Other | 3 | 10.7 | 13.0 | 100.0 |
| | Total Valid | 23 | 82.1 | 100.0 | |
| | Missing | 5 | 17.9 | | |
| | Total | 28 | 100.0 | | |

To validate the measurement scales for intrinsic and extrinsic motivation (Van Herpen, Van Praag, & Cools, 2005) and retention (Sjöberg & Sverke, 2000), a confirmatory factor analysis was conducted. Those questions pertaining to retention loaded nicely onto one factor. However, the first analysis of the motivation variables returned three factors with one question (Q20) loading with communality 0.999. This question was removed, and a second analysis returned three factors with a different question (Q10) loading with a communality 0.999, so that question was also removed.

A final analysis resulted in two factors; however, one question (Q14) did not load significantly on either factor (communality 0.069), so it, too, was removed. Since the sample did not produce the same results as the original scale for intrinsic and extrinsic motivation, a further confirmatory factoring exercise was administered with six academics. These participants were given the

remaining questions pertaining to motivation and asked to group the questions into categories. The majority of participants grouped the questions in alignment with the final analysis above (see Table 2).

Table 2

*Confirmatory Factor Analysis*

| Question | Factor 1 (Out of 6 participants) * | Factor 2 (Out of 6 participants) * |
|---|---|---|
| Q11. Enthusiasm with compensation | 6 | |
| Q12. Satisfaction with compensation determinants | 6 | |
| Q13. Accomplishment recognition | | |
| Q15. Opportunity for challenge | | 6 |
| Q16. Compensation motivating | 6 | |
| Q17. Work satisfaction | | 5 |
| Q18. Job worth effort | | 5 |
| Q19. Job satisfaction | | 5 |

*All scores <3 suppressed.

As a result of the factor analyses, three questions (Q10, 14, 20) were removed. An extrinsic composite was established by calculating the mean of three questions (Q11, 12, 16) loading onto the extrinsic factor; an intrinsic composite was established by calculating the mean of the five questions (Q13, 15, 17, 18, 19) loading onto the intrinsic factor; and a retention

composite was established by calculating the mean of the three questions (Q21, 22, 23) loading onto a retention factor. Furthermore, a Total Motivation composite was created by calculating the mean of all motivation variables. Eight cases contained >15% missing data, therefore the factor analyses were run as "excluded pairwise" to maximize the amount of information that was used for estimation.

The variables were tested for normality both before and after the factor analysis and the creation of composites, and none of the variables had normal distributions either before or after. The Shapiro-Wilk test, which returned a significance level of <.05, confirmed the non-normal distribution. All four dependent variables were negatively skewed, with varying levels of kurtosis. The extrinsic and retention composites were slightly skewed, with slightly negative kurtosis, whereas the intrinsic and total motivation composites were significantly skewed and had high kurtosis. Since normal distribution is a requirement of many statistical analyses, to mitigate its negative effects, non-parametric testing was utilized, as discussed later in this chapter.

The MANOVA (multivariate analysis of variance) was used because it allows for the comparison of two independent variables—those executives who receive variable pay and those who do not—in relation to the levels of one or more dependent variables, in this case extrinsic motivation, intrinsic motivation, and retention. To conduct the MANOVA test, certain assumptions had to be met, including the homogeneity of variance-covariance matrices across groups and the linearity of variables, therefore additional tests were required (Laerd Statistics, 2016). For variance-covariance, homogeneity was confirmed by Box's M test, which returned a result of $p$=.036. Unlike most tests where alpha=.05, Box's M test uses alpha=.001 (Laerd Statistics, 2016), therefore the test produced a non-significant result, confirming homogeneity.

For linearity of variables, a scatterplot matrix for each group of the independent variables illustrated that the relationship approximately followed a straight line, thereby confirming a linear relationship.

Next, the data were tested for any univariate outliers, to check for extreme outlier values on one variable, and multivariate outliers, to check for extreme values on two or more variables, since extreme outliers can skew results. The use of boxplots confirmed three univariate outliers, while the Mahalanobis distance test at $p>.001$ confirmed no multivariate outliers. Two cases (21, 50) had very low values for both the Intrinsic (2.86, 2.14 respectively) and Total Motivation (2.67, 2.10 respectively) variables, when the means for these variables were Intrinsic=4.46 and Total Motivation=4.13. One case (64) had low Extrinsic (2.0) and Total Motivation (3.3) values compared with the means of Extrinsic=3.34 and Total Motivation=4.13. Since the data sample was small at 68 participants, these univariate outliers were assessed to determine the impact of their removal (see Table 3). After conducting the assessment, all three cases were removed, which resulted in a change in of 2.28% in total motivation and 2.09% in the retention variables for those who do not receive variable pay, and a change of 1.09% for total motivation and 1.18% for retention for those who receive variable pay. Since the results for those who do receive variable pay compared to those who do not receive variable pay were close in value, an adjustment of 1%–2% was meaningful. Following are the results by question.

**Proportion of compensation.** Participants were asked to identify the percentage of total compensation that their variable pay plans represented. The number of responses was limited to those participants who received variable pay ($n$=23). The vast majority of respondents received less than 20% of their salaries as variable pay. Of the 23 respondents who received variable pay, nine received less than 10% and 10 received between 10% and 20%; three received payment

Table 3

*Analysis of Univariate Outliers*

| Dependent Variables | Q1 Coded – Variable Y/N | All Cases | Without Case 50 | Difference | Without Cases 50, 21 | Incremental Difference | Total Difference | Without Cases 50, 21, 64 | Incremental Difference | Total Difference |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Mean | % Change | Mean | % Change | % Change | Mean | % Change | % Change |
| Total Motivation Composite | No | 4.04 | 4.09 | 1.30% | 4.13 | 0.98% | 2.28% | 4.13 | 0.00% | 2.27% |
| | Yes | 4.28 | 4.28 | 0.00% | 4.28 | 0.00% | 0.00% | 4.32 | 1.09% | 1.09% |
| | Total | 4.13 | 4.16 | 0.85% | 4.19 | 0.62% | 1.46% | 4.20 | 0.38% | 1.83% |
| Retention Composite | No | 3.74 | 3.78 | 1.16% | 3.81 | 0.83% | 2.09% | 3.81 | 0.00% | 2.09% |
| | Yes | 3.98 | 3.98 | 0.00% | 3.98 | 0.00% | 0.00% | 4.03 | 1.18% | 1.18% |
| | Total | 3.83 | 3.86 | 0.77% | 3.88 | 0.54% | 1.35% | 3.89 | 0.40% | 1.75% |

other than percentage of pay. Only one respondent received higher than 20% variable pay.

**Determination factors.** For this research question, participants were asked to choose from a list of the factors that applied to their circumstance (see Table 4).

Table 4

*Criteria for Awarding Variable Pay*

| Criteria | Number of Respondents | Percentage of Respondents | Number of Factors | % by Number of Factors |
|---|---|---|---|---|
| All – I, O, P-F, O-F | 7 | 30.43% | 4 | 30.43% |
| I, O, P-F | 1 | 4.35% | 3 | |
| I, O, O-F | 4 | 17.39% | 3 | 21.74% |
| I, O | 5 | 21.74% | 2 | |
| I, P-F | 1 | 4.35% | 2 | 26.09% |
| I | 3 | 13.04% | 1 | |
| O | 2 | 8.70% | 1 | 21.74% |
| Total Responses | 23 | 100.00% | | 100.00% |

I = Individual Performance
O = Organizational Performance
P-F = Portfolio Financial Performance
O-F = Organizational Financial Performance

Individual performance and organizational performance were the most important, with 91% and 82% of participants, respectively, including these as criteria. Financial results were less important, with only 26% reporting either portfolio or organizational level results as criteria. Multiple criteria versus a single criterion was most prevalent. Only 22% of respondents cited a single criterion, whereas 30% had four or more criteria, 52% had three or more, and 88% had two or more.

**Retention and motivation.** Participants were asked: "Do variable pay plans retain college executives in their roles?" and "Do variable pay plans improve individual motivation?" There was no significant difference in the motivation to perform or be retained between those who received variable pay and those who did not. A one-way multivariate analysis of variance (MANOVA) was run to determine the effect of variable pay on motivation. Four measures of motivation were assessed using questions from previous scholarly research: extrinsic motivation, intrinsic motivation, total motivation, and retention. Executives who received variable pay scored slightly higher by mean in all motivation measures—extrinsic, intrinsic, total, and retention (see Table 5); however, the differences between those who received variable pay and those who did not on the combined dependent variables was not statistically significant. For assessing power, or statistical significance between groups, on the independent variable, the Roy's greatest characteristic root, Wilks' lambda, Pillai's criterion, and Hotelling's T2 all returned the same results. So, despite the reasonably small sample size, after removing outliers, the observed power at .779 fell only slightly short of the recommended .800 (Cohen, 1988) (see Table 6).

Table 5

*MANOVA Descriptive Statistics*

| | Receive Variable Pay Q1 Coded – Y/N | Mean* | Std. Deviation | N |
|---|---|---|---|---|
| Extrinsic Motivation | No | 3.13 | .91 | 38 |
| | Yes | 3.70 | .62 | 22 |
| | Total | 3.34 | .85 | 60 |
| Intrinsic Motivation | No | 4.42 | .61 | 38 |
| | Yes | 4.53 | .41 | 22 |
| | Total | 4.46 | .54 | 60 |
| Total Motivation | No | 4.04 | .57 | 38 |
| | Yes | 4.28 | .42 | 22 |
| | Total | 4.13 | .53 | 60 |
| Retention | No | 3.74 | .98 | 38 |
| | Yes | 3.98 | .89 | 22 |
| | Total | 3.83 | .95 | 60 |

*Based on a scale of 1–5.

