ABSTRACT

Examining Health Insurance Literacy
for Employer-Based Health Insurance Education

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Many employees report being satisfied with the health plans offered by their employer; however, research shows that they do not understand the key terms and concepts needed to effectively choose and use a health plan. Health insurance terminology and concepts are complicated and require various competencies for comprehension and application, and many individuals face barriers when it comes to effectively using health insurance. Most insured people in the United States under the age of 65 are insured by an employer-sponsored health plan, creating an urgent need for education and acknowledgment of barriers in the work sector.

The issue of low health insurance literacy (HIL) was explored through the examination of existing literature, uncovering that while education exists for the public sector, the work sector has not adopted a HIL framework due to the lack of research. To address the lack of research, a qualitative case study focused on employees at a large nonprofit based in Denver, Colorado. The sample included nineteen employees from the Human Resources department, with access to the same health plans and education. The

case study was divided into two phases, utilizing a questionnaire and interview to address the research questions. The study explored the current HIL of participants, reasons why health insurance is difficult to understand, and barriers to HIL. Transformational Learning Theory guided the development of the research questions, data collection, and data analysis for the case study.

The findings from the case study provided evidence of the need for HIL education in the workplace. An in-depth analysis determined gaps in HIL and uncovered emerging themes regarding barriers to HIL. Based on the results of the study, the recommendation for a workplace HIL program includes the incorporation of reflection on past experiences using health insurance, practice calculating health service scenario costs utilizing the employee's specific health plan variables, and the allowance of time for questions to increase transparency and break down past assumptions about health insurance. Further research should be conducted to learn more about the impact of training design and implementation.

Examining Health Insurance Literacy
for Employer-Based Health Insurance Education

by

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A Dissertation

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DEDICATION

To my mom, dad, Jack, and Charlie.

CHAPTER ONE

Introduction to the Problem of Practice

Introduction

While the future of employer-sponsored health care is unclear, it remains the leading source of health care coverage in the United States. Employers have a responsibility to educate health plan subscribers, however, a widely used framework for health insurance literacy (HIL) education in the workplace does not exist. Instead, many employers rely on employees to do their own research. Navigating a health plan requires a variety of skills, and employers do not have the research or tools needed to promote improvement.

In 2011, a Roundtable comprised of experts with a wide range of backgrounds came together at the Kaiser Foundation to construct a definition and discuss strategies for increasing HIL.

> Health insurance literacy measures the degree to which individuals have the knowledge, ability, and confidence to find and evaluate information about health plans, select the best plan for their own (or their family's) financial and health circumstances, and use the plan once enrolled. (Quincy, 2012, p. ii)

The dissection of this definition reveals the complexities of HIL. Knowledge, ability, and confidence are each multifaceted and vary based on strengths and challenges faced by individuals. To understand and forecast the need for services and medications throughout the plan year, individuals need HIL knowledge and the ability to plan ahead. Confidence and self-efficacy play a role in the subscriber's ability to seek answers to questions and locate resources. Terminology and numeracy skills are crucial for evaluating the cost of

medications and services. Poor experiences with health insurance negatively impact the motivation and confidence to become more engaged in one's own health insurance management.

Examples of existing workplace initiatives include the use of benefits orientations, email communications, technological initiatives, summary plan descriptions (SPDs), and guidebooks. These attempts have an impact on plan comprehension but do not address each variable needed to increase HIL. Little research exists regarding the employee's perception of the effectiveness of employer health insurance education. However, a study conducted by Harris Interactive and reported on Kaiser Health News is one of many that provides evidence for the inadequacy of current measures. Fifty-one percent of 1,008 people surveyed for the report could not correctly define the terms premium, copay, and deductible (Evans, 2013). These terms along with other terms and concepts are dynamic, and a clear understanding is crucial when using health insurance.

A one-size-fits-all approach to HIL education is not reasonable, as each workplace employs a unique population. This study aims to provide employers with better insight for the development of tools for promoting HIL for their diverse groups of employees. This requires a current snapshot of health insurance knowledge and gaps, existing education initiatives attempting to simplify the complex system, and common barriers to HIL.

Statement of the Problem

A brief history of employer-sponsored plans provides a background for workplace benefits and the evolution of the current problem. During World War II, employers introduced the employer-sponsored health plan to attract talent during wage freezes. The

employer carried most of the cost and education was an afterthought. In the 1990s, employer-sponsored health insurance costs shifted to the employee. Education became a focus; however, social messages in the United States promoting the use of credit and consumerism conflicted with education initiatives that focused on savings (Vitt, 2013). Education initiatives appeared to have little impact. In 2013 the President's Advisory Council on Financial Capability presented research advocating for workplace health insurance education (Vitt, 2013). The evidence strengthened advocacy efforts for HIL initiatives but has not led to improvements in the work sector. Vitt (2013) explains that failing past initiatives may play a part in the lack of action around outreach and adult education.

Using a health plan properly requires a variety of skills, such as reading comprehension, numeracy, and vocabulary. Without these skills, individuals may experience difficulty leading to stress. Greenwald et al. (2019) surveyed over 1,000 participants regarding their understanding of health benefits and reported that "aligned with their top financial stressors, 88% report that retirement savings plans contribute the most toward a feeling of financial security. Health insurance tops that list of financial stressors, with 89% saying it contributes the most to financial security" (p. 7). This alarming evidence of stress due to low HIL exists across the literature, providing evidence of the need for change. Perrault and Hildebrand (2019) report that "about half of employees whose employers offer health insurance believe that making decisions related to health insurance causes them significant stress" (p. 14). Research-based, adult education to increase HIL would decrease the stress caused during decision making.

Despite current education efforts by insurance companies and employers, HIL remains low. Employees self-report that they understand health insurance but do not perform well when displaying an understanding of basic terms and concepts. Greenwald (2018) explains that "more than one-third (37 percent) of employees indicate that their employer or benefits company provides no education or advice on benefits" (p. 10). This may not be due to employers' lack of awareness that the issue exists. Many employers believe that employees should have a good understanding of health insurance; however, a LIMRA International survey found that just a small percentage of employers believe that they do (Gilligan, 2010). It is no longer acceptable or reasonable for the reliance on health insurance companies to engage employees and increase HIL. Many health care vendors attempt to appeal to employers through education initiatives, but current strategies continue to produce poor results. Even the most well-intentioned health plan communications increase confusion and frustration for employees that do not understand health insurance, negatively impacting confidence.

The literature supports claims that a combination of competencies provides the most effective outcomes for choosing and using health insurance. The most frequently cited competencies include knowledge, ability, confidence, financial literacy, numeracy, and reading comprehension. Villagra (2019) stated that "…HIL must be looked at as a unique skill, without which consumers cannot rationally choose or use health insurance or realize the full value of their policies" (p. 1). A competency inclusive model for employers is crucial and does not exist, but an understanding of the reasons why employees struggle to understand and use health insurance is needed first.

Barriers to HIL such as language, low socioeconomic status, low financial literacy, low health literacy, and other factors play a role in the problem of low HIL. Villagra (2019) explains that "racial and ethnic minorities, young adults, and those with limited English language proficiency are especially disadvantaged" (p. 1). The required understanding of complicated terminology and concepts, numeracy, and confidence leave the most vulnerable behind. This increases stress on populations which already experience a low margin for learning new information. An equitable lens for increasing HIL is crucial for addressing the problem.

A lack of research contributes to the neglect of HIL. The majority of HIL research addresses HIL for those people enrolling through the Marketplace. The Marketplace was created with the deployment of the Affordable Care Act (ACA), which greatly exposed the issue of low HIL. The Marketplace is a platform for enrollment in public health plans that was created in response to the ACA. Most employers require employees to use a benefits platform to enroll in their employer-sponsored plan. While the use of enrollment platforms to enroll and educate employees is time effective, personalized interventions are important. The content in current modes of education does not accommodate the variety of scenarios that the diverse workforce experiences. Access to technology and technological skill level may prove these modes of communication good for some and more frustrating for others. Employers must examine the microcultures within the organization and determine the barriers that are faced by their population. This study provides a sample of employees' baseline knowledge and perception of barriers regarding employer-based health insurance using a case study to inform recommendations for future workplace HIL education.

Purpose of the Study

This study exposes gaps in the HIL of a group of employees working in a large nonprofit organization in Denver, CO. The complexity of health insurance can be paralyzing for the employee, especially if they are already experiencing deficiencies in other competencies. The primary research question that will guide this study is: What are the health insurance literacy gaps in the workplace? By providing evidence for this question, the first goal is to provide employers with a better understanding of what employees struggle to understand. Employers need research-based information about subscribers of employer-based health insurance plans to design effective HIL education initiatives.

The first sub-question in the study is: Why are health insurance benefits difficult to understand? Existing employee benefits research provides employers with feedback for benefits communication interventions. Perrault and Hildenbrand (2019) state that "one of the ways employees learn about benefits is through communications provided by their human resources departments. However, little research is dedicated to how effective employees perceive human resources communication about benefits to be" (p. 13). Vitt (2014) emphasizes that "the business case by which employee training succeeds at any task requires an assessment of need, the feasibility of the instruction, competent educators, evaluation and improvement, socio-cultural sensitivity, and the sustained commitment of leadership over time" (p. 72). This study provides guidance for considerations made when designing a robust and effective HIL education initiative.

The second-sub question that further guides the study is: What factors contribute to or are barriers to health insurance literacy? Current workplace health benefits initiatives have not applied HIL barrier research. As described in the literature review,

examples include a lack of confidence and competencies, low socioeconomic status, and racism. More research is needed to continue to uncover barriers, and the hope is that this study's questionnaires and interviews will provide emerging themes for common barriers through the reflection of past experiences using employer-sponsored health insurance. A lack of inclusive research and assessment strategies have perpetuated the problem of low HIL.

Theoretical Framework

Current frameworks for improving HIL were designed and implemented in response to public confusion when electing a health plan on the Marketplace. While some university extensions offer partnerships with employers for HIL education, the adoption of these programs has been sparse. This study builds on frameworks from previous research and incorporates Transformational Learning Theory.

Adults enrolled in an employer-sponsored health plan must undergo a shift in mindset when it comes to the importance of understanding and using health insurance. As listed in the definition of HIL, confidence is a key element for success. Transformational Learning Theory proposes that by connecting new knowledge with past experiences and assumptions, one can begin to truly learn and act based on new knowledge. Bergeron et al. (2017) explain that Transformational Learning Theory is an effective theory for constructing a program that allows individuals to engage in this type of learning process. Some Human Resources practitioners currently apply this theory when designing professional development opportunities and job skills trainings. An employer's shared services department, which typically houses benefits administration, must also put this theory into practice. When adults relate past experiences to new knowledge, the outcomes

have shown to produce more autonomy and independent thinking (Ju, 2018). Ju (2018) and his colleagues explored theories that are relevant to Human Resources Development and found that within the psychology theories and adult professional education, Transformational Learning Theory leads to independent thinking (p. 142).

Paulo Freire is originally credited with developing Transformational Learning Theory, and more current research has been conducted by Jack Mezirow. Mezirow (1997) has written numerous articles regarding Transformative Learning and explains that "critical reflection, awareness of frames of reference, and participation in discourse become significant elements in defining learning needs, setting educational objectives, designing materials and methods, and in evaluating learner growth using nontraditional methods such as portfolios" (p. 11). Simply teaching terminology and concepts in HIL and expecting action is not effective. The learner must attach meaning to become autonomous. Autonomy is accomplished through reflection, the breaking down of past assumptions, and the examination of barriers.

Transformative learning provides an effective lens for building a workplace HIL framework that addresses barriers and promotes action based on new knowledge. Workplace HIL improvement calls for education that is effective for a diverse set of individuals. Moving past the barriers that exist in HIL requires that individuals assess their personal assumptions about health insurance. Mezirow (1997) theorized that meaning schemes and meaning perspectives help form how we think. Meaning schemes include an individual's beliefs, attitudes, and emotions. The meaning perspectives identified for transformative learning include psychological, sociolinguistic, and epistemic perspectives. Many individuals have had negative experiences using health

insurance and have experienced emotional responses which have shaped their attitudes and confidence.

A large majority of organizations are not education oriented and lack the communication and andragogy skills to properly administer a health plan. The incorporation of Transformational Learning Theory into education initiatives will help define the path for employers for beginning to impact HIL. The transformative learning process will allow the employee to take ownership, demand resources and proper communication, and feel empowered to use health insurance in a healthy, cost-effective way.

Research Design

The researcher chose a qualitative case study design for the study. Creswell and Poth (2018) describe the qualitative process as one which "entails preliminary considerations, phases in a process, and overall elements to consider throughout the process" (p. 42). A natural setting, bounded sample, the theoretical framework, research questions, and ethical elements were considered throughout the research design. Low HIL is a problem in need of more exploration, and a two-phase case study was determined to be the most effective design to gain a better understanding of the issue.

The researcher collected data from the Human Resources department of a large nonprofit organization in Denver, Colorado. An emphasis on gaps in HIL, the complexity of health insurance, and barriers to HIL was critical and a questionnaire and interview were chosen and modified from the literature review to gain more evidence regarding these issues. The researcher utilized the questionnaire in phase one and the semi-structured interview in phase two.

For the first step of the study, emails were sent to all Human Resources employees including the reason for the study, a consent form, and a link to the Qualtrics questionnaire. Participants were given one week to complete the questionnaire and participation was made mandatory by leadership. The questionnaire collected participant demographics, knowledge of health insurance terminology, application of concepts, and perceived barriers regarding the use of health insurance. Questionnaire participants included nineteen human resources employees with access to one of the organization's employer-sponsored health plans. Based on demographic diversity and volunteer agreement to participate, three employees were determined for a one-hour, semi-structured interview. The interviews were conducted using a video conference platform and transcription application and consisted of ten open-ended questions which aimed to provide more in-depth information regarding the research questions.

Definition of Key Terms

Andragogy: "Knowles (1970) defined andragogy as acknowledging that learners are self-directed and autonomous and that the teacher is a facilitator of learning rather than presenter of content" (Henschke, 2011, p. 34).

Financial Literacy: Defined by the President's Advisory Council on Financial Literacy as, "…the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being" (Harnett, 2019, p.169).

Employer-sponsored Health Insurance: health insurance offered by an employer.

Health Insurance Literacy: ". . . the knowledge, ability, and confidence to find and evaluate information about health plans, select the best plan for their own (or their

family's) financial and health circumstances, and use the plan once enrolled" (Quincy, 2012, p. ii).

Health Literacy: The Institute of Medicine (2010) expanded on the term capacity in the paper. "An individual's health literacy capacity is mediated by education, and its adequacy is affected by culture, language, and the characteristics of health-related settings" (p. 32).

Health Insurance Literacy Measure (HILM): "…shows the relationship between knowledge, skills, and confidence and subsequent health insurance behaviors or 'outcomes'—selecting and using a health plan" (Consumer Reports, 2012, p. ii).

Plain language: "…defined by the Department of Health and Human Services as communication that users can understand the first time they read or hear it" (Quick Guide to Health Literacy, 2010, p. 2.2).

