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ABSTRACT

SAMANTHA A. REEVES. Employee Referrals: A competitive advantage or operational inefficiency? (Under the direction of Dr. George Banks)

Effective and efficient recruiting is required for firms as they seek to maintain a competitive advantage in the race to hire top talent. United States unemployment rates had reached historical lows of less than 4% as of the first quarter of 2019 (Bureau of Labor Statistics, 2019). To maintain connectivity to employee networks, employers have leveraged employee referral programs (ERP) and other sources such as LinkedIn for hiring efforts. Firms are inclined to attempt to invoke extrinsic motivations by increasing bonus offerings for ERPs as they seek to fill roles that are challenging to source.

This study aims to leverage three years of hire data from a U.S. accounting and professional services firm to address three gaps with ERP research, these include; program effectiveness (performance and retention of hires from ERPs and cost-per-hire of ERP hires), comparison of hires from ERPs and LinkedIn and finally, a review of contingent value or contributions to target populations that enable a competitive advantage. Data analyses provide guidance for practitioners to ensure effective and efficient recruiting strategies. The study uncovered if the presence of a bonus (or level of bonus) influenced the performance and retention of hires generated from an ERP. Additionally, the evolution of social and professional networking reinforced the importance to compare ERPs to LinkedIn hires to further understand how each has contributed to important targeted populations, including women and minority hires.

Keywords: Employee referral programs, word-of-mouth recruiting, recruiting channels, recruiting inefficiencies, talent acquisitions strategies, resource-based view of the firm.

DEDICATION

I dedicate this to my father, Jerry Aurelia, who has always been my biggest fan. Through the most challenging times life has thrown at me, you've always been there and have been the greatest cheerleader. Because of you, I knew if all else failed, you'd be there to pick me up. There is no way I could have made it here without your unconditional support, love and encouragement. I learned the value of resilience from YOU. Thank you for being the most humble, honest and comedic role model any daughter could ask for. It was your strength and work ethic that helped create a powerful force - we were always ready to tackle whatever challenge was in front of me (us). I only hope I can leave half the legacy that you have continued to create. I am who I am because of you. Second, I would like to dedicate this to my supportive husband Joe – while we were both challenged with random life "stuff" and the very real juggle-struggle, you pushed me to keep going and had the confidence I often didn't through the hardest parts of this endeavor. I am so happy you chose to share this journey through life with me. Finally, to my son Preston – YOU are my why. Never doubt your abilities and never let anyone suggest you can't do something. Thank you for making me laugh when I needed it and for giving me hugs and encouragement every time, I asked for it (and sometimes when I didn't).

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LIST OF ABBREVIATIONS

ERP Employee Referral Program

CPH Cost Per Hire

RBV Resource Based View

SHRM Society for Human Resource Management

SDT Self Determination Theory

VRIO Value Rare able to be Imitated Organized

CHAPTER 1: INTRODUCTION

Recruitment has become one of the most critical human resource functions for organizational success and survival in the 21st century (Breaugh, 2008; Pieper, 2015; Saks, 2006). According to the resource based view of the firm (RBV), firm recruiting activities can meet the criteria for a source of strategic advantage (Barney & Wright, 1998). United States unemployment rates have reached historical lows of less than 4% as of the first quarter of 2019 (Bureau of Labor Statistics, 2019). The downward trend with unemployment is shifting the "war for talent" into more of a "race for talent" as organizations need to be faster to engage candidates and to quickly move desired talent through the recruiting process. Firms are continuously working to identify sourcing channels that will enable them to efficiently attract new talent (Sinha & Thaly, 2013). Strategies leveraged by talent acquisition teams have evolved to include recruitment marketing, employment branding, online advertising, search engine optimization and other marketing methods to build awareness while remaining competitive. The investment made to support these strategies can be significant (Breaugh, 2013).

Unlike previous decades, the shift in the employment landscape requires firms to be attentive to candidate needs when it comes to being an employer of choice, as candidates are often seeking more than just a paycheck in their searches for employment (Hogg & Terry, 2000; Pratt, Rockmann, & Kaufmann, 2006). Job seekers have seen increased access to firm information as technology and web presence for firms evolve. This allows candidates to be more selective when it comes to where they want to work (Thibault Landry, Schweyer, & Whillans, 2017). Cultural alignment, growth

opportunities, and numerous other benefits such as time off, bonus potential or tuition reimbursement can impact a candidate's decision to apply for jobs (Aaker, 2013).

The goal for any firm's recruiting efforts should be to produce a pool of qualified candidates, move them quickly through the recruiting process, and to hire the most suitable person for the job (Breaugh, 2009). The effectiveness of any recruiting channel can be dependent on the magnitude of non-hirable candidates entering through these channels (Phillips & Gully, 2015). ERPs are designed to reward current employees for reaching into their social or professional networks to recommend people they already know for open positions in their company. Assumptions around ERPs in the past suggested that employees prescreened and were likely to refer only qualified candidates in order to maintain their own reputation (Kirnan, Farley, & Geisinger, 1989).

Considering the shift in employment behaviors and competition amongst employers to maintain talent, it is worth reviewing and assessing the behaviors generated through ERPs today.

Referrals from current employees have long been regarded as the most "beneficial" source of hires, as employers believe candidates presented through referrals are more likely to be culturally aligned (Kirnan et al., 1989; Pieper, Greenwald, & Schlachter, 2018; Yakubovich & Lup, 2006). Practitioners and researchers have long claimed that referrals from the current workforce are likely to stay longer and perform better than candidates sourced through other recruitment channels (Brown, Setren, & Topa, 2016; Weller et al, 2009). In fact, much of the research over the last two decades related to ERPs has revolved around the performance and firm (economic) benefit. Cost benefits highlighted through much of the research include the costs associated with

turnover or replacement costs for hires (Freibel et al, 2019; Shinnar, 2004; Thibault et al, 2017) or the relatively low cost for ERPs as a sourcing channel as compared to other sources such as advertisements or job fairs (Breaugh, 2013). Despite the suggested benefits of ERPs, there are gaps in the extant literature that must be answered to fully understand when and to what extent ERPs can truly meet the criteria of a strategic resource according to the RBV theoretical framework (Barney & Wright, 1998). Recent research has seemingly shifted from focusing on tenure and performance (Schlachter & Pieper, 2019). However, closer examination of potential relationships that impact ERP effectiveness (or benefit) continues to be a beneficial exercise that can enable data-driven strategies for talent acquisition.

Prior to understanding the strategic recruiting channel research related to ERPs, it was important to understand the full breadth of research focused on ERPs to date. Much of the literature focusing on ERPs comes from a number of expertise areas, including; Marketing (Buttle, 1998), Economics (Burks, Cowgill, Hoffman, & Housman, 2015a; Ekinci, 2016; Galenianos, 2014), Sociology (Schwed et al, 2014), Human Resources (Bloemer, 2010; Taber & Hendricks, 2003), Psychology (Schlachter et al, 2019; Shinnar, 2004; Stockman et al, 2017) and Management (Sinha & Thaly, 2013).

Across fields, it is evident that there are three major gaps as the practice of ERPs has continued to evolve. The three gaps that I will address include; program effectiveness (including quality of performance, retention and cost); comparison of these factors of ERPs to more modern channels like LinkedIn; and finally, contingent value (contributions to target populations that enable competitive advantage for firms).

Addressing the first gap, there has been limited examination in the last decade around ERP effectiveness (Van Hoye, 2013). For the purpose of this research, effectiveness analyses will examine; cost effectiveness (e.g. cost-per-hire) and quality of hires (e.g. performance and time in position). The ease for employees to cast wide nets to their social networks while firms are leveraging those same networks may be providing hires, but it also may be invoking more unintended clutter or duplicity for firm recruiters to cull through. Large pools of applicants can introduce increases with costs-per-hire and inefficiencies that compromise recruiter time on non-hirable talent.

Advances in technology and social media provide alternative mediums for employees to engage referrals (Schlachter & Pieper, 2019). Practitioners have potential to lose valuable time on the wrong talent where they could otherwise be direct sourcing or allocating funds differently to avoid inefficiencies and frustration for all parties within the hiring process (Barber, 2005). If not run efficiently, ERPs have the potential to infuse unnecessary clutter and if not monitored, the wrong hires may be entering the firm as a result of the assumption that ERP hires are the "best" hires. There is significant value in regular review of all talent sourcing channels to assess time in position and overall performance metrics related to volume of candidate referrals and hires (Williams, 2009).

The majority of research on ERPs has taken isolated approaches to investigating the cost benefit, cultural alignment or performance and retention (Schlachter & Pieper, 2019; Zottoli & Wanous, 2000). Several researchers have found that referred employees demonstrated higher performance and retention relative to non-referred employees (Brown et al, 2016; Pieper, 2015). This research seeks to reinforce that successful ERPs

need regular maintenance and review - this may be where many firms are neglecting to review valuable data that offer insight on program health.

Another element of effectiveness revolves around cost. The cost to replace employees today can be upwards of 20-50% of an employee's base compensation according to the Society for Human Resource Management (SHRM) in 2015. When firms spend excessive time and resources hiring the wrong employees, they not only lose productivity time for the open position, they see increased expenses in sourcing efforts to replace that talent. Ultimately, time and dollars are wasted hiring the wrong people (Craig, 2015). Firms are challenged to consider the most valuable, productive positions they seek to fill and leverage strategies that will facilitate fast and efficient placement of the right hires (Burks et al, 2015). While some cost-per-hire metrics will facilitate understanding, the true economic value for ERP hires would require additional data on productivity (Burks et al, 2015b). Turnover is agreed amongst many researchers to be one of the most important cost considerations in recruiting. Hiring the wrong employees can further delay productivity of teams and impact a firm's bottom-line financials (Ordanini & Silvestri, 2008; Breaugh, 2013, Schlachter & Pieper, 2019). Investing in the right sourcing channels that generate high performing talent with minimal turnover is one of the keys to ERP success.

ERPs have cost implications depending on how programs are built. Some programs offer tiered payouts that pay smaller amounts for roles that are generally easier to fill (i.e., administrative assistants or entry-level support), whereas more challenging roles (specialists, business development or international tax professionals) may be on the higher end of the pay tier given they are critical roles that likely contribute to firm

revenue (Pieper et al, 2018, Van Hoye, 2013). Firms may benefit from considering the intrinsic (non-monetary) incentives and review if non-monetary bonus paid referrals are staying longer or performing better than hires from paid programs or other channels. If referrals that are hired without monetary incentive are higher performing and remain employed longer, there may be value in investing more in the current workforce versus increasing ERP bonus incentives to drive more volume. This is also not something that has been highlighted in previous research.

Cullen (2001) referred to the connection of employee life-cycle data as "erecruiting" – this concept includes the collection of information about employees or candidates for the purpose of making strategic, data-driven decisions. Life-cycle data includes the data gathered from the attraction, engagement and retention stages of employment, more context on these areas later. The need to focus on integrated data and systems are more likely to drive the redesign of existing HR practices. Even without fully integrated systems, the data should be examined and can drive more efficient strategic direction. Research on recruiting source value has continued for decades (Blau, 1990; Pieper, 2013; Saks, 1994; Zottoli, 2000). Practitioners can overlook or miscalculate the value of each recruiting source without connecting the data regularly to measure effectiveness of each channel. Life-cycle data for the purpose of this research refers to the data points related to selection of referrals as well as the performance and time in position for the hires obtained through referrals.

A second major gap within the ERP recruiting literature is understanding and comparing ERP hiring against social media (specifically LinkedIn). This includes reviewing which provides stronger performers who have longer retention or looking into

yield ratios to understand the firm's return on investment. Yield ratios can include the number of applicants, phone screens conducted, interviews and offers extended before ultimately leading to a hire. These are worth paying attention to as high front-end numbers in this funnel can be an indication of inefficiencies. Analysis of yield ratios can enable firms to identify the proportion of hires from the total number of applications to generate the cost-per-hire. This ultimately provides an understanding of return on investment for each channel (Rafaeli et al, 2005). Additional implicit costs may also be assumed through yield ratios as time and effort for each stage of recruiting requires engagement with recruiting professionals, interviewers, and hiring managers (Rafaeli et al, 2005).

Comparatively, each of these channels require significant investments and should demonstrate cost-per-hire metrics that justify the expense firms incur leveraging such resources. If one channel is more beneficial than the other, those dollars may best be spent on awareness and branding rather than leveraging it as a direct sourcing channel if costs are not justified. The distinction of which channel provides stronger performing, longer tenured hires has been unfounded to date. Both sourcing channels are considered firm imperatives today (Brotherton, 2012), and there is a benefit to uncovering which yields the most worthwhile candidates. As stated earlier, there is risk in duplicity of candidates – especially given that employees are likely leveraging LinkedIn to connect to their own networks to find referrals. The straightforward approach to determine this will be considering cost, time in position and performance between ERPs and social media web tools like LinkedIn. Zottoli and Wanous, (2000) conducted a meta-analysis of recruiting source research and noted the opportunity for future research to assess the

effectiveness of the internet and social media as a recruitment source. In a 2019 Harvard Business Review featured story, recruiting was highlighted as one of the most important sources of competitive advantage for firms. Only about a third of U.S. companies reported that they monitor whether their hiring practices lead to good employees; only a minority track cost per hire (Cappelli, 2019).

One could question if the reason for high-volume non-hired talent is because of heavily pushed or poorly executed referral programs. Without an adequately developed workforce planning or strategic talent sourcing, it is possible that ERPs are more heavily pushed to counter the inability to hire talent through other channels. No firm wants to waste resources on non-hired talent as a result of heavily pushed or poorly executed referral programs. Pushing ineffective campaigns could have a negative impact on the existing employee population (Schlachter & Pieper, 2019; Friebel, 2019). One of the most important considerations related to ERPs is that higher bonuses may increase referrals, but the quality of referrals may be impacted (Friebel et al, 2019).

The third gap this research seeks to address is related to contingencies that may affect the value of ERPs. To build upon efficiency opportunities within the talent acquisition space, recruiting teams are challenged with not only finding the right fit for roles, but firms in general are recognizing the value in ensuring they have a diversified workforce (Rubineau & Fernandez, 2013). It is important to ensure all channels leveraged for recruiting are supporting and driving an appropriate mix of talent that ultimately become hires. In looking at ERPs specifically, the evolution of social media channels like LinkedIn, Glassdoor, and Indeed.com have created a shift in how candidates want to learn about jobs and how current employees can share openings. With the dependency on

social media for job-seekers the recruiting landscape has changed for job seekers as well as firms (Sivertzen, Nilsen, & Olafsen, 2013). This could mean that the actual hires are getting to a firm more directly than before (from a firm's careers page). Looking at each year of activity within an ERP, a firm can see if yield ratios and activities are worthwhile. If referral numbers are decreasing, there may be a need to revitalize or communicate the specifics around the campaign while generating "buzz" around incentive opportunities. At the same time, if referral candidates are increasing while hires are not, clarity or program requirements may need to be reinforced.