Table 6

*Observed Power for MANOVA*

| Effect | | Partial Eta Squared | Noncent. Parameter | Observed Power[c] |
|---|---|---|---|---|
| Q1Coded | Pillai's Trace | .160 | 9.911 | .779 |
| | Wilks' Lambda | .160 | 9.911 | .779 |
| | Hotelling's Trace | .160 | 9.911 | .779 |
| | Roy's Largest Root | .160 | 9.911 | .779 |

a. Design: Intercept + Q1Coded
b. Exact statistic
c. Computed using alpha = .10

Because the dependent variables are categorical in nature, the MANOVA, which assumes non-categorial dependent variables, was not ideal. Therefore, further series of non-parametric tests for data that is not normally distributed were conducted at alpha=.05 and confidence level=0.95 to confirm whether there was any significant difference between the two independent variable groups—those who received variable pay and those who did not—for each of the dependent variables—extrinsic motivation, intrinsic motivation, total motivation, and retention. The Mann-Whitney U test determines if there is any significant difference in the distribution between independent variable groups. The categories of intrinsic motivation, total motivation, and retention well exceeded the $p<0.05$ at 0.994, 0.137, and 0.472 respectively, rejecting the hypotheses that there were differences between the groups for these dependent variables. However, extrinsic motivation, at 0.041, indicated that there was a difference between the groups, thereby supporting the hypothesis that there was a difference between the groups with respect to extrinsic motivation. Two further tests, the Moses Test of Extreme Reaction, which tests for difference in range for the independent variable groups, and the Independent Samples

Median test, which tests for difference in medians for the independent variable groups, both demonstrated no significant difference between the independent variables for all motivation measures (see Table 7).

Table 7

*Non-Parametric Testing for Independent Sample Differences*

| Test | Null Hypothesis | Sig. | Decision |
|---|---|---|---|
| Mann-Whitney U | The distribution of Extrinsic Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .041 | Reject the null hypothesis. |
| Mann-Whitney U | The distribution of Intrinsic Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .994 | Retain the null hypothesis. |
| Mann-Whitney U | The distribution of Total Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .137 | Retain the null hypothesis. |
| Mann-Whitney U | The distribution of Retention Composite is the same across categories of "Receive Variable Pay Y/N" | .472 | Retain the null hypothesis. |
| Moses Test of Extreme Reaction | The range of Extrinsic Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .238 | Retain the null hypothesis. |
| Moses Test of Extreme Reaction | The range of Intrinsic Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .635 | Retain the null hypothesis. |
| Moses Test of Extreme Reaction | The range of Total Motivation Composite is the same across categories of "Receive Variable Pay Y/N" | .061 | Retain the null hypothesis. |
| Moses Test of Extreme Reaction | The range of Retention Composite is the same across categories of "Receive Variable Pay Y/N" | .126 | Retain the null hypothesis. |
| Independent Samples Median | The medians of Extrinsic Motivation Composite are the same across categories of "Receive Variable Pay Y/N" | .176 | Retain the null hypothesis. |
| Independent Samples Median | The medians of Intrinsic Motivation Composite are the same across categories of "Receive Variable Pay Y/N" | .763 | Retain the null hypothesis. |
| Independent Samples Median | The medians of Total Motivation Composite are the same across categories of "Receive Variable Pay Y/N" | .373 | Retain the null hypothesis. |
| Independent Samples Median | The medians of Retention Composite are the same across categories of "Receive Variable Pay Y/N" | .901 | Retain the null hypothesis. |

**Control variables.** The original intention was to utilize the demographic statistics as control factors; however, because of the sample size, some of the numbers for each control variable put into question the ability to conduct statistical analyses such as the MANOVA. Because the data were skewed and did not have a normal distribution, the chi-square test of homogeneity did not meet the minimum of five or more data points in each square of the test, rendering it an ineffective analysis tool for both the previous tests and for this test where MANOVA was used. Despite the ability to generate statistically significant data, and although not in direct alignment with the research questions, the overview of the data collected did provide some interesting findings. The following are some of the highlights:

1. Location (see Table 8)

    - Eastern participants who received variable pay were more extrinsically and intrinsically motivated than those who did not.
    - Overall, Eastern participants were slightly more extrinsically and intrinsically motivated than their Western counterparts.
    - Eastern participants who received variable pay were more likely to be retained than those who did not receive variable pay and more likely to be retained than their Western counterparts, especially when comparing those who received variable pay.

Table 8

*Results by Location*

| | | Do you receive variable pay? Mean (/5) | | |
|---|---|---|---|---|
| Dependent Variable | Location | No | Yes | Total |
| Total Motivation Composite | Eastern | 4.00 | 4.39 | 4.21 |
| | Western | 4.18 | 4.23 | 4.19 |
| | Total | 4.13 | 4.32 | 4.20 |
| Retention Composite | Eastern | 3.70 | 4.42 | 4.09 |
| | Western | 3.84 | 3.52 | 3.75 |
| | Total | 3.80 | 4.03 | 3.89 |

2. Years of Service (see Table 9)

Total motivation

- Those with 0–5 years of service who received variable pay were more totally motivated than those who did not.
- Those with 5–10 years of service who did not receive variable pay were more totally motivated than those who received variable pay.
- Those with 10–20 years of service who received variable pay were more totally motivated than those who did not.
- Those with 10–20 years of service who did not receive variable pay were the least totally motivated.
- Those with more than 20 years of service who did not receive variable pay were the most highly totally motivated.
- Overall, total motivation increased with years of service.

Table 9

*Results by Years of Service*

| | | Do you receive variable pay? Mean (/5) | | |
|---|---|---|---|---|
| | Years of Service | N | Y | Total |
| Total Motivation Composite | 0–5 years | 4.01 | 4.33 | 4.11 |
| | 5–10 years | 4.37 | 4.19 | 4.29 |
| | 10–20 years | 3.85 | 4.48 | 4.30 |
| | >20 years | 4.60 | | 4.60 |
| | Total | 4.13 | 4.32 | 4.20 |
| Retention Composite | 0–5 years | 3.73 | 4.23 | 3.89 |
| | 5–10 years | 4.15 | 3.56 | 3.91 |
| | 10–20 years | 3.17 | 4.20 | 3.90 |
| | >20 years | 3.67 | | 3.67 |
| | Total | 3.80 | 4.03 | 3.89 |

Retention

- Those with 0–5 years of service who received variable pay were more likely to be retained than those who did not.
- Those with 5–10 years of service who did not receive variable pay were more likely to be retained than those who received variable pay.
- Those with 10–20 years of service who received variable pay were more likely to be retained than those who did not.
- Retention remained consistent for the first 20 years of service and then started to decline.

3. Gender (see Table 10)

- Both males and females who received variable pay were more totally motivated than those who did not; however the ratio was higher for males.
- Both males and females who received variable pay were more likely to be retained than those who did not.
- Females were more likely to be retained than their male counterparts regardless of whether or not they received variable pay.

Table 10

*Results by Gender*

| | | Do you receive variable pay? Mean (/5) | | |
|---|---|---|---|---|
| Dependent Variable | Gender | N | Y | Total |
| Total Motivation Composite | Female | 4.14 | 4.27 | 4.20 |
| | Male | 4.12 | 4.41 | 4.21 |
| Retention Composite | Female | 4.06 | 4.18 | 4.11 |
| | Male | 3.56 | 3.79 | 3.63 |

4. Percentage of variable pay (see Table 11)

- There was little difference in total motivation levels between those who received less than 10% variable pay and those who received more than 10% and up to 20% variable pay.
- Those who receive less than 10% variable pay were more likely to be retained than those who received more than 10% and up to 20% variable pay.

Table 11

*Results by Percentage Variable Pay Received*

| | | Mean | Number |
|---|---|---|---|
| Total Motivation Composite | <=10% | 4.27 | 7 |
| | >10% and <=20% | 4.29 | 12 |
| | >20% | 4.90 | 1 |
| | Other | 4.50 | 1 |
| | Total | 4.32 | 21 |
| Retention Composite | <=10% | 4.67 | 7 |
| | >10% and <=20% | 3.61 | 12 |
| | >20% | 4.67 | 1 |
| | Other | 4.00 | 1 |
| | Total | 4.03 | 21 |

**Summary of Phase 1 results and analysis.** The small sample size presented challenges in the analysis of the data. As a result, the intended control variables were not able to be utilized for those who received variable pay, as originally intended; however, the data collected provided some interesting results that could serve as catalysts for further exploration. The extrinsic and intrinsic variables failed to produce a clean factor structure as they did for Van Herpen, Van Praag, & Cools (2005), but after removing some questions, similar factors were achieved. The first phase of quantitative data for public colleges in Canada indicated that, overall, college executives were highly motivated. However, the data did not support any significant difference in motivation between those who received and those who did not receive variable pay. Furthermore,

less than half of the colleges surveyed used variable pay, and when they did, it generally represented less than 20% of an executive's base salary and was based on two or more criteria. The next phase of this study focused on the thoughts and opinions of college executives across the country to provide insights to explain these results.

**Phase 2: Qualitative Findings**

Phase 2 focused on supplementing the results of Phase 1 and provided contextual understanding for the research questions as noted at the beginning of the chapter. This phase explored the following research questions:

Q1: How do you explain the level of participation of Canadian public colleges in variable pay plans?

Q2: Why does your organization use variable pay?

Q3: How is your variable pay determined? Are these factors within your influence? Are they within your control?

Q4: How does variable pay influence your retention in your present role? Why?

Q5. How and why does the presence of variable pay motivate you to work differently?

Q6: How does variable pay maximize motivation in college executives?

Q7: How does variable pay impact the public college system?

Seven interviews were conducted with a variety of college executives across the country. Participants were asked to volunteer as part of the quantitative survey, and a total of six participants volunteered, which was the total targeted in the research plan. However, to achieve balance in regional representation, in the proportion of those who received variable pay, in position, and in gender, two more executives were invited to

participate. One was available and agreed to participate as an interviewee. Of the seven participants, three were from the West and four from the East, four were male and three female, three received variable pay and four did not, and four were vice presidents and three presidents, which closely mirrored the participant ratios from the quantitative survey. Years in an executive role varied with three at 0–5 years, three at 6–10, and one at greater than 10 years. Of the three that received variable pay, one received less than 10%, one received 11%–20%, and one received greater than 20% of base salary; in the quantitative survey, just under half (9/23) received less than 10%, just under half (10/23) received 11%–20%, and only one received greater than 20%. See Table 12 for a summary of the interviewee demographics.