Smart Choice Health Insurance©: "…a consumer education program based on the definition and emerging measurement of health insurance literacy and a review of literature and appropriate theoretical frameworks" (Brown, 2016, p. 209).

Transformational Learning Theory: "In transformational learning, one's values, beliefs, and assumptions compose the lens through which personal experience is mediated and made sense of" (Merriam, 2004, p. 60).

Conclusion

Low HIL is an ongoing issue in the work sector that requires further research and action. The benefits of improving HIL are far too great, and this issue impacts too many individuals to not take action. Research showing outcomes from actions taken to inform consumers about health insurance following the implementation of the ACA prove that

individuals across the United States benefit from HIL programs. These initiatives lay a strong foundation for the development of a framework for education in the workplace. More research is needed within the work sector to uncover current HIL gaps and barriers. The following chapters explore the evidence of the need for organizational change regarding HIL education. Employers must view HIL education as a critical piece of an inclusive employer-sponsored health insurance benefits program. The subsequent chapters provide a review of the literature, an explanation of the research design, and the findings from the study.

CHAPTER TWO

Literature Review

Introduction

A detailed literature review examining the current state of health insurance literacy (HIL), complexities of health insurance, and barriers to HIL provides a snapshot of current gaps and education initiatives. Existing evidence highlights the need for more employer-sponsored HIL research to inform employers, instructional designers, and other researchers. The expansion of the Affordable Care Act (ACA) brought about the development of HIL educational frameworks. Smart Choice Health Insurance (Brown et al., 2016) is an example of an existing HIL framework that built upon the Health Insurance Literacy Measurement tool (Paez, 2014) for assessment. Because these models were created for the public sector, they do not adequately capture the needs of a workplace program. Employer-sponsored health insurance targets a more specific population that typically has the support of a human resources department and only a few health plans from which to choose. Many employers have the luxury of gaining baseline information before workplace training initiatives through surveys and focus groups. Diversity and inclusion are a focal point for many workplaces when developing strategies for education. Cultural differences have been overlooked in existing HIL frameworks, even though research provides evidence of cultural barriers to HIL.

The first section of the literature review focuses on the state of HIL in the United States. People of all generations, education levels, and cultures struggle to understand basic health insurance terminology and concepts. The approach for benefits

communication and the technology being used does not provide a solution to the issue. Documents are challenging to read, and benefits leaders do not have HIL at the forefront of benefits administration. The second section focuses on the complexity of health insurance education. Current HIL frameworks are examined and recommendations for education are explained. The third section of the literature review focuses on barriers to HIL. Language, education, culture, and politics, each emerges from the literature, contributing to the ongoing problem.

The Current State of Health Insurance Literacy

Few employers implement strategies to address health insurance literacy using research-based frameworks or andragogy. Health care companies, employee benefits research organizations, Human Resources professional organizations, and community collaboration initiatives are concerned with the issue of low HIL and need evidence-based solutions for designing initiatives.

One strategy for increasing health insurance knowledge is with technology. United Healthcare conducted its fourth annual survey in 2019, focusing on HIL variables, including technology (United Healthcare Consumer Survey, 2019). More than 1,000 adults across the United States participated in surveys and interviews. The executive summary reports that technology is one of the largest areas of focus for education. However, 66% of participants reported a preference for speaking with a person for customer service and ten percent preferred an application or online solution. The survey also provides statistics showing that Generation X and Baby Boomer generations feel more prepared at the time of enrollment than Millennials or Generation Z. This survey also explored knowledge regarding key terms. Fifty-nine percent of participants knew the

definition of the term health plan premium, 53% knew the definition of health plan deductible, 33% knew the definition of out-of-pocket maximum, and 21% knew the definition of coinsurance (United Healthcare Consumer Survey, 2019).

The modes for education and customer service tools do not seem to reflect the preferences or meet the needs of participants presented in these statistics. For example, the use of online platforms and applications on devices is a key approach for some employers, while statistics show that technology is not always preferred. Technology is a great asset to a program; however, technology alone will not help to increase the competencies needed for employees to choose and use health insurance. Technology makes the process easier for Human Resources and for those employees with technology access and knowledge; however, these platforms must introduce the content in an effective way. The use of andragogy and the incorporation of cross-cultural techniques is crucial. Content must be research-based and cover the terminology and concepts most needed by employer-sponsored health insurance subscribers.

The Society for Human Resources Management (SHRM, 2018) published an article highlighting the effectiveness of online enrollment platforms. The study follows a retail company, American Eagle, after the implementation of an online health insurance platform. The platform generates suggestions for health plans by calculating the participant's use of health care the previous year. There was a demonstrated change in the number of employees that made changes to coverage at open enrollment. Enrollment in the high deductible health plan (HDHP) and health savings account (HSA) went from seven percent to 36% (SHRM, 2018). The HDHP usually involves a low monthly premium but comes with a high deductible. The HSA provides a safety net for those

employees enrolled in an HDHP. A clear understanding of the HDHP and HSA by subscribers in this study is not explained, and HDHPs can be dangerous for employees that do not make a living wage or are unable to develop savings. The study does not state whether or not the retail company contributed to the HSA. These low premium plans may seem attractive to those who do not understand terminology such as the word deductible. Lack of understanding demonstrates the need for reliable content that teaches employees about the positive and negative impacts of choosing a health plan. Technology is a great tool, but effective education is crucial for the effectiveness of any platform.

An abundance of literature provides guidance for successful enrollment in health plans in the workplace; however, there is a lack of literature that suggests a framework or strategy for integrating andragogy. An article in HR Magazine, written by Joanne Sammer (2017) provides six steps for making it through open enrollment, offering valuable advice and checklists, along with examples of health benefits education initiatives.

> The business provided short videos in English and in Spanish, a dedicated space on the company's intranet, and reminders to reinforce previous messages about the importance of using urgent care centers rather than emergency room and how to use health care pricing data to shop for, say a cost-effective MRI provider. (Sammer, 2017, p. 42)

The content on the intranet space and in the videos are not explained in the article. These standard recommendations for companies are not facilitating improvements in HIL. A 2010 survey showed that 90% of participants say they believe a one-on-one meeting with someone at the company would make them feel more informed. A lack of understanding is due to the inadequate instructional design in video, email, intranet, benefits guides, and applications. Only 58% of participants reported that one-on-one meetings are an option

provided by the employer (Gilligan, 2010). While many employers provide an orientation during new hire onboarding or at annual open enrollment, some employers do not provide any training before or during enrollment in a health plan. The Employee Benefits Research Institute (EBRI) of Washington, D.C. conducted a prominent survey in 2019 reporting that 37% of workers do not feel that they receive any type of benefits education (Greenwald, 2019). 78% of participants report that their employer offers health insurance. These statistics are unacceptable. Feelings of financial security are a reoccurring theme across the research, and the EBRI survey captures evidence that workers have financial security on their minds, and that health insurance is the top benefit contributing to this feeling of security. A better understanding of how to choose and use health insurance is crucial for initiating a feeling of security. The EBRI study points out the lack of benefits education; however, it also states that 64% of workers feel confident about their election choices. This discrepancy spans the literature.

Comprehension of plan documents, which may include a benefits guide or Summary of Benefits, is another issue in the current state of HIL. The use of plain language and readable materials is crucial. Plain language allows an audience to comprehend written material the first time. When individuals do not understand a guidebook, they will typically ignore the information (Janiak et al., 2013). Haar and Kossack (1990) agreed that reading levels for benefits materials should be at a fifth to eighth-grade level. A university study by Perrault et al. (2019) found that benefits communications and handbooks are far above these grade levels, with dental coverage terms and concepts requiring the highest reading level (p. 22). The study looked at the perceived effectiveness of benefits communications and the readability of benefits

guides. The sample for the study was the full staff of a large university in the Midwest, of which half expressed having a good understanding of their health benefits, but also claimed that health insurance is a significant cause of stress. Perrault et al. (2019) report that "results from the 2017 ALEX Benefits Communication Survey indicated that though almost 90% of participants claimed that they understand their benefits choices, only 59% could distinguish components that make up their total healthcare costs" (p. 14). The poor readability of health insurance materials continues to be an issue 30 years after the publication of the article.

Various studies show that the current state of health insurance literacy is not acknowledged or understood by subscribers. In a mixed-methods study conducted by Nobles et al. (2019), a survey of 455 college students gathered information regarding the understanding of health insurance. Of the 455 participants, 68.6% were female, and the mean age was 19.7 for undergraduate students and 25.4 for graduate students. A little more than half of the sample was undergraduate students. Around 71% of respondents reported being covered by a health plan not associated with the university. While many of the participants were probably covered as dependents under a parent or guardian's coverage and did not have the need to choose a plan, 24.4% reported that they had delayed a doctor's visit in the past because they did not feel confident in their health insurance knowledge. The literature shows that people's self-perceived literacy is typically higher than it is. Evidence from the college student study shows that 63.7% of participants felt that their understanding of health insurance was very good, but following a questionnaire, this rating fell to 41.1%. Two scenarios required the students to calculate the cost of care, one using the concept of applying a deductible and coinsurance, and the

other scenario using the concept of applying a copay and coinsurance. “Only 11.9% (n=54) of respondents could correctly determine their financial responsibility for both scenarios” (Nobles, 2019, p. 473). HIL tools mentioned in this study include TOFHLA, Newest Vital Sign, and the Medical Data Interpretation Test. Reported results suggested that it is financial literacy, choosing a plan, and communicating an understanding of the plan that need improvement (Nobles, 2019). Students are entering the workforce with low levels of HIL, and it is up to employers to take responsibility for providing effective education for these employees to truly benefit from the employer’s health plan.

The Complexity of Health Insurance Education

Health Insurance plans are complex, using language and calculations that require a variety of competencies. The literature review provides strategies for increasing competencies in the public sector, which were initiated by the deployment of the ACA (Harnett, 2019). The ACA, which once mandated that people in the United States have health coverage, did not require the implementation of a HIL tool. Since then, there has been some progress in designing education initiatives. Current frameworks and assessment tools for choosing and using health insurance in the Marketplace lay a foundation for the development of a framework to increase HIL in the workplace.

Frameworks for increasing HIL in the public sector have emerged. Consumer Reports (2013) published a report from the 2011 Roundtable at the Kaiser Foundation which brought the University of Maryland Extension (UME), American Institutes for Research (AIR), and the Consumer’s Union to a common agreement of recommended actions for increasing HIL (Consumer’s Union, 2012). The Consumer’s Union, a branch of Consumer Reports that focuses on advocacy and policy, agreed to focus on health

insurance education advocacy. The AIR would design a HIL assessment model, and the UME would design a HIL curriculum (Brown et al., 2016). The Roundtable of experts constructed a definition of HIL and developed a conceptual model for measuring HIL, called the Health Insurance Literacy Measurement (HILM) tool. The HILM used Professor Sandra Huston's framework, originally designed for financial literacy education.

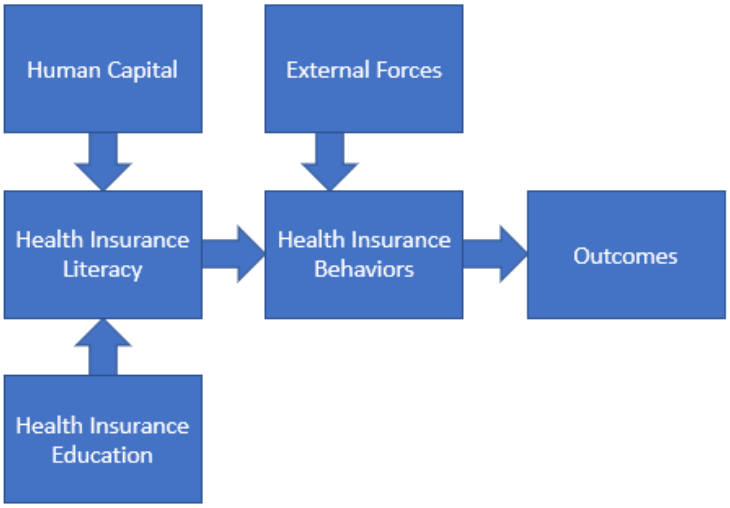


Figure 1. How health insurance literacy leads to personal health insurance outcomes. Adapted from Brown et al., 2016, p. 211.

This conceptual model indicates that health insurance education and human capital impact HIL. These variables are predicted to lead to improved health insurance behaviors. Human capital includes competencies that are acquired by an individual such as reading comprehension and numeracy skills and include the employee's past experiences and assumptions about health insurance. An individual's past learning opportunities and experienced barriers impact HIL. For example, external forces such as the types of health insurance plans offered, or the availability of community outreach

programs, have an impact on health insurance behaviors and will lead to specific outcomes. Other examples include native language and values. Improved outcomes include the ability to locate and understand health insurance information, choose the best plan for the individual and their family, effectively utilize the plan, and understand how to locate resources. Ideally, the outcome of a workplace HIL program would be that the employee feels empowered to manage their health insurance leading to enhanced wellness. Greenwald (2012) provides key concepts that are beneficial for designing content in an adult learning HIL program. The skills listed are: "finding, understanding, evaluating, communicating, using, and navigating prose, documents, quantitative information, and speech" (p. 12). These skills may help health plan subscribers break down complicated information in a health plan document, communicate with a health care or Human Resources professional, and comprehend quantitative data listed in a table or graph.

The ACA was in full swing by 2014, but health insurance literacy education was still not receiving the widespread attention that it needed to ensure success for subscribers. In 2014, Kathryn Paez and a group of researchers expanded on the work accomplished by the HIL Roundtable of 2013 and pointed out that while research for health literacy is abundant, health insurance literacy research is scarce. Paez et al. (2014) designed a conceptual model and conducted cognitive tests and field tests to determine the validity of their model. This conceptual model consists of self-efficacy as a foundation along with "four buckets" leading to the goal of HIL (Paez et al., 2014, p. 229). The four buckets are knowledge, information seeking, document literacy, and cognitive skills (Paez et al., 2014).

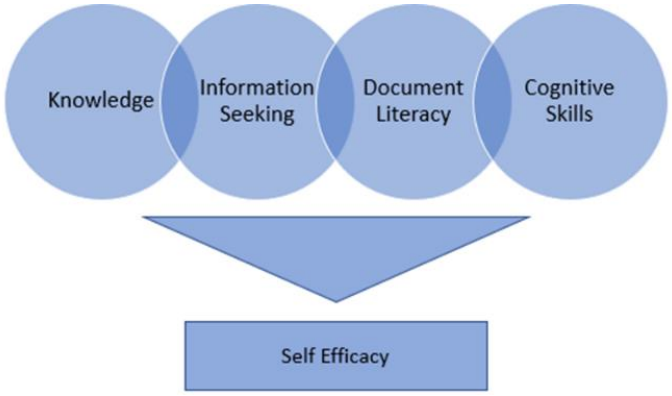


Figure 2. A health insurance literacy conceptual model. Adapted from Paez et al., 2014, p. 229.