In summary, the current study will determine effectiveness and potential inefficiencies with ERP and LinkedIn sourcing channels for the firm in review. I will begin with a review of the RBV to illustrate how ERPs were specifically designed to serve as a strategic resource for a firm. Next, incentives and motivational theory will be considered to demonstrate the theoretical mechanisms that operate in the ERP processes. An examination of how paid referrals compare to non-paid referrals will facilitate an understanding as to whether there is a positive relationship between incentives and beneficial hires. As firms look at their overall sourcing efforts, it is worthwhile to consider whether (or to what extent) these channels are contributing to women and ethnicity hires year over year. The answers to these and many other questions may reveal some data that should drive future planning or decision making around how and where ERPs are adding value and where they might be creating more noise in the system (Taber & Hendricks, 2003).

To further supplement the findings, I will provide recommendations for practitioner application and note any gaps or reinforcement with existing studies

effectiveness at a U.S. based accounting firm. Additionally, ERPs will be compared to social media recruiting (specifically LinkedIn). While there are a number of channels firms leverage for sourcing talent, ERPs and LinkedIn (social media) have been considered essential "must have" channels for firms to recruit (Brotherton, 2012; Doherty, 2010). The firm used for this study is familiar with the "race for talent" and has expressed the importance of attracting and hiring top talent efficiently. They operate with the understanding that doing so is imperative to maintain a competitive advantage. The results from this study will lead to recommendations for both theory and practice to optimize ERPs for future hiring.

CHAPTER 2 – LITERATURE REVIEW, HYPOTHESES & RESEARCH QUESTION DEVELOPMENT

2.1 Resource based view of the firm

The RBV theoretical framework is relevant when considering recruitment strategies, and specifically ERPs, as a source of competitive advantage. When firms leverage their existing employee population, there is an opportunity to connect with talent that is more closely aligned to firm goals and culture. Simply put, an existing employee is likely to know others, like themselves, worth referring. Researchers who have contributed to or examined RBV have agreed that recruitment plays a significant role in the quality of a firm's human capital (Amit & Belcourt, 1999; Ordanini & Silvestri, 2008; Terpstra & Rozell, 1993). The key suggestion is that firms need to actively seek competitive capabilities that are unmatched by competition (Barney & Wright, 1998). In thinking about RBV, typical resources include financial, physical, organizational or human capital. Fundamentally, the RBV suggests that strategic resources need to follow the VRIO framework. This means they must have something valuable that is rare, not able to be imitated and organized in a way that allows for long term advantage (Banks & Kepes, 2015; Wright, McMahan, & McWilliams, 1994).

Human capital is arguably the most costly and important resource a firm has, therefore, successful recruiting to promptly replace or add talent should be equally important. An existing workforce knows the firm and can offer authentic employment brand messaging that can reduce perceived risk or increase interest for potential applicants (Collins & Stevens, 2002; Van Hoye & Lievens, 2005; Vecchio, 1995). Efficient leveraging of the current workforce to reduce time to fill or cost implications

associated with talent acquisition can protect against overspending or inaccurately operationalizing at least two of the four criteria identified by RBV. Talent and ability of one's workforce is arguably the most distinct competitive advantage a firm has (Shinnar et al., 2004). In thinking about ERPs from an RBV perspective, all four criteria are relevant.

In offering *value*, costs for recruitment can be reduced by leveraging ERPs to minimize external fees or sourcing time and effort by recruiters. Search firms alone can charge as much as 20-30% of an employee's annual compensation. Several hires coming from outside vendors due to time or resource constraints can be a costly pursuit of talent. The value in hiring talent promptly and efficiently, can be demonstrated through the hiring of productive employees who can drive increases in revenue.

The value associated with ERPs and other channels can also be assessed using a simplified net cost-per-hire formula. Additionally, value could be associated with the productivity and return associates generate based on performance. To fit the criteria of being *rare*, ERPs are likely to generate the identification of candidates who are not only fit various roles, but may have not been seeking employment (i.e., the "passive" candidate). There are also greater chances of finding niche talent that are often getting outreach from other firms or agencies. These candidates are more likely to engage with people they know who can speak to job requirements or firm benefits. This type of insight is not as easy to get if engaging with a third-party search.

Regarding the inability to be *imitated*, ERPs have the potential to be uniquely motivating when properly implemented, communicated, and evaluated. It is suggested that ERPs enable a firm's ability to attract and engage passive job seekers to consider

employment with their firms (Burks et al., 2015a; Schlachter & Pieper, 2019). The ability to post jobs, brand the firm and allow recruiters the ability to direct source from LinkedIn can be costly.

The firm under review for this research invests nearly \$270k a year to offer unique branding, job postings, and access to recruiter licenses that give recruiters the ability to search candidate profiles for open positions. In addition, they spend an average of \$572k per year on referral hire bonus payouts and the effectiveness of the program is not assessed with regularity to identify inefficiencies or strain on recruiter time.

Effectiveness of this program may be challenged if the employees are not delivering as intended. If communication around expectations and requirements for incentive eligibility is not properly communicated, employees will cease activities to offer referrals (Burks et al., 2015b).

Invoking too many referrals that do not lead to hires can be detrimental to the credibility of the ERP and could deter further engagement with the program from employees. The premise of RBV provides a theoretical explanation as to how ERPs can create a competitive advantage for firms. It is essential to keep a close connection to the data from ERP referrers and referrals to maintain a view of behavior of the current workforce as well as the referral population.

Both motivational theory and firm value for ERPs will be considered for the purposes of this research. Simply having an ERP does not mean it is providing intended value (Friebel, Heinz, Hoffman, & Zubanov, 2019). Remaining focused on both areas can provide a clearer picture, enabling more precise, worthwhile strategy development for firm talent acquisition efforts.

2.2 Resource based view: Employee life-cycle data

The lifecycle of an employee revolves around three basic categories of attract, engage, and retain. Each of these categories has valuable data points that can provide clarity around ERP effectiveness. Attraction is primarily focused on recruiting talent, while engagement triggers individuals' satisfaction, trust, and feeling of valuable utilization of skills (Laumer et al., 2015; Macey, 2009). Retention is focused on keeping the employees from considering or moving to other firms and is important in that costs to replace employees includes finding a replacement, covering a vacant position, as well as hiring and training someone new (Hester, 2013; O'Connell & Kung, 2007).

The Society for Human Resource Management (SHRM) noted in 2015 noted that it is essential to conduct ongoing analysis to ensure ERPs are yielding intended results. With ERPs (and any channel) many candidate applications without a worthwhile number of hires (or hires that stay and perform well) is not the most cost-effective use of time and resources. One of the potential reasons there is limited research related to ERP effectiveness could be that data are often unintegrated (Burks et al, 2015; Rafaeli, 2005). Each point of data has the potential and in many cases does reside on a different system (Erts, 2017; Laumer, Maier, & Eckhardt, 2015; Lee, 2007). Not all firms have single view platforms that get the full view of behaviors from both referrers and referrals (Wiblen, Dery, & Grant, 2012). Even if they did, the consideration of the benefit to view the full story of ERP or other source hires is often neglected as the focus is often directed to the next need once requisitions are filled (Laumer et al, 2015; Lee, 2007).

Before delving into the incentive offerings or motivations behind ERPs, it is important to understand the value in connecting data points through the hiring process to

successfully determine sourcing channel effectiveness. ERP data are essential for firms to understand if the intended competitive advantage is demonstrated or if inefficiencies are being forced into the hiring process.

While some firms have technology that enables full cycle tracking of referrals from the point of entry and beyond, it is quite often that the review of ERPs ends once a referred candidate is hired. Furthermore, few firms spend much time examining program effectiveness, that is the review of *referrers* or *referrals* beyond the payout of a referral bonus and a job being filled (Schlachter, 2019; Van Hoye, 2013). Tracking total number of referrals submitted as well as time in position and performance of those hired provides insight into potential inefficiencies being presented to talent acquisition professionals that limit the strategic benefits of ERPs.

An applicant tracking system (ATS) captures the talent acquisition activity (attraction) of potential candidates and allows for status updates for referrals at every interaction, ultimately capturing hires versus non-hires (Lee, 2007). ATS systems are valuable sources of information that can be easily overlooked, but the data likely provide trends in behaviors and activities of referrers and referrals themselves. In considering RBV, an ATS is likely the initial entry point for human capital and much can be ascertained with the data captured at candidate entry.

As an example, there may be valuable profiles coming from a specific organization or competing firm that is amidst strategic redirection, workforce reduction, or geographic relocation. This further reinforces the value HR professionals can provide through ongoing data analysis as proposed by a number of Human Resource Information Systems (HRIS) researchers (Paul Huo & Kearns, 1992; Qadir & Agrawal, 2017) The

ability to uncover this source of intel through ERP referral behaviors may enable an opportunity to target candidates who are unsettled with their current employer, allowing recruiters to get to qualified candidates sooner (Laumer et al., 2015; Maier, Laumer, Eckhardt, & Weitzel, 2013). A firm's own employees may uncover this before their recruiting professionals, further driving firm competitive advantage. Most ERP programs are closely linked to the ATS and capture current or previous employers for tracking purposes. It is worth noting, not all ERPs are housed within an ATS – further complicating the ability to track success. Some firms have plugin software solutions to capture referrals, whereas others are tracking referrals manually through spreadsheets. This practice can impact program credibility and could limit engagement as well. Once candidates are deemed as hirable, it is often the ATS that initiates the next phase of the employee lifecycle related to onboarding, this can include background checks, employee identification assignment, and payroll initiation.

As an employee is recognized as hired in the system, there is often a connection to other systems for the later stages of *engagement*, including: onboarding, training, recognition, performance management, and satisfaction surveys. Even when firms leverage a single system that tracks all employee touch points, it is unlikely that much time is spent examining the richness of data to get a clear picture for human capital. In theoretical research within the last decade, this is not addressed, perhaps due to a limited understanding of where the various data points reside. Assessing the full story of hires made through employee referrals arguably touches all four of the key elements of RBV, including value, rarity, uniqueness, and organized approach to assessing ERP effectiveness. Connecting these data points to follow candidates through post-hire

process provides the ability to uncover departmental behaviors, insights relative to referrer and referral performance, diversity hiring or other trends that may shed light on ERP success for longer term firm benefit.

As it relates to ERPs, programs should be designed to motivate behaviors that are mutually beneficial for both the employees and the firm. Firms must remain cognizant of hirable referrals—this can include those referrals who are offered positions but may decline for other reasons. It is important to stay aware of these candidates as well—as the referrer is still providing the right talent, the process or other reasons may be to blame for the lack of acceptance of offers extended. Reviewing candidate performance through referrals considers those who meet or exceed supervisor expectations as being the most worthwhile hires. Hiring talent that does not meet expectations infuses inefficiencies into the human capital pools and could put strains on productivity. Time in position (tenure) is a significant factor to consider as the longer an employee is retained, the more they minimize the costs associated with sourcing, replacing, and training talent (Breaugh, 2013; Pieper et al, 2019; Schlachter, 2019).

As an example of where ERP data examination may provide beneficial insight, consider employee referrals that do not offer a payout; there may be employee segments of the firm that are not eligible for a bonus payout, but employees continue to provide hirable, high performing talent referrals. This is worth uncovering as it may shed light on an engaged (or intrinsically motivated) population of the workforce and there may be other ways to recognize these employees for their efforts. I will consider this population later.

From a hiring risk perspective, it is essential for firms to understand the return on various sourcing channels, as this can also provide clarity around whether or not they are conforming to equal employment opportunity (EEO) discriminatory practices – if certain groups are not referring or being referred, firms must maintain alternative recruiting methods to remain EEO compliant. Collecting these data may also uncover if certain diversity groups within the firm are not offering referrals and it would be worth identifying why. According to the RBV, these insights can contribute to a firm's ability to maintain a competitive advantage around talent acquisition or even employee engagement.

Three areas related to employee life-cycle data will be leveraged for this study: with the attraction stage, I will be looking at the impact of a bonus payout on performance and turnover. Reviewing ERP policies, there are often reasons for employees to become ineligible for a bonus payout. This does not and should not deter them from acting – these data will be relevant in looking at how paid versus non-paid referrals differ. The questioning will include which group provides referrals that stay longer, and which group provides referral hires that are stronger performers? The last element of life-cycle data that will be reviewed includes the comparison of yield ratios and hire differences between ERPs and LinkedIn as a source for hires. To best understand yield ratios, cost-per-hire, performance, and retention/turnover comparisons between the two channels will be reviewed and these data points come from the attract and engage stages of an employee life-cycle and likely reside in different systems (Laumer et al., 2015; Lee, 2007; Thomas & Ray, 2000).

However, it is worthwhile to consider the motivations that drive employees to provide referrals in the first place. Several researchers have started to examine the motivations and impact (Breaugh, 2013; Pieper et al, 2019), but there seems to be limited exploration of how bonus offerings play a role in the referral activity and quality generated by employees.

Motivation theories and ERPs

In general, there are two key types of motivation that are relevant in considering ERPs: they are intrinsic and extrinsic motivations. Intrinsic and extrinsic motivation have invoked a significant amount of research and were first introduced by Deci and Ryan (1975) in self-determination theory (SDT). According to SDT, people have three psychological needs: (1) the need to feel competent, (2) the need to feel autonomous (Neimiec & Ryan, 2009), and (3) the need to interact, be connected to and experience caring for others (Baumeister & Leary (1995). This suggests that employees are likely to be intrinsically motivated because they find it inherently satisfying and that in itself is a satisfactory "reward". (Ryan, 1995; Shinnar et al., 2004; Van Hoye, 2013).

Employees must be motivated to generate referrals in the first place (Schlachter, 2019). Some researchers have suggested that employees provide referrals because of intrinsic motivations - meaning that individuals are personally driven and satisfied by taking action, whereas others are motivated by incentives that can consist of verbal (public) recognition or monetary reward (Marin, 2012; Schlachter & Pieper, 2019; Shinnar, Young, & Meana, 2004; Stockman, Van Hoye, & Carpentier, 2017). However, many firms choose not to rely solely on intrinsic motivations and offer incentives

(monetary payouts) for referral hires. Some studies have examined how incentives drive desired behaviors (Pieper et al, 2018; Van Hoye 2013).