Table 12

*Qualitative Interviewee Demographics*

| Interviewee | Variable Pay (Yes / No) | Region (West, East) | Gender (Female, Male) | Position (Vice President, President) | Years in Position |
|---|---|---|---|---|---|
| 1 | Y | W | M | VP | 5–10 |
| 2 | N | E | M | VP | 5–10 |
| 3 | N | E | M | P | 0–5 |
| 4 | Y | W | F | P | 5–10 |
| 5 | N | W | F | VP | 0–5 |
| 6 | Y | E | F | P | 10–20 |
| 7 | N | E | M | VP | 0–5 |

Participants received a summary of the findings from Phase 1 (see Appendix I) and were asked to discuss what generally resonated with them or surprised them. Four

themes emerged from the discussions. First was the lack of association between the use of variable pay and motivation. None of the participants was surprised with those results and specifically commented on the disconnect between compensation and motivation. As articulated by one participant,

> So, what I interpreted was that there's not a great deal of noise suggesting that variable pay makes a difference from a motivational perspective. And that's not surprising to me ... I don't think that people work in the public sector to a large extent, because they are driven by money (Interviewee #6).

Others supported that view with comments such as,

> … it's not what keeps you coming to work. You keep coming to work because of the changes you can make or the people that you work with, the challenges that you're facing, the problems that you're solving, the connections that you have to the work teams you're a part of (Interviewee #2).

Second was the percentage of overall use of variable pay in public colleges. Although one interviewee was surprised the use was so high (40%), for most, it affirmed their assumption that usage was low due to lack of government support for variable pay, which could be attributed to a lack of public support for variable pay for public organizations. As one participant stated:

> One of the things that struck me was, you can make the intellectual argument all day, every day. But in an institution like ours, where we get [the majority] of the budget from the government, we would be crucified, in public opinion, which means the government would be crucified, if we were to pay bonuses for any numbers they were supposed to get anyway. That's how most of the public would

> see it. So, I doubt very much, even if you were to prove that merit pay would work, I don't think our political people would have the wherewithal to embark on such an endeavour (Interviewee #7).

Third, they discussed the range in percentage of variable pay for those who receive it, especially at the lowest and highest ends of the range. Although lower to mid-levels of less than 20% were expected, overall, the highest range of greater than 20% was unexpected. One participant noted that the low levels of percentage of variable pay was the reason for the lack of significant correlation, "I wasn't surprised that the lower the percentage, the lower the motivation; less than 10% is not so motivating" (Interviewee #4).

Finally, the theme that generated the most discussion concerned the criteria for awarding variable pay. The interviewees expressed concern that 22% of participants who received variable pay were measured on only one criterion. As one executive articulated, "[given] the research that I have done that some would have one single outcome that they were working on. I assumed a more robust, combined sort of thing ... 22% had a single criterion. It just seems too high" (Interviewee #2). With only 20% of participants citing financial performance, one executive suggested, "I think it speaks to perhaps different organizational cultures" (Interviewee #1). Instead of a single criterion, one executive suggested that criteria should be more complex and at least comprise individual and organizational outcomes, including financial performance, and furthermore, consider other measures such as climate, employee engagement, student satisfaction, and behaviours measured through mechanisms such as 360s (Interviewee #4). These themes

were explored further through the following data analysis as it pertained to the Phase 2 research questions.

**Participation.** Interviewees were asked, "How do you explain the level of participation of Canadian public colleges in variable pay plans?" There was only one consistent factor to explain the level of participation—government interference and control. In all cases, the government-controlled variable pay through mechanisms such as salary scales, salary caps, salary freezes, and the abolishment of variable pay entirely. As noted earlier by Interviewee #7, it would be politically unpopular for governments if public organizations such as post-secondaries awarded variable compensation. Participants concluded that this interference of government in the compensation of executives resulted in a lack of participation.

Three of the interviewees specifically discussed the negative manner in which some governments have influenced executive compensation; for example:

> I found the way the government approached it was very mean-spirited. And I see that more of an indicator of how the government values post-secondary as a whole. They basically painted every executive in the province as a pig at the trough, with exorbitant bonuses and perks that were just robbing the system blind. And I find that very distasteful (Interviewee #1).

> The public ridicule of presidents and post-secondary institutions and the ridicule, or hostility, that politicians are showing towards them, who wants that? Who needs that? ... to ridicule that group of people, and I don't know to what end that is, if it gets them votes from certain sectors of the population. Nobody has any pity for anybody who is making more than $150,000 (Interviewee #6).

The third executive described how executives have to complete and submit performance plans to the provincial government to be eligible to receive a 1%–2% increase after a seven-year salary freeze. These types of government actions created unfavourable climates for variable pay to exist.

**Rationale**. Interviewees were asked, "Why does your organization use variable pay?" Since not all the participants hailed from organizations where variable pay was used, the question was modified to "Why does your organization choose not to use variable pay?" Some of the reasons mentioned for utilizing variable pay included the following: 1) it was a positive and effective motivator for leaders to perform; 2) it helped the organization realize a higher level of performance; and 3) it helped the organization focus. "We use it because we believe it is a positive effective motivator for leadership performance. That's really the fundamental philosophy around it" (Interviewee #1).

Conversely, some of the reasons for not utilizing it included: 1) it was difficult to measure success objectively; 2) there was complexity in choosing appropriate criteria; 3) it was politically unpopular; and 4) it was not well understood within the academic context. "I think it's very difficult to create pay schedules or steps that can be clearly, closely, and objectively aligned with objective measures of success" (Interviewee #5). Interviewee #3 further reinforced the complexity in measurement:

> There's a saying from some old statistician to say that, 'you get what you measure.' So, then the debate or argument in the corporate world was, 'what's the right measure?'...There was not always consensus on what was the right measure, but there was consensus that you needed them.

The diversity in responses was indicative of the diversity of compensation schemes across the country, propagated, as explained by several interviewees, by the political agenda of each province.

**Determination Factors.** Interviewees were asked, "How is your variable pay determined? Are these factors within your influence? Are they within your control?" Again, for those who did not receive variable pay, the question was modified to "If you were to bring variable pay into your organization, what might be some of the determinants?" For those who received variable pay, they agreed on the metrics of financial performance, employee engagement, and student success. Other outlier determinants for this group included the achievement of individual objectives and student full-load equivalent (FLE) growth. They further agreed that these determinants were within their influence but, aside from individual objectives, not always within their control.

Those who did not receive variable pay agreed on including the achievement of individual objectives, but they also introduced other criteria demonstrating more soft skills such as achieving results ethically, creating and managing relationships, developing people, modelling agility and collaborating, and embracing creativity and innovation.

> For me, it's the result and how you get to the result. Both are important indicators. Because sometimes the result that we're looking for, we're not 100% responsible for the input to that. And therefore, it's how do you go about it, which is important because how you went about it developed relationships that might be valuable down the road (Interviewee #2).

These soft skill determinants were not present in any of the responses from those who received variable pay. Perhaps this signals a changing attitude toward the importance of human skills, which would be both within their influence and control. Regardless of the presence or absence of variable pay, all participants suggested a variety of determinants and measures, which corroborated their earlier disapproval of some institutions employing only one criterion.

**Retention.** Interviewees were asked, "How does variable pay influence your retention in your present role? Why?" This question was expanded to include a second part to include attraction to their present role. In all but one case, variable pay was not a factor in attracting participants to their roles, nor did they believe it was important for recruiting individuals to executive roles. "People who are motivated by salary, clearly would not have done what I did ... it was for quality of life, pure and simple" (Interviewee #3). Four of the participants referred to other, more important factors relating to quality of life and career advancement, and three of the four even criticized those who would be attracted by variable pay, which was best summarized by the following comment: "If you are driven by wanting to become a president or vice president, I don't think money is important. If it's the only factor, you're in the wrong business" (Interviewee #7).

However, when it came to retention in their present roles, four out of the seven believed it did influence their propensity to stay. Some of the caveats to this belief included maintaining total compensation and maintaining equitable compensation compared to others in the sector. They felt that variable pay provided them with a sense of accomplishment, recognition for going above and beyond, and appreciation for their

efforts. To summarize, if compensation did not decrease or become misaligned with salaries for comparable roles in the sector, the majority felt it had a motivational effect for continuing in their current roles.

**Individual motivation.** Most of the participants agreed that variable pay did or could motivate them to work differently. Three participants clearly agreed, one disagreed, and three both agreed and disagreed. Participants felt that variable pay could or did motivate them to be more focused and accountable. In comparing environments where one offered variable pay and the other did not, one participant noted, "I believe you get more focused attention to what is important. I think people are held more accountable and behave accordingly. So, is an organization better with or without? I believe it is better with" (Interviewee #1). Variable pay also afforded more clarity with respect to priorities and decision-making. The following is an illustration of how decision making could be impacted:

> If my compensation were structured to reflect that—well, if I get paid more because I bring in more research dollars, that would certainly affect me in terms of my decision making—what meetings I take and don't take. Because if it came down to a meeting between looking at the quality of instruction in the college versus a meeting where I can maybe get some extra revenues for research, then I would take the research meeting because it affects my bottom line (Interviewee #7).

Furthermore, they were motivated by the challenge of stretch goals and the satisfaction of meeting or exceeding goals, and they had a clearer understanding of expectations. As one participant posited, "in order to support [this type of] approach,

people have to have a pretty good understanding of what it looks like to be exceptional" (Interviewee #5). Conversely, those who partially or totally disagree considered themselves as possessing high intrinsic motivation; therefore, the presence or absence of variable pay had little to no bearing on how they behaved or performed.

**College executive motivation.** Four out of seven participants felt variable pay did or had the potential to maximize motivation in college executives because it drove them to decisions that reflected an ability to achieve outcomes and brought focus to what was deemed important. Yet others were still unsure:

> Sometimes we have to do things that we may not seem like immediately the benefit's going to be there. But if you're thoughtful and thinking about the long term about the students, it will be there eventually. But it's sometimes hard to measure on the annual criteria (Interviewee #4).