Within the knowledge bucket are the types of insurance services, terms and concepts, and rules for coverage of the employee and dependents. An understanding of insurance concepts such as payments for service before a deductible is met is one example of knowledge. The information-seeking bucket includes the competency of seeking resources to answer questions about health insurance. Employers and employees are fortunate to have Human Resources professionals to help sort through information that is difficult to understand. Document literacy involves the ability to "read and follow directions, interpret summary of benefits, use schedules, and complete forms" (Paez et al., 2014, p. 229). The use of plain language is critical in making sure that documents are readable for employees. Technological applications must also take this recommendation into consideration. Cognitive skills are human capital skills accumulated by the individual throughout life experiences, such as numeracy and financial literacy. The foundation of self-efficacy is "the confidence to perform the tasks noted above" (Paez et al., 2014, p. 229). The authors of this study tested participants, interviewed informants, held meetings with stakeholders, administered a survey, and conducted a literature review. In the first round of cognitive testing, Paez et al. (2014) found that most

participants did not engage in their health insurance often enough to respond to a behavior scale when asked to reflect on past behaviors. The second round examined participants' HIL knowledge and skills. The next phase was the design of the field survey, which included "27 self-assessment and 15 knowledge and skills items" (Paez et al., 2014, p. 231). Paez et al. (2014) reported that, "our formative research indicates that consumers who are unsure of their health insurance coverage may hesitate to obtain a service because of their concerns about the out-of-pocket costs" (p. 237). Self-efficacy can only be attained through attention to each of the four buckets.

Around the time of the Paez (2014) study, Vitt (2014) developed a timeline beginning with the birth of employee benefits and explained relationships between EBRI, the U.S. Department of Labor (DOL), and the American Savings Education Council (ASEC). ASEC, formed in 1995, was an important product of conversations between the DOL and EBRI. HIL education in the workplace relates to financial literacy education. Vitt (2014) brings up an important point about financial education explaining that "most evaluators of financial education programs focus on learner outcomes based on presumed behavioral dispositions and financial facts rather than on pedagogical approaches consonant with the social structure in which the individuals are embedded" (p. 71). Harnett (2019) explains how financial literacy and health literacy are related, reporting that 21% of people in the United States have outstanding balances for medical services (p. 170). More than half of all Americans do not have the skills to balance accounts or make timely payments. The knowledge to choose and use a plan requires financial literacy. Harnett (2019) emphasizes how "it is necessary to understand all concepts within the health care experience, including financial and health insurance knowledge"

(p. 168). As Vitt (2014) pointed out, there may be an inaccurate perception of reasons for individuals' outcomes due to trainings that do not incorporate proper adult learning principles. Employees appear lazy or to lack the intrinsic motivation to take effective action following the learning when it is possible that Transformative Learning and andragogy were required. More research is needed to provide Human Resources leaders specializing in employee benefits with the adult learning skills needed to provide effective trainings.

Virginia Brown et al. (2016) published a study modifying the HILM resulting in The Smart Choice Health Insurance model. The group of researchers that designed this model used the HIL Roundtable's work as a guiding conceptual model to design a program to "train the trainer." Almost 90 educators prepared to teach the program, attending an eight-hour training to prepare for leading instruction. These attendees were primarily from the finance and health sciences fields. Five theories, which are shown in Figure 3, are included in the program. HIL is at the center of Social Learning Theory, Stages of Change, Planned Health Behavior, Health Communication, and Adult Education.

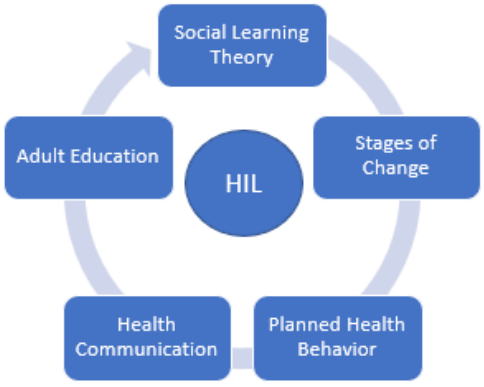


Figure 3. "What theories are a good fit for a health insurance intervention?" Adapted from Brown et al., 2016, p. 211.

Brown et al. (2016) formed a hypothesis for the assessment of the Health Insurance Literacy Model, stating that reduction in confusion coupled with an increase in capability and confidence would be outcomes of the Smart Choice Health Insurance program. Researchers implemented and tested Smart Choice Health Insurance. Brown et al. (2016) reported that "between September 2013 and April 2014, data was collected from 994 participants who attended the Smart Choice Health Insurance workshops in seven states: Delaware, Iowa, Maryland, Michigan, Minnesota, North Dakota, and Oregon" (p. 212). The University of Maryland Extension (UME) offered "train the trainer" sessions, workbooks, and a one-hour workshop, leveraging partnerships with the university and community to promote education opportunities (Brown, 2018, p. 244). Brown et al. (2016) reported that "based on the analysis of the findings, we concluded that the Smart Choice Health Insurance workshop likely results in increased confidence and capability and reduced confusion in participants" (p. 214). Overall, the authors described Smart Choice Health Insurance as an empowering tool that helps subscribers feel confident and understand how to seek out valuable resources. It was not until 2018 that the literature connected andragogy and HIL.

Virginia Brown's 2018 study focused on the andragogic principles of Smart Choice Health Insurance. Brown (2018) explained that the U.S. Department of Health and Human Services acknowledged the lack of education initiatives and designed a plan for increasing HIL. The USDHHS's plan is comprised of seven goals (p. 241):

1. Develop and disseminate accurate and actionable health and safety information
2. Promote health care system changes that improve health information, communication, informed decision making, and access

3. Incorporate accurate, standards-based and developmentally appropriate health and science information and curricula throughout all education levels

4. Support and expand local efforts to provide adult education and culturally and linguistically appropriate health information services in the community

5. Build partnerships, develop guidance, and change policies

6. Increase the research, development, implementation, and evaluation of practices to improve health literacy

7. Increase the dissemination and use of evidence-based health literacy practices

Smart Choice Health Insurance would aid consumers in choosing the appropriate health insurance plan based on the needs of the family. The integration of andragogy in the Smart Choice Health Insurance program resulted in a two-hour workshop for those seeking health insurance, and addressed three main questions (Brown, 2018, p. 242):

1. Why is health insurance important?

2. What are your health care needs?

3. How much can you afford and how much will it cost?

The program activities revolve around key health insurance terminology and promote discussions about why health insurance coverage is important. While this training was designed for the public sector choosing health insurance on the Marketplace, facilitating an understanding of why health insurance coverage is important will have benefits for employers and employees as well. The employee's perception that the employer has the employee's best interest in mind is important. This education may help to remove the perception of the employee that they are being sold a service by the company, demystifying the relationship between the employer and health insurance company. The case study portion of the Smart Choice Health Insurance program helps

participants see different scenarios to help determine which plan is best by asking the participant to think about their personal, past experiences (Brown, 2018). This is a powerful link to Transformational Learning Theory. Brown (2018) noted that experiences leading to perception play a key role in HIL. "Perhaps one of the most important lessons in the program is that the value of a health care program is in the eye of the beholder—there is not necessarily a 'best' plan" (p. 243). The program incorporated break-out groups to reduce anxiety around numeracy, to alleviate confusion caused by terminology, and to allow participants to work through the interpretation of documents. The three main principles considered for Smart Choice Health Insurance were self-concept, self-direction, and respect (Brown, 2018). Another important aspect of this program is the setting. Choosing a space that is quiet and allows for learning shows respect for the learner. An employer might choose a large conference room or move offsite to a public library or conference space. Offering a time when dependents can attend is another consideration. The first year for the Smart Choice Health Insurance program was the 2013–2014 open enrollment year. Participants of the program took pre-tests and post-tests designed by the American Institutes for Research to assess HIL. Sixty percent of participants were White, 60% were female, and less than half of the 994 participants earned less than $49,999 annually. The survey explored confidence in plan choice, in-network, and out-of-network understanding, emergency room versus urgent care understanding, and other competencies (Brown, 2018). Findings regarding the impact of the Smart Choice Health Insurance workshop emphasized its value.

A year later, another study provided strong evidence of the need for employers to implement HIL interventions. Adepoju et al. (2019) modified the HILM, taking it from

its original four categories, down to three categories. The purpose of this study was to collect participant demographics and HIL data. Researchers found that privately insured individuals showed lower HIL than publicly insured. The authors propose that three strategies are put in place to effectively address gaps in HIL. First, high schools and universities should begin to add HIL courses to inform individuals in a more proactive way. Second, adults enrolled in health insurance who understand the system should mentor new enrollees. And third, insurance companies should provide onboarding for new enrollees. Employers can have an impact on the second and third strategies of this recommendation. Members of communities expect employers to practice social responsibility for the communities in which their employees live and work, and the improvement of HIL would be a tangible example.

Health literacy is another crucial competency under the umbrella of HIL. The Institute of Medicine published a report in 2004 that made a mark on health literacy research. While this information exists in the literature, effective strategies are not in place. "…patient centered health care is based on the important concept that health plan members will play a major role in their own health and health care, which requires clear information that individuals can understand and act on" (Gazmararian et al., 2010, p. 94). This concept and HIL are interwoven. The language that medical professionals use includes jargon related to conditions, services, and health insurance. This study produced an assessment tool with six sections for providing resources and communications that are more patient-friendly. These sections focused on "…Information for Members, Web Navigation, Verbal Communication, Forms, Nurse Call Lines, and Case and Disease Management" (Gazmararian et al., 2010, p. 94). Verbiage alignment across fields is

important so that individuals can make connections between health insurance and health services.

Another group of researchers conducted a review of interventions used to improve health literacy. They found that there are many strategies for increasing the reading comprehension and intuitiveness of documents and applications. Visual strategies are key and should include tables, icons, and video when possible (Sheridan et al., 2011, p. 49). The use of plain text that is heavy on jargon is discouraging for the reader.

Health Literacy is a concept closely related to HIL. The term health literacy once included the concept of health insurance literacy, and they continue to cross over. The U.S. Department of Health and Human Services (USDHHS, 2015) published The Quick Guide to Health Literacy as a resource for individuals providing health care services. The guide reviews key concepts and plans for improving communication and teaching, as well as providing examples and advocacy tips. The guide explains plain language, cultural and linguistic competency, why health literacy is important, and populations that may experience barriers to health literacy. The next section of the literature focuses on barriers that may be more prevalent in some populations as well as barriers that exist for all individuals. A guide for HIL, similar to the health literacy guide, would be useful for workplace benefits administrators.

Barriers to Health Insurance Literacy

The most prominent barriers to emerge from the literature are language and low levels of education. The USDHHS's Quick Guide (2015) recommends ensuring that materials and communications are language and age-appropriate, socially and culturally diverse, and match the skills of the population. The Quick Guide (2015) is thorough in its

explanation of populations that experience barriers to health literacy. HIL barriers exist to varying degrees in the United States. The USDHHS (2015) describes populations that are at higher risk for barriers.

> Populations most likely to experience low health literacy are older adults, racial and ethnic minorities, people with less than a high school degree or GED certificate, people with low income levels, non-native speakers of English, and people with compromised health status. (USDHHS, 2015, p. 2.4)

With jargon that is already difficult to understand, it is even more challenging as a non-native English speaker. This is not the only issue caused by the language barrier. There is a misconception that some groups are more informed than they are. Kim (2010) explains that survey information may be skewed because the participants filling out surveys most likely speak English. There are also roles within the family that are disrupted when a younger person must translate for or educate an older person. Some may choose to avoid hard conversations by not enrolling in health insurance. Within the workplace, employees designated to help educate those with language barriers may need to find an interpreter that not only speaks the language but also understands the culture.

English as a second language poses a barrier to one of the largest cultural groups in the United States. Hispanics make up the largest minority population in the country, and over two million of these individuals have Diabetes. If English is the second language, controlling this disease may be a challenge. In a 2007 study, Campos discusses the management of Type 2 diabetes. The ability to choose the correct plan is crucial for those needing to manage the disease. Campos (2007) notes that two and a half million Hispanic people are living with this disease in the Unites States today, and the population will make up 25% of the U.S. population by 2050 (p. 812). Campos points out that in response to a lack of disease management, health care providers must be more culturally

sensitive. Appallingly, Spanish-speaking employees along with other foreign-language speakers may experience bias and other barriers at the time of service and should be equipped with the knowledge needed to make informed decisions when being treated inequitably. Communication skills for self-advocacy to improve equity should be infused in HIL education. Methods emerging in the literature include the use of plain language, various forms of learning styles, and the teach-back method to check for understanding. Communication styles vary and communication barriers exist for many individuals. This has a negative impact on the understanding and effective use of health insurance. Some individuals may be visual learners and find greater success in learning using visuals, while others may prefer a one-on-one conversation with a professional. While health care providers work to decrease the effects of these barriers on health literacy, employers must work to decrease the barriers on HIL.

Social pressure is another barrier to HIL. Employers must be sensitive to the presence of shame during a health insurance training. Employee benefits orientations typically require that people across departments within a company are seated together to learn and ask questions as a group. There are social and psychological reasons why an employee may not participate in this setting. People may feel shame for asking questions (Caylan et al., 2017). The U.S. Department of Health and Human Services focuses on stigma and shame in their Quick Guide. Many individuals may not be willing to openly ask questions and may instead choose to hide the lack of various competencies.

Research shows that individuals with less education may have lower HIL. Villagra et al. (2019) conducted a study to learn more about the disparities in HIL between races, ethnicity, and language preferences. In one study, 506 participants living

in Connecticut completed a survey with questions on race, ethnicity, and education, and household income. Forty-six percent of participants were White, 27% were Hispanic, and 25% were Black. Only one of those identifying as Hispanic did not prefer Spanish. Villagra et al. (2019) explained that "overall, enrollees with a college education scored higher across all demographic groups, but disparities by race and ethnicity persisted" (p. 3). This study pointed out the need to increase the knowledge of key terms, but that numeracy skills stood out as an even larger issue. Alarmingly, only 31% of respondents could calculate a cost involving a deductible and copays. Feelings of shame and embarrassment can be alleviated with an inclusive HIL intervention that allows everyone to increase their knowledge.

Yet another barrier to HIL is the perceived politicization of the health-care system. Ali (2018) and a group of researchers led a study to determine barriers to HIL for African Americans living in an urban community. Participants in twelve different focus groups reported that they do not trust health insurance companies. Ali (2018) includes a comment from a participant that asked, "why would they play politics with your health? Don't you want me to be healthy so that I can go to work, go take care of my kids?" (p. 1211). This barrier is not specific to minority groups. With the enactment of the ACA, health care has become common political rhetoric. The government has done little to address the healthcare literacy issue and the system that is so difficult to navigate. While this pertains mostly to the Marketplace, it also impacts employer-sponsored health care. Employers can use education to empower employees so that they do not feel that they are pawns in a system they cannot control.

Conclusion

The literature review provides evidence of HIL frameworks and programs designed and implemented for individuals enrolling in a public option for health insurance coverage. Research related to HIL, promoted by the enactment of the ACA, along with financial and health literacy research, is the starting point for gaining a better understanding of HIL in the workplace. Regardless of the future of employer-sponsored health insurance, more research is needed for workplace HIL education. Research exists to help uncover barriers to HIL, the complexities of health insurance, and the competencies needed to improve HIL; however, limited research exists to inform employers. The contribution of this study is the examination of HIL gaps and barriers in the workplace so that a validated HIL program can be designed.