Much of the literature around the incentives suggests that referral hire bonus offerings are incentivizing engagement and driving activity with ERPs (Burks et al., 2015a; Shinnar et al., 2004). In many firms, there are tiered incentive offerings and have policies that articulate disqualifications for bonus payouts. For example, if an employee in the recruiting department provides a referral, they may not be eligible for a referral payout because sourcing talent and understanding what the firm needs is their responsibility (Breaugh, 2008). In other instances, executives (based on level within the firm) may not be paid since their roles require them to continuously network or represent the firm. Few firms are reviewing "effectiveness" or differences between paid or non-paid employee referrals. Effectiveness is defined here as cost-efficient channels that provide hires who perform at higher levels and remain employed longer than hires from other channels).

Intrinsic motivation

The concept of intrinsic motivation stems from the idea that an individual is motivated without external (tangible) reward. Ryan & Deci (2000) suggest that intrinsic motivation is what drives someone to act for the fun or challenge rather than because of external products, pressures or rewards (pg. 56). Several researchers have suggested that employees who feel positive about their employers may be intrinsically motivated to make referrals because they experience a desire to relive the feeling of joining or to confirm their satisfaction with the firm, or a desire to reinforce their conviction that they made the right choice in working for the employer (Marin, 2012; Pieper et al., 2018;

Schlachter & Pieper, 2019; Van Hoye, 2013). Secondarily, they could be interested in sharing the benefits of joining the firm with others (Shinnar et al., 2004). Intrinsic motivation behind ERPs has been conducted, but is limited in academic literature (Bloemer, 2010).

If an employee feels positively about their employer, they are likely to be referred to as *engaged*. While there are a number of definitions for engagement, it is most simply the concept that employees are satisfied and willing to contribute to their employers' success (Ludwig & Frazier, 2012). The concept of employee engagement has long been a component of practitioner human resource strategies for firms as a strategy for retaining top talent (Delaney & Royal, 2017; Macey & Schneider, 2008).

There is much debate in this arena, (Schmit & Allscheid, 1995), however, most researchers agree that engaged employees tend to contribute more and are less inclined to leave a firm (Macey & Schneider, 2008). Other researchers have noted that engaged employees have a direct correlation to firm profitability and success (Hyten, 2009). There may be evidence to suggest that employers should consider investing resources to increase existing workforce engagement and satisfaction as a priority over the investment of time or resources into increasing ERPs. However, this analysis will not be the focus of this research.

If the premise is true that highly engaged employees will refer without needing extrinsic (bonus) incentive, there may be a greater benefit in balancing budgets to be allocated less to ERP payouts and more toward engaging the firm's existing workforce. The assumption here is that if an employee is engaged (satisfied), there is a natural inclination to make the additional effort required provide referrals (Kahn, 1990; Macey,

2009). The reason this is worth noting is that one could argue that employee engagement and retaining employees should be as much a priority as attracting new employees (Harter, Hayes, & Schmidt, 2002; Schmit & Allscheid, 1995).

Intrinsic rewards for employees are suggested to be equally important to extrinsic rewards (Harpaz. 1990). One might assume if an employee is willing to provide a referral without the offer of pay or being bonus eligible, they may be intrinsically motivated. Understandably, firms offer bonuses to generate referrals. However, rewards might undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Some employees are likely to recommend their employer to others because they are intrinsically motivated (Ryan & Deci, 2000). The idea is that an engaged workforce that is supportive of their employer's brand may provide referrals regardless of bonus offerings or eligibility. However, there has been little to no research to date that has assessed which motivations generate hires that stay longer and perform better than hires from paid referrals or compared to other sourcing channels. It is expected that employees who are satisfied with their job are intrinsically motivated to provide *positive* referrals (Van Hoye, 2013).

Many firms choose not to rely on intrinsic motivation as the primary driver of participation with ERPs and they offer monetary incentives for referral hires. Some researchers have examined how incentives are driving desired behaviors (Pieper et al, 2018; Van Hoye, 2013). But the question that becomes relevant here is, how might paid referrals compare to non-paid referrals in terms of performance and retention or turnover?

Extrinsic motivation

Extrinsic motivation is the inverse of intrinsic motivation in that individuals who are extrinsically motivated are seeking to earn an external award or avoid repercussions

(Deci & Ryan, 2000). The effort to activate extrinsic motivations for employers who offer incentive pay for referral hires on the other hand, is seeking to trigger drivers for employees to engage, such as promises of a reward and is focused on the utility of the activity rather than the activity itself (Deci, & Ryan, 1985; Delaney & Royal, 2017). It is suggested that for extrinsic rewards to work, there must be clarity about behavioral expectations and resulting outcomes (Deci et al, 1999). This may be where ERPs get lost in translation. There have been studies that have gone so far as to suggest that the simple offering of a payment for referrals can have a detrimental effect on an employee's credibility around positioning an employer (i.e., are they referring simply for the payout opportunity?) (Bond, Fernandez, & Labuzova, 2018). In a study conducted by Bond et al, (2018) higher bonus offerings resulted in lower quality candidates. Other researchers uncovered that referral bonuses can drive employees to behave with purely their own interests in mind, neglecting to care for any firm benefit (Fafchamps & Moradi, 2015).

As ERPs have gained traction, firms have been challenged to keep employees motivated to support recruiting efforts. In response, ERPs have in many cases increased payout amounts with the intent to drive mutually beneficial results. In a recently published white paper, Friebel et al. (2019) introduced tiered payout ERPs in a random sampling of stores in a grocery store chain. The study found that increasing payouts increased referrals, but decreased quality of hires (Freibel et al, 2019). It is my objective to validate if referral pay is a mediator for hire performance or turnover within the U.S. accounting and professional services industry. This is unique from the Freibel study in that ERP payouts are significantly larger than those highlighted in the grocery store population where the max payout was ~ \$130 or ~ 40% of a cashier's salary (2019). With

this study having payout eligibility ranging from \$500 (for lower level positions) to \$8,000 - \$10,000 (for higher level, greater impact positions). This is relevant as ERP trends within this population have the potential to uncover unique differences from what Freibel and his colleagues found. Data to be reviewed includes referral activity over a 3-year period - it is unclear if the same results would be reflected. If the intended logic behind increasing payouts equates to more work and higher quality return on a referral, firms should be review and assess activities with some regularity to ensure the programs are driving intended results.

It is important to note that not all paid referrals should be assumed to be exclusively motivated by the bonus payouts (or extrinsic incentive exclusively) but the examination of non-paid quality of referrals is what will shed light on an employee population that may be worth engaging to understand how or why they have tapped into their networks and how they can support further engagement efforts for the firm. The actual motivation behind each referral would require an assessment of its own.

Understanding if there are differences in the hires made from unpaid and paid referrals will certainly validate if the increased bonuses are serving their intended purpose.

Considering unique employee motivations for ERPs can be critical to enhance the RBV competitive advantage the programs are meant to enable. Many ERPs start with planning and strong design, but as time progresses, they can lack the follow through and opportunity to adequately promote or maintain employee interest beyond implementation (SHRM, 2015). The majority of research within ERP literature is focused on firm value *or* employee motivation (Pieper et al., 2018; Schlachter & Pieper, 2019; Van Hoye,

2013). It is important to consider the alignment of both to gain a competitive advantage in the race for talent.

The idea of employee referrals stems from the concept of word-of-mouth recruiting (Van Hoye et al, 2016). The concept of word-of-mouth is researched in marketing literature as the objective to get consumers or current customers to share their satisfaction with others to increase awareness, ultimately contributing to a firm's customer base. ERPs are similar and highly relevant component for maintaining a competitive advantage (Bansal & Voyer, 2000; Groeger & Buttle, 2014; Laczniak, Decarlo, & Ramaswami, 2001). Incentives can trigger extrinsic interest, and people may engage in more referral (word-of-mouth) behaviors when offered incentives (Wirtz & Chew, 2002). Current research regarding incentives and word-of-mouth within the marketing realm suggests motivation may increase as the incentive increases (Gupta & Shaw, 1998). This idea has limited examination within the realm of employee referral incentive offerings.

Recent evidence has suggested that empirical research has been minimal and efforts firms take to motivate referrals and the effectiveness of these efforts are likely to affect referrer motivations (Pieper et al, 2018). This can raise the question of authenticity behind referrals that will be examined in the contingencies affecting ERPs. A valid question would be whether employee referrals that are provided without eligibility for a payout (executives, senior leaders, colleagues who have direct engagement with the open position or HR professionals may be ineligible for a bonus). However, these same individuals may remain in their positions and be strong performers who provide talent who demonstrate the same characteristics. If they are not seeking monetary incentive, it

could be suggested that their motivation is intrinsic in nature (Deci & Ryan, 1985; Delaney & Royal, 2017).

There is significant value in tracking the candidate performance and retention beyond the hiring of a referral to identify which referrers can provide the highest performing referrals (defined as meeting or exceeding firm expectations) as well as the time in position for referrals. Given the cost to replace candidates, tenure tracking continues to make sense (Friebel et al., 2019). However, much of the research around ERP value has shifted from looking at both turnover and time in position with performance, but these factors are still relevant in determining ERP success (Pieper et al., 2018). The hypotheses to examine the impact of pay within the ERP program include:

Hypothesis 1: Candidates hired through unpaid referrals perform better on average than candidates hired through paid referrals.

Hypothesis 2: Candidates hired through unpaid referrals are retained longer on average than paid referrals.

In considering inefficiencies as part of program effectiveness, there is value in understanding if one group, paid or unpaid, infuses more (or less) hirable candidates into the system. If the firm is driving campaigns highlighting incentives (triggering extrinsic motivations) they might assume they are driving the right behaviors, but this is not known without looking at the hire activity generated from each of the groups. Source effectiveness has been researched by many over the last several decades with ERPs being noted as a highly worthwhile channel for practitioners (Breaugh & Mann, 1984; Decker & Cornelius, 1979; Swaroff, Barclay, & Bass, 1985). However, there appears to be limited analysis around the role bonus payouts play in ERP effectiveness.

Incentives have long been debated in academic research. The concept of offering incentives to trigger motivations suggests that individuals will adapt behaviors to achieve the required goals in order to receive the incentive being offered (Deci, 1972; Korman, Glickman, & Frey, 1981; Vroom, 1964). Additional researchers have argued that increasing rewards can have unintended consequences (Bates, 1979; Condry, 1977; Deci, Ryan, & Koestner, 2001). Most agree that providing rewards generates an increased effort and activity, but Condry (1977) suggested, "the activity is of lower quality and contains more errors" (pg. 471). In thinking about ERP bonus payouts, it is commonly understood by firms that implement tiered ERPs that the higher the payout, the more difficult the role is to fill through other channels of recruiting. For example, senior roles or those that generate effective revenue for the firm should be aligned to higher bonus payouts as the assumption is that they are more challenging to source and this is where employee networks can be a unique advantage for the hiring process. A large incentive offering runs the risk of creating unintended skepticism or lack of trust from employees (Baucus & Beck-Dudley, 2005; Bernstein, 1990; Korman et al., 1981).

Given the simplicity of mass communicating opportunities to colleagues, friends, and family members, employees may be adding more clutter than quality to acquire a bigger payout. Schlachter (2019) stated "as the referral bonus increases, incumbent workers will lower their match quality thresholds becoming willing to refer less qualified friends because the financial reward is higher (pg. 5). Whereas the ability to refer more of the moderate to lower payout candidates may be easier, the sheer offering of an increased payout may be driving more non-hirable volume than firms are intending on culling through. Some firms have built limited time campaigns for meeting short term hiring

objectives for roles that are either time-sensitive to meet company objectives or are very difficult to find in general (i.e., a firm seeking a high impact role such as a head of sales development whereby revenue generation is a critical requirement for the hire). Without keeping a close eye on the hirable talent provided, these campaigns could be driving unintended inefficiencies. An additional hypothesis to consider related to bonus payouts is whether the dollar amount has an impact on referrals provided and quality of referrals provided. If administrative positions are generally easier to find, one could assume that there would be more ERP activity (referral submissions) with lower levels as compared to higher level (payout category) referrals.

With bonus payouts under consideration, the following hypothesis will be considered:

H3: Hire ratios and retention rates differ across payout amounts.

If validated, Friebel and colleagues' observations can be generalized as program effectiveness and efficiencies are challenged as bonus payout increases (Friebel, 2019). As candidates enter the funnel for consideration, they are more likely to require effort and time from internal resources. Communication and feedback throughout the ERP process are critical to maintain program efficiency and effectiveness (SHRM, 2015). The volume of vacancies and referral candidate traffic in a competitive job market can make this difficult for firms to stay ahead of. Referral bonuses have been implemented on the premise that financial reward will motivate employees to engage and perform (Rashid & Zafar, 2019).

Consider the example of groups that need to work closely together on a regular basis, a technology organization providing the infrastructure support for the firm. An

employee already within the team might be motivated to find someone with close personality alignment since they are likely to be dependent on one another – this driver (personality fit) may outweigh any bonus pay associated with a referral so the incentive may be irrelevant (Bloemer, 2010). However, this might not be as relevant if a firm was looking for a highly innovative audit professional who will be consulting with external clients. This may be a challenging position to fill and an increased payout offering could be made to drive current employees to think about who they might know in their own networks that could satisfy the need. The assumption tiered ERPs is making is that the firm should pay more to those ERP hires that require more effort for employees and are naturally harder to find or contribute to firm productivity (Friebel et al., 2019). Senior level roles or niche functions fall into this category that are generally higher compensated and more uniquely skilled talent (e.g. administrative support). However, there is minimal research that examines the payout offerings and quality of referral differentiations that might exist through campaign or higher bonus incentives. From a referrer perspective, the lower bonus payout roles may not be worth the effort required, whereas an increased payout may serve as motivation to engage, but not necessarily impact the quality of candidates submitted.

A final opportunity in linking life-cycle data is around comparing ERP hires (in general) to hires coming from another source that practitioners feel is essential for their recruiting efforts, LinkedIn. Social networks continue to be essential channels for tapping into talent pools (Granovetter, 1995). The evolution of social media as a sourcing channel for firms presents an opportunity to examine which channel is providing more worthwhile hires. Within the last

decade, researchers have considered social media as a tool for recruiting (Strehlke, 2010; Vicknair, Elkersh, Yancey, & Budden, 2010). Others have noted there is an opportunity in assessing the effectiveness of social media sites as recruiting tools (Brown & Vaughn, 2011; Davison, Maraist, & Bing, 2011; Grant & Newell, 2013).

LinkedIn was introduced in May of 2003 as a social media channel designed to enable professionals to network with one another. The channel has evolved to allow working professionals to not only stay connected to colleagues from their past (and present), but it has also become a reliable source of industry news or a platform for job-seekers (Doherty, 2010; Ollington, Gibb, & Harcourt, 2013; Vicknair et al., 2010)

Recruiters within the firm have been leveraging LinkedIn as a source to engage both passive and active candidates. Using social media channels like LinkedIn for recruiting can allow for more targeted outreach (i.e., recruiters can hone in on skills, qualifications or other unique characteristics) (Davison et al., 2011; Dekay, 2009). Many researchers have noted social media can help connect with "passive" candidates — those who may not be looking for work or are currently employed (Wolk, 2004).