There was also uncertainty because of the lack of evidence to support variable pay, as noted by one participant, "I haven't seen evidence of it ... I mean, people have stayed for years under frozen conditions and haven't taken off in the hoards people were predicting" (Interviewee #6).

Some of the interviewees supported the idea that variable or incentive pay could change behaviours at the organizational level. Four participants felt that variable pay could have a positive role in moving organizations toward achieving outcomes, two were unsure, and one reserved comment. A few caveats were offered, such as the need to focus on outcomes rather than activities (Interviewee #2), clear and measurable criteria (Interviewee#7), and people had to believe it would have a positive outcome (Interviewee #3).

**System impact.** Although there was no clear consensus, participants generally considered variable pay as lacking impact on the public college system presently. Right now, "good leaders are doing it because it is part of their soul" (Interviewee #6) or executives "get angry and say they are going to leave, but they don't" (Interviewee #4). Furthermore, the tide has turned, and variable pay has become political. "I don't think they [governments across Canada] have the political will or capability to say how a post-secondary system performs or how it could perform better with variable pay ... and politics always trumps pragmatics" (Interviewee #1).

However, education is changing, and the status quo is no longer effective, so perhaps variable pay has the potential to have a more significant impact if it were applied consistently for senior officials across the country (Interviewee #7). Through carefully constructed incentives, governments could drive better integration between post-secondary education and industry (Interviewee #7) or innovation in programming (Interviewee #2). Governments have demonstrated how they can drive organizational behaviour through targeted grants, so there is past practice to predict future potential (Interviewee #2).

There exists a potential for variable pay to influence the Canadian public college system. Two interviewees indicated there is potential, four indicated there is a possibility to influence the system, and one believed it is not possible. At a system level, variable pay for organizations could drive innovation in programming (Interviewee #2), incent better integration (Interviewee #7), or attract leaders as the pool diminishes (Interviewee #6). However, there are a few challenges that could undermine the success of this type of incentive scheme: ambiguity in system measurement (Interviewee #5), the "collaborate

versus compete" nature of colleges (Interviewee #3), and the fact that compensation has become political (Interviewee #1). So, although there is potential, several barriers will need to be overcome.

**The role of government.** In addition to the themes discussed in reaction to the quantitative date, another theme that emerged as threading throughout the questions was the prominent role of provincial governments in influencing and sometimes interfering with variable pay and compensation in general. Interviewees commented on salary caps in general and specifically on events in Alberta, including the introduction of legislation that forces boards to remove variable pay for presidents and limit total compensation effective April 2020 (Government of Alberta, 2018) and how politicians spoke about the legislation in the media. For example, Interviewee #6 commented that "people can't get out of Alberta fast enough because of the lack of respect and hostility that's being demonstrated," and then further commented that government financial support for colleges has decreased significantly, from 90% of income to 35%, so governments such as Alberta's were exerting more policy control because their ability to exercise financial control was waning. Another commented that "if they can get better favour by saying they are cost controlling post-secondary, they'll get much more public favour, I believe" (Interviewee #1).

## Chapter Summary

The qualitative results from Phase 2 confirmed and clarified the hypotheses from Phase 1. First, they confirmed that there is no substantial difference in motivation between those who received and those who did not receive variable pay. They also clarified one hypothesis in which the results notably differed—the retention of

executives. The Phase 2 participants expressed much higher levels of motivation to be retained through variable pay than the Phase 1 participants; however, variable pay was not a factor in considering attraction to their roles. These dissonant opinions could be explored further in future research studies.

The qualitative results confirmed that less than half of the colleges surveyed used variable pay and that generally variable pay represented less than 20% of an executive's base salary. Finally, they confirmed the use of two or more criteria to determine the awarding of variable pay. But perhaps the greatest contribution of the Phase 2 results was the context it provided. Interviewees discussed the political climates in the various provinces, the range of government involvement in compensation, the nature of their roles in the public sector, and their personal beliefs and values surrounding the use of variable pay.

# Chapter 5. Discussion and Conclusions

This research study set out to examine whether variable pay plans for senior college executives were effective in motivating and retaining talented executives. Furthermore, it explored a variety of theories related to variable pay and assessed whether public service motivation theory applied to executives in public colleges in Canada. In particular, the research sought to inform senior leadership of practice at Canadian public colleges as they consider implementing variable pay plans. The researcher reviewed the efficacy of variable pay plans for public colleges within the geographic area of Canada and identified those aspects of variable pay plans attributable to improved retention and motivation. The independent variable included variable pay, while the dependent variables included retention, intrinsic motivation, and extrinsic motivation.

This research study proposed to inform, from a theoretical perspective, scholars who are conducting research regarding the motivational effects of variable pay and, from a practical perspective, individuals or organizations evaluating the efficacy of variable pay for post-secondary institutions. The first section focused on discussion of the findings relative to the body of literature and potential implications for research and practice. The second section addressed the research approach and limitations and concluded with general recommendations, including future research possibilities.

## Discussion and Implications

In reviewing the findings in comparison with the literature surrounding the effectiveness of variable pay, the results of this study contribute to the general field of literature on the motivational effects of variable pay. However, its more substantial contribution is to the limited amount of research that links variable pay to public service,

and, more specifically, to the public college system. This discussion explores these contributions and implications for both the body of research on the subject of variable pay and practice in the field of public post-secondary education for utilizing variable pay.

**Implications for Research**

In the literature, the use of variable pay was estimated at 70% for the American private sector (Bevilacqua & Singh, 2009; Robbins & Judge, 2008), and at 80% globally by the OECD (Lah & Perry, 2008; Frey, Homberg, & Osterloh, Organizational Control Systems and Pay-for-Performance in the Public Service, 2013), which included both the private and public sectors. These statistics are not typically collected for public organizations (Frey, Homberg, & Osterloh, Organizational Control Systems and Pay-for-Performance in the Public Service, 2013), let alone the post-secondary sector. The results of this study, at 40% usage, suggested a much lower percentage for Canadian colleges than private or private and public organizations combined. The research results, when reviewed in context of theories explored in the literature review—agency theory, reinforcement theory, expectancy theory, and public service motivation theory—shed light on possible reasons for this discrepancy.

The review of agency theory, the most popular theory applied to variable pay (Gerhart, Rynes, & Smithey Fulmer, 2009), in this study revealed a potential flaw in applying this theory to public colleges: ambiguity in shareholder identification. Although the literature identified five different potential shareholders, namely the board of directors, faculty and administrators, student body, scientific community, and the general public (Tang, Tang, & Tang, 2000), this research added another shareholder—the government. As some of the interviewees pointed out, the government interfered with the

public college governance process, whereby the Board of Governors was the shareholder and the president the principal. For example, although in some cases the board set the salary and had the ability to set variable pay for the college president, which aligned with the agency model, in other cases, government usurped this authority by regulating salary caps and grids or banning the use of variable pay. So, college administrators as the principals were left with two shareholders—the Boards of Governors, authorized to govern them, and the provincial government, which, in some cases, interfered with that governance process and directed college administrators. In Canada, the provincial governments, which own the acts and regulations by which public post-secondaries are governed, are presently absent, but should be added to the literature as another reason why agency theory failed to apply to Canadian public colleges.

Reinforcement theory posited that individuals will apply extra effort if they know they will be rewarded through monetary means (Lawler & Worley, Built to change: How to achieve sustained organizational effectiveness, 2006), implying that individuals are purely extrinsically motivated. This research study posited that reinforcement theory alone did not explain how executives in Canadian colleges were motivated. Although those who received variable pay were somewhat more extrinsically motivated than those who did not, they were almost equally intrinsically motivated. Therefore, if 60% of executives do not receive variable pay, then most college executives are highly motivated, despite the absence of monetary rewards for their efforts. The results of this study support research studies, such as Perry, Engbers, and Jun's (2009), that acknowledged the limitations of reinforcement's causal theory.

This study's results pointed to a few flaws in applying expectancy theory in the Canadian public college context. Expectancy theory posited that motivation was the product of expectancy, instrumentality, and valence (Lambright, 2010), and was based on definitional assumptions. First, expectancy assumed that effort yielded a certain level of performance. The interviewees, who generally concurred that performance was measured through the achievement of personal objectives, financial performance, student satisfaction, and employee engagement, indicated that their performance measures were within their influence but some measures, such as student satisfaction and employee engagement, were not always within their control. Therefore, the expectancy assumption was invalid. Second, with respect to instrumentality, which assumed that performance led to the achievement of a certain outcome (in this case, monetary reward), the assumption was true in cases where variable pay existed. However, under government interventions, such as compensation freezes or other restrictions, receiving the outcome was impossible, rendering the assumption invalid. Finally, valence assumed that executives valued monetary rewards. Although this assumption was true to some extent, more interviewees placed value on recognition versus monetary rewards, again rendering the assumption invalid. Consequently, the results of this study pointed to expectancy theory as inappropriate for explaining motivation in Canadian public college executives.

Finally, public service motivation (PSM) theory maintained that public employees were not motivated by financial incentives; rather, their motivations were as follows: 1) rational, grounded in a sense of public duty; 2) norm-based, grounded in serving the public interest and social equity; and 3) affective, grounded in a sense of patriotism and social justice (Rainey, 1982; Perry & Wise, 1990). Further research resulted in the

development of three key learnings for public organizations: 1) there was a positive correlation between PSM and attraction and retention; 2) there was a positive correlation between PSM and individual performance; and 3) although PSM was generally less dependent on extrinsic motivators, results were mixed, and therefore this assumption was not fully supported (Perry, Hondeghem, & Wise, 2010).

The results of this study offered some data to support and refute the assumptions proposed by PSM theory. Canadian public college executives were generally more intrinsically motivated at 4.43/5 versus extrinsically motivated at 3.34/5, which aligned with and supported PSM theory. However, those who received variable pay were slightly more extrinsically and intrinsically motivated than their counterparts who did not receive variable pay, raising doubt on the assumptions of PSM theory and supporting the mixed result findings of Perry, Hondeghem, and Wise (2010). In this case, the interviewees indicated that compensation influenced their propensity to continue in their current roles, although variable pay was not as prominent as pay equity. This result was in opposition to the assertion of a positive correlation between PSM and retention. Overall, there was some evidence in this study to cast doubt on the applicability that PSM theory had for the use of variable pay in public colleges.