CHAPTER THREE

Methodology

Introduction

The purpose of this case study was to determine the health insurance literacy (HIL) gaps and barriers experienced by subscribers of an employer-based health plan at the corporate office of a large non-profit organization. Considering the gaps in health insurance knowledge, the complexity of health insurance, and the known barriers to HIL examined in the previous chapter, this study uncovered workplace HIL themes that answered the main research questions. Existing research does not pose questions regarding terminology, scenarios, or past experiences in the workplace. A more in-depth look at these variables is crucial for beginning to improve the issue of low HIL. This case study examined gaps and perceptions of barriers regarding employer-based health insurance to inform a future study with the goal of creating a HIL program for employers.

To attain the goals determined for this study, a primary research question and two sub-research questions were constructed. The primary research question for the study asked: What are the gaps in the HIL of employees enrolled in an employer's health plan at a large organization? A questionnaire was used to explore employer-sponsored health plan subscribers' knowledge of terminology, the application of concepts for solving scenarios, and the presence of barriers based on experience using a health plan. Semi-structured interviews helped the researcher take a deeper dive into participants' perceived barriers, confusion, and past assumptions.

The first sub-question asked: Why are health insurance benefits difficult to understand? Health insurance is complex, and current initiatives are not increasing the HIL of subscribers of employer-based health plans. One goal of the interview was to help shed light on this question.

The second-sub question asked: What factors contribute to or are barriers to health insurance literacy? Participants were asked to reflect on past experiences using health insurance to help make connections to assumptions and possible barriers. The concept of reflection on past experiences will aid researchers and practitioners in the development a HIL program. The literature review described examples of barriers such as a lack of confidence and competencies, low socioeconomic status, and racism. More research is needed to uncover barriers for employer-based health plan subscribers.

The research questions build on what we already know from past research. Through the participation of the organization and group of participants, employers interested in increasing HIL will be closer to realizing that goal. Answering these research questions also contributes to the academic conversation regarding HIL in the workplace by helping to fill the gap in research.

Researcher Perspective and Positionality

I spent the first half of my career on the preventive side of health and wellness. Through the design and implementation of health and wellness programs, I learned the importance of education and how reflecting on past experiences when learning new information can lead to agency over one's health. For the past six years, I have worked under the Shared Services umbrella of Human Resources, and the awareness of the importance of education has stayed with me. While education is not typically at the

forefront of Shared Services initiatives, it is important to me that these departments undergo organizational change, specifically to offer HIL education in conjunction with employer-based health insurance.

As an employee subscriber of employer-sponsored health insurance attempting to navigate a complicated plan, as well as an administrator of health plans, I have identified the need for education. The case study design lends well to my strengths, including facilitation and synthesizing, as a researcher and Human Resources leader. From an epistemological standpoint, using a site where I am employed will allow me to gain valuable insight from employees that share the same plan options that I do. It is my hope that the group of participants will see the value of this research as it so closely aligns with the culture of the organization. As a current employee, I am familiar with and have witnessed firsthand the organization's value of education, diversity, inclusion, and racial equity. It makes sense that decision makers at the organization would see the congruency of this study with their current initiatives.

My constructivist worldview, Transformational Learning Theory, andragogy, and research questions drove the modification and development of the questionnaire and interviews used for the study. Creswell and Poth (2018) explain that "in social constructivism, individuals seek understanding in the world in which they live and work" (p. 24). It is important that employees are provided with the knowledge and resources they need to have agency regarding their health plans and understanding those needs through the lens of the participant will help employers move the dial in that direction. My long-term goal is to create legislation for workplace HIL education, mandating that

organizations offering employer-based plans must provide at least one, annual training designed to increase HIL for the plans offered by the organization.

Theoretical Framework

Transformational Learning Theory proposes that by connecting new knowledge with past experiences and assumptions, one can begin to truly learn, and act based on new knowledge (Bergeron et al., 2017). This research design allowed for the facilitation of reflection and examination of past assumptions by participants. The use of health insurance plans requires the recall of other competencies as well as recall from past experiences, and individuals possess a large variance in both. A diverse set of perspectives from the case study provided evidence of this value (Creswell & Poth, 2016). The complexity of the issue has taken shape due to the presence of this framework in the research design, data collection, and analysis phases. With the goal of future initiatives remaining consistent with this framework, it was important that this study lay a solid foundation.

The research questions are firmly grounded in Transformational Learning Theory. The primary research question examined HIL gaps for subscribers of an employer-based health plan. Participants did not answer these questions following a training, and instead were asked to recall information based on past experiences and held competencies, aligning with Transformational Learning Theory. Interview questions were also designed to provoke recall from past experiences. Semi-structured interviews went in depth regarding participants' experiences to elaborate further on the gaps and barriers asking open-ended questions related to the research questions. The first sub-question was also rooted in Transformational Learning Theory. For the participant to answer if and why

they felt health insurance was difficult to understand, facilitation of the recall of past experiences and assumptions was crucial. The second sub-question was posed to uncover barriers, requiring critical reflection of personal experiences to help determine intrinsic and extrinsic barriers.

Theoretical framework congruency with the data collection process was important during the design of the study. As noted in Chapter One, Mezirow (1997) explains that "critical reflection, awareness of frames of reference, and participation in discourse become significant elements in defining learning needs, setting educational objectives, designing materials and methods, and in evaluating learner growth using nontraditional methods such as portfolios" (p. 11). The questionnaire was a combination of the recall of terminology, a scenario calculation, and barrier perception. The goal was to provide the participant with the experience of recalling knowledge gained from past experiences as well as having the opportunity to speak to past experiences.

Transformational Learning Theory also informed the data analysis. In assessing the data, it was important to remove my personal experience and bias in developing codes and uncovering themes. To view each questionnaire and interview through the lens of the participant required that I remained cognizant of the experiences of the individual. Connecting HIL gaps with past experiences and assumptions required my buy in of Transformational Learning Theory. For example, if a participant showed high HIL, what were their perceptions of past experiences like? If they exhibited low HIL, how did they describe their past experiences? These types of themes were important to explore. Transformative learning meaning schemes and meaning perceptions as defined by

Mezirow were used to code open-ended questionnaire answers as well as interview responses.

Research Design and Rationale

This study's research questions required a current snapshot of HIL from the perspectives of diverse individuals within a group experiencing the same education initiatives through a shared employer. Creswell and Poth (2018) defined case-study research as "a qualitative approach in which the investigator explores a real-life, contemporary bounded system or multiple bounded systems over time, through detailed, in-depth data collection involving multiple sources of information, and reports a case description and case themes" (p. 96). This case study aligns with that definition in multiple ways. The understanding of employer-based health plans is a real-life issue faced by employees enrolled in health insurance at the organization in this study. The questionnaires and interviews provided in-depth insight into the HIL of employees and sought to explain the issue through the lens of each participant, aiding the researcher in uncovering major themes. The importance of illustrating the complexity of HIL was top of mind and interviews focused on eliciting narrative responses from participants about their past experiences and assumptions using employer-based health insurance. Reflection on past experiences and the uncovering of assumptions was driven by the theoretical framework, Transformational Learning Theory.

The purpose of the study was to provide evidence of HIL gaps and barriers within the parameters of the organization. Creswell and Poth (2018) explained that the case study is a good approach when the inquirer has clearly identifiable cases with boundaries and seeks to provide an in-depth understanding of the cases or a comparison of several

cases. The study was bound by the site and time of study, as each participant was employed by the organization, worked in the Human Resources department, had access to one of the employer-based health plans, and received the same benefits education at the time of the study. Participants were exposed to the same health insurance education resources, health insurance communications, and organizational culture. While these commonalities existed, each participant brought a diverse set of past experiences, perceptions, competencies, and health insurance knowledge to the study. The case study used convenience sampling, and the design allowed the researcher to gain in-depth insight into the experience of using employer-sponsored health insurance offered by the organization. Participation in the questionnaire was not within the researcher's control, but it was hoped that the existing culture of the organization as well as the "why" provided in the email to eligible employees would generate participation.

The research questions posed for the study required the examination of baseline health insurance knowledge and required insight that could only be relayed through the lens of the participant. Creswell and Poth (2016) provide clarity around the construction of research questions best suited for a case study by explaining that they should be focused on "understanding the bounded system" (p. 140). The research questions were addressed with the bounded system using the questionnaire and semi-structured interviews. The questionnaire asked participants to answer questions about health insurance terminology, cost scenarios, and past experiences using employer-sponsored health plans to shed light on gaps and barriers to literacy. Semi-structured interviews allowed for a more in-depth discussion around perceptions and barriers from participants. A coding and thematic system were developed and used for each questionnaire and

interview to ensure confirmability, creating validity for continued building on the research.

Site Selection and Participant Sampling

The site chosen for the study is one of the nation's largest affordable housing organizations, providing housing to low-income individuals, families, seniors, and people with special needs. The site's home office was purposefully selected as the researcher is an employee and had access to the participants' email addresses as well as the platform commonly used across the organization for video conference. The organization's value of education, diversity, inclusion, and racial equity led the researcher to believe that the level of participation would be high.

Participants for the study had access to a benefits guide and were each members of the Human Resources department. The organization does not currently hold open enrollment meetings; however, a benefits manager is available to answer questions about benefits and to assist employees with enrollment by request. The organization has a benefits page on their intranet that hosts a variety of benefits information and wellness guidance. All Human Resources employees were sent an email with a request to complete a questionnaire. The questionnaires were used to uncover the HIL of participants, explore health insurance complexity, and barriers to HIL. This was accomplished through coding. The coding in set one of the questionnaires provided participant demographics information. Questions in set two provided insight into the existing knowledge regarding terminology and cost scenarios and set three addressed barriers to HIL.

After the questionnaires were completed, they were coded based on participant responses. Questions in set one filtered by race, age, and native language. Questions in

set two were given a "Y" when the response was correct, and "N" when the response was incorrect. Each participant was then given a percentage of correct responses for set two. The responses in set three were color coded based on emerging themes. Participants for phase one provided valuable baseline HIL information, perceptions around HIL, and perceptions around barriers to HIL. Four participants identified as male and fifteen as female. 70% of participants identified as White, 20% as African American or Black, eight percent as Hispanic, and two percent as Asian/Pacific Islander. Two of the participants did not list English as their native language. Nine participants were between the ages of 27 and 44, while 10% participants fell between the ages of 45 to 65 years old.

Based on the demographic responses from the questionnaire, three participants were asked to take part in a one-hour, semi-structured interview. This purposive sample was constructed with the goal of choosing participants of a different race, gender, and age bracket.

Qualitative Data Collection

The data collection process was informed by the research questions, literature review, and Transformational Learning Theory. The questions in the questionnaire and interview aimed to collect evidence to answer the research questions. The questions were posed in a manner that facilitated reflection and knowledge gained from past experiences, aligning with Transformational Learning Theory. For example, the final two questions in the questionnaire asked participants if they had experienced barriers to HIL, and whether those barriers had caused them to delay seeking care. Through the process of recall and the formulation of a response, participants were faced with assumptions about past experiences that informed their current lens.

Identifying the sample was the first step in the process. The organization originally agreed to allow all home office employees to participate in the questionnaire, however, leadership requested to narrow the sample to Human Resources employees as the questionnaire was ready to be deployed. Next, appropriate data collection measures were chosen so that they aligned with the theoretical framework and research questions. Following approval from the Institutional Review Board, leadership at the site approved access for the researcher to the employees in the Human Resources department of the organization. Data collection was organized into two phases: Phase one of the study was the deployment of a questionnaire to participants, and phase two involved the conducting of a semi-structured, open-ended, video conference interview.

The first phase of data collection utilized the questionnaire. The original questionnaire used for the study was developed by Noble et al. (2019), using data obtained from Healthcare.gov. and was modified to fit the goals of this study. Prior to the distribution of the questionnaire, the questions were shared with Human Resources and Employee Benefits leaders at the organization for feedback and final approval. The full list of questions from the questionnaire is included in Appendix A. Participants were emailed a consent form, a link to the online questionnaire, the context and importance of the study, and the study's alignment with the organization's over all mission and values. The completed consent forms were attached and emailed back to the researcher with a due date of one week, and the researcher gathered completed questionnaires from Qualtrics. Next, the questionnaires were filtered and coded, and themes relating to the theoretical framework and research questions were uncovered.

Interview questions were adapted from the same study as the questionnaire, conducted by Nobles et al. (2019). Creswell (2014) stated that "interview questions are often the sub-questions in the research study, phrased in a way that interviewees can understand", and the researcher followed this guideline when modifying the interview questions for this study (p. 164). A demographics report was exported from the Human Resources Information System and matched to the demographic responses from the questionnaire. This report included the name, race, gender, and age of each person in the Human Resources department. The researcher hoped to collect data from participants from different racial groups, age brackets, genders, and native languages. Chosen participants were informed about the Problem of Practice study, importance, and goals of the study. Three participants were chosen and were emailed a request for participation in an interview. Two of the first three interviewees emailed with the request agreed to participate in the second phase, and a fourth email provided the third participant. The participant who declined did not choose English as her native language and did not provide a reason for declining participation. Participant A was a Black male, within the age bracket of 45–65 years old. Participant B was White male, between within the age bracket of 45–65 years old. Participant C was a Black female, within the age bracket of 26–44 years old. Each participant chose English as their native language. Interviewees were asked to participate in a one-hour, semi-structured, virtual interview. The researcher used open-ended questions which asked participants to elaborate on their feelings regarding HIL confusion and barriers, as well as past experiences using employer-sponsored health insurance. Interviews were recorded using the platform's record feature, and extensive memoing and diagraming were executed to uncover themes using the

participants' direct quotes. The interview protocol and questions can be found in Appendix C. The two phases of the case study were used to synthesize data for a more holistic and robust analysis, which is discussed in the next section.

Qualitative Data Analysis

Data from the questionnaires and interviews were read, coded, analyzed for themes and descriptions, synthesized, and interpreted. As Creswell (2014) explains, "the qualitative data analysis will yield quotes, codes, and themes" (p. 226). For both phases of data collection, a spreadsheet was created to track codes and themes in order to increase the visibility of patterns.

The questionnaires were analyzed based on the three sets of questions in the questionnaire. The first set of questions was filtered based on demographic responses, and the second set of questions were coded based on the answers to each question, with correct answers receiving a "Y" and incorrect answers receiving a "N". The third set was color coded based on the connection of the open-ended response to the theoretical framework and research questions. The researcher color coded based on verbiage providing emerging themes and perception categories defined in Transformational Learning Theory.

Next, the researcher chose three interview participants based on the age and race of participants. The researcher aimed to provide more in-depth responses from participants who differed in race and age bracket. Recorded interviews were transcribed using an application and reviewed multiple times. Interpretations were developed and data was separated and charted in themes or families. As the memos were examined and analyzed, questions posed by the researcher included why, what, when, how, and what

possible meanings behind the words used might mean (Creswell & Poth, 2018, p. 188). Each conversation was used to develop a complex picture of the problem (Creswell, 2014, p. 186). The researcher focused on extracting meaning from the conversations through the lens of each participant and practiced reflexivity to ensure that biases and assumptions were disclosed and did not influence analysis.