The evolution of social media has also inspired researchers and suggestions note that channels like LinkedIn should be supplementing other recruiting strategies – they should not replace traditional methods for recruiting (Joyce, 2016; Madia, 2011). These channels have generated interest with job seekers as it gives them the ability to leverage their own networks to learn more about or assess their own potential alignment to a firm (Chiang & Suen, 2015; Gerard, 2012).

With both recruiters and employees leveraging LinkedIn, there is a risk in duplicative effort, but each group is likely to leverage the channel in a different way. Current firm employees (those not actively recruiting) can post messages and connect with broader audiences. With the growing interest in leveraging sites like LinkedIn for active recruiting, candidates are also being encouraged to refine their profiles and engage their own networks for connection to firms where they may gain employment (Chiang & Suen, 2015; Rangel, 2014; White, 2017)

To assess the difference between ERPs and LinkedIn as a hiring source, the following hypotheses will be examined looking at year over year data as a comparison:

H4: ERPs have lower turnover rates on average than hires from LinkedIn.

H5: ERP hires perform better on average than hires from LinkedIn.

Comparing the two channels with regards to turnover and performance will show which is providing the most worthwhile hires. However, as noted, effectiveness of hires is one component to overall program effectiveness, I am also seeking to understand the cost-effectiveness of ERPs as a sourcing channel. Therefore, the review and comparison of yield ratios for ERPs against LinkedIn candidates and ERP contributions to other core hiring goals for the firm are relevant considerations. The effort of comparing channels and strategies is worthwhile in that, "the key to success is to compare results to existing recruiting strategies based on viable applicants, response rates and quality of candidates to arrive at an organization's optimal recruitment mix" (Madia, 2011). Comparing the value of hires generated from each channel is one component of overall

effectiveness. It is also worthwhile to consider the cost implications with each hire generated through LinkedIn and ERPs as this is where there may be unintended clutter being pushed through recruiting processes.

Cost implications of sourcing channels

Firms are constantly seeking recruitment channels that generate that best talent in the most cost-effective manner (Breaugh, Greising, Taggart, & Chen, 2003; Ordanini & Silvestri, 2008; Rafaeli, Hadomi, & Simons, 2005). For simplicity sake, the investment of ERPs can be notated as bonus payouts associated per hire. For example, if an employee refers a hire for a client-facing manager level role at firm A (see appendix for payout tiers), they are eligible for an \$8,000 payout. At first glance, this seems like a "win" for the firm as compared to a third-party search firm fee, this is significantly lower. However, other implicit costs may be incurred in the form of valuable time consumption by recruiters or staff (Rafaeli et al., 2005; Taylor & Schmidt, 1983).Rafaeli (2005) defined yield ratios as "proportion of new hires from the complete pool of applicants produced by a recruiting source" (pg. 356). Recruiting yield ratios are something that most practitioners are familiar with – they are considered one of the most important key performance indicators (KPIs) to track recruiting success.

While performance and turnover metrics continue to be important, the financial impact for recruiting sources can provide further clarity around sourcing channel effectiveness. Non-hirable talent pushed through the process can be costly and should not be overlooked. A high yield ratio (with a low number of non-hirable candidates at

the top of the funnel is ideal, whereas, a lower yield ratio infers inefficiencies and is not ideal (Ordanini & Silvestri, 2008; Rafaeli et al., 2005).

Yield ratios generally consider the total number of candidates submitted, screened by recruiters, interviewed by hiring manager(s) or potential colleagues and ultimately hired. For example, consider LinkedIn provides a firm with 200 potential candidates, 100 of those candidates proceed to phone-screens (consuming recruiter time), 75 proceed to 1st round interviews, 50 proceed to 2nd round interviews and 15 employees are hired. The example here nets a 7.5% yield ratio for hires from LinkedIn. If the annual investment with LinkedIn was \$147k, simple math would equate to 147,000/15 hires = \$9,800 per hire.

However, phone screen and interview time for recruiters, managers or potential colleagues should not be overlooked as this is valuable time that could be allocated to direct sourcing or other forms of productivity or utility. It is an essential need to process data analytics from applications to hires to truly determine efficiencies (or inefficiencies) in the recruiting process (Breaugh et al, 2003; Rafaeli et al, 2005).

With ERPs, the process employees follow for ERPs has shifted from a three-step process where historically, current employees would consider a network of qualified candidates before moving to step two, where they reach out and engage qualified candidates (Pieper et al, 2018; Van Hoye, 2013; Vecchio, 1995). The final step was where they submitted candidates into the ERP process determined by the firm. This has shifted to a more simplified two-step process where there are several ways to cast larger nets through mass communications to engage personal or professional networks of potential candidates with minimal assessment prior to submitting them for ERPs.

Therefore, one might consider the diluted authenticity of referrals that may have been in year's past, i.e., how well do employees know who they are referring? This could be demonstrated in high numbers of non-hirable candidates entering through ERPs or LinkedIn directly. In considering RBV, comparing LinkedIn and ERP yield ratios is a worthwhile effort in examining which channel provides the most cost-effective hires. Therefore, the following research questions will be examined, looking at yield ratio and cost-per-hire data for ERP and LinkedIn candidates:

Research Question 1: Do ERPs and LinkedIn differ with regards to yield ratios?

Research Question2: What do ERP and LinkedIn cost-per-hire metrics look like over 3-year period?

Contingency value of sourcing channels

A final gap and area of consideration with ERPs revolves around contingencies and trends that may not be evident without reviewing ERP data with some regularity. From a strategic perspective, it is important to understand the moderating factors that might influence the assumed benefit of ERPs. These include the impact ERPs have on inclusion and diversity for the workforce of the firm as well as contributions to women hires as another relevant focus for firms (Schlachter & Pieper, 2019; Breaugh, 2008). There lies a challenge in that if the workforce is minimally representative of diversity, the perpetuation of the same types of hires is inevitable (Taber & Hendricks, 2003).

In general, people have increased dependencies on both the internet and mobile devices for recruiting (Hinojosa, Walker, & Payne, 2015; Walker, 2012). There is an increased expectation for transparency and instant information that has impacted nearly every interaction to mirror the expectations set by dating or other social media sites today

(Cairns, 2015). Engagements that have historically taken longer are much faster and connections to social, personal, or professional networks are easier than ever before. The sheer number of social media or professional network platforms has made it easy for individuals to engage potential candidates (Sivertzen et al., 2013). Firms wanting to remain ahead of competition need to keep a close view on how the increased dependency on social media or the internet in general may have influenced the overall quantity and quality of candidates being referred.

Two of the core attributes of RBV revolve around being valuable and rare (Barney & Wright, 1998; Terpestra & Rozell, 1993). One might argue that diversity is an essential area of strategic focus as any firm seeking success in the marketplace must have sensitivity and understanding of diversity. There is significant value in ensuring one's workforce is representative of the environment one seeks to do business in. Diversity can be defined differently for various firms, but when thinking about an employer's ability to optimize a diverse workforce, it can include representation of differences in age, ethnicity, and gender as three core identifiers (Cox et al, 1991; Gilbert et al, 1999). Diversity not only offers uniqueness in thought and experiences that impact the way employees approach work, but also enables a broader opportunity to understand and relate to clients or customers (Milliken & Martins, 1996). In fact, groups that are more diverse have been noted to make higher quality decisions and are more likely to respond to the demands of the environment (Milliken & Martins, 1996; Williams, 2009).

Using ethnicity as an example, the ability to speak multiple languages opens the opportunity to gain additional business and can impact the bottom line. ERPs and the data associated with them can provide insight on the behaviors and activities of these key

categories of employees. If employees are not generating referrals that provide diverse talent, there may be a reason. If the firm is already struggling with having a diverse and balanced workforce, there may be a need to develop targeted strategies that enable more diversity talent pipelining to ensure diversity is being cared for within the realm of talent acquisition (Breaugh, 2013; Connolly, 2015; Pieper et al, 2018).

The opportunity with reviewing diversity referral behaviors would be that if there are limited diversity referrals being hired as compared to other candidate hires, there may be opportunities for firms to educate their workforce around the value of having various diversity groups represented throughout the firm and for considering how to generate a pool of potentially diverse referrals (including women and various ethnicities).

Additionally, there may be value in engaging employee resource groups that represent diverse groups within the firm to understand how to best reach different audiences and understand the value that should be reinforced through recruitment messaging.

In addition to the increased need to focus on diversity hiring initiatives, there has been a continued increase in the focus on supporting the growth of women as professionals in the workforce. There are increasing numbers of channels that focus on recognizing women-supportive organizations. Organizational accolades can attract or detract women from considering a firm. Working mother magazine releases a "100 Best" list every year and it provides additional support for a firm's willingness and commitment to hiring women. InHerSight is another organization that is focused on anonymous data provided by a firm's current workforce to highlight the willingness to hire, develop, and support women hires. It is worthwhile to examine how ERPs contribute to women hiring in firms. Several researchers have noted, ERPs carry risk in that employees are likely to

refer people like themselves, especially in terms of ethnicity (Breaugh, 2013; Schlachter, 2019; Williams, 2009). Therefore, reliance on ERPs as a source of women and ethnicity hires is argued to be frivolous and requires supplemental recruiting channels to ensure balanced diversity recruiting for gender and ethnicity (Williams, 2009).

This is important for firms to pay attention to, as the need to focus on increasing women hires is equally as important as hiring diversity for firms today. In looking at the uniqueness of financial services or public accounting specifically, these firms tend to lag in their women hiring initiatives and ERPs could be a valuable hiring channel and feeder to increase women hiring. The U.S. Labor force continues to predict that women and diversity hires are going to have an increased representation in labor pools in the next decade. As one example, women (specifically, African American, Asian and Hispanic women) are projected to increase nearly 3.5% by 2024. (U.S. Department of Labor, 2016). If the current women within the firm are not providing referrals there may be a bigger problem to solve around engaging the current population. If the ERPs are minimally contributing to women and ethnic hires, there will clearly be other channels or strategies needed to ensure the firm is hiring the right balance of candidates to remain competitive as an employer.

This research will review the following research question as it relates to women and ethnicity hiring contributions:

Research question 3a: To what extent are ERPs and LinkedIn contributing to women hires?

Research question 3b: To what extent are ERPs and LinkedIn contributing to ethnicity hires?

There is an opportunity through these two questions to uncover if there is one channel that might be stronger than the other. Identifying trends or behaviors here might provide insight for future opportunities of research or firm investment in the future.

CHAPTER 3: METHODS

3.1 Description of data

Data for the current study used to test three categories of hypotheses and research questions was be gained from archival data from one of the U.S top-twenty accounting firms (https://moneyinc.com/top-accounting-firms-in-the-united-states/). Headquarters are on the East coast of the U.S. and there is an established employee referral program with tiered payout offerings.

The firm was invited to share previous year's data with the benefit of receiving program effectiveness metrics and recommendations on how to best increase value and effectiveness for the current ERP. Additionally, they were asked to share specifics around the ERP policy they publish for their employees. This was especially important to learn and understand specifics around payment eligibility for employees as they engage with the program (see appendices 1).

With regards to the specific activities generated from the ERP, requested data included (but were not limited to) referrer gender, age, ethnicity, time in position, performance and referral payout amounts. Data shared included referral (hires) information that captured the following: levels of roles referrals were hired for, tenure (as known), performance, post-referral hire engagement with ERPs (as known), and demographic information. Data provided included complete fiscal years 2017-2019 of employee referral hire information.

The head of human resources agreed to participate and did so by committing to send archival data from existing HR software platforms in excel formatting (see appendix 3). In order to share the requested variables, a data analyst was required to connect

multiple systems data in order to gain a full life-cycle view of referrer and referral information. For referrals, employee identification numbers were randomized but tracked to provide a view of repeat referrers and corresponding hires (as a potential exploration for future action). Referring employee time in position, performance, bonus payout, compensation and general demographics such as gender, age and diversity classification were additional variables included in the data share. Employee identification information was randomized to confirm anonymity of all individuals. Lastly, hiring data including performance, time in position of hires and total cost of investment with LinkedIn was provided for the hypotheses seeking to compare the two channels.

3.2 Measures and analyses

Data were cleaned, organized and dichotomized where applicable prior to loading into SPSS for analysis. Basic descriptive statistics were performed to verify and summarize data before conducting analyses. To set the foundation, the data examined incorporated fiscal year 2017-2019 data. The overall number of hires for each channel included ERPs = 574 hires, while LinkedIn = 129 hires. Therefore, the overall hire activity represented 703 hires over the 3-year period. Within the category of ERP hires, it was essential to validate the number of paid and unpaid referral hires and to ensure that there were non-confounded behaviors. For instance, looking at non-paid ERP hires, there were varying levels of hires and varying levels of referrers. According to the ERP policy, there were 4 main reasons a referral would *not* be paid and these included; (1) Referrer = Partner or Principal level; (2) Referrer has potential to work directly with referrer; or (3) Referrer is a recruiter and finally; (4) Candidate has already been contacted by a recruiter

prior to being submitted as a referral. Specifics of the ERP policy stipulations are included in Appendix 1.

First, I examined hypotheses 1 and 2 questioning whether referrals hired without a bonus perform better or are retained longer than referrals that are paid, data was categorized into two groups; unpaid versus paid. Descriptive statistics helped clarify why the unpaid referrers were not paid (e.g. employee level, direct engagement with referred employee or duplicative of a direct-sourced candidate by the recruiting team). Metrics from fiscal years 2017-2019 were leveraged to conduct an independent samples t-test to compare turnover/time in position and performance. Performance for the firm was tracked on a 3-point scale, categorized as; 1 = Lagging; 2 = Achieving; 3 = Leading. Only individuals with performance ratings from their first supervisor rating were considered, this is within 6-8 months of employment in most cases. Those employees who remain beyond their first supervisor rating have the potential to have shifted ratings as their time in position continues, but for the sake of this research, only the first performance ratings were examined. The analysis here revealed if, in fact, non-paid referrals were stronger performers, ultimately providing more benefit to the firm compared to paid hires. The retention rates were determined by seeing how many employees departed and how many days of tenure were tracked from their original startdates.