In conclusion, this study offered some meaningful contributions to the literature surrounding theories pertaining to variable compensation. First, although agency theory could be applied in the private sector, it was less relevant in the public sector as a result of the ambiguous nature of the concept of shareholder. With respect to agency theory, this study added the consideration of government as a shareholder for public organizations. Second, the results of this study cast doubt on the applicability of

reinforcement theory since public college executives were highly motivated despite the absence of financial incentives. Third, the results failed to align with some of the assumptions of expectancy theory, and therefore, discrepancies should be noted as potential flaws in applying this theory to variable compensation in public college settings. Finally, although PSM theory may apply to public service organizations in general, the results from this study suggested that PSM may not apply to public colleges in Canada.

**Implications for Practice**

This study informs practice for public colleges at various stages of implementing variable pay for college executives—those colleges considering the implementation of variable pay, those presently offering it, and those considering removing it. For each stage, the study revealed several considerations for colleges related to effectiveness and structure. In addition to implications for colleges utilizing variable pay at the individual level, the interviewees also supported the use of variable pay at the organizational level or system level. The following discussion explores these implications.

For those colleges considering implementing variable pay, the results of this study indicated that those executives who received variable pay were slightly more extrinsically motivated than those who did not; there was little difference between the groups when comparing intrinsic motivation; and those who received variable pay had an overall slightly higher, but not statistically significant, level of total motivation. Another consideration was executive retention. Those who received variable pay were more likely to want to continue in their present roles than their counterparts. Therefore, what colleges considering implementing variable pay can garner from this study is that there may be some benefit in terms of motivation and retention as a result of the variable pay. As

discovered through the interviews, some executives were more motivated by variable pay than others, so the results will likely vary from college to college. Overall, however, the colleges with variable pay will likely realize some benefit, both in terms of more motivated executives and executives more likely to continue in their roles.

For colleges that presently utilize variable pay, this study offers a kind of environmental scan and points to the most common criteria for awarding variable pay and the most common levels of pay. In the quantitative study, 52.17% percent of colleges used multiple criteria for awarding variable pay, including individual performance, organizational performance, and some measure of financial performance, either at the portfolio or organizational levels. Only 21.74% based awarding variable pay on a single criterion. The interviewees supported the need for complexity and more specifically noted organizational measures such as employee engagement and student satisfaction. Some also noted the need for measuring leadership or personal competencies as part of individual performance. In terms of the level of pay, the quantitative results revealed that most colleges (74.7%) offered 10% or less for variable pay, while only a small percentage (15.3%) offered greater than 10%. In terms of impact, executives who received greater than 10% variable pay had higher levels of extrinsic motivation; however, those who received less than or equal to 10% variable pay were more intrinsically motivated and more motivated to be retained in their roles. So, colleges offering variable pay may want to consider the opportunity cost for variable pay higher than 10%.

For colleges considering the elimination of variable pay, the implications from this research fell within similar themes as for those considering adding variable pay but

with the reverse implications. Colleges in this context need to assess the risk or threat of reduced motivation and reduced retention as a result of removing the variable pay. The quantitative results of this study inferred that the implication would be some loss of both motivation and retention, but the loss would not be considerable. The Phase 2 participants expressed higher levels of motivation to be retained through variable pay than the Phase 1 participants. However, these higher levels could also be attributed to total compensation or being rewarded in other ways versus the variable pay in and of itself. Regardless, the risk of losing executives as a result of removing variable pay may be higher than the quantitative results suggest and should be considered carefully.

This study offers a few implications for the practice of utilizing variable pay in public colleges in Canada. First, colleges considering the implementation of variable pay will need to consider the statistically insignificant differences in motivation and weigh the opportunity costs for these differences. Second, colleges already using variable pay will need to continually assess their criteria for awarding variable pay and levels of variable pay to maximize motivational effects. Third, colleges contemplating the discontinuation of variable pay will need to assess the potential risk of reducing motivation, especially as it pertains to retention. And, finally, the conceptual research model introduced early in the study was simplified to remove the control variables that were unable to be utilized in the intended manner. However, the model could be further expanded and contracted for use by practitioners interested in further exploring other dependent or control variables related to variable pay plans. These implications will assist colleges in their decision making and in their risk and opportunity assessments.

## Overview

This study employed a mixed methods research design, exploring the breadth and depth of current practice through Phase 1 quantitative research followed by utilizing the knowledge and opinions of college leaders to further explain the how and why of the quantitative results through Phase 2 qualitative research. The quantitative questionnaire was sent to 237 college executives across Canada, which resulted in 68 responses. The data from the survey were validated utilizing a variety of statistical tests and then analyzed using a multivariate analysis of variance (MANOVA), which compared the means of two or more dependent variables across categorical independent variables. Four measures of motivation were assessed using questions from previous scholarly research: extrinsic motivation, intrinsic motivation, total motivation, and retention. Executives who received variable pay scored slightly higher by mean in all motivation measures—extrinsic, intrinsic, total, and retention; however, the differences between those who received variable pay and those who did not on the combined dependent variables was not statistically significant.

The results of the analysis provided the data necessary for the proposed hypotheses:

H1: Those who receive variable pay are less intrinsically motivated than those who do not receive variable pay. This hypothesis is rejected. The results pointed to those who received variable pay as slightly, but not significantly, more intrinsically motivated than those who did not receive variable pay.

H2: Those who receive variable pay are less likely to be retained in their current role than those who do not receive variable pay. This hypothesis is also rejected. The

results indicated that those who received variable pay were more slightly likely to be retained in their current role than those who did not receive it.

H3: There is no significant difference in extrinsic motivation between those who receive variable pay and those who do not. This hypothesis is supported. Although those who received variable pay were more extrinsically motivated, the difference was not statistically significant.

Phase 2, the qualitative phase, provided contextual understanding for the quantitative results. Seven interviews were conducted with college executives across Canada, representing a balance of region, gender, years of service, and proportion of variable pay disbursement. Interviewees were asked their opinions regarding the use and effectiveness of variable pay as it pertained to motivation. The results from Phase 2 confirmed and clarified the hypotheses from Phase 1. First, the results confirmed a somewhat positive relationship between variable pay and motivation but no substantial difference in motivation between those who received and those who did not receive variable pay. They clarified one hypothesis in which the results differed—the retention of executives. The Phase 2 participants expressed much higher levels of motivation to be retained through variable pay than the Phase 1 participants. Other themes that surfaced through the interviews included the following: 1) provincial governments had a prominent role in influencing and sometimes interfered with variable pay and compensation in general; 2) variable pay had the ability to motivate executives to act differently; and 3) there existed a potential for variable pay to influence the Canadian public college system.

**Research Limitations**

The most pervasive limitation in this study related to the sample size (N=68) for the quantitative study. The entire population (N=237) was both invited and reminded to participate, so all the data reasonably possible were obtained. Furthermore, although the sample was small, it represented a sizable portion of the total population at 29%, and it was unreasonable to assume that a significantly higher proportion of the population could practically be attained, considering the heavy workloads and busy schedules of college executives. However, the sample size caused a few limitations for this research study and brought into question representativeness, especially where only a portion of the overall sample was considered.

The sample size limited the ability to use the control variables across the dependent variables. Consequently, some of the data collected with respect to gender, location, years of service, and percentage of variable pay had limited value. Although those control variables could be applied to the entire population, when applied to only those who received or those who did not receive variable pay, the numbers were too small to examine. Because of the population size and the associated challenges in obtaining a large sample, the study may have been better suited to a qualitative design or a simpler statistical analysis, as some useful information was obtained from the quantitative data.

A further limitation of the study was taking a national look at a country where post-secondary education is legislated provincially and the contexts from one province to another differ considerably. For example, some provinces legislate executive pay levels, even to the point of providing salary grids, while other provinces exercise a “hands off”

approach, allowing boards to negotiate compensation with their presidents without limitations. This diversity in government involvement in compensation raises some challenges for analyzing the qualitative results but could have been included in the quantitative phase. Despite these challenges, however, themes were identified and rich results obtained.

**Recommendations for Future Research**

Further research could address some of this study's limitations. A qualitative study utilizing either more interviews or focus groups would eliminate the need for a large quantitative population and sample sizes. Another benefit of a qualitative design would be the ability to separate results by province to alleviate the inconsistent role of governments and politics. Whereas quantitative inquiry seeks to find meaning through numbers, qualitative inquiry seeks to find meaning through experiences. In this study, the number of occurrences and the extrapolation of the data gathered proved less useful than the experiential meaning gathered through the qualitative interviews. The qualitative data collected in this study closely mirrored the quantitative data, so it is reasonable to assume that the interview data could be representative of the larger population.

Another study that could provide meaningful contributions to this body of research would be to include all public colleges in North America in a quantitative study. This design would substantially increase the population size and draw a sample that would allow for more significant testing and analysis. A third study could focus on the motivating factors for college executives. If variable pay or compensation has some impact on motivation, are there other factors that have more influence? Interviewees mentioned factors such as recognition, fair pay, and engaging work. The results of this

type of research study could further inform boards and colleges as they seek to attract, retain, and maximize the efforts of their executives.

Finally, the control variables, although unable to be utilized fully for this research study as a result of the sample size, provided some interesting data to prompt further research. A researcher could inquire whether variable pay is valued differently between genders, explore further whether there is a difference in motivation based on different percentages of variable pay, or pursue whether regional or provincial policies influence the extent to which executives are motivated. Also, within each control variable are other questions for further exploration.

**Conclusions**

This study set out to explore the effectiveness of variable pay plans in Canadian public colleges. The analyses and discussions presented in this study provide a richer understanding of the role of variable pay as it relates to the intrinsic and extrinsic motivations to perform, as well as the retention of college executives. College executives are highly motivated, regardless of whether they receive variable pay or not. Although those who received it were marginally more motivated than those who did not, the difference was not statistically significant. However, the use of variable pay may be more effective when it comes to retaining college executives as it provides an avenue for recognition and a means to measure achievement. As a result, these individuals felt valued and motivated to keep doing good work.