A goal of the analysis was to determine if a pattern existed between the theoretical and observational patterns. For example, a pattern of reflection on past experiences grounded in assumptions used when forming perceptions about using health insurance would create new insight and provide guidance for education initiatives. As Creswell states, "researchers continue analysis by getting a sense of the whole database" (p. 187). It was important that the data was visually represented using a visualization. A table was created for demographics, questionnaire response accuracy, and barrier themes. This table helped the researcher to synthesize and summarize data for a representation that holistically described the HIL levels and themes that emerged from the data, serving as a modified codebook. Creswell (2018) notes the importance of a codebook, stating that, "the codebook articulates the distinctive boundaries for each code and plays an important role in assessing inter-rater reliability among multiple coders" (p. 190). The codebook provided the name of the code, the defining parameters of the code, and examples of the code from the study (Creswell & Poth, 2018, p. 190). While only one researcher coded, this increased the transferability of the study, providing a baseline of themes for future researchers. The emerging themes derived from the codes can be compared to other samples when participants are given the same questionnaire and interview.

Transferability was important because a goal of this study was to gather information for future research and program design.

Ethical Considerations

My life experiences, race, gender, and more have undoubtedly shaped my opinions and biases regarding HIL, and in response to that awareness, I kept objectivity at the forefront when designing the questionnaire, interview, collecting data, and analyzing data. As a white, middle class, woman, I was aware of how the system of oppression in the United States had not impacted my life as it has others, primarily those of color or those speaking English as a second language.

I provided assurance to interview participants that any obtained information would not be connected to their identity when shared with the employer or described in the research. For reliability, I checked all transcripts to ensure there were no errors, continuously compared data with my codes, and acquired cross-checking of codes. Transcribed interviews were sent to participants to ensure that the verbiage and ideas were accurately captured.

Limitations and Delimitations

Perhaps the largest limitation placed on this study was the number of participants in which the researcher was given access. The original goal accepted by the site was to include around 100 participants. This included the entire home office of the organization. It was only days before the questionnaire was deployed that leadership requested that the sample be reduced to include Human Resources employees only. The Vice President of Human Resources did, however, make participation mandatory. There was also one participant that did not complete the questionnaire entirely and data from this person was

excluded from the findings. Participant diversity was also limited. This convenience sample included participants that identified mostly as white, native English speakers. Due to the nature of the case study, the researcher did not have control regarding the responses to the questionnaire. The original plan was designed so that participants would not attempt to educate themselves on terminology or scenarios and would strictly provide baseline knowledge based on previous experience and education. The request was for participants to avoid using a Google search or to research answers to questions, and the importance of recall from previous knowledge was emphasized.

Another limitation of the study was the lack of HIL research and validated survey tools in the literature and researcher bias. While research exists for the public sector, this study begins the academic conversation aimed at creating a program or tool for increasing HIL in the workplace. The researcher stated objectivity and confidentiality in each interview, however, the presence of bias may still have been present in some interviews. Creswell (2014) notes that "not all people are equally articulate and perceptive" and that "the researcher's presence may bias responses" (p. 191). Unconscious bias was taken into consideration during interviews and notes were made regarding the clarity of past experiences and connections made to perceived barriers by each interviewee.

Conclusion

This case study examined health insurance literacy knowledge from a small, HR department in order to provide evidence for the researcher's research questions. The questionnaire aimed to uncover gaps and barriers regarding HIL, while the interviews were conducted to further explore barriers in more depth. It is important for researchers

and Human Resources leaders to understand the gaps and barriers to HIL experienced by employer-based health insurance subscribers in order to provide education that properly addresses the issue. The methodology for data collection and analysis is closely tied to the theoretical framework of the study. Transformational Learning Theory provided guidance for the modification of the questionnaire and interview questions and guided the thematic coding for data analysis. The results of this study have implications for future research and HIL education initiatives. The following chapter examines the results of the study and discusses implications of the findings.

CHAPTER FOUR

Results and Implications

Introduction

The methodology for data collection and analysis of the results of the case study were closely tied to the theoretical framework of the study and aimed to answer the research questions. The review of literature presented an emphasis on education initiatives for public health plans, and the barriers and stress caused by low health insurance literacy (HIL) in the public sector. The evidence from these findings must be built upon through future research and education in the work sector. Employer-based health insurance is the leading form of health insurance in the United States, and it is urgent that research-based education is implemented. The results from this case study aim to contribute to the improvement of HIL for employer-based health plan subscribers.

The data collection for this qualitative study included a questionnaire and interviews, analyzed to determine gaps in health insurance literacy, uncover complexities of HIL, and further explain barriers to HIL related specifically to workplace subscribers. The theoretical framework, Transformational Learning Theory, guided the development of the research questions, data collection, and data analysis process. The research questions, designed specifically for HIL in the workplace, were organized to guide this study. The primary research question was:

- What are the gaps in the HIL of employees enrolled in an employer's health plan at a large organization?

The study also employed two sub-questions:

- Sub-Question: Why are health insurance benefits difficult to understand?
- Sub-Question: What factors contribute to or are barriers to health insurance literacy?

The examination of these questions is crucial for the improvement of HIL in the workplace.

The questionnaire and interview, which comprised phases one and two of the study, aimed to provide evidence for the research questions by determining gaps in the HIL of those enrolled in an employer-sponsored health plan, uncover complexities of HIL, and further define barriers to HIL related specifically to workplace subscribers. Results showed that employees of all demographics need scenario-based examples to increase the ability to calculate a medical service. The theoretical framework, Transformational Learning Theory, guided the development of the research questions, data collection, and data analysis process, and was illuminated in the responses from participants.

The study's results, discussion, and implications sections of this chapter were structured in alignment with a qualitative case study design. The results section of this chapter provides a detailed description of the data collected, analyzed, and interpreted. For the first phase of the study, the questionnaire was analyzed, examining participant demographics and responses to the multiple-choice and open-ended questions. In phase two, interviews were analyzed and emerging themes were identified. Next, a thematic analysis was conducted, exploring patterns across both phases, and describing how they are related to Transformational Learning Theory. Following the results section, an in-depth discussion explores the key findings and contributions of this study. Finally, the implications of the study were broken up into three subsections. The first addresses the

primary research question, the second addresses the first research sub-question, and the third addresses the second research sub-question. The conclusion and summary section of this chapter address the high stakes surrounding the issue of HIL, and the study's main findings.

Results

The results determined from the data analysis provide evidence of the need for HIL education in the workplace. Data from the questionnaire, interviews, and connections to the literature review provide evidence that reveals a clear need for change. The results analysis is broken up into three sections: phase one questionnaire analysis, phase two interview analysis, and thematic analysis.

Phase One

Phase one included the analysis of responses from the HIL questionnaire, which was modified from a study by Noble et al. (2014). Participants were employed in the Human Resources department of the nonprofit, and the questionnaire was made mandatory for each person in the department by the Vice President of Human Resources. Each participant had access to the employer's health plans and benefits guide and was provided the same benefits communications and education throughout the year. The organization does not provide an open enrollment orientation or other education opportunity for employees.

The first set of questions of the questionnaire collected demographics information from each participant. Demographics questions asked for the participants' ethnicity, age, and whether English was their second language. Of the nineteen participants, eleven identified as White, four as Black or African American, and three as Hispanic or Latino.

Nine participants were within the age range of 27 and 44 years old, and ten were between 45 and 65 years old. Two participants chose English as their second language; however, all participants chose to complete the questionnaire in English.

The second set of questions of the questionnaire included multiple-choice items and required participants to choose the correct term or calculation from a list of health insurance terms and service costs. These questions were organized to determine the level of understanding of HIL terms and scenario calculations. Appendix B contains the questions and number of correct responses for set 2 of the questionnaire.

Set three of the questionnaire included open-ended questions and asked participants to describe perceived barriers. The first question asked: Has there been a time when you experienced barriers or were confused about using your health insurance? If yes, can you briefly describe without providing personal information? The second question asked: Have barriers and/or a lack of understanding of your health insurance plan ever stopped you or significantly delayed you from seeking medical care? If yes, can you briefly describe without providing personal information? Responses were coded using a color-coding system for words and phrases, aiming to determine a theme or themes.

The number of incorrect responses in set two determined the need for a clearer understanding of terminology and health scenario calculations. Each answer from set two was coded with a "Y" for correct, and "N" for incorrect on an excel spreadsheet. Answers were then filtered to determine the number of incorrect responses from participants, and each participant received a percentage. Following the determination of correct responses to the questions in set two, the health terms causing the most confusion were "Health

Maintenance Organization" (HMO), "coinsurance", and "out-of-pocket maximum." Forty-seven percent of participants were able to distinguish the HMO from Point of Service (POS) and Preferred Provider Organization (PPO). Of those participants unable to identify HMO as the correct response to question number ten, five did not answer either open-ended barrier question from set three of the questionnaires, one left the first barrier question blank, and one replied yes to the second barrier question. One of the nine replied no to experiencing barriers or delaying care due to barriers. The term, "coinsurance", was also difficult for participants to determine. Forty-seven percent of participants answered this question incorrectly, with two leaving both barrier questions blank, one replying no to each, and five providing reasons why barriers exist and admitting to the delayed seeking of care. One participant in this group believed barriers existed but had not delayed care. The third term to cause the most confusion was "out-of-pocket maximum". Forty-seven percent of participants answered this question incorrectly, with two leaving barrier questions blank, two answering no to both barrier questions, and one answering no to the second barrier question. An understanding of each of these terms helps subscribers estimate costs, choose the right plan, and answer network questions. Without an understanding of these terms, the financial stress and confusion of using a plan is substantial. These results align with the data collected from Harris Interactive, reported on Kaiser Health News, stating that roughly half of participants surveyed for the report could not correctly define common health insurance terms (Evans, 2013). This information is concerning, but perhaps the most alarming is the question missed by the most participants in the questionnaire. Set two contained one cost scenario question, answered incorrectly by 79% of participants. Fifteen of nineteen could not

correctly calculate the scenario in Q17 of the questionnaire. The extremely low correct response percentage to this question makes sense based on the response to the barrier questions.

The emerging theme from the third set of questions, regarding barriers to HIL and delayed seeking of care, was the cost of services. The literature review provides evidence of barriers to HIL, and this study illuminated the issue. The first open-ended barrier question asked participants to recall and describe times when they experienced barriers or confusion related to using health insurance. Participants listed a variety of reasons for unforeseen health service costs, recalling confusion regarding specialist fees, payments following surgery, upfront costs for visits, and surprise invoices following being told that nothing was owed by the patient. Network confusion and the number of visits allowed for mental health services were also mentioned, both pointing back to a fear of what the cost would be to the participant. The second open-ended question asked participants to describe barriers or a lack of understanding of the health insurance plan that significantly delayed the participant from seeking medical care. Similar to the first barrier question responses, confusion about the cost of service and affordability delayed some from seeking care and using their health plan. Participants reported delaying care because of out-of-pocket costs, a lack of clarity regarding the cost, and experiences causing fear of the financial consequences of a service. Opaque terms, their interdependent definitions, and lack of visualizations in benefits guides were each listed as additional reasons for delaying care. One participant reported being surprised that services were in fact covered when they were not aware that they would be. These barriers shine a light on the amount of confusion, fear, and delaying of care caused by the lack of HIL education.

Emerging themes from sets two and three of the questionnaire provide helpful insight to the gaps and barriers to HIL. As a reminder, set two included terminology and scenario questions and set three included open-ended barrier questions. The emerging themes across both sets of questions included confusion regarding the calculation of health service scenarios and the fear of unforeseen costs following a medical service. Fear and avoidance of care caused by the confusion of costs is extremely costly to the employee and employer. Eleven of nineteen participants reported experiencing barriers or confusion related to health insurance. And alarmingly, eight of nineteen delayed seeking care because of perceived barriers. Overall, correct scores for multiple-choice answers ranged from 53% to 100%, with one participant answering all questions correctly. Nine participants scored in the 83% to 100% range, with seven of the nine in the 45–65 age bracket. Of those nine, six were White, two Hispanic or Latino, and one Black or African American. The other ten participants scored between 53% and 79%, with seven of the ten within the 27–44 age bracket. Five identified as White, three Black or African American, and two Hispanic or Latino. Those responding no to perceived barriers included one White participant, one Black or African American participant, and one Hispanic or Latino participant. Of those responding that they have not delayed care, one participant was White, two were Hispanic or Latino, and three were Black or African American. Of those reporting barriers due to cost, five were White and two were Black or African American, with an equal spread between age brackets. This analysis revealed that race, age, or native language does not influence how participants responded to the questionnaire.

Phase Two

Phase two of the study included interviews with three of the participants from phase one. Interview participants were chosen based on demographic diversity, aiming to provide responses from different race, age, gender, and native language groups. Participant A identified as an African American male, within the 45–65 age bracket. This participant had an extensive amount of experience using health insurance, having experienced multiple medical needs throughout adulthood. Participant B identified as a White male, within the age bracket of 45–65. This participant did not have as much experience using health insurance as Participant A but did show an understanding of costs regarding a plan's annual cycle. Participant C identified as an African American female, within the age bracket of 26–44. Participant C reported having very little experience using an employer-based health plan. During interviews, the main three emerging themes were that experience mattered when it came to understanding and using health insurance, that materials and communication need vast improvement, and that the cost of services was a barrier to using health insurance. The following is an exploration of the three emerging themes using actual verbiage from each participant.

Experience Matters

The first emerging theme was the perception that experience matters when it comes to understanding and using health insurance. Each interview participant recalled past experiences, making connections between their experiences and current knowledge and perceptions regarding health insurance. The first participant to contribute to this theme, Participant A, explained the benefit of having experience using health insurance, stating:

> If you've had a lot of health issues, I think it would become very easy to see the similarities in different health plan coverages. If you haven't, I think it can be very difficult to understand what is covered and what is not covered when you start getting into percentages of coverages.

Understanding how coinsurance percentages work in parallel with copays, deductibles, and out-of-pocket maximums, takes years to understand. The terminology remains the same, but jobs, health plans, and service scenarios are always changing for individuals. Each interviewee spoke to the value of experience when it comes to saving money and creating new patterns for using health insurance.

Participant B explained that he was able to plan for medical expenses to some extent after years of experiencing the use of deductibles and out-of-pocket maximums, but the costs still facilitate shock and delay care. He stated:

> You know, it's always a shock in January because you have to pay money to start eating through your $2,000 premium, or whatever it is. I don't know if I'm using the right words here, but you have to pay in full at first. So, January always stinks. And you never budget for that. But, once I hit March and I've gone to the doctor enough, and everything starts getting routine for the rest of year, it's very nice and it works great. I find, yeah, that wasn't so bad, so I do find it easy to use... I don't like January either. I really wish I could get rid of the old January fact because nobody saves money for January, right? You spend it all on Christmas. And then you're like, crap, don't go to the doctor in January.

This quote illustrates the value of understanding health insurance cycles through experience using health insurance, however, the verbiage used by the participant highlights the ongoing struggle participants face with terminology and savings for health insurance costs.