Hypothesis 3 leveraged descriptive statistical analysis to understand how bonus payout amounts (or levels of ERP hires) generate different results. The practitioner assumptions suggest that lower paying referrals generate more hires because the corresponding talent is relatively less complex to find. This analysis revealed if the

incentive offerings drove more hires or not. Additionally, was reviewed relative to the total number of hires at each of the varying role levels to understand how or if bonus incentives have impacted the quantity of ERP hires and what the corresponding retention rates within the ERP bonus levels look like. The bonus payouts were categorized by amounts ranging from \$500 - \$10,000. Unpaid referrals were excluded for this hypothesis. All hires or activities were reviewed within fiscal years 2017-2019. Within each of these payout categories, referral hires and retention rates over the 3-year period were considered.

Hypothesis 4 leveraged an independent samples t-test to compare which source has higher retention rates for hires. Comparing ERPs (both paid and unpaid) with LinkedIn hires, I examined the number of departures and average days of employment prior to turning over. Furthermore, the identification of which channel has comparatively retained the highest percentage of hires was be noted. In addition, the percentage of hires made under each payout category, these numbers was compared to firmwide hires eligible for each payout made in the same 3-year period to identify if activity was in line with the openings the firm filled and to verify the contribution each payout category made to the overall talent sourcing strategy for the firm.

Hypotheses 5 and 6 build upon the ERP hire analysis with an objective of comparing overall ERP and LinkedIn hires year over year. While both channels have been considered essential investments by firms, I conducted an analysis to identify which channel provides the most hires with the greatest performance and longest time in position. An independent samples t-test was utilized to compare the averages from both channels and descriptive statistics will enable visibility to other noteworthy behaviors.

Considering LinkedIn hire data and building upon RBV and strategic talent sourcing channels, it continues to be relevant to consider operational efficiencies in conjunction with return on investment. Research question 1 was crafted to do just this. Yield ratio data and financials for this analysis include LinkedIn year over year spend. For LinkedIn, it was imperative to exclude any advertising or branding components of the vendor relationship. For this research, the financial components leveraged are the recruiter-only portions.

Financials from ERP bonus payouts year over year were considered. While the cost-per-hire was calculated for each channel. Consider the following example: 25 hires from ERPs with a bonus payout totaling \$120k would equate to \$4,800 per hire (\$120k \div 25 = \$4,800). If LinkedIn cost \$99k for the year and generates 6 hires, the cost per hire = \$16,500 (\$99k \div 6 = \$16,500). This is a straightforward cost-per-hire analysis; however, I will elaborate to assess the yield ratios for each channel within the year. This further enables the opportunity to identify if in addition to the cost-per-hire, additional time and inefficiencies are being infused into the process.

It was my hope that additional implicit expenses would also be uncovered. This could include costs associated with the time required for recruiting phone-screens or interviews conducted with candidates who do not equate to hires. Identifying these inefficiencies or mis-targeting allows the firm to understand health and efficiency for each channel.

Finally, the remaining research question seeks to review contingency factors that could be impacting the value of ERPs or identifying areas that ERPs may not be supporting from a hiring perspective. As noted, diversity hiring is an important source of

competitive advantage for firms and understanding how each channel contributes to these hires is critical to ensure a collectively strategic talent acquisition strategy is applied year over year. The data leveraged for this research question comes from archival data with recommendations provided. I will conclude with observations and recommendations for the firm to leverage for future strategic sourcing development related to women and ethnicity hires.

CHAPTER 4: RESULTS

The analyses of H1-H5 leveraged a combination of analytic approaches to verify if there were notable differences with unpaid versus paid employee referrals regarding performance of hires generated as well as retention rates. The various payout category hires were also reviewed to identify observable trends to verify if bonus offerings generate activity without the desired level of performance and retention that make the bonus payout worthwhile. Secondarily, mirroring data for performance and retention from LinkedIn was also utilized to compare the sourcing channels.

Hypotheses 1 and 2 focused solely on the comparison of paid and unpaid referral hires to identify if there were differences in the hires made and to assess whether payment drives the intended results. First, for a comparison, the firm average performance was worth considering seeing if the channels were on par with the firm's average performance. The firm's average performance for individuals rated within their first 6-months of employment was 2.3 on a 3-point scale. In comparing paid versus nonpaid ERP hires, descriptive statistics showed 333 ERP hires were paid and 241 were unpaid. Not all employees receive performance reviews within 6 months, but generally, annual evaluations are conducted and tracked mid-calendar year. For the purpose of this study, only those who had tracked performance reviews were used for the first hypothesis to identify if non-paid hires performed better. Therefore, the sample includes only those hires who had their first performance review recorded. The unpaid group (n = 97) was associated with a performance rate of M = 2.29 (SD = .628). By comparison, the paid group (n = 196) was associated with a performance rate of M = 2.34. The difference was minimal in magnitude (t(291)=.673, p=.44; d=.078. This means hypothesis 1 is not

supported as unpaid versus paid referrals do not have insignificant differences related to performance.

Leveraging the same data with unpaid and paid referral hires, hypothesis 2 stated the non-paid referrals would be retained longer on average compared to paid referrals. Analysis revealed of the 333 total hires from the ERP, 156 had left the firm. The average years of service for all tracked departed ERP hires was M = 1.05. Unpaid referral hires that resulted in turnovers resulted in n = 48 (14%), with the average tenure M = 1.08 years of service prior to departure. Paid referral hires that resulted in turnovers showed n = 108 (32%) with an average tenure M = 1.04 years of service prior to departure. The difference was minimal in magnitude and not statistically significant; (t(64.6) = .295, p = .769; 95% CI = -.24 to .32; d = .058). This means that hypothesis 2 was not supported given the limited difference between unpaid and paid referral hire's time in position. However, it does reveal that referral payout has low impact on ERP hires potential to stay versus those who are hired via referral and no bonus payout.

Hypothesis 3 looked at hire ratios across the various payout amounts to. understand if increased payment generates more hires (the core purpose of offering increased payout amounts). As previously noted, 333 bonus payouts were offered for referrals across bonus payout amounts. 84% (n = 280) of ERP paid hires were generated from bonus payout categories of \$6,000 or more. Of those 280 hires, 95 departed, accounting for 29% of ERP hires over the 3-year period not being retained at the time of this report. Most departures fell under the \$6,000 payout category, with 35% of those hired departed. Additionally, 12 of those (16%) left before 6 months of employment. Overall, this shows that 69% of referrals that departed were paid referral hires. In looking

at the ERP bonus payout eligibility, the majority of firm hires over the 3-year period were eligible for bonus payouts of more than \$1,000 (72% of roles filled). H3 is supported in that hire ratios and retention rates vary widely among the different payout amounts.

Hypothesis 4 introduces a comparison of retention rates for ERP and LinkedIn hires over the same time period. The firm attrition average equates to approximately 24% over the 3-years of 2017 to 2019 or approximately 76% of all hires retained. To examine ERP and LinkedIn hire retention rates, the data reviewed included 574 hires from the ERP and 129 hires from LinkedIn. ERPs hires had a total of 156 departures (27%), while LinkedIn had 41 departures (32%). The retention rate % for ERPs is therefore 73% using a standard retention rate calculation (slightly lower than the firm average): Total # of hires – Total number of departures x 100 = Retention rate %. Using this same formula, the LinkedIn hire retention rate was 68%. Additionally, an independent samples t-test was leveraged to compare the means of the two groups. LinkedIn hires were associated with an average tenure (years of service prior to departure) of M = 1.28, whereas ERP hires had an average tenure of M = 1.05. The difference was moderate in magnitude and the difference in days of employment is statistically significant: (t(53) = -1.53, p = .133); 95% CI = -.52 to .070; d = .316). In practicum, this equates to an average of ~100 days of additional employment from LinkedIn hires over ERP hires and suggests H4 is not supported given ERPs have higher turnover rates. However, the length of tenured difference can be considered significant from a firm (employer) perspective.

Hypothesis 5 uses the hire data to perform an independent samples t-test to compare average performance between the two groups. Much like hypothesis 1, only those hires that had their first performance reviews were used for comparison. This

equated to a sample of n = 293 from the ERP group and n = 60 for LinkedIn hires. The ERP hires were associated with a performance rate of M = 2.32 and LinkedIn hires were associated with a rate of M = 2.23. The difference was moderate in magnitude with no statistically significant difference: (t(351) = 1, p = .548; Therefore, hypothesis 5 proposing that ERPs would perform better was not supported.

Moving to the research questions, RQ1 questioned the difference in selection ratios between ERPs and LinkedIn candidates. Figure 5 shows the total number of applications in each category while also showing total number of phone screens, interviews, offers extended and offers accepted. Findings show a much larger percentage of candidates through ERPs putting time strain on employees before getting offers as compared to LinkedIn hires. With more than 70% of candidates through ERPs getting phone screened (recruiter time) and 38% moving to initial interviews, this puts strain on current resources to vet candidates prior to extending offers. Considering applications to hires, 22% of ERPs were hired. LinkedIn applicants on the other hand have a hire rate of 2%. This is a significant difference as the volume of applicants from LinkedIn is more than twice those of ERPs, but far less candidates are phone screened, interviewed or offered positions as compared to ERP hires. Even with that, attrition rates (number of departures relative to number of hires) equates to 27% for ERP hires and 31% for LinkedIn hires.

Research question 2 examines the straightforward cost implications of the two channels and seeks to provide a cost-per-hire metric to determine if one channel is more cost effective than the other. Looking at ERPs, the total straight cost of ERP bonus payouts was \$1,716,000 and for LinkedIn recruiter specific costs over 3 years the cost

was \$374,000. The straight cost-per-hire metrics examines total cost (\$) ÷ total # of hires. Using this calculation, the following cost-per-hire metrics were identified: LinkedIn: \$374,000 ÷ 129 = \$2,899 cost-per-hire (CPH) and ERPs: \$1,716,000 ÷ 574 = \$2,989 CPH. Given the cost for recruiting today, these are not exorbitant costs given SHRM (2016) estimated cost-per-hire was \$4,129. The straight cost reflected here is comparable with minimal differences, however, additional costs were identified through ERPs that will be addressed in the discussion section.

Research question 3(a) sought to understand to what extent each of these sources was contributing to women hires. In reviewing the total number of hires (n = 703), there were 37 hires who did not have an identified gender, so these were not considered for this analysis. Leaving the sample n = 666 hires from the ERP and LinkedIn for 2017-2019. Of these, there were 303 cumulative ERP and LinkedIn hires that identified as female. ERPs accounted for 231 of the female hires whereas LinkedIn accounted for 72 of the female hires. Between the two channels, ERPs account for a greater contribution to women hires. Within each channel, female hires equate to 40% of the total ERP hires and 56% of the total LinkedIn hires. However, when compared to the total number of female hires made for the firm in the 3-year period ERPs were a significant contributor bringing in 34% of the 671 female hires for the firm. LinkedIn contributed 11%.

The second part of this research question seeks to identify to what extent ERPs and LinkedIn are contributing to ethnicity hires for the firm. The variable for this question categorizes this as minority or non-minority hires. Overall, 665 hires had self-identified as minority or non-minority. These hires between the two channels accounts for 29% of the total number of hires between the two channels (n = 203). ERPs accounted

for 75% (156) of the minority hires and LinkedIn lagged with 47 hires identifying as minorities. With this, it is relevant to note that in comparing these numbers against each channel's total number of hires, 36% of LinkedIn hires were representative of minorities and 27% of all ERP hires were minorities. In considering the contribution to the total number of firm minority hires, ERPs provided 36% of the firm's 435 minority hires and LinkedIn contributed 11%.

CHAPTER 5: DISCUSSION

ERPs have been attracting researcher attention for decades, with much coverage suggesting the hires generated from ERPs are stronger performers who will stay longer than hires from other sources (Brown et al, 2016; Burks et al, 2015; Friebel et al, 2019; Kirnan, 2009; Van Hoye & Lievens, 2009). In addition, social networking sites like LinkedIn have been noted as some of the most popular websites on the internet (Nikolaou, 2014). There is a benefit to understanding the value of internet applicants and this will continue to evolve as candidate behaviors and expectations evolve (Lievens et al, 2002). The primary goal of this research revolved around ERPs and the impact of incentives on hire performance and retention. Secondarily, a comparison of hires from ERPs and LinkedIn was worthwhile to uncover if the cost-effectiveness is as assumed for ERPs. Lastly, the review of contingency value (contribution toward women and minority hires) was conducted to assess whether one channel was providing more hires over the other.

Firms continue to seek fast and efficient ways to fill roles with talent that can propel them ahead of their competitors (Taylor & Collins, 2000). RBV reinforces that human capital has been one of the primary sources to enable competitive advantage (Amit & Belcourt, 1999: Schlachter & Pieper, 2019; Shinnar et al, 2004). Effective recruitment of talent that can perform well and remain with the firm is key to minimizing gaps in productivity or disruption within teams (Barney & Wright, 1998; Breaugh, 2013; Chellemi & Gui, 1997). SHRM (2019) noted that quality and retention rates may become more important than cost-per-hire metrics as the market becomes increasingly difficult for employers to fill roles. This research contributes to the theoretical research related to

human capital as a competitive advantage and was designed to uncover if ERPs and Linked in, two of the most highly regarded sourcing channels for several firms, are delivering as expected.

The remaining portions of this discussion will cover theoretical and key practical implications that are categorized as: performance and retention, incentives, cost implications and contingency value. I will conclude the discussion with limitations and future research opportunities.

5.1 Theoretical and practical implications

One of the first implications for practitioners from this study is the understanding the full breadth of cost-per-hire (including incentive offering payouts). Firms must remain focused on efficiency and effectiveness of sourcing strategies leveraged to acquire top talent. Tiered ERP payouts or limited time increased bonus offerings can have negative effects on hiring outcomes. Findings with the firm in study further supported previous research that demonstrated less than ideal outcomes as a result of bonus payouts for ERPs (Pieper et al, 2018; Stockman et al, 2017). There continue to be opportunities for practitioners to keep an eye on referrals and perhaps offer incentives differently.

Additionally, this study further reinforces previous theoretical studies that both intrinsic and extrinsic motivations can be considered when developing or analyzing incentives for employee referrals (Shinnar et al, 2004; Van Hoye, 2013). It was evident that performance and retention of referrals are not likely to be influenced by which incentive or motivation drives the referral. As a result, to further enable the RBV and competitive advantage by optimizing talent sourcing strategies. In addition, there may be a benefit to rebalancing the investment from ERPs to further invest in engaging the

current workforce. As noted, engaged employees are invested in supporting positive outcomes for the firm (Harter et al, 2002; Saks, 2006).

Performance and retention

With regards to ERP hire performance and retention (and unpaid versus paid hires), there were minimal differences between the unpaid or paid referral hires. The suggestion in some of the research would imply that employees that were less motivated by extrinsic rewards would provide stronger performing hires. Yet, there is no statistical or practically significant difference between the unpaid and paid referral hires. The effect-size is relevant here as it reflects a small effect between the two groups: (Cohens d = .078 for performance and Cohens d = .058 for average tenure prior to departure).