In addition to informing practice, this study adds to the extremely limited body of research regarding the use of variable pay in the public sector. More specifically, it opens opportunities for a new body of research regarding variable pay in the public college

system. Furthermore, the study adds to the growing literature around public service motivation theory, supporting the premise of the theory regarding high intrinsic motivation for those in public service, regardless of compensation scheme.

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## Appendix A: Mandate

NorQuest College is a board-governed public college operating as a comprehensive community institution under the authority of the Post-secondary Learning Act of Alberta. With campuses and learning sites across the Edmonton region, NorQuest enhances access to educational opportunities through its role as regional steward.

NorQuest provides high-quality learning opportunities that prepare graduates for careers and further studies in business, industry, health sciences, human services, early learning and education, and information, communication, and design technologies. A leader in enhancing access to post-secondary education, the college is widely recognized for its foundational learning opportunities in academic upgrading, adult literacy, employment readiness, and English as a second language education. Credentials granted by the college include certificates, diplomas, and applied degrees.

NorQuest students experience unique educational opportunities in a vibrant and supportive environment that is responsive to changing learner needs and dedicated to learner access and success. Faculty and staff are committed to academic excellence and to enriching co-curricular student-life opportunities. At NorQuest, learners from diverse educational, cultural, and social backgrounds can achieve their personal and career goals and enhance their lives. NorQuest programming is sensitive to the cultural experience of Indigenous learners and learners for whom English is a second language. The college is a leader in meeting the needs of learners with disabilities.

As a comprehensive community institution with regional stewardship responsibilities, NorQuest engages community partners to meet literacy and foundational learning needs and ensures access to a full spectrum of post-secondary learning

opportunities. In rural and urban communities throughout the region, the college opens pathways for lifelong learning.

NorQuest is an active partner in Campus Alberta, collaborating with other post-secondary institutions, governments, business, and community agencies to enhance educational opportunities, strengthen the Alberta knowledge economy, and address the economic, societal, and cultural needs for education regionally and provincially.

NorQuest delivers educational opportunities to people where they live and work. The college provides flexible alternatives in both credit and non-credit programming, including transfer credits, career laddering, recognition of prior learning, bridging, general studies, and part-time study. Workforce training is customized to meet specific needs in communities and workplaces. Through our partnership with eCampusAlberta and other innovative distributed learning alternatives, the college serves students across Alberta, throughout Canada, and around the world.

NorQuest is committed to enhancing teaching and learning through applied research that informs its academic programming and builds capacity in the communities it serves. The college's centers for excellence are engaged nationally and locally with partners in business, industry, government, and communities, to develop innovative solutions to social and technological challenges.

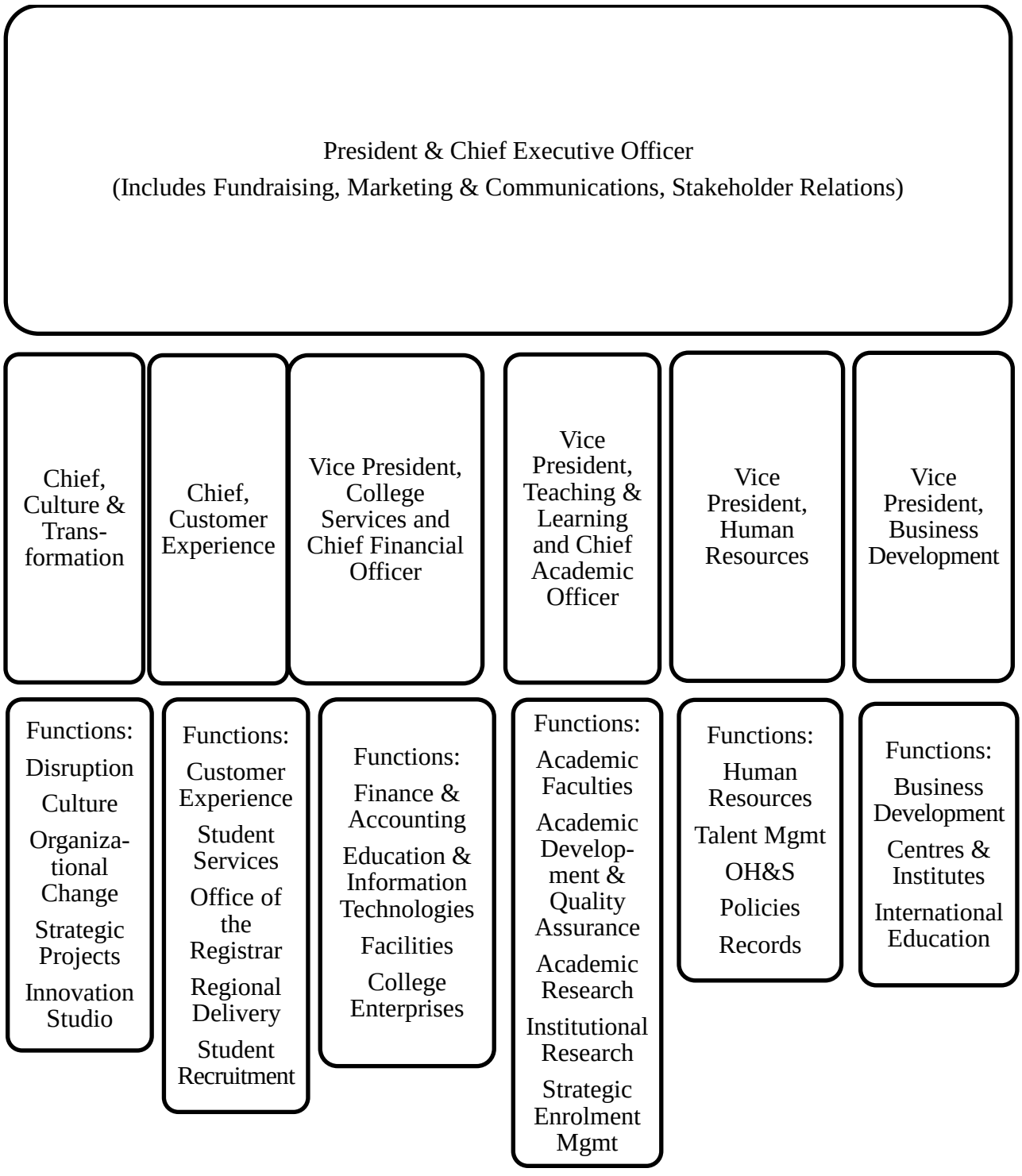
NorQuest College contributes to a strong Alberta economy by developing the skilled workforce that both public and private sector employers require. Educated in an environment that emphasizes critical thinking, experiential learning, technology integration, and intercultural competence, graduates of NorQuest College are global citizens and valued contributors in their communities.

*Mandate approved by the Minister of Enterprise and Advanced Education (formerly Advanced Education and Technology), June 2010*

Retrieved from

https://norquest.ca/NorquestCollege/media/pdf/publications/reports/strategic-plan.pdf on July 26, 2016.

**Appendix B: Functional Organizational Chart**



## Appendix C: Vision, Mission, and Values

Vision

NorQuest College is a vibrant, inclusive, and diverse learning environment that transforms lives and strengthens communities.

Mission

NorQuest College inspires lifelong learning and the achievement of career goals by offering relevant and accessible education.

Values

We value people. We:

- treat people with integrity and respect
- empower and encourage risk taking
- celebrate commitment, contribution, and accomplishments
- promote health and wellness

We value learning. We:

- foster creativity, innovation, and critical thought
- encourage growth, development, and lifelong learning
- build on the diversity of our learners, employees, and partners

We value our role in the community. We:

- display leadership and responsibility for our outcomes
- partner to achieve community goals

We value the quality of the processes we use in reaching our goals. We:

- demonstrate a learner-centred approach

- set clear expectations, measure results, and demonstrate accountability
- promote teamwork, cooperation, and sharing throughout the college
- follow fair process in accomplishing our objectives

Retrieved from

https://norquest.ca/NorquestCollege/media/pdf/publications/reports/strategic-plan.pdf on

July 26, 2016.

## Appendix D: Public Colleges in Canada

71 English speaking

48 French speaking

119 Total

Alberta

- Bow Valley College
- Grande Prairie Regional College
- Keyano College
- Lakeland College
- Lethbridge College
- Medicine Hat College
- NorQuest College
- Northern Alberta Institute of Technology
- Olds College
- Red Deer College
- Southern Alberta Institute of Technology

http://eae.alberta.ca/post-secondary/institutions/public/

British Columbia

- British Columbia Institute of Technology
- Camosun College
- Canadian College
- College of New Caledonia
- College of the Rockies

- Douglas College
- Kwantlen Polytechnic
- Langara College
- Northern Lights College
- Northwest Community College
- Okanagan College
- Selkirk College
- Vancouver Community College

Retrieved from http://www.aved.gov.bc.ca/publicpsed/colleges.htm on July 10, 2016.

Manitoba

- Assiniboine Community College
- Red River College
- University College of the North

Retrieved from http://www.edu.gov.mb.ca/ald/uni_coll.html on July 10, 2016.

New Brunswick

- Collège communautaire du Nouveau-Brunswick*
- New Brunswick Community College

Retrieved from

http://archives.gnb.ca/Exhibits/archivalportfolio/TextViewer.aspx?culture=en-CA&myFile=Education-3 on July 10, 2016.

Newfoundland and Labrador

- College of the North Atlantic

Retrieved from http://www.aes.gov.nl.ca/postsecondary/public.html on July 10, 2016.

Northwest Territories

- Aurora College

Retrieved from https://www.ece.gov.nt.ca/advanced-education on July 10, 2016.

Nova Scotia

- Nova Scotia Community College

Retrieved from http://novascotia.ca/lae/ on July 10, 2016.

Nunavut

- Nunavut Arctic College

Retrieved from http://gov.nu.ca/education/information/adult-learning-0 on July 10, 2016.