Participant C reported having above-average experience with health insurance through her work at a pharmacy. Through her role at the pharmacy, she was able to obtain billing knowledge that other health plan subscribers would not necessarily have access to. Due to her role, she was required to understand and answer billing questions as

needed by customers. Participant A shared regarding his struggle working through confusing billing procedures, explaining that it took multiple actions on his part to resolve an issue, leading to increased knowledge he could not have gained from the benefits guide, but was able to obtain through experience. He stated:

> …so those are all the little caveats that I think could just make somebody bonkers, and I'm just really experienced, only because I had to go through it. But, when I think about it from the perspective of, hey, I'm in a new job and this is my health insurance, I'm like wow, I would have never known that from what I'm being presented.

Participant A brings up a good point. The information presented at an orientation or in a benefits guide does not typically explore scenarios and is convoluted with information about all employee benefits. There is simply not time in a one-hour orientation to provide the information that employees need to choose and use the right health plan.

Improved Benefits Materials and Communications

The second theme to emerge from the interviews was the need for clear information in communications and benefits materials, especially using cost scenarios. The literature review brought this barrier to light, and this study validated the urgency for this change. Sheridan et al. (2011) explained that visual strategies are key and should include tables, icons, and videos when possible. The lack of visualizations in benefits guides, the absence of an advocate or Human Resources benefits specialist for support, as well as vague language were all identified by participants as barriers to understanding and using health insurance. Participant B showed vulnerability regarding the comprehension of health benefits reading materials, stating:

> Everybody reads differently. Everybody understands differently. Our comprehension skills are different levels. I happen to have some of the more poor comprehension skills on this earth. And that's why I need a person to talk to, to say, I don't get it. Why is this? Which one should I be doing? I need help.

Participant B is not alone and may be more of a visual or auditory learner. Charts, graphs, and plain language will increase the readability of benefits guides, however, a training alongside other tools is crucial. A training allows employees to meet the benefits team, who can answer their plan questions, and learn valuable information that a guide alone cannot provide. Service scenario examples were brought up throughout the study. Each of the participants in phase two determined the need for scenario examples in benefits guides or other training initiatives. Participant A gave an example regarding coinsurance calculations.

> When you start getting into percentages of coverages, based on what actually happened, 80% is covered based on this up until this deductible… I think more clarity could be given based on real life situations. In those scenarios, you know, more and more real-life scenarios could be given in those seminars or webinars when you're first presenting it to an employee.

When he was asked if he thought education was important, he responded that he felt it was, and that scenarios were key. The literature review explores the competencies required to increase HIL. Scenarios help individuals work through the combination of terminology and costs relevant to their plan, to begin to understand how these components work together.

Cost Barriers

The third theme to emerge from phase two was cost barriers. Participants claimed to have a lack of understanding as well as the ability to pay for services, especially as the complexity of the health scenario increased. Participant A explained that complex health issues not only increase the need for advisement from a benefits specialist but decrease the ability to forecast how much services will cost. Participant C provided an example using a family member's experience.

> My sister has multiple sclerosis, and her medication is not covered, but the medical visits are. Besides medication being so expensive…her medical coverage just doesn't help.

In many cases, cost barriers such as Participant C's sisters are an issue that HIL education cannot tackle without a financial literacy component. However, in some cases, help from an advocate could assist in navigating types of plans and options for individuals seeking assistance. Participant B provides an example of the confusion and lack of clarity regarding plan types and costs.

> I mean, ultimately it comes down to money. For some people, it comes down to medicines and prescriptions, and for some people it comes down to how many times I can go per year…for me it's strictly about how much money is coming out of my pocket each paycheck. I'm just trying to find that in most cases, because I'm not a sick person, I don't go to the hospital that often, at all. I take care of myself and stuff, so I don't use health care that much, and when I do, I don't want to pay any money. But I don't want to pay $700 a pay period; I know that's exaggerating. That's what I'm getting at…it feels like there should be an option for people who don't go often at all. If I had an extremely low premium like a $100 premium… but it's just, reading those documents is the barrier- that is the barrier. And by the way, you only get 30 days. So good luck. All right.

Participant B clearly speaks to the issue of confidence when it comes to selecting and using the right health plan for the individual or their family. It is evident from his response that he experiences financial burden and stress due to health insurance. Participant A spoke again to the power of experience, the need for cost scenario education, and described the burden caused by unforeseen charges.

> I think that there are rules to this system that aren't clearly understood or explained at the beginning. And I think the employee is kind of then, stuck with the bill that they may not have known upfront was going to happen, and maybe could have planned better for it, had they known this is the way it works. Most people are experienced after they've gone through it, and I think they could be better educated up front.

It is the employer's responsibility to provide transparency and ensure that materials and trainings are available for employees to reduce the perception that hidden rules exist, or that the employee is inevitably "stuck."

Framework Analysis—Phases One & Two

Transformational Learning Theory was used for the thematic analysis of phases one and two, and illuminates strong themes related to the theoretical framework. Mezirow (1990) explained that reflection on past experiences shapes how adults understand their experiences, defining how "meaning perspectives refer to the structure of assumptions within which new experience is assimilated and transformed by one's past experience during the process of interpretation" (p. 2). Adults define their experiences through lenses shaped by these perceptions, which are made up of many variables that shape our beliefs. Transformational Learning Theory advocates for the creation of new lenses as the educator facilitates a self-awareness of assumptions so that the learner can make choices and act based on new perceptions. Mezirow (1990) explains the impact of perceptions below:

> Nonetheless, what we do and do not perceive, comprehend, and remember is profoundly influenced by our meaning schemes and perspectives. We trade off perception and cognition for relief from the anxiety generated when the experience does not comfortably fit these meaning structures (Goleman, 1985). When experience is too strange or threatening to the way we think or learn, we tend to block it out or resort to psychological defense mechanisms to provide a more compatible interpretation (p. 4).

Here, he shared how perception can be a powerful barrier to learning new information and acting based on new knowledge. Mezirow (2020) listed three categories of perception within Transformational Learning Theory: Epistemic Perception, Psychological Perception, and Sociocultural Perception. He explained that these

categorical lenses are referred to as distortions, similar to filters that change the way a learner, or in this case participant, may respond to a question after reflecting on past experience. Epistemic distortion involves the "nature and use of knowledge" (Mezirow, 1990, p. 15). Another epistemic distortion involves the belief that things are outside of one's control. Sociocultural perception is explained below by Mezirow (1990).

> Sociocultural distortions involve taking for granted belief systems that pertain to power and social relationships, especially those currently prevailing and legitimized and enforced by institutions (p. 9).

Sociocultural distortion helps explain why Participant B spoke to hidden rules within employer-sponsored health insurance. Without the transparency provided by well-developed informational materials and clear communications, employees are left to form opinions based on past assumptions. Sociocultural distortion can also be explained by confirmation bias. When individuals are not aware of a bias belief, this distortion is experienced. A HIL training that facilitates conversation will allow individuals to explore their own biases through the development of new knowledge. The third category involves psychic distortions. Mezirow (1990) explains that "psychological distortions have to do with presuppositions generating unwarranted anxiety that impedes taking action" (p. 16). When an attempt is made to understand a health plan and the resources are not effectively designed, it is typical that an individual will avoid returning to the learning materials. After examining phases one and two, Mezirow's three categories of perception clearly stand out in participant responses. Next, the thematic analysis of the case study is broken up into Mezirow's three categories of meaning perceptions responses. A color-coding method was used to highlight the three categories within the spreadsheet of data. Table 4.1 provides a visualization of perceptions and their alignment with the study's findings.

Table 4.1

Table of Transformational Learning Theory and Aligning Emerging Themes

Meaning Perception	Meaning Perception Description	Aligning Emerging Themes
Epistemic Perception	Causes one to believe that a situation is out of one's control.	Health insurance terminology and information regarding cost of services is too confusing to understand. Fear of shame and embarrassment is an experienced barrier.
Sociocultural Perception	When an individual does not engage in critical thinking, or does not have access to information, and falls victim to a belief system.	Hierarchies exist for health insurance subscribers. Healthcare has become highly politicized. Subscribers become skeptical. The relationship between the employer and health insurance vendor is in question.
Psychological Perception	The involvement of trauma responses can inhibit the development of new knowledge.	Past experiences dealing with financial burden or inability to pay a medical bill. Feelings of shame for asking questions. Anxiety is caused by the inability to seek care early in the year when deductible amounts are high.

The first category used for the thematic analysis is Epistemic perception. Epistemic distortion causes one to believe that a situation is out of one's control. This could be due to the nature of the system, or the nature of the knowledge. If information is too difficult to understand, one may believe it is beyond their control to gain the new knowledge. The open-ended questions in set three of the questionnaire provided a variety of examples of this lens. Participants reported feeling confused about the number of visits allowed in some plans, and how much services would cost. Ten responses to the questions relating to barriers confirmed confusion about the cost of services. When participants feel that information is too complicated or complex to understand, this perception poses a threatening barrier. The interview responses strongly related to this

category. Each of the three interviewees reflected on a time when they were unsure of how much something would cost. Being "stuck with the bill" is a bump in the road for some employees but devastating for others, especially if the expense was for a catastrophic event. The fear of shame and embarrassment for using a service and being unable to pay while at the provider's office caused Participant B anxiety. She explained that she would feel better if she understood up front how much a service would cost. The generic cost for services is typically found in a benefits guide, however, many individuals could benefit from the use of scenarios, discussion surrounding the scenario, and the ability to ask questions.

The second category of perception, sociocultural distortion, occurs when an individual does not engage in critical thinking, or does not have access to information, and falls victim to a belief system. This is the generic explanation provided by Mezirow; however, more nuanced distortions occur, and are present across phases one and two of the study. Phase two provided a great example, as Participant B verbalized his skepticism regarding the lack of education regarding HSAs.

> I want to take advantage of an FSA, or really an HSA, but I'm scared because when I read the literature in the health plan, it doesn't make sense to me. And there's a tiny paragraph, it's like, three sentences long, and you're like, wait a minute, this plan takes up a page and a half… That's Option A, Option B takes up another page now... Why do all the executives do HSA, and it's three sentences long? What am I missing? Why is this? It's like, it's like there's some hidden… like executives have upper hand knowledge to an HSA that the 90% of us don't have, and that's frustrating because I want to take advantage of wealth building with an HSA, but I don't know. It's three sentences and it means absolutely nothing.

Belief systems regarding health care and hierarchies, such as the one experienced by Participant B, can be extremely negative. The relationship between the employer and health insurance vendor can also be perceived in a negative way. Many wonder why an

employer is contributing this benefit and what is in it for them. Health care has become politicized with the Affordable Care Act and interest in the socialization of health care, and many believe it to be a system that exploits subscribers by keeping communication vague and the system difficult to navigate. Just as Participant B explained, many perceive that there are hidden perks that are only for certain, more elite groups. This clearly speaks to the premise of sociocultural distortion.

The third and final category defined by Mezirow (1990) is psychic distortion. Similar to sociocultural distortion, the bolder meaning can involve trauma responses and other issues from childhood that must be addressed before learning can occur. Regarding HIL, many past experiences of financial burden are also traumatic. In one response to Q18, the participant's experience with one doctor visit leading to many others, along with compounding costs, delayed their seeking of care. Anxiety paralyzes an individual from acting. Appearing to not understand a plan in front of peers, Human Resources, or a doctor can induce anxiety. In the literature review, Caylan et al. (2017) explained that people may feel shame for asking questions. Culture also plays a role, with some groups finding these conversations difficult, with some experiencing shame from a language barrier when English is a second language. Questions in set three of the questionnaire brought many of the participants' anxieties to light, as they reported reasons for delaying care due to barriers. The fear of not having enough money to pay for a service, the amount of research required to set up a visit, the amount of time required when referrals are involved, and not knowing which provider to use due to varying costs were all cited as reasons for delaying care. Time of year was cited in phase two, as Participant B explained the yearly cycle of using health insurance regarding deductibles. The amount

of the deductible can make it difficult to visit the doctor early in the year, making only crucial visits worthwhile until the deductible is paid.

Discussion

The findings from this study continue the conversation in the literature review. A review of the literature determined that there is a gap in research that is aimed at HIL in the workplace. The primary research question posed for this study was: What are the health insurance literacy gaps in the workplace? Based on the results, a lack of understanding regarding the cost of medical services is the most prominent theme to emerge from the study, with over half of participants unable to resolve a health service cost scenario. The ability to calculate the cost of a service is a proven barrier to using health insurance. This confirms statistics reported in the literature review, such as the one by Perrault at al. (2019), which reported that 90% of participants in a study claimed to understand health insurance, while only 59% could accurately complete a cost calculation (p. 14). Phases one and two of the current study echoed these findings, proving that the cost of services is difficult to calculate and causes substantial stress.

The first sub-research question posed for this study was: Why are health insurance benefits difficult to understand? The literature review presented a study by Adepoju et al. (2019), which found that privately insured individuals showed lower HIL than the publicly insured. The authors recommended that adults enrolled in health insurance who understand the system should mentor new enrollees. These individuals have had more experience using health insurance, which is linked to an emerging theme from phase two of this study. Participants in the study found ways to use health plans as effectively as possible depending on past experiences. Figure 1 from the literature review, adapted from

the Consumer Reports (2013) conceptual model, indicated that health insurance education and human capital contribute most to HIL. Human capital includes competencies that are acquired by an individual such as reading comprehension and numeracy skills and include the employee's past experiences and assumptions about health insurance. This connection between the literature and this study is significant. Trainings should allow time for reflection, examination of assumptions, break-out groups, and questions. The sharing of individuals' diverse cultural capital in small break-out groups provides a safe space for asking questions and learning from others. Each interviewee from the study brought a unique lens, which would be an asset to the conversation in a HIL training.

The second sub research question asks: What factors contribute to or are barriers to health insurance literacy? The use of the theoretical framework, Transformational Learning Theory, was an integral part of the development of the study and understanding of its findings. Findings from the study illuminated the need to break-down past assumptions, focusing on sociocultural, epistemic, and psychological distortions. To facilitate this paradigm shift, it is critical to provide reasons why HIL is important. Brown (2018) noted that experiences leading to perception play a key role in HIL. The case study portion of the Smart Choice Health Insurance program helped participants see different scenarios to help determine which plan was best by asking the participant to think about their personal, past experiences (Brown, 2018). The program incorporated break-out groups to reduce anxiety around numeracy, to alleviate confusion caused by terminology, and to allow participants to work through the interpretation of documents.

Social pressure is stated as another barrier to HIL in the literature. Employers must be sensitive to the presence of shame during a health insurance training. This is closely related to the meaning perception category, psychological perception. Employee benefits orientations typically require that people across departments of a company are seated together to learn and ask questions as a group. There are social and psychological reasons why an employee may not participate in this setting. People may feel shame for asking questions (Caylan et al., 2017). The U.S. Department of Health and Human Services focuses on stigma and shame in their Quick Guide. Providing the recommended training as opposed to a benefits orientation addresses this issue. Sociocultural perception is another barrier that is linked to the literature. A study by Ali (2018) included a comment from a focus group, which was one of twelve to report a lack of trust in health insurance companies. One participant from the focus groups asked, "why would they play politics with your health? Don't you want me to be healthy so that I can go to work, go take care of my kids?" (p. 1211). While this pertained to the public sector, it also impacts employer-sponsored healthcare. Employers must use education to empower employees so that they are able to challenge old belief systems and take action to manage their health.