When examining the difference between unpaid and paid hire retention metrics, there were insignificant numerical differences. Both findings are consistent with the Bond et al. (2018) study that suggested higher ERP bonus offerings would result in an increased likelihood that lower quality referrals will be generated. In fact, Bond et al. (2018) noted that any monetary offering increases the desire for financial gain and increased volume of referrals. This is especially interesting given that this research revealed employees who did not qualify for a bonus because of the policy generated similar performing hires. This research supported that pay is irrelevant in influencing the performance or retainability hires. Therefore, there may be a benefit to reducing the tiered approach to the ERP and offer a single or limited tier bonus instead.

Time in position prior to turnover revealed that unpaid referral hires are retained slightly longer on average compared to the paid ERP hires. Unpaid referrals stayed ~ 2 weeks longer on average as compared to paid referrals with the two means showing 1.08

versus 1.04 years of service. Cohens d = .058, revealed that there was an effect size lower than .2, which is considered the guideline for a small effect size (Cohen, 1992). This further reinforces the idea that bonus payout amounts have minimal impact on ERP hires potential to stay. Unpaid referrals have remained employed longer with an 80% retention rate. Paid ERPs revealed a 68% retention rate. This validates that practitioners should question if increased payouts are generating the intended quality (specifically regarding retention). At first glance, hires are good, but not if they are solid performers who turnover. There is a benefit to ensuring performance reviews are conducted and satisfaction is monitored to minimize the hiring of low performing employees who have no intention of staying for the long term. SHRM (2017) noted that attracting, retaining and minimizing turnover of employees can contribute to firm productivity and overall business performance. Prolonging the cycle of recruiting will only incur added costs that may be implicit.

As noted, firms have been activity seeking the most worthwhile channels for sourcing talent and ERPs and social media channels continue to be at the top of the list (SHRM, 2015). With the firm in review for this study, retention comparisons were relatively close to one another with ERPs maintaining a 73% rate of retention, whereas LinkedIn hires were behind with a 68% retention rate. However, the average time in position prior to turnover was significant from a practitioner perspective. Considering the average days in position prior to departures, LinkedIn hires stayed approximately 100 days longer than ERP hires. This is significant from a practitioner perspective in terms of how long it can take to replace positions, especially with the seasonality of public accounting. Timing can be valuable with regards to being able to service clients and

turnover at the wrong time can have impacts on current employees' morale and productivity (Weller et al, 2009).

Inside Public Accounting (2017) released a benchmark report for accounting and professional services firms suggesting the national average turnover rate for the industry was about 12.4%. This firm is above that average and may benefit from examining exit interview data to understand why employees are leaving. Doing this may provide insight to areas needing attention. This could include technology, inclusion or even workload issues that may be causing employees to seek employment elsewhere. Again, the market unemployment rates are low, and employees have more options than year's past. This volume of turnover could be a costly and ineffective cycle if not monitored.

Shifting focus to performance, an additional observation revealed that nearly 50% of ERP hires were missing performance reviews. It was confirmed that hires were spread over the 3-year period, so more than 80% (more than 200) of these hires were still employed a minimum of 12 months of service without any record of performance indicated. This indicates an opportunity to ensure supervisors are providing performance reviews and feedback to their employees as not doing so could lead to additional inefficiencies in terms of utility (London, 2009). Performance management (including feedback) can enable managers to increase engagement of their workforce (Mone et al, 2009).

Incentives not serving intended purpose

The purpose of offering incentives for ERPs is to drive a mutual benefit for employees and the firm. Findings have supported that employees may not need monetary incentive to provide referrals (Breaugh, 2013; Pieper, 2018; Saks, 2015; Van Hoye,

2013). Promotional rates upwards of \$10,000 may not be generating the firm's intended results. Several researchers have challenged the credibility of referrals when incentives are added to the equation (Van Hoye, 2012; Cable & Turban, 2001). While offerings have been found to have negative effects such as perceptions that a firm may not be as attractive as it seems and the incentive is the only motivation for the referrer (Stockman et al, 2017). The current study supported that tiered bonus offerings, should be monitored for effectiveness as the concept that increased bonus payouts will invoke program engagement and more hires was not supported through this firm's data.

In reviewing the outcomes of 333 paid hires, there is significant imbalance in where hires were made. Looking at the 3-years of hiring activity, the majority (70%) of the firm's hired positions were eligible for \$1,000 payouts or more. This explains the volume of hires that were paid \$6,000 or more (84% of the ERP hires), given the highest volume of requisitions filled for the firm were client facing (revenue generating) or senior strategic (internal) roles. In reviewing the bonus payout differences in hiring volumes and retention, metrics revealed a misalignment with regards to ERP hiring outcomes. It was demonstrated that there was interest piqued for the current workforce to engage with the ERP, however, turnover in these same categories equates to 88% of ERP turnovers. This means that 95 employees were associated with those ERPs that paid more than \$6,000. This can be considered a high turnover rate in considering the entire firm experienced an average of 25% turnover in a 3-year period. More surprising is that nearly 16% of those \$1k+ bonus payout hires turned over before they reached 6 months of employment. Given the lack of evidence that the high ERP bonus payout is effective, those dollars may be best redirected on employee engagement efforts, as employees who are engaged will

work to be innovative and improve outcomes for the firm (Eldor, 2017, Harter et al, 2002; Macey, 2009; Saks, 2006).

A potential solution could include more cost-effective platforms or engagement with firms like Blueboard.com – these firms exist to create unique and meaningful rewards for employee referrals and this unique offering could invoke engagement but does so in offering other incentives aside from a one-time monetary payout. For instance, current state maintains that if bonus eligible, a referral hire is made and pays a certain amount of monetary incentive after the initial 90-days of employment. There may be value in offering an incentive beyond the 90-day payout (offering another incremental payout after 6-months of employment). To further incentivize the referrer to maintain connectivity or mentorship for their referral (engagement opportunity), firms might want to consider offering the *referral* a "welcome" incentive as well. This could be offered with messaging on how to contribute to ERPs and to pique interest for them to provide referrals, thus creating a snowball effect. Variable incentive offerings for at least one study related to referrals was shown to be effective (Beaman & Magruder, 2012)

Cost implications

The second gap to be addressed through this research is focused on the cost implications associated with hiring through the different channels. Costs can include straightforward expenses, or implicit costs that are not as evident in the data. Time spent by the current workforce can equate to a significant investment as it relates to phone screening and interviewing talent. The fact that volume of LinkedIn candidate applications is twice the amount of ERP applications with only 3% of those candidates being hired would suggest there is a more efficient process for vetting talent coming

through this channel. Even prior to the offer stage, significantly less proceeded to interviews. ERPs have 38% of candidates moving forward to be interviewed. However, in comparison, LinkedIn has only 6% of their candidates interviewed. Even if one-hour of time is spent interviewing both ERP and LinkedIn candidates, this equates to more than 1,300 hours spent interviewing to net 703 hires (this equates to 162.5 full workdays in a 3-year period). Offer acceptance rates are also important to consider as time spent narrowing down candidate pools and getting to the stage of hiring ideally equates to hires. Offer acceptance rates can reflect the highly competitive job market. Time spent vetting talent can infuse inefficiencies into the hiring process.

Cost implications are extremely important for talent sourcing channel consideration (Taylor & Schmidt, 1983; Zottoli & Wanous, 2000). The analysis for the straightforward CPH for ERPs and LinkedIn hires was relatively the same (\$90 difference). However, further review revealed additional cost implications that should also be factored into CPH.

Sign-on bonuses for ERPs added \$1,460 per hire when spread across the 574 hires. While the number of hires for ERPs is more than 4x the total number of hires from LinkedIn, the sign-on bonuses and relocation offerings were 7x the amount they were for LinkedIn. There were no relocation expenses offered for LinkedIn hires, which should also be considered as to why or why not? Is there implicit bias occurring with decision making related to ERPs? Sign-on bonuses totaled \$104,500 for LinkedIn whereas ERP sign-on bonuses for the same time period totaled nearly \$785,000. Volume differences in offers do not justify this action. This increases the CPH for ERPs to \$4,449.

Sign-on bonus expenses are not insignificant if the employees who departed are associated with sign-on bonuses or relocations. While the costs outlined here are still less than the costs associated with 25-30% agency hire fees, what might be assumed to be an "inexpensive" sourcing channel may not be as cost-effective as it seems without considering all these costs. There is an opportunity to consider if there is in-fact bias in the recruiting process for ERPs. Is this impacting the likelihood to push candidates through to interviews and ultimately hire?

In thinking about the evolving landscape for job seekers today, there are several ways candidates can choose to engage with current employees or employers directly, but there is no question that the internet is a primary and preferred source for candidate applications. According to the 2018 Silkroad sources of hire report, 75% of applicants were acquired through online channels (Silkroad report). This means that firms need to offer as much information as possible by way of the internet so candidates can seek information through interactive online channels (Cober, Brown, Keeping, & Levy, 2004; Dineen, Ash, & Noe, 2002). This further reinforces the need for firms to be strategic in selecting their online partners and potentially educating their current employees on how to best leverage LinkedIn to engage their own networks for potential ERP candidates.

Another potential component to cost implications involves the imbalance with regards to candidate selection ratios. There appears to be a significant amount of time strain on the ERP candidates, as a result, the firm may be missing out on valuable hires from LinkedIn or other sources. However, at the same time, the number of hires through the ERP channel is much larger than LinkedIn, so are more in-depth review of the quality component of the hires (performance, retention or productivity) might reveal this is effort

well-spent. This imbalance and seemingly preferential treatment (sign on bonuses and relocation offerings) to ERPs has the potential to be of concern or a potential risk in hiring practices. With regards to the additional bonus or relocation funds offered to ERP hires, if there are no agreements signed or stipulations that require a payback if the hires leave, there may be additional lost costs associated with these hires. ERP candidates have a lot of inconspicuous costs and time invested by the current workforce – as the volume of candidates who were phone screened and interviewed is significant. Time required to care for these candidates who are not hired should otherwise be spent on direct sourcing talent through other channels (Vicknair et al, 2010).

Understandably, firms are challenged to maintain the credibility of their programs and are likely reaching out to candidates so that the current workforce will continue to provide referrals (Freeman, 2014). However, as these numbers increase, so does the time required by and this ultimately deters hiring managers from doing the jobs they are responsible for, therefore there is the potential of infusing significant inefficiencies into the productivity of the existing workforce. This reinforces the need for firms to conduct ongoing quantitative analysis with all their sourcing channels so they can identify weak links within the recruiting process (Sun, 2015).

Contingent value for sourcing channels

The final opportunity within the current talent sourcing research is to uncover contingent value that the talent sourcing channels are offering. This research revealed significant value in contributions for women and minority hours through both ERPs and LinkedIn. Women hires from both ERPs and LinkedIn equate for approximately 52% of the hires from these two channels. Minorities represented 55% of the overall LinkedIn

hires. These two channels are both contributing to these important populations, however, turnover for these two populations hovers in the range of 30%. ERPs have more women departing than minorities and LinkedIn represents the inverse with higher percentages of minorities leaving as compared to women. For context, the total number of female hires for the firm over the same three-year period equated to 671 total hires, this means these two channels contributed 303. Therefore, the two channels are accounting for 45% of the firm's overall female hires. This means that while the firm is primarily white males, the contributions for female hires from ERPs are significant enough to pay attention to in terms of contingent value.

There are additional opportunities to review who the referrers were from a gender and minority perspective – additionally, it may be worth examining if there is a likelihood that a performance and retention of hires coming from those most like themselves.

5.2 Limitations and opportunities for future research

While there were several contributions from this research, several limitations that can lend to future research can be noted. First, this was a review of one firm. Previous ERP researchers have covered a multitude of industries such as call centers (Fernandez & Castilla, 2017; Pieper, 2015), the vast differences related to compensation and skill levels show varying contributions to the outcomes presented through this study. Additionally, several factors that may be culturally influenced with regards to the current workforce's engagement with ERPs. The observations for this firm may be unique to the accounting and professional services industry and should be compared to other firms of comparable size and industry to identify trends or nuances that have the potential to be unique to one

firm. This firm has demonstrated imbalance as some teams are more heavily engaged in providing referral hires whereas other teams have little to no activity (even when there are job openings). This could equate to the leadership push for referrals and should be monitored for long-term effectiveness. Therefore, a meta-analysis would also improve validity with additional data considerations.

A second limitation exists in not fully knowing how or where the firm communicates ERP opportunities to the current workforce. Is there a promotional period to invoke participation? Is there messaging built into the early onboarding of new employees? Understanding the communication behind the ERP to generate engagement is helpful to recognize how or why employees are made aware of the process and policy surrounding the ERP. In thinking about the need to generate minority and female hires, a firm could leverage their internal employee resource groups centered around inclusion and diversity (i.e. empowering women networks, African American networks or other multicultural groups) to explain the firm's focus on sourcing talent from all groups to drive competitive advantage.

There is opportunity in building upon and looking at repeat referrer behavior (Fernandez & Castilla, 2001). For instance, if a referrer provides multiple referral hires, there may be an opportunity to assess if there comes a point of "saturation" where the performance or retention of the hire(s) or the referrer start to diminish over time. One might uncover that employees who are successfully providing referral hires may become imbalanced when it comes to performance for their current roles and this could negate a referral hire benefit. If there is an identified referrer "sweet spot" that enables high performance and high ERP engagement, there may be an advantage to having referrers

share testimonials on how they are generating referrals, how much they are earning and what motivates them to do so - as this could trigger interest from others and increase engagement with the ERPs overall.

The link between ERPs and LinkedIn should be explored for future research. Schlachter & Pieper (2019) conducted an integrative review of ERP research and proposed an agenda for future research in the area of ERPs and noted the need to examine technology (social media) and its effect on generating referral requests. LinkedIn specifically would be beneficial to review given the growing population of users who use it to maintain connectivity to current and former networks. It is likely that employees and recruiters are leveraging the same channel to engage potential candidates. With both channels requiring investment from firms, there is value in uncovering where there may be duplicity in candidate outreach.

5.3 Conclusion

Strategic hiring will continue to be an imperative for firms in the coming decade. Efforts to have efficient and effective recruitment channels will not drastically change in the coming years; if anything, the need to move top talent through the hiring process faster will become more of a priority. ERPs and social media (LinkedIn) will continue to be essential investments for firms to leverage in attracting talent and the return on these investments is important to monitor to ensure a competitive advantage in hiring practices. Fine tuning a strategic talent sourcing plan can impact productivity for the firm (Pieper et al, 2018; Wolthoff, 2018).