Ontario

- Algonquin College
- Cambrian College
- Canadore College
- Centennial College
- Collège Boréal*
- Conestoga College
- Confederation College
- Durham College
- Fanshawe College
- Fleming College
- George Brown College
- Georgian College
- Humber College

- La Cité collégiale*
- Lambton College
- Loyalist College
- Mohawk College
- Niagara College
- Northern College
- St. Clair College
- St. Lawrence College
- Sault College
- Seneca College
- Sheridan College

Retrieved from https://www.ontario.ca/page/ontario-colleges on July 10, 2016.

Prince Edward Island

- Collège Acadie Î.-P.-É.*
- Holland College

Retrieved from http://www.gov.pe.ca/ial on July 10, 2016.

Québec

- Cégep André-Laurendeau*
- Cégep Beauce-Appalaches*
- Cégep d'Ahuntsic*
- Cégep de Baie-Comeau*
- Cégep de Bois-de-Boulogne*
- Cégep de Chicoutimi*

- Cégep de Drummondville*
- Cégep de Granby-Haute-Yamaska*
- Cégep de Jonquière*
- Cégep de la Gaspésie et des Îles*
- Cégep de La Pocatière*
- Cégep de l'Abitibi-Témiscamingue*
- Cégep de Lévis-Lauzon*
- Cégep de l'Outaouais*
- Cégep de Maisonneuve*
- Cégep de Matane*
- Cégep de Rimouski*
- Cégep de Rivière-du-Loup *
- Cégep de Rosemont*
- Cégep de Sainte-Foy*
- Cégep de Saint-Jérôme*
- Cégep de Saint-Laurent*
- Cégep de Sept-Îles*
- Cégep de Sherbrooke*
- Cégep de Sorel-Tracy*
- Cégep de St-Félicien*
- Cégep de St-Hyacinthe*
- Cégep de Thetford*
- Cégep de Trois-Rivières*

- Cégep de Valleyfield*
- Cégep de Victoriaville*
- Cégep du Vieux Montréal*
- Cégep Édouard Montpetit*
- Cégep François-Xavier Garneau*
- Cégep Gérald-Godin*
- Cégep John Abbott*
- Cégep Limoilou*
- Cégep Lionel Groulx*
- Cégep Marie-Victorin*
- Cégep Montmorency*
- Cégep régional de Lanaudière à Joliette*
- Cégep Saint-Jean-sur-Richelieu*
- Champlain Regional College*
- Collège d'Alma*
- Collège Shawinigan*
- Dawson College
- Heritage College
- John Abbott College
- Kiuna Institute*
- Vanier College

Retrieved from http://www2.education.gouv.qc.ca/ens-sup/ens-coll/program/listecol.asp#cegep on July 10, 2016.

Saskatchewan

- Carlton Trail Regional College
- Cumberland College
- Great Plains College
- North West Regional College
- Northlands College
- Parkland College
- Saskatchewan Polytechnic,
- Southeast Regional College

Retrieved from https://www.saskatchewan.ca/residents/education-and-learning/universities-colleges-and-schools/post-secondary-institutions#regional-colleges on July 10, 2016.

Yukon

- Yukon College

Retrieved from http://www.education.gov.yk.ca/index.html on July 10, 2016.

*Francophone institutions.

## Appendix E: Summary of Questions

| Variable | No. | Question |
|---|---|---|
| Motivation: Extrinsic* | 1 | The manner in which I am compensated ensures that I am motivated to give the fullest effort possible. |
| | 2 | There are enough *opportunities to be recognized for my accomplishments* [promotion possibilities] to stimulate me to work hard. [1] |
| | 3 | I'm satisfied with the way in which my compensation is determined. |
| | 4 | I'm satisfied with the *opportunities for challenging work* [promotion possibilities] existing in the *college* [company]. [1] |
| | 5 | I get the feeling that the *college* [company] finds it important to have a solid and clear compensation system. [1] |
| | 6 | I'm enthusiastic about my compensation level. |
| | 7 | I find the compensation system to be motivating. |
| Motivation: Intrinsic* | 1 | I get much satisfaction from the work I do. |
| | 2 | My job is worth the effort. |
| | 3 | I'm very satisfied with my job. |
| | 4 | I often have to force myself to go to work. |
| | 5 | Usually I'm enthusiastic about my job. |
| | 6 | While at work I often feel like the day will never end. |
| Turnover intention** | 1 | I am actively looking for other jobs. |
| | 2 | I feel that I could leave this job. |
| | 3 | If I was completely free to choose, I would leave this job. |

*Questions modified from Van Herpen, et. al. (2005). Additions italicized; original in brackets.
**Questions from Sjöberg & Sverke (2000).

## Appendix F: Questionnaire for Quantitative Phase

### THE EFFECTIVENESS OF VARIABLE PAY PLANS IN CANADIAN PUBLIC COLLEGES

**ONLINE PARTICIPANT CONSENT FORM (for anonymous survey-based research)**

**Principal Researcher:**

**Norma Schneider**

**University**

**normasch@telus.net**

**Supervisor:**

**Dr. Kay Devine, Athabasca**

**Kay.Devine@fb.athabascau.ca**

Your responses are highly valued as the results will help inform colleges as they consider the use of variable compensation, sometimes referred to as pay for performance, in their organizations as a means to motivate and retain executives. Involvement in this study is entirely voluntary and you may refuse to answer any questions or to share information that you are not comfortable with. You will not be asked to provide any personal or identifiable information or data.

You may withdraw from the study at any time by simply closing out of your browser. Once you submit your completed survey, however, data cannot be withdrawn as the survey is completely anonymous. Please print a copy of this consent form for your records.

Please note that the survey data may be initially collected and stored on a server in the U.S. and is subject to access under the U.S. Patriot Act until it is transferred from that server to the researcher's computer.

All hard copy data will be kept in locked cabinets in my home office. All electronic data will be encrypted through password protection and stored on a computer at my home office. All information and records will be destroyed by confidential shredding;

electronic records will be deleted, when all project requirements have been met (including the 5-year mandatory retention requirement) on or around March 2022. It is my desire to retain the data for further studies pertaining to variable compensation, but only with the consent of participants. If more than 90% of participants consent, then I will create a research database. If more than 10% fail to consent, the data will be destroyed after the five-year period.

Results of this study may be requested by emailing me, or they will be accessible through Athabasca University once the dissertation has been posted. I plan to publish relevant scholarly articles in appropriate journals in the fields of higher education and human resources.

At the end of the survey, you will be asked questions pertaining to ongoing participation in the study as follows:

1. You will be asked to allow your survey responses to be retained beyond the five-year period for my further studies pertaining to variable compensation;
2. You will be asked to indicate your willingness to participate in the qualitative phase of the research study. If you agree, you will be asked to provide an email address. This email will not be stored with the data set and will be known only to the researcher as separate from the data.

If you have any questions about this study or require further information, please contact Norma Schneider or Dr. Kay Devine using the contact information above.

This study has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in

this study, please contact the Office of Research Ethics at 1-800-788-9041, ext. 6718 or by e-mail to rebsec@athabascau.ca.

Thank you for your assistance in this project.

Sincerely,

Norma Schneider

CONSENT: **The completion of the survey and its submission is viewed as your consent to participate.**

**Demographic information**

What is your senior executive role in the college?
- o President
- o Vice President, Provost, or Chief Academic Officer (reporting to a President)

What is length of your service as a senior executive?
- o ___ years

What is your gender?
- o Man
- o Woman

In what province or region is your college's main campus situated?
- o British Columbia
- o Alberta
- o Saskatchewan or Manitoba
- o Ontario
- o Quebec
- o The Maritime provinces (Nova Scotia, New Brunswick, Newfoundland, PEI)
- o The Territories (Nunavut, Yukon, Northwest Territories)

**Survey**

1. Does your College have a variable pay plan for senior executives?
   - o Yes
   - o No

2. What percentage of total compensation does the variable pay plan represent?
   - o ____%

3. What criteria does your college use to award variable pay? (choose all that apply)
   - o Individual performance
   - o Organizational performance
   - o Other (please list or describe)

Please indicate to what extent you agree or disagree with the following statements.

4. The manner in which I am compensated ensures that I am motivated to give the fullest effort possible.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| o | o | o | o | o |

5. There are enough opportunities to be recognized for my accomplishments to stimulate me to work hard.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

6. I am satisfied with the way my compensation is determined.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

7. I am satisfied with the opportunities for challenging work in the college.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

8. The college finds it important to have a solid and clear compensation system.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

9. I am enthusiastic about my compensation level.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

10. I find the compensation system to be motivating.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

11. I get much satisfaction from the work I do.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

12. My job is worth the effort.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

13. I'm very satisfied with my job.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

14. I often have to force myself to go to work.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

15. Usually I am enthusiastic about my job.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

16. While at work I often feel like the day will never end.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

17. I am actively looking for other jobs.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

18. I feel that I could leave this job.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

19. If I was completely free to choose, I would leave this job.

| Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

## Appendix G: Interviews for Qualitative Phase

### PARTICIPANT CONSENT FORM

**Principal Researcher:**
Norma Schneider
normasch@telus.net

**Supervisor:**
Dr. Kay Devine, Athabasca University
Kay.Devine@fb.athabascau.ca

You are invited to participate in a research study about the effectiveness of variable pay plans, which is sometimes referred to as pay for performance, in Canadian public colleges. This study will analyze and describe the relationships between variable pay and motivation as well as retention amongst senior executives. I am conducting this study as a requirement to complete my Doctor of Business Administration.

As a participant, you are asked to take part in an interview, which may be conducted in person, on-line via Skype or another appropriate tool, or on the phone. All interviews will be audio recorded. The nature of the questions will relate to your interpretation of the results of the first phase of the study, which includes the analyzed data and results pertaining to the occurrence of variable pay and its relationship to motivation and retention amongst college executives. Participation will take approximately 1.5 hours of your time.