Implications

Findings from the study and evidence from the literature review provide a comprehensive understanding of the needs of employer-based health plan subscribers, which should be considered for the design of a HIL program. There is an urgent need for HIL education within the workplace, across all demographics, and this will require organizational change. The shared services umbrella of Human Resources, which typically includes Benefits, Compensation, Payroll, and Human Resources Information

Systems, must put education at the forefront of initiatives, similar to the professional development side of Human Resources. A HIL training policy should be developed and implemented so that change in leadership or Human Resources roles does not interfere with the existence of the HIL program. Education should be developed using research-based data related to the lack of understanding when it comes to cost scenario calculations, the emphasis on learning from experience using health insurance, and Transformational Learning Theory.

Trainings should include health plan scenario application in small groups, using the organization's plan coinsurance percentages, deductible, and out-of-pocket maximum amounts. Benefits guides and other resources should be used as a part of the training so that participants can refer to them during and following the training. Health insurance terminology should be explored and defined in a way that allows participants to apply the terms in scenarios.

This study provides evidence that experience using health insurance matters when it comes to HIL. Trainings should leverage cultural capital and allow for knowledge sharing based on experience using health insurance. Facilitators should allow time for conversation and questions and provide contact information for the benefits team and other individuals that can answer questions throughout the plan year. The literature shows that individuals of all generations prefer speaking to another individual over the use of technology when it comes to having their health insurance questions answered.

The underlying framework for trainings should be Transformational Learning Theory. Perceptions should be addressed through the examination of past assumptions to break down distorted perceptions and current belief systems. This type of learning leads

to agency and proactive self-care. Distorted perceptions are currently holding employees back from increasing HIL.

Future research should be conducted to design and implement HIL programs using pre-tests and post-tests. Through the application of andragogy, Transformational Learning Theory, and the application of terminology and scenario content, effective workplace trainings can be implemented, evaluated, and improved. Given access to validated training measures, legislation should be created to ensure that organizations providing an employer-based health plan provide access to HIL training each year.

Conclusion and Summary

When it comes to HIL education, the stakes are high. The findings from the literature review as well as evidence presented from this case study further the conversation which began in the public sector. HIL statistics are alarming; however, gaps have now been identified that promote change regarding this issue. From the creation of the definition of HIL in 2011, to the development of trainings for the public sector in 2018, it is time to use this information to improve HIL in the workplace. HIL initiatives provide a more robust employee wellness initiative, empowering individuals to manage their own health. Financial literacy education in the workplace provides a great example of the benefit of new knowledge and the empowerment over the management of one's finances. Leaders must take this lesson and apply it to health insurance. The return on investment due to less stress, better health, and increased retention is too valuable to overlook.

This study used a qualitative case study design and asked participants within a large nonprofit organization to participate in a questionnaire and interview, aimed at

gathering information to answer the research questions and further the conversation regarding HIL in the workplace. Key findings of the study pointed to the need for improved health benefits resources, cost scenario examples, and a training facilitating the examination of meaning perceptions so that learning can take place.

The implications of this study are valuable for leaders of organizations that are interested in increasing the HIL of employees so that they are empowered to manage their health. The inclusion of scenario-based content, knowledge sharing, and incorporation of Transformational Learning Theory in trainings will have a positive impact on HIL in the workplace.

CHAPTER FIVE

Distribution of Findings

Introduction

Employers have a responsibility to educate employees regarding their health plan, however, a widely used framework for health insurance literacy (HIL) education in the workplace does not exist. In 2011, a Roundtable comprised of experts with a wide range of backgrounds came together at the Kaiser Foundation to construct a definition and discuss strategies for increasing HIL.

> Health insurance literacy measures the degree to which individuals have the knowledge, ability, and confidence to find and evaluate information about health plans, select the best plan for their own (or their family's) financial and health circumstances, and use the plan once enrolled. (Quincy, 2012, p. ii)

The construction of this definition was the first step in beginning the HIL conversation in the academic and public sector.

This Problem of Practice dissertation study provided employers with better insight into the HIL gaps and barriers which should be addressed during the instructional design of a HIL training. Without the ability to choose and use the employer-sponsored health plan, the benefit becomes a stressor for employees. Greenwald et al. (2019) surveyed over 1,000 participants regarding their understanding of health benefits and reported that "aligned with their top financial stressors, 88 percent report that retirement savings plans contribute the most toward a feeling of financial security. Health insurance tops the list, with 89 percent saying this contributes to financial security" (p. 7). This alarming evidence of stress due to low HIL exists across the literature. The most prominent gap to

emerge from the literature review was the lack of research designed to analyze the state of HIL in the workplace.

Overview of Data Collection and Analysis Procedures

The data collected in this case study included responses from a questionnaire and semistructured interviews to examine HIL gaps and perceived barriers experienced from a sample of nineteen nonprofit employees with access to the same employer-sponsored health plan. In phase one, the information collected from the questionnaire included participant demographics, knowledge of health insurance terminology, application of concepts, perceived barriers to HIL, and the delay of care caused by HIL barriers. Based on demographic diversity, three employees were chosen to participate in the phase two semistructured interviews. Interviews aimed to provide more insight into the gaps and barriers present in the current system.

Data collection and analysis were designed to answer the following research questions: What are the gaps in the HIL of employees enrolled in an employer's health plan at a large organization? Why are health insurance benefits difficult to understand? What factors contribute to or are barriers to health insurance literacy? The examination of these questions is crucial for addressing HIL in the workplace. Methods for data collection and analysis were grounded in the theoretical framework, Transformational Learning Theory. The premise of Transformational Learning Theory is that adult learners must examine past assumptions related to experiences to put new knowledge into action. This theory, often applied in Human Resources, aided in the identification of emerging themes from the findings.

Summary of Key Findings

The most prominent emerging themes from the study were gaps in knowledge needed to calculate the cost of a service, fear of unforeseen costs following a service, and the perception that experience matters when it comes to using health insurance. These themes were aligned with Jack Mezirow's, Transformational Learning Theory, each reflecting either epistemic, psychological, or sociocultural distortion.

The most prominent barriers to emerge from the literature review were language and low levels of education. Perhaps this lack of alignment with the current study illuminates the need for more research in the workplace. This population, with access to employer-sponsored health insurance, may experience different barriers than those enrolled in a public health plan.

Demographic patterns comprised of race, age, and native language, related to participant responses were insignificant. Overall, correct scores for multiple-choice answers ranged 53% to 100%, with one participant answering each question correctly. The most common incorrect answer to the multiple-choice questions required participants to calculate the cost of a hospital visit, which was answered incorrectly by 79% of participants. Fifty-nine percent of participants reported experiencing barriers or confusion related to health insurance, and an alarming eight of nineteen participants delayed seeking care because of perceived barriers.

Informed Recommendations

Recommendations for key stakeholders regarding the implementation of an effective HIL training include the incorporation of time for reflection on past experiences using health insurance, practice calculating costs through health service scenarios

utilizing the employee's specific health plan variables, and the allowance of time for questions to increase transparency. Further research should be conducted to learn more about the impact of training implementation. Benefits guides designed by the employer or benefits broker should incorporate health term definitions and health scenario examples to help enrollees choose and use a health plan. Cost scenario examples should be included in the benefits guide to reduce confusion regarding the intersection of coinsurance, deductibles, and out-of-pocket maximums. This guide should be a learning tool and resource as well as a list of employee benefits.

To compensate for turnover in leadership, it is crucial to implement policies and expectations for HIL resources and training programs. Expectations should be examined and modified as the program is continuously evaluated. HIL trainings should promote relationship building between employees and the benefits administrator. Transformational Learning Theory and andragogy should be applied in the design and facilitation of the training, and the trainer should facilitate reflection on past benefits experiences as they move through topics related to health insurance. Break-out groups should be utilized, allowing individuals to knowledge share, as the group will have strengths in varying competencies.

Findings Distribution Proposal

It is critical that the findings from this case study and literature review are utilized. Employee benefits leaders lack guidance for HIL initiatives, and the findings from this study provide evidence of the gaps and barriers to HIL in the workplace for the development of trainings. Reaching Human Resources leaders and researchers in HIL will impact organizational change promoting the improvement of HIL. The target

audience, distribution methods, and distribution materials have been considered and some already implemented from the findings. The researcher sought to present information from the study at a top national employee benefits conference, and to the Human Resources leadership team at the organization responsible for participation in the study. Resources were developed and provided to enhance each presentation and to provide a resource to the audience following the presentation.

Target Audience

The distribution of findings from the study are targeted for employee benefits professionals and Human Resources leaders. Individuals attending an employee health benefits conference and leadership from the Human Resources team participating in the case study were the target audiences for the findings. This case study provides leadership of organizations with the evidence needed to promote organizational change relating to increased employee health plan education. Human Resources professionals specializing in employee benefits will gain more insight into the gaps and barriers that employees experience relating to health insurance and will be able to proactively address these issues. Knowledge of the findings will lead to a more holistic employee benefits program, which positively impacts an employee's experience at the organization. It is also important that this information reaches other researchers interested in conducting studies to provide research-based evidence of the impact of HIL training. The design of a widely used workplace HIL program, pre-testing and post-testing, and analysis are a critical next step.

Distribution Method and Venue

There are two methods of distribution for this research. A professional presentation for key stakeholders was conducted by the researcher and co-presenter, Dr. Tony Talbert, at the Health Benefits Conference & Expo (HBCE), on May 26–27, 2021. HBCE is hosted by the International Foundation of Employee Benefit Plans (IFEBP) and is one of the leading conferences for employee health benefits and wellness education. The conference brings together employee benefits specialists and other Human Resources professionals from across sectors and qualifies for credit toward the Certified Employee Benefits Specialist (CEBS) certification, the top certification in the field of employee benefits. It was crucial to present this study's information to this audience because of their vested interest in employee health plans and the impact they have on their employees' HIL. The interactive presentation lasted 45 minutes, allowing time for questions and answers following the presentation. The goals of the presentation were to answer the following questions: What is Health Insurance Literacy (HIL) and why is it important? What are andragogy and the 6 assumptions for adult learning? What is Transformational Learning Theory and how does it impact organizations? Why should we engage in research for insights and research for change? How does Organizational Change impact Health Insurance Literacy?

The second method of distribution was a one-hour presentation of the findings of the study for the Human Resources leadership team at the organization providing the participant sample for the study. The presentation covered the definition of HIL, current research in the field of HIL, HIL research related to the workplace, findings from the case study, and recommendations for the application of these findings in the workplace. The Senior Vice President of Human Resources, Human Resources Director of Operations,

and Employee Benefits Manager were invited to attend. These individuals are responsible for managing the health plans, health plan communications, and health plan education for the organization.

Distribution Materials

Both presentations required materials that could be used as resources following the presentation. A Power Point was developed and distributed to session attendees at the Health Benefits Conference and Expo. The slides were created to facilitate conversation and provide useful content that participants could refer to following the conference. Participants were asked to use an interactive website to answer questions related to the presentation. For example, they were asked to reflect on their role and provide an example of a past strategy they had used to increase employees' knowledge about how to use health insurance. This allowed for the transfer of ideas across the group. Slides covered the main topics of the session including: The definition of Health Insurance Literacy (HIL) and why is it important, andragogy, Transformational Learning Theory, and how organizational change impacts HIL. The presentation slides are included in Appendix D.

The presentation for the Human Resources leadership team included a handout with key points from the study, as well as the executive summary from the Problem of Practice. The handout included the definition of HIL, current research in the field, HIL research related to the workplace, findings from the case study, and recommendations for the application of these findings in the workplace. The handout is included in Appendix E.

Conclusion

Low HIL is an ongoing issue in the work sector which requires further research and organizational change. The benefits of improving HIL are far too great, and this issue impacts too many individuals for leaders to not take action. Findings from the literature review and case study lay a strong foundation for the development of a framework for education in the workplace. Employers must view HIL education as a critical aspect of employer-sponsored health insurance programs.

APPENDICES

APPENDIX A

Health Insurance Literacy Questionnaire

Set 1: About You

1. How old are you?
2. How do you define your race/ethnicity?
3. Is English your second language?
    - Yes
    - No

Set 2: Health Insurance Terminology

1. _____ drugs are prescription or over the counter drugs sold by a drug company under a specific name or trademark and that is protected by a patent.
    - Generic
    - Brand name
    - Formulary
    - Referral
2. This is the health care items or services covered under a health insurance plan. Covered _____ and excluded services are defined in the health insurance plan's coverage documents.
    - Qualifying health coverage
    - Continuation health coverage (COBRA)
    - Insurance co-op
    - Benefits
3. A _____ is approval from a health plan that may be required before you get a service or fill a prescription in order for the service or prescription to be covered by your plan.
    - Prior authorization
    - Premium
    - Coordination of benefits
    - Referral
4. The _____ is the amount you pay for covered health care services before your insurance plan starts to pay.
    - Coinsurance
    - Premium
    - Deductible
    - Out-of-pocket maximum
5. A _____ is the facilities, providers and suppliers your health insurer or plan has contracted with to provide health care services.

- Formulary
- Network
- Referral
- Health insurance marketplace

6. The _____ is the percentage of costs of a covered health care service you pay (20%, for example) after you've paid your deductible.
   - Coinsurance
   - Premium
   - Copay
   - Out-of-pocket maximum
7. The _____ is a legally required standardized document that insurance must provide to let you make apples-to-apples comparisons of costs and coverage between health plans.
   - Formulary
   - Coordination of benefits
   - Referral
   - Summary of Benefits and Coverage (SBC)
8. A _____ is a fixed amount ($20, for example) that you pay for a covered health care service after you have paid your deductible.
   - Coinsurance
   - Premium
   - Copay
   - Out-of-pocket maximum
9. The _____ is the amount you pay for your health insurance every month. In addition to it, you usually must pay other costs for your health care, including a deductible, copayments, and coinsurance.
   - Premium
   - Claim
   - Referral
   - Formulary
10. A _____ is an arrangement you set up through your employer to pay for many of your out-of-pocket medical expenses with tax-free dollars. These expenses include insurance copayments and deductibles, and qualified prescription drugs, insulin and medical devices. You decide how much of your pre-tax wages are taken out of your paycheck and put towards this.
    - Health reimbursement account (HRA)
    - Health savings account (HSA)
    - Employer shared responsibility payment (ESRP)
    - Flexible spending account (FSA)
11. A _____ is a type of health insurance plan that usually limits coverage to care from doctors who work for or contract with the insurance company. It generally will not cover out-of-network care except in an emergency.
    - Point of service (POS)
    - Preferred provider organization (PPO)
    - Health maintenance organization (HMO)
    - Continuation health coverage (COBRA)

12. A _____ is a type of health plan that contracts with medical providers, such as hospitals and doctors, to create a network of participating providers. You pay less if you use providers that belong to the plan's network. You can use doctors, hospitals, and providers outside of the network for an additional cost.
    - Point of service (POS)
    - Preferred provider organization (PPO)
    - Health maintenance organization (HMO)
    - Continuation health coverage (COBRA)
13. A _____ is a list of prescription drugs covered by a prescription drug plan or another insurance plan offering prescription drug benefits. This is also called a drug list.
    - Network
    - Referral
    - Formulary
    - Summary of benefits and coverage (SBC)
14. The _____ is a cap on the benefits, in terms of a dollar amount of covered services or the number of visits for a particular service, that your insurance company will pay in a year while you're enrolled in a particular health insurance plan. These caps are sometimes placed on services such as prescriptions or hospitalizations. After this is reached, you must pay all associated health care costs for the rest of the year.
    - Out-of-pocket maximum
    - Deductible
    - Premium
    - Annual limit
15. The _____ is the most you must pay for covered services in a plan year. After you spend this amount on deductibles, copayments, and coinsurance, your health plan pays 100% of the costs of covered benefits.
    - Out-of-pocket maximum
    - Annual limit
    - Coinsurance
    - Premium
16. A _____ is a written order from your primary care doctor for you to see a specialist or get certain medical services. If you don't get this first, the plan may not pay for the services.
    - Referral
    - Prior authorization
    - Coordination of benefits
    - Claim
17. The _____ is the expense for medical care that isn't reimbursed by insurance. These expenses include deductibles, coinsurance, copayments for covered services, and any expenses for medical care that aren't covered by your insurance.
    - Out-of-pocket maximum
    - Annual limit

- Premium
- Out-of-pocket cost

Set 3: Scenario

1. Your insurance company has negotiated a rate of $11,000 for a surgery. You have a deductible of $1,000, co-insurance of 20%, and out-of-pocket maximum of $4,000. What amount are you responsible for?
   - $4,000
   - $3,000
   - $2,200
   - $1,000

Set 4: Feedback about Understanding Health Insurance

1. Has there been a time when you experienced barriers or were confused about using your health insurance?
   - Yes
   - No

   If yes, can you briefly (1-3 sentences) describe without providing personal information?