This research demonstrated that firms need to routinely monitor sourcing channels and their corresponding effectiveness. A channel that provides significant volumes of applications without an appropriate number retained adequately performing hires challenges efficiency and effectiveness of the source. ERPs have continuously been regarded as the most cost-effective, worthwhile sources for talent (Bloemer, 2010; Burks et al, 2015; Galenianos; 2014; Van Hoye, 2013). While this may continue to be the case, there are unintended inefficiencies that can enter through the hiring process if these channels are not reviewed. Additionally, the efforts to increase payouts to generate interest and engagement have proven to not work as expected for the firm in this study as referrals from employees who did not receive bonus payouts were no different in terms of performance quality or retention.

Finally, sources like LinkedIn, or other social media should also be watched closely as these channels are impacting the way in which employees are casting nets to engage their networks. If the tools are duplicative of one another, the long-term benefit of

hires from one channel versus another may not be as evident with regards to net hires' performance and retention. Social media sites like LinkedIn have evolved how firms look to recruit new employees (Kaplan & Haelein, 2010), but in turn networking sites and access to a firm's current workforce has also shifted. There is clearly no single channel that serves as the "magic bullet" to enable competitive advantage recruiting, but ERPs and LinkedIn remain highly relevant and important channels to keep an eye on.

TABLE 1: FY 2017-2019 Bonus payout hires and turnover

Payouts	Hires	Departures	Turnover %	< 6-month	Turnover %
			(within payout)	tenure	for ERPs
\$500	35	11	31%	2	7%
\$1,000	9	1	11%	-	-
\$3,000	3	1	33%	-	-
\$4,000	5	-	-	-	-
\$5,500	1	-	-	-	-
\$6,000	221	77	35%	12	49%
\$7,000	6	1	17%	-	-
\$8,000	52	17	33%	3	11%
\$10,000	1	-	-	-	-

^{*}Last column incorporates unpaid referral hires to calculate total turnover % for ERPs

TABLE 2: FY 2017-2019 Bonus eligible firmwide hires

Payouts	Eligible Hires	Percentage of firm hires
\$500	433	28%
\$1,000	60	4%
\$3,000	-	-
\$4,000	20	1%
\$5,500	-	-
\$6,000	763	49%
\$7,000	-	-
\$8,000	292	19%
\$10,000	-	-

TOTAL: 1568 total hires were made all of which were bonus eligible. (500 other positions are interns)

TABLE 3: Yield ratio data for ERPs and LinkedIn candidates

Source	Applications	Screens	Interviews	Offers	Accepts	Exits	Attrition
ERP	2574	1834	968	627	574	156	27%
LinkedIn	5208	788	335	145	129	41	31%

TABLE 4: Cost per hire metrics for ERPs and LinkedIn hires

Source	Firm investment	Hires	Straight CPH*	Sign-on bonus	Relocation
ERP	\$1,716,000	574	\$2989	\$784,597	\$53,500
LinkedIn	\$374,000	129	\$2899	\$104,500	\$0

^{*}Straight CPH does not account or sign-on or relocation expenses associated with hires.

REFERENCES

- Aaker, J. (2013). Millennial Searchers (pp. SR1). New York, N.Y.: New York Times Company.
- Amit, R., & Belcourt, M. (1999). Human resources management processes: a value-creating source of competitive advantage. *European Management Journal*, 17(2), 174-181.
- Banks, G. C., & Kepes, S. (2015). The influence of internal HRM activity fit on the dynamics within the "black box". *Human Resource Management Review*, 25(4), 352-367.
- Bansal, H. S., & Voyer, P. A. (2000). Word-of-Mouth Processes within a Services Purchase Decision Context. *Journal of Service Research*, 3(2), 166-177.
- Barber, J. (2005). Create an effective employee referral program. *Strategic HR Review*, 4(4), 5-5.
- Barney, J. B. and Wright, P. M. 1998. On becoming a strategic partner: the role of human resources in gaining competitive advantage. *Human Resource Management*, 37(1): 31–46.
- Bates, J. A. (1979). Extrinsic Reward and Intrinsic Motivation: A Review with Implications for the Classroom. *Review of Educational Research*, 49(4), 557-576.
- Baucus, M., & Beck-Dudley, C. (2005). Designing Ethical Organizations: Avoiding the Long-Term Negative Effects of Rewards and Punishments. *Journal of Business Ethics*, 56(4), 355-370.
- Beaman, L., & Magruder, J. (2012). Who gets the job referral? Evidence from a social networks experiment. The American Economic Review, 102, 3574–3593.
- Bernstein, D. J. (1990). Of carrots and sticks: A review of Deci and Ryan's intrinsic motivation and self-determination in human behavior. *Journal of the Experimental Analysis of Behavior*, *54*(3), 323-332. doi:10.1901/jeab.1990.54-323
- Bloemer, J. (2010). The Psychological Antecedents of Employee Referrals. *The International Journal of Human Resource Management*, 21(10), 1769-1791.
- Bond, B., Fernandez, R. M., & Labuzova, T. (2018). At the Expense of Quality? *Academy of Management Proceedings*, 2018(1), 14379.

- Breaugh, J., & Mann, R. (1984). Recruiting Source Effects: A Test of Two Alternative Explanations. *Journal of Occupational Psychology*, *57*(4), 261.
- Breaugh, J. A. (2008). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review*, 18(3), 103-118.
- Breaugh, J. A. (2013). Employee Recruitment. *Annual Review of Psychology*, 64(1), 389-416.
- Breaugh, J. A., Greising, L. A., Taggart, J. W., & Chen, H. (2003). The Relationship of Recruiting Sources and Pre-Hire Outcomes: Examination of Yield Ratios and Applicant Quality. *Journal of Applied Social Psychology*, 33(11), 2267-2287.
- Brotherton, P. (2012). Social media and referrals are best sources for talent: a new survey shows that companies are investing more and more of their recruitment resources in social media networks and seeing it pay off. T+D, 66(1), 24.
- Brown, M., Setren, E., & Topa, G. (2016). Do Informal Referrals Lead to Better Matches? Evidence from a Firm's Employee Referral System. *Journal of labor economics*, 34(1), 161-161.
- Brown, V., & Vaughn, E. (2011). The Writing on the (Facebook) Wall: The Use of Social Networking Sites in Hiring Decisions. *Journal of Business and Psychology*, 26(2), 219-225.
- Burks, S., Cowgill, B., Hoffman, M., & Housman, M. (2015b). The Value of Hiring through Employee Referrals. *The Quarterly Journal of Economics*, 130(2), 805.
- Buttle, F. A. (1998). Word of mouth: understanding and managing referral marketing. *Journal of Strategic Marketing*, *6*(3), 241-254.
- Cairns, T. D. (2015). Disruptive Talent-Acquisition Strategies. *Employment Relations Today*, 42(3), 29-35.
- Chiang, J. K.-H., & Suen, H.-Y. (2015). Self-presentation and hiring recommendations in online communities: Lessons from LinkedIn. *Computers in Human Behavior*, 48, 516-524.
- Chillemi, O., & B. Gui, 1997. "Team Human Capital and Worker Mobility," Journal of Labor Economics, 15, 567–585.
- Cober, R. T., Brown, D. J., Keeping, L. M., & Levy, P. E. (2004). Recruitment on the Net: How Do Organizational Web Site Characteristics Influence Applicant Attraction? *Journal of Management*, 30(5), 623-646.

- Cohen, J. (1922). A Power Primer. Psychological Bulletin, 112, 155-159.
- Collins, C. The interactive effects of recruitment practices and product awareness on job seekers' employer knowledge and application behaviors. *Journal of Applied Psychology* 92.1 (2007): 180-190.
- Collins, C., & Stevens, C. (2002). The relationship between early recruitment-related activities and the application decisions of new labor-market entrants: A brand equity approach to recruitment. *Journal of Applied Psychology*, 87(6), 1121-1133.
- Condry, J. (1977). Enemies of exploration: Self-initiated versus other-initiated learning. *Journal of Personality and Social Psychology*, *35*(7), 459-477.
- Craig, M. (2015). Cost Effectiveness of Retaining Top Internal Talent in Contrast to Recruiting Top Talent. *Competition Forum*, *13*(2), 203-209.
- Davison, H., Maraist, C., & Bing, M. (2011). Friend or Foe? The Promise and Pitfalls of Using Social Networking Sites for HR Decisions. *Journal of Business and Psychology*, 26(2), 153-159.
- Deci, E., & Ryan, R. . (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E., Koestner, R., & Ryan, R. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. Includes comments by M.R. Lepper, J. Henderlong and I. Gingras and by R. Eisenberger, W. D. Pierce and J. Cameron and reply by authors. *Psychological Bulletin*, 125(6), 627-668.
- Deci, E. L. (1972). The effects of contingent and noncontingent rewards and controls on intrinsic motivation. *Organizational Behavior and Human Performance*, 8(2), 217-229.
- Deci, E. L., Ryan, R. M., & Koestner, R. (2001). The Pervasive Negative Effects of Rewards on Intrinsic Motivation: Response to Cameron (2001). *Review of Educational Research*, 71(1), 43-51.
- Decker, P., & Cornelius, E. (1979). A Note on Recruiting Sources and Job Survival Rates. *Journal of Applied Psychology*, 64(4), 463.
- Dekay, S. (2009). Are Business-Oriented Social Networking Web Sites Useful Resources for Locating Passive Jobseekers? Results of a Recent Study. *Business Communication Quarterly*, 72(1), 101-105.

- Delaney, M., & Royal, M. (2017). Breaking Engagement Apart: The Role of Intrinsic and Extrinsic Motivation in Engagement Strategies. *Industrial and organizational Psychology*, 10(1), 127-140.
- Dineen, B. R., Ash, S. R., & Noe, R. A. (2002). A Web of applicant attraction: person-organization fit in the context of Web-based recruitment. *The Journal of applied psychology*, 87(4), 723-734.
- Doherty, R. (2010). Getting social with recruitment. Strategic HR Review, 9(6), 11-15.
- Eldor, L., & Vigoda-Gadot, E. (2017). The nature of employee engagement: rethinking the employee-organization relationship. *The International Journal of Human Resource Management*, 28(3), 526–552.
- Ekinci, E. (2016). Employee referrals as a screening device. *RAND Journal of Economics*, 47(3), 688-708.
- Erts, N. (2017). Still In Doubt? 53 Reasons To Use HR Systems: Saying yes to an HR management system. *Core HR, HRIS and Payroll Excellence Essentials*.
- Fernandez, R. M., & Castilla, E. J. (2001). How much is that network worth? Social capital returns for referring prospective hires. In K. Cook, N. Lin, & R. Burt (Eds.), Social capital: Theory and research (pp.85–104). Hawthorne, NY.
- Fafchamps, M., & Moradi, A. (2015). Referral and Job Performance: Evidence from the Ghana Colonial Army. *Economic Development and Cultural Change*, 63(4), 715-751.
- Freeman, C. (2014). Employee Referral Programs Need Support From Employers. *HR Focus*, 91(3).
- Friebel, G., Heinz, M., Hoffman, M., & Zubanov, N. (2019). What Do Employee Referral Programs Do? *IDEAS Working Paper Series from Research Papers in Economics (RePEc)*.
- Galenianos, M. (2014). Hiring through referrals. *Journal of Economic Theory*, 152, 304.
- Gerard, J. G. (2012). Linking in With LinkedIn®: Three Exercises That Enhance Professional Social Networking and Career Building. *Journal of Management Education*, 36(6), 866-897.
- Granovetter, M. (1995). *Getting a Job: A Study of Contacts and Careers*. Cambridge, MA: Harvard University Press.

- Grant, D., & Newell, S. (2013). Realizing the strategic potential of e-HRM. *Journal of Strategic Information Systems*, 22(3), 187-192.
- Groeger, L., & Buttle, F. (2014). Word-of-mouth marketing influence on offline and online communications: Evidence from case study research. *Journal of Marketing Communications*, 20(1-2), 21-41.
- Gupta, N., & Shaw, J. D. (1998). Let the Evidence Speak: Financial Incentives are Effective. *Compensation & Benefits Review*, 30(2), 26-32.
- Harter, J. K., Hayes, T. L., & Schmidt, F. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis.(Abstract). *Journal of Applied Psychology*, 87(2), 268.
- Hester, J. (2013). The High Cost of Employee Turnover and How to Avoid It. *Nonprofit World*, 31(3), 20-21.
- Hinojosa, A. S., Walker, H. J., & Payne, G. T. (2015). Prerecruitment organizational perceptions and recruitment website information processing. *The International Journal of Human Resource Management*, 26(20), 2617-2631.
- Hogg, M., & Terry, D. (2000). Social Identity and Self-Categorization Processes in Organizational Contexts. *Academy of Management. The Academy of Management Review*, 25(1), 121-140.
- Hyten, C. (2009). Strengthening the Focus on Business Results: The Need for Systems Approaches in Organizational Behavior Management. *Journal of Organizational Behavior Management*, 29(2), 87-107.
- Joyce, S. (2016). The Internet Revolution: Digital Disruption in Recruiting and Job Search. *Career Planning and Adult Development Journal*, 32(2), 17-24.
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *The Academy of Management Journal*, *33*(4), 692-724. doi:10.2307/256287
- Kirnan, J. P., Farley, J. A., & Geisinger, K. F. (1989). The relationship between recruiting source, applicant quality, and hire performance: An analysis by sex, ethnicity, and age. *Personnel Psychology*, 42(2), 293-308.
- Korman, A. K., Glickman, A. S., & Frey, R. L., Jr. (1981). More is Not Better: Two Failures of Incentive Theory. *Journal of Applied Psychology*, 66, 255-259.

- Laczniak, R. N., Decarlo, T. E., & Ramaswami, S. N. (2001). Consumers' Responses to Negative Word-of-Mouth Communication: An Attribution Theory Perspective. *Journal of Consumer Psychology*, 11(1), 57-73.
- Laumer, S., Maier, C., & Eckhardt, A. (2015). The impact of business process management and applicant tracking systems on recruiting process performance: an empirical study. *Journal of Business Economics*, 85(4), 421-453.
- Lee, I. (2007). An architecture for a next-generation holistic e-recruiting system. *Communications of the ACM*, 50(7), 81-85.
- Lievens, F., van Dam, K., & Anderson, N. (2002). Recent trends and challenges in personal selection. *Personnel Review*, 31, 580-601.
- Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Current Directions in Psychological Science*, 15(5), 265-268.
- London, M. (2003). *Job feedback: giving, seeking and using feedback for performance improvement* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Ludwig, T. D., & Frazier, C. B. (2012). Employee Engagement and Organizational Behavior Management. *Journal of Organizational Behavior Management*, 32(1), 75-82.
- Macey, W. H. (2009). *Employee engagement : tools for analysis, practice, and competitive advantage*. Malden, MA: Wiley.
- Macey, W. H., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and organizational Psychology*, 1(1), 3-30.
- Madia, S. A. (2011). Best practices for using social media as a recruitment strategy. *Strategic HR Review*, *10*(6), 19-24.
- Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2013). Analyzing the impact of HRIS implementations on HR personnel's job satisfaction and turnover intention. *Journal of Strategic Information Systems*, 22(3), 193-207.
- Marin, A. (2012). Don't mention it: why people don't share job information, when they do, and why it matters. *Social networks*, 34(2), 181-192.
- Mone, E. M., & London, M. (2009). Employee engagement through effective performance management: a manager's guide. New York: Routledge.
- Nikolaou, I. (2014). Social Networking Web Sites in Job Search and Employee Recruitment. *International Journal of Selection and Assessment*, 22(2), 179–189.