Your responses are highly valued as your interpretation of the results will help inform colleges as they consider the use of variable compensation in their organizations as a means to motivate and retain executives. Involvement in this study is entirely voluntary and you may refuse to answer any questions or to share information that you are not comfortable sharing. You may withdraw from the study at any time during the data collection period by contacting the principal investigator and indicating your desire to withdraw in writing. Any data collected in hard copy will be shredded and any electronic recordings or transcriptions will be deleted.

Transcriptions of the interview may be provided to you for your review via email, and you will be given ten calendar days to provide any comments or clarifications or to withdraw from the study.

Results of this study may be made available to you by request to the principal investigator on this consent below or by email. Alternately, the study will be accessible through Athabasca University once the dissertation has been posted. The principal investigator plans to publish relevant scholarly articles in appropriate journals in the fields of higher education and human resources.

If you have any questions about this study or require further information, please contact Norma Schneider or Dr. Kay Devine using the contact information above.

This study has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this study, please contact the Office of Research Ethics at 1-800-788-9041, ext. 6718 or by email to rebsec@athabascau.ca.

Thank you for your assistance in this project.

**CONSENT:**

I have read the Letter of Information regarding this research study, and all of my questions have been answered to my satisfaction. I will keep a copy of this letter for my records.

My signature below confirms that:

- I understand the expectations and requirements of my participation in the research;
- I understand the provisions around confidentiality and anonymity;
- I understand that my participation is voluntary, and that I am free to withdraw at any time with no negative consequences;
- I am aware that I may contact the researcher, the researcher's supervisor, or the Office of Research Ethics if I have any questions, concerns or complaints about the research procedures.

Name (please print): _____

Date: _____

Signature: _____

By initialing the statement(s) below,

_____ I am granting permission for the researcher to use an audio recorder

_____ I acknowledge that the researcher may use specific quotations of mine, without identifying me

_____ I would like to receive a copy of the results of this research study by

Email (provide email address):

_____

or

Mail (provide mailing address):

_____

If you are willing to have the researcher contact you at a later time by e-mail or telephone for a brief conversation to confirm that I have accurately understood your comments in the interview, please indicate so below. You will not be contacted more than six months after your interview.

_____ Yes, I would be willing to be contacted.

**INTERVIEW QUESTIONS**

1. How do you explain the participation of Canadian public colleges in variable pay plans?

2. Why does your organization use variable pay? *(OR Why does your organization not use variable pay?)*

3. How is your variable pay determined? *(OR How is your pay determined?)* Are these factors within your influence? Are they within your control?

4. How does variable pay *(OR the lack thereof)* influence your retention in your present role? Why?

5. How and why does the presence of variable pay motivate you to work differently? *(OR how and why do you think variable pay motivates individuals to work differently? Do you think it would motivate you to work differently?)*

6. How does variable pay maximize motivation in college executives?

7. How does variable pay impact the public college system?

Note: Text in italics represents how the questions were adapted for those who did not receive variable pay.

## Appendix H: Phase 1 Summary of Findings

Phase 1 aimed to answer the following questions:

Q1: What proportion of total compensation is attributable to variable pay?

Q2: What factors are considered to determine if variable pay is awarded?

Q3: Does the variable pay plan retain top talent?

Q4: Does the variable pay plan improve individual motivation?

A questionnaire was prepared using an online survey tool, administered via the Web, and delivered via email. The researcher prepared a list of presidents and academic vice presidents (the highest-ranking academic position reporting to the president, who may be referred to as the provost or chief academic officer) and emailed each person the survey along with directions and appropriate ethics review information. The total population was 235 and the minimum opportunity sample, derived by those who choose to participate, was set at 50 participants. The results were recorded and analyzed using IBM SPSS Version 24 software.

A total of 68 responses were returned on the quantitative survey, which represents 28.94% of the total population and exceeds the target sample size of 50. However, despite the positive response, the number of responses was still reasonably small (Hair, Black, Babin, & Anderson, 2010), which presented some challenges in the validation of data and achieving significant results through testing. As a result, some decisions were required regarding the inclusion and exclusion of data to achieve the most reliable results.

From a demographic perspective, the sample represented a good cross-section of college executives across the country. More vice presidents versus presidents participated at a ratio of 70/30, which is similar to the total surveys sent, which were at a ratio of

65/35. Gender was balanced, with 52% female and 48% male. The executives were fairly new to their roles, with just over half (58%) of the respondents in their first five years of service, and 39% serving more than five but fewer than 20 years, leaving only 3% serving over 20 years.

Participants indicated from which province they hailed, and there was at least one respondent per category, with Alberta, British Columbia, and Ontario representing the highest number of participants. Because the numbers for some provinces were small, the results were grouped. The West (BC, AB, SK, MB, YK, NV) participation was higher than the East (ON, PQ, NB, NS, PE, NF) at a ratio of 60/40, even though the East constitutes more of the country's population. In terms of variable pay, less than half (40%) of respondents receive variable pay, and of those, 83% receive less than 20% of their total compensation as variable, with almost half of those receiving less than 10%.

## Results for Research Questions

### What proportion of total compensation is attributable to variable pay?

Participants were to identify the percentage of total compensation their variable pay plans represent. The number of responses was limited to those participants who receive variable pay. The vast majority of responses receive less than 20% as variable. Of those, 39 % receive less than 10% and 44% receive between 10% and 20%. Only a few (4%) receive higher than 20% of their compensation as variable pay.

**What factors are considered to determine if variable pay is awarded?** For this research question, participants were asked to choose from a list of factors as many factors as applied to their circumstance. Individual performance and organizational performance were the most important, with 91% and 82% of participants, respectively, including these

as criteria. Financial results were less important, with only 26% reporting either portfolio or organizational level results as criteria. Multiple criteria versus a single criterion was most prevalent. Only 22% of respondents cited a single criterion, while 30% had four or more, 52% had three or more, and 88% had two or more.

**Do variable pay plans retain college executives in their roles? Do variable pay plans improve individual motivation?** A one-way multivariate analysis of variance was run to determine the effect of variable pay on motivation. Four measures of motivation were assessed using questions from previous scholarly research: extrinsic motivation, intrinsic motivation, total motivation, and retention. Executives who receive variable pay scored slightly higher in all motivation measures—extrinsic, intrinsic, total, and retention; however, the differences between those who receive variable pay and those who do not on the combined dependent variables was not statistically significant.

## Control Variables

The original intention was to utilize the demographic statistics as control factors; however, because of the sample size, some of the numbers for each controlled variable fell below the acceptable benchmark, putting into question the ability to generalize results. Therefore, those analyses were not formally considered. To make use of the demographic data as it pertains to the motivation variables, a further MANOVA was conducted with each control variable acting as the independent variable. The intended control variables produced some interesting results, although not in direct alignment with the research questions. The following are some of the highlights:

- Eastern Canada participants have slightly higher levels of motivation across all motivational variables when compared to their Western counterparts.

- Those executives with five or more years of service have higher levels of motivation across all categories versus those with fewer than five years of service.
- Females are more motivated than males across all motivational variables.
- Executives who receive more than 10% variable pay have higher levels of extrinsic motivation and slightly higher levels of total motivation; however, those who receive 10% or less are more intrinsically motivated and more motivated to be retained in their roles.

## Conclusion

There is great debate among business and human resources professionals and scholars regarding the effectiveness of variable pay plans to motivate executives to improve performance and be retained in their roles. Although there are a significant number of studies to support the efficacy of variable pay in both the private and public sectors, the first phase of quantitative data for public colleges in Canada did not support any significant difference in motivation between those who receive and those who do not receive variable pay. The next phase of this study will focus on the thoughts and opinions of college executives across the country to provide insights to explain these results.

# Appendix I: Ethics Approval

Athabasca University
RESEARCH CENTRE

## CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

**Ethics File No**.: **22396**

**Principal Investigator**:
Mrs. Norma Schneider, Graduate Student
Faculty of Business\Doctorate in Business Administration

**Supervisor**:
Mrs. Norma Schneider (Principal Investigator)
Dr. Kay Devine (Supervisor)

**Project Title**:
THE EFFECTIVENESS OF VARIABLE PAY PLANS IN CANADIAN PUBLIC COLLEGES

**Effective Date:** January 03, 2017 **Expiry Date**: January 02, 2018

**Restrictions:**

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

**Approved by:** **Date: January 3, 2017**

Fathi Elloumi, Chair
Faculty of Business, Departmental Ethics Review Committee

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Athabasca University Research Ethics Board
University Research Services, Research Centre
1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.675.6718

Athabasca University
RESEARCH CENTRE

## CERTIFICATION OF ETHICAL APPROVAL - RENEWAL

The Athabasca University Research Ethics Board (AUREB) has reviewed and approved the research project noted below. The AUREB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and Athabasca University Policy and Procedures.

**Ethics File No**.: **22396**

**Principal Investigator**:
Mrs. Norma Schneider, Graduate Student
Faculty of Business\Doctorate in Business Administration

**Supervisor**:
Dr. Kay Devine (Supervisor)

**Project Title**:
THE EFFECTIVENESS OF VARIABLE PAY PLANS IN CANADIAN PUBLIC COLLEGES

**Effective Date:** January 01, 2018 **Expiry Date**: January 02, 2019

**Restrictions:**

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

**Approved by:** **Date:** January 1, 2018

Joy Fraser, Chair
Athabasca University Research Ethics Board

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Athabasca University
RESEARCH CENTRE

## CERTIFICATION OF ETHICAL APPROVAL - RENEWAL

The Athabasca University Research Ethics Board (AUREB) has reviewed and approved the research project noted below. The AUREB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and Athabasca University Policy and Procedures.

**Ethics File No**.: **22396**

**Principal Investigator**:
Mrs. Norma Schneider, Graduate Student
Faculty of Business\Doctorate in Business Administration

**Supervisor**:
Dr. Kay Devine (Supervisor)

**Project Title**:
THE EFFECTIVENESS OF VARIABLE PAY PLANS IN CANADIAN PUBLIC COLLEGES

**Effective Date:** January 02, 2019 **Expiry Date**: January 01, 2020

**Restrictions:**

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

**Approved by:** **Date:** January 2, 2019

Carolyn Greene, Chair
Athabasca University Research Ethics Board

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