   _____
   _____
   _____
2. Have barriers and/or a lack of understanding of your health insurance plan ever stopped you or significantly delayed you from seeking medical care?
   - Yes
   - No

   If yes, can you briefly (1-3 sentences) describe without providing personal information?

   _____
   _____
   _____

APPENDIX B

Table of Questionnaire Set Two Questions and Number of Correct Responses

Table B.1

Questionnaire Set Two Questions and Number of Correct Responses

Question	Number of participants with correct answer
Q1: _____ drugs are prescription or over the counter drugs sold by a drug company under a specific name or trademark and that is protected by a patent.	13 of 19
Q2: A _____ is approval from a health plan that may be required before you get a service or fill a prescription for the service or prescription to be covered by your plan.	15 of 19
Q3: The _____ is the amount you pay for covered health care services before your insurance plan starts to pay.	17 of 19
Q4: A _____ are the facilities, providers, and suppliers your health insurer or plan has contracted with to provide health care services.	17 of 19
Q5: The _____ is the percentage of costs of a covered healthcare service you pay (20%, for example) after you have paid your deductible.	10 of 19
Q6: The _____ is a legally required standardized document that insurance must provide to let you make apples-to-apples comparisons of costs and coverage between health plans.	18 of 19
Q7: A _____ is a fixed amount ($20, for example) that you pay for a covered health care service after you have paid your deductible.	17 of 19
Q8: The _____ is the amount you pay for your health insurance every month. In addition to it, you usually must pay other costs for your health care, including a deductible, copayments, and coinsurance.	19 of 19
Q9: A _____ is an arrangement you set up through your employer to pay for many of your out-of-pocket medical expenses with tax-free dollars. These expenses include insurance copayments and deductibles, and qualified prescription drugs, insulin and medical devices. You decide how much of your pre-tax wages are taken out of your paycheck and put towards this.	13 of 19

Question	Number of participants with correct answer
Q10: A _____ is a type of health insurance plan that usually limits coverage to care from doctors who work for or contract with the insurance company. It generally will not cover out-of-network care except in an emergency.	10 of 19
Q11: A _____ is a type of health plan that contracts with medical providers, such as hospitals and doctors, to create a network of participating providers. You pay less if you use providers that belong to the plan's network. You can use doctors, hospitals, and providers outside of the network for an additional cost.	13 of 19
Q12: A _____ is a list of prescription drugs covered by a prescription drug plan or another insurance plan offering prescription drug benefits. This is also called a drug list.	16 of 19
Q13: The _____ is a cap on the benefits, in terms of a dollar amount of covered services or the number of visits for a particular service, that your insurance company will pay in a year while you're enrolled in a particular health insurance plan. These caps are sometimes placed on services such as prescriptions or hospitalizations. After this is reached, you must pay all associated health care costs for the rest of the year.	17 of 19
Q14: The _____ is the most you must pay for covered services in a plan year. After you spend this amount on deductibles, copayments, and coinsurance, your health plan pays 100% of the costs of covered benefits.	18 of 19
Q15: A _____ is a written order from your primary care doctor for you to see a specialist or get certain medical services. If you don't get this first, the plan may not pay for the services.	17 of 19
Q16: The _____ is the expense for medical care that isn't reimbursed by insurance. These expenses include deductibles, coinsurance, copayments for covered services, and any expenses for medical care that aren't covered by your insurance.	10 of 19
Q17: Your insurance company has negotiated a rate of $11,000 for a surgery. You have a deductible of $1,000, co-insurance of 20%, and out-of-pocket maximum of $4,000. What amount are you responsible for?	4 of 19

Questions adapted from Nobles et. al (2019).

APPENDIX C

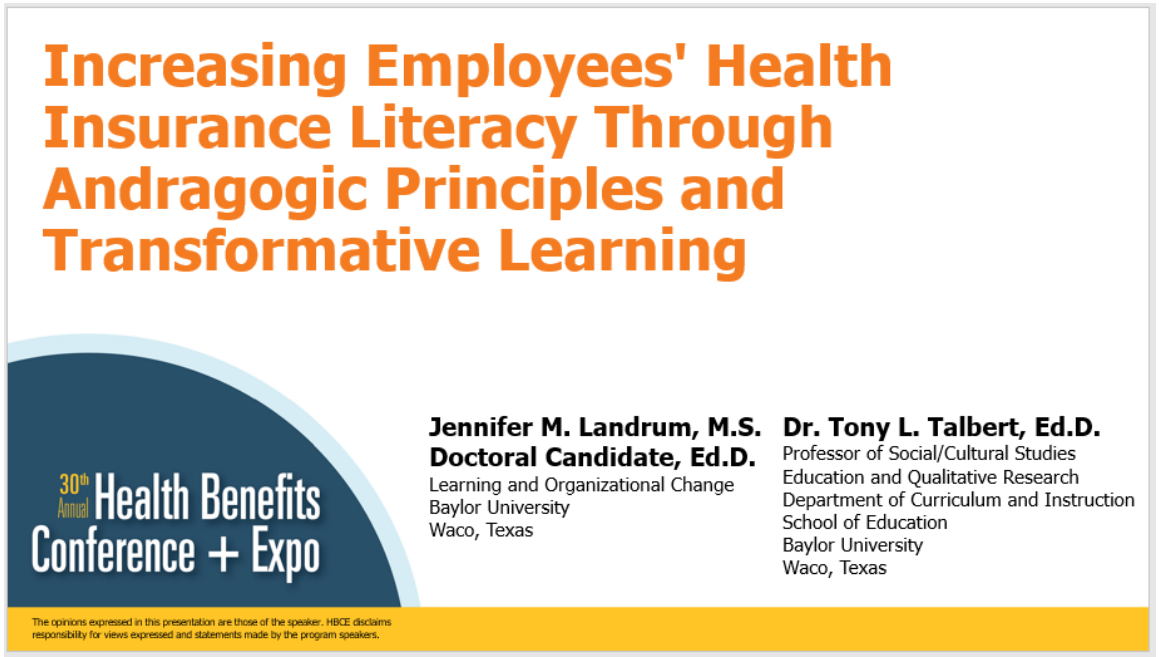
Health Insurance Literacy Interview

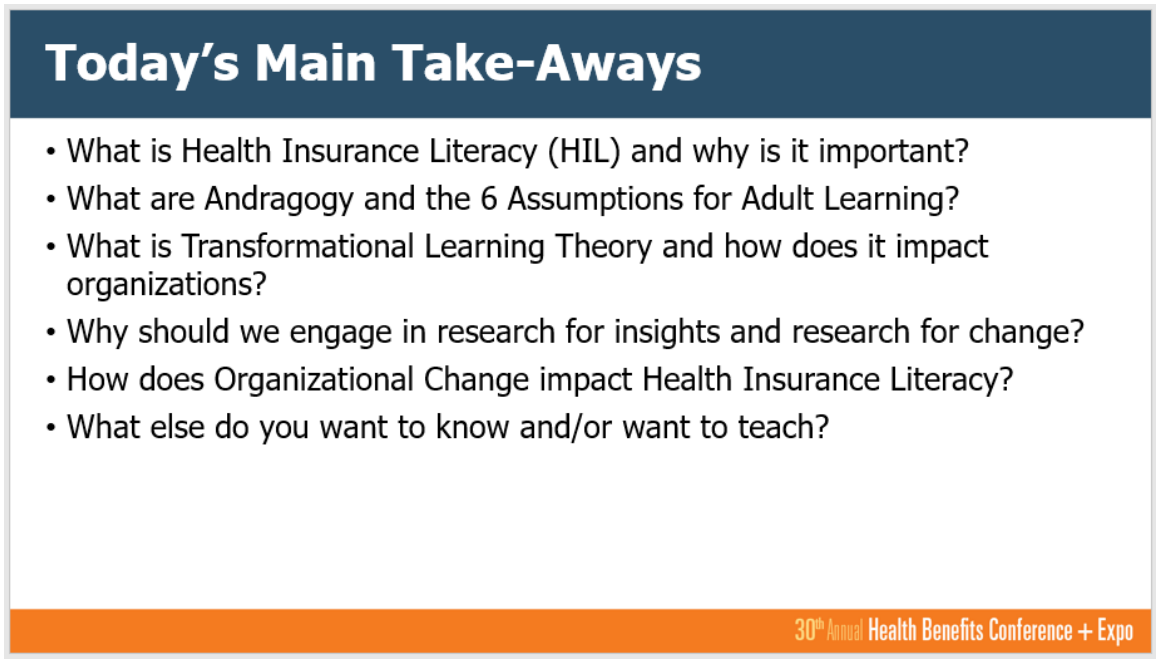
1. Tell me about your past experiences with health insurance education.
2. Have you found benefits guides or orientations to be helpful when it comes to understanding your plan?
3. Do you feel that health insurance benefits are difficult to understand and/or use? If so, why?
4. Tell me about your past experience using employer-sponsored health insurance.
5. Do you believe that barriers exist to understanding and/or using health insurance?
6. If you feel that you have experienced barriers that are outside of your control, can you explain?
7. If you feel that you have experienced barriers that are within your control, can you explain?
8. Do you feel health insurance education is important?
9. Do you feel a sense of agency when it comes to managing your health through the effective use of health insurance?
10. If your employer offered an annual health insurance training program, would you attend?

Questions adapted from Nobles et. al (2019).

APPENDIX D

Health Benefits Conference and Expo Presentation Slides





Welcome!

Reflect

Reflecting on your role in the organization where you serve, what is an example of a strategy you have used to help increase an employee's knowledge, ability, or confidence when it comes to using their health insurance?

Write your response on a Jamboard post-it-note (see link in chat)@ https://jamboard.google.com/d/1csk7Uc8icSD-iP9YwcgFJZ15Xz5KKeMTPLgegYshUiA/viewer?f=0

What is Health Insurance Literacy? Why is it Important?

- Health Insurance Literacy: Measures the degree to which individuals have the knowledge, ability, and confidence to find and evaluate information about health plans, the best plan for their own (or their family's) financial and health circumstances, and use the plan once enrolled. (Quincy, 2012, p. ii)

- Health insurance literacy is important to me because . . .
- Health insurance literacy is important to my employees because . . .
- Health insurance literacy is important to my organization because . . .
- Health insurance literacy is important to our community/state/nation because . . .

The 6 Assumptions of Andragogy	Workplace Health Insurance Literacy Application
1. The Need to Know	How can this help me? Employees must understand the importance of gaining health insurance knowledge.
2. Self Concept	Why should this matter to me? Employees should begin to connect the reason for education with feelings of empowerment over one's health care management, their family's wellbeing, and social responsibility.
3. Prior Experience	Have I developed assumptions based on past experiences? Employees need time to reflect on past experiences. Have I or has anyone I know experienced barriers to health insurance literacy? What were those barriers?
4. Readiness to Learn	Know your group! The Benefits Administrator should collect baseline knowledge using a survey or other tool for understanding which competencies may need most improvement within the employee population.
5. Learning Orientation	Your group contains individuals with diverse learning styles. Ensure that you provide resources that have visuals like tables and pictures if possible.
6. Motivation to Learn	Share success stories involving the use of employer-based health insurance! It pays to know your group. The core values of the organization may assist in targeting motivational strategies.

Digging deeper into past experiences using Transformational Learning Theory: Using reflection to facilitate action on the part of the adult learner

What research tells us!

30th Annual Health Benefits Conference + Expo

Post-It and Share It

- What are examples of one or more of the following conditions that make Transformational Learning Theory relevant in your organization?
- Complicated Rhetoric
- Socioeconomic Disparity
- Company Culture
- Cultural Diversity
    - Write the response on the Jamboard post-it-note @ [redacted]

Action without research leads to chaos. Research without action leads to complacency. Problem of Practice (PoP) research is intended to engage all stakeholders in the exploration of best practice that allows for the collaborative sharing of insights and the deliberative strategy of change.

This study entitled, Examining Health Insurance Literacy for Employer-Based Health Insurance Education, is being conducted as in-depth case study design determined to identify gaps in HIL and uncover other emerging themes within the participant sample involved in the study. A questionnaire is being given to a sample at a mid-size nonprofit. Outliers in both groups are being asked to participate in semi-structured interviews to provide more understanding. Based on the results of the study and the progression of current research from the literature, a recommendation for a workplace HIL framework for education will be developed.

~REMEMBER~
RESEARCH FOR INSIGHTS & RESEARCH FOR CHANGE

Increasing HIL Requires Organizational Change!

1. Love Your Employees
2. Connect Peers with Purpose
3. Capacity Building Prevails
4. Learning is the Work
5. Transparency Rules
6. Systems Learn

(Fullan, 2008)

Individual-Share-Whole Group Declare

- What is something you learned by participating in this discussion?
- What is something you want to learn more about after participating in this discussion?
- What is something you are going to do to teach others in your organization after participating in this discussion?

Ask a Question

- Open the Q&A panel and type your questions to the speaker.
  - We will not acknowledge the "Raise Hand" feature or open audience microphones and cameras for participation.

Session and Conference Evaluations

- Your feedback is important to us!
  - A session evaluation will open in a new window after this session ends.
  - Links to all session evaluations and the overall conference evaluation may be found on the Evaluations page of the virtual conference environment.

APPENDIX E

Key Stakeholders Presentation Handout

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