- O'Connell, M., & Kung, M.-C. (2007). The Cost of Employee Turnover. *Industrial Management*, 49(1), 14-19,15.
- Ollington, N., Gibb, J., & Harcourt, M. (2013). Online social networks: an emergent recruiter tool for attracting and screening. *Personnel Review*, 42(3), 248-265.
- Ordanini, A., & Silvestri, G. (2008). Recruitment and selection services: Efficiency and competitive reasons in the outsourcing of HR practices. *The International Journal of Human Resource Management*, 19(2), 372-391.
- Paul Huo, Y., & Kearns, J. (1992). Optimizing the Job-person Match with Computerized Human Resource Information Systems. *Personnel Review*, 21(2), 3-18.
- Phillips, J. M., & Gully, S. M. (2015). Multilevel and Strategic Recruiting: Where Have We Been, Where Can We Go From Here? *Journal of Management*, 41(5), 1416-1445.
- Pieper, J. (2015). Uncovering the Nuances of Referral Hiring: How Referrer Characteristics Affect Referral Hires' Performance and Likelihood of Voluntary Turnover. *Personnel Psychology*, 68(4), 811.
- Pieper, J. R., Greenwald, J. M., & Schlachter, S. D. (2018). Motivating employee referrals: The interactive effects of the referral bonus, perceived risk in referring, and affective commitment. *Human Resource Management*, *57*(5), 1159-1174.
- Pratt, M., Rockmann, K., & Kaufmann, J. (2006). Constructing professional identity: the role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49(2), 235-262.
- Qadir, A., & Agrawal, S. (2017). HR Transformation through Human Resource Information System: Review of Literature. *Journal of Strategic Human Resource Management*, 6(1), 30-38.
- Rafaeli, A., Hadomi, O., & Simons, T. (2005). Recruiting through advertising or employee referrals: Costs, yields, and the effects of geographic focus. *European Journal of Work and Organizational Psychology, 14*(4), 355-366.
- Rangel, L. (2014). Writing a LinkedIn profile to get found by recruiters. *Career Planning and Adult Development Journal*, 30(2), 126-132.
- Rashid, F., & Zafar, I. (2019). Impact of referral bonus on (RHP) referral hiring process with moderating effect of organizational justice: A case study of telecom companies of Pakistan. *International Journal of Scientific & Engineering Research*, 10(4), 1048-1089.

- Rubineau, B., & Fernandez, R. (2013). Missing Links: Referrer Behavior and Job Segregation. *Management Science*, 59(11), 2470-2489.
- Ryan, R. (1995). Psychological Needs and the Facilitation of Integrative Processes. *Journal of Personality*, 63(3), 397-427.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7), 600-619.
- Schlachter, S. D., & Pieper, J. R. (2019). Employee referral hiring in organizations: An integrative conceptual review, model, and agenda for future research. *The Journal of applied psychology*, 104(11), 1325-1346.
- Schmit, M. J., & Allscheid, S. P. (1995). Employee attitudes and customer satisfaction: Making theoretical and empirical connections *Personnel Psychology*, 48(3), 521-536.
- Shinnar, R., Young, C., & Meana, M. (2004). The Motivations for and Outcomes of Employee Referrals. *Journal of Business and Psychology*, 19(2), 271-283.
- Sinha, V., & Thaly, P. (2013). A Review on Changing Trends of Recruitment Practice to Enhance the Quality of Hiring in Global Organizations. *Management: Journal of Contemporary Management Issues*, 18(2), 141-156.
- Sivertzen, A.-M., Nilsen, E. R., & Olafsen, A. H. (2013). Employer branding: employer attractiveness and the use of social media. *Journal of Product & Brand Management*, 22(7), 473-483.
- Stockman, S., Van Hoye, G., & Carpentier, M. (2017). The Dark Side of Employee Referral Bonus Programs: Potential Applicants' Awareness of a Referral Bonus and Perceptions of Organisational Attractiveness. *Applied Psychology*, 66(4), 599-627.
- Strehlke, C. (2010). Social network sites: A starting point for career development practitioners. *Journal of Employment Counseling*, 47(1), 38-48.
- Sun, L. (2015) Exploring the Causes of Recruiting Failure. *Journal of Service Science and Management*, **8**, 42-45.
- Swaroff, P., Barclay, L., & Bass, A. (1985). Recruiting Sources: Another Look. *Journal of Applied Psychology*, 70(4), 720.

- Taber, M., & Hendricks, W. (2003). The Effect of Workplace Gender and Race Demographic Composition on Hiring Through Employee Referrals. *Human Resource Development Quarterly*, 303-319.
- Taber, M. E., & Hendricks, W. (2003). The effect of workplace gender and race demographic composition on hiring through employee referrals. *Human Resource Development Quarterly*, 14(3), 303-319.
- Taylor, M. S. & Collins, C. J. (2000). Organizational recruitment: Enhancing the intersection of research and practice. In C. L. Cooper & E. A. Locke (Eds.) *Industrial and Organizational Psychology* (pp. 304-334).
- Taylor, M. S., & Schmidt, D. W. (1983). A process-oriented investigation of recruitment source effectiveness. *Personnel Psychology*, *36*(2), 343-354.
- Terpstra, D. E., & Rozell, E. J. (1993). The Relationship of Staffing Practices to Organizational Level Measures of Performance. *Personnel Psychology*, 46(1), 27-48.
- Thibault Landry, A., Schweyer, A., & Whillans, A. (2017). Winning the War for Talent: Modern Motivational Methods for Attracting and Retaining Employees. *Compensation & Benefits Review*, 49(4), 230-246.
- Thomas, S. L., & Ray, K. (2000). Recruiting and the web: High-tech hiring. *Business Horizons*, 43(3), 43-52.
- Van Hoye, G. (2013). Recruiting Through Employee Referrals: An Examination of Employees' Motives. *Human performance*, 26(5), 451-464.
- Van Hoye, G., & Lievens, F. (2005). Recruitment-Related Information Sources and Organizational Attractiveness: Can Something Be Done About Negative Publicity? *International Journal of Selection and Assessment*, 13(3), 179-187.
- Vecchio, R. P. (1995). The Impact of Referral Sources on Employee Attitudes: Evidence from a National Sample. *Journal of Management*, 21(5), 953-965.
- Vicknair, J., Elkersh, D., Yancey, K., & Budden, M. C. (2010). The Use of Social Networking Websites as a Recruiting Tool for Employers. *American Journal of Business Education*, *3*(11), 7.
- Vroom, V. H. (1964). Work and motivation (Vol. 54): Wiley New York.
- Walker, H. J., Feild, H. S., Bernerth, J. B., & Becton, J. B. (2012). Diversity cues on recruitment websites: investigating the effects on job seekers' information processing. *The Journal of applied psychology*, 97(1), 214-224.

- Walker, S. (2012). Employee engagement and communication research: measurement, strategy, and action (1st ed.). Philadelphia: Kogan Page.
- Weller, I., Matiaske, W., Holtom, B. C., & Mellewigt, T. (2009). Level and time effects of recruitment sources on early voluntary turnover.(Author abstract)(Report). *Journal of Applied Psychology*, *94*(5), 1146.
- White, S. (2017). Write a LinkedIn profile that draws in recruiters. *Journal of Accountancy*, 223(2), 20-21.
- Wiblen, S., Dery, K., & Grant, D. (2012). Do you see what I see? The role of technology in talent identification. *Asia Pacific Journal of Human Resources*, 50(4), 421-438.
- Williams, N. (2009). Employee referral schemes help net top talent (pp. 39). Sutton: Reed Business Information UK.
- Wirtz, J., & Chew, P. (2002). The effects of incentives, deal proneness, satisfaction and tie strength on word-of-mouth behaviour. *International Journal of Service Industry Management*, 13(2), 141-162.
- Wolk, D. (2004). Social-networking sites pique the interest of company recruiters; Sites such as LinkedIn and Ryze can yield good passive candidates, but it's unclear whether they are recruiting's "secret weapon".(The Insider). *Workforce Management*, 83(8), 70.
- Wolthoff, R. (2018). Applications and interviews: Firms' recruiting decisions in a frictional labour market. *Review of Economic Studies*, 85. 1314-1351.
- Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *The International Journal of Human Resource Management*, 5(2), 301-326.
- Yakubovich, V., & Lup, D. (2006). Stages of the Recruitment Process and the Referrer's Performance Effect. *Organization Science*, 17(6), 710-723.
- Zottoli, M. A., & Wanous, J. P. (2000). Recruitment Source Research: Current Status and Future Directions. *Human Resource Management Review*, 10(4), 353-382.

Appendix 1

Firm ERP Policy (As posted on employee intranet)

The goal of the Employee Referral Program is to reward deserving employees who make referrals of highly qualified candidates for identified needs within the firm that subsequently result in the candidate being hired by XXXX. In order to receive an Employee Referral Program bonus, the process must be followed.

- All XXXX employees are eligible with the exception of partners, principals, directors and internal recruiters. HRBPs and HR Managers are not eligible for those referred into the lines of business they support.,
- The referral must be for a full-time position and the candidate must be hired to work a full-time schedule.
- A current employee can be eligible for a referral bonus when recruiting a former employee of the firm, provided the candidate has been separated from the Firm for three or more years.
- Former employees of XXXX (except as noted above), candidates working through a temporary service or headhunter, seasonal employees and contract candidates are not eligible candidates for the Employee Referral Program.
- The candidate must be aware they are being submitted as a referral to XXXX.
- The program is for experienced hires only. The candidate must have relevant work experience and not be entering the work force directly from campus.
- Referral credit is non-transferable and cannot be assigned to another employee if that employee
 was not involved in the initial contact with the candidate.
- The Employee must submit the referral through the Employee Referral Program system to be assigned credit. This alerts Talent Acquisition of the referral, as they will then reach out to set up a phone call. Referrals coming from any other channel (e-mail, text, etc.) will not be assigned credit. Referring employees should also be able to set up a phone call between the referred candidate and Talent Acquisition, if needed.
- Only one employee may be listed as the "referring employee." The first employee to submit the referred candidate will qualify for the bonus.
- The referring employee must be a current employee of the Firm at the time the referral is made and at the time the bonus is payable.

Employee Type	External Client- Facing*	Non-External Client-Facing	
Director	\$8,000	\$6,000	
Senior Manager	\$8,000	\$6,000	
Manager	\$8,000	\$6,000	
Lead Consultant	\$8,000	N/A	
Senior Associate	\$6,000	\$4,000	
Senior Consultant	\$6,000	N/A	
Associate (Experienced)	\$6,000	\$1,000	
Consultant (Experienced)	\$6,000	N/A	
I Staff Accountant (Experienced)	\$1,000	N/A	
[Accounting Supervisor	\$1,000	N/A	
Client Accountant (Experienced)	\$500	N/A	
Administrative Staff	\$500	\$500	

^{*}External Client-Facing roles are defined as the following Staff Classes: Assurance Services, Financial Services, Forensics & Valuation, Government Contracting, Healthcare Consultant, IT Advisory, Loan Review Advisory, Other Advisory, Other Compliance, Retirement Plan Services, Risk Advisory Tax (including all specialties), Transaction Advisory Services, Write-up and Bookkeeping.

All candidates submitted through the Employee Referral Program will be evaluated, along with all other candidates, under XXXX's recruiting policies and procedures. There will be no favoritism given to any referred candidate for any reason. All information regarding the screening and hiring decisions will remain strictly confidential.

Bonuses are processed as taxable income in accordance with tax regulations and will be paid through the normal payroll system. The Director of Talent Acquisition will sign the Referral Bonus Form and will forward to the payroll department for processing.

The bonus amount will be paid in full after the new employee has been employed for 90 days. The incentive schedule will be created and approved by the Executive Committee each plan year. The bonus amount will be determined by the level or position, internal demand and market demands.

There is no limit to the number of referrals or awards any employee may make or receive. The Employee Referral Program may be suspended or amended at any time at the discretion of the Firm. Regional Managing Partners have the discretion of approving an additional incentive for positions deemed as critical, based upon staffing needs and labor market conditions.

Appendix 2

Data received from participating firm:

• ERP Specifics (Payout amounts & policies/guidelines)

Referrer (employee) info:

- Employee ID (randomized to protect identification)
- Gender
- Age
- Diversity Identification
- Level/Title/Department
- Supervisor rated performance
- Days employed with firm (tenure)

Referral (pre/post new hire) info:

- Employee ID (randomized to protect identification)
- Gender
- Age
- Diversity Identification
- Level/Title/Department
- Supervisor rated performance
- Days employed with firm (tenure)
- All referrals submitted over 3-year period, including:
 - o Hired
 - o Offered, not accepted
 - Not hired
- LinkedIn candidates over 3-year period, including;
 - o Hired
 - o Offered, not accepted
 - Not hired

Data on Yield Ratios:

- Recruiter phone screen
- Interviewed
- Offered (offer declined)
- Offered (offer accepted)

Appendix 3

Additional variables coded for SPSS

Source2.0 (For comparing ERP/LI)

1=Internal Referral

2=LinkedIn

Tenure2.0

1 = exited employee

0 = still employed

Unpaidorpaid

0=Unpaid

1=Paid

Gender

0 = Unidentified

1 = Female

2 = Male

Total number of hires (breakdown):

Internal Referrals = 574

LinkedIn = 129

ERP Paid/Unpaid:

0 - Unpaid = 241

1 - Paid = 333

Performance

Internal Referrals with first performance reviews

0 - Unpaid = 97 hires

1 - Paid = 196 hires

Total LinkedIn Hires $w/1^{st}$ performance review = 60

ERP Departures (For retention metric)

0 - Unpaid = 48 departures

1 - Paid = 108

Total Departures from Internal Referrals = 156

LinkedIn Departures

41