# Walden University

College of Management and Human Potential

This is to certify that the doctoral dissertation by

### Heidi Burgess

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee
Dr. Amy Hakim, Committee Chairperson, Psychology Faculty
Dr. Lakshmi Narayanan, Committee Member, Psychology Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2023

#### Abstract

Developing and Leveraging Proactive Personality to Bridge the Soft Skills Gap

by

Heidi Burgess

MA, Walden University, 2020 BS, Florida Atlantic University, 2000

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Industrial and Organizational Psychology

Walden University

November 2023

#### **Abstract**

There is a gap in the current labor market of protean workers who possess the uniquely human soft skills required by the increased reliance on artificial intelligence and digitization brought by the fourth industrial revolution. The purpose of this qualitative phenomenological study was to use the agentic perspective of Bandura's social cognitive theory to understand how existing employees' proactive personality is seen and experienced in the workplace. Using the human capital view on existing talent, this study explored how the soft skill of proactive personality can be developed in existing employees for the self-identification of opportunities for upskilling or reskilling when faced with skills obsolescence or shifting skill requirements. Six managers and four individual contributors at U.S. organizations participated in semistructured interviews to describe their lived experiences of responding to shifting skill requirements. Findings from coded analysis using Belwalkar and Tobacyk's tripartite model taxonomy of proactive personality indicated that existing talent can be developed by leaders to provide positive social change that empowers individuals to become and remain relevant and employable throughout their careers. Findings revealed that by developing existing employees to become more proactive, organizations can create sustainable mindset shifts, habits, and behaviors that can mitigate the soft skills gap. Findings could be used to decrease unemployment, poverty, and inequality of income, and could increase societal dignity by keeping people employed and organizations competitive and profitable.

### Developing and Leveraging Proactive Personality to Bridge the Soft Skills Gap

by

## Heidi Burgess

MA, Walden University, 2020 BS, Florida Atlantic University, 2000

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Industrial and Organizational Psychology

Walden University

November 2023

#### Acknowledgments

Nothing is done in a void, and I am so thankful to all the people in my life who helped me through this process. My family inspired me, supported me, and pushed me, especially Tricia, Nicky, and Sierra: you are my people who get me through the day!!!

And to the family I have chosen, my village of friends, I am so grateful to you all for always listening, encouraging, and holding me accountable. Thank you especially to Sandy, Lauren, and Dana. I am also in such awe and hold such respect for the professionals who signed up to participate in my study with no thought to the extra time and energy it would take away from their already full days. I learned so much from each and every one of you, thank you! Finally, to my dissertation committee, this truly could not have happened without your guidance, support, and presence. Thank you, Dr. Hakim

and Dr. Narayanan!

## Table of Contents

List of Tables	V
List of Figures	vi
Chapter 1: Introduction to the Study	1
Background	1
Problem Statement	3
Purpose of the Study	4
Research Questions	5
Theoretical/Conceptual Framework	6
Theoretical Foundation	6
Conceptual Framework	7
Nature of the Study	8
Definitions	9
Assumptions	11
Scope and Delimitations	12
Limitations	13
Significance.	13
Summary	14
Chapter 2: Literature Review	16
Literature Search Strategy	26
Theoretical Foundation	26
Conceptual Framework	37

Personality	41
Proactivity	43
Proactive Behavior	44
Proactive Personality	46
Literature Review	50
Summary and Conclusions	58
Chapter 3: Research Method	60
Research Design and Rationale	60
Role of the Researcher	62
Methodology	65
Participant Selection Logic	65
Instrumentation	67
Procedures for Recruitment, Participation, and Data Collection	68
Data Analysis Plan	69
Trustworthiness	70
Credibility	70
Transferability	71
Dependability	71
Confirmability	71
Ethical Procedures	72
Summary	73
Chanter 4: Results	74

Setting
Demographics
Data Collection
Data Analysis
Evidence of Trustworthiness
Credibility
Transferability
Dependability84
Confirmability84
Results85
RQ187
Theme 1
Theme 2
RQ289
Theme 3
Theme 4
Theme 5
RQ391
Theme 6
Theme 7
RQ492
Theme 8

Theme 9	93	
RQ5	94	
Theme 10	94	
Theme 11	95	
Summary	95	
Chapter 5: Discussion, Conclusions, and Recommendations	99	
Interpretation of the Findings	100	
Limitations of the Study	103	
Recommendations	104	
Implications	106	
Conclusion	109	
References	112	
Appendix A: Invitation and Recruitment	143	
Annendix B: Interview Protocol and Guide	144	

## List of Tables

Table 1. Participant Demographics	77
Table 2. Initial Coding	79
Table 3. Themes	80
Table 4. Skill Set Shifts Required	87

## List of Figures

Figure 1	. Responses to	Shifting S	Skill Set Requirements	86
----------	----------------	------------	------------------------	----

#### Chapter 1: Introduction to the Study

The world of work is in the midst of changing skill sets emanating from the fourth industrial revolution (IR 4.0) in which protean workers must perform more than rote skills in the wake of the increased use of artificial intelligence and digital synchronization (Novakova, 2020; Sevinc et al., 2020). There is a gap in the current labor market in which the presenting talent does not possess an adequate supply of the newly required soft skills (Santandreu Calonge et al., 2019). Proactive personality, an increasingly valued soft skill, is the ability to see an opportunity for change, act to implement that change, and persevere in the face of obstacles (Belwalkar & Tobacyk, 2018). The development of proactive personality in organizations' existing talent could be a potential mitigator of the soft skills gap the workforce is currently experiencing. The mitigation of this soft skills gap through proactivity ensures that existing talent remains employable, their skills remain relevant and viable, and the organization is enabled to attain or retain a competitive advantage and remain profitable.

#### **Background**

Although the literature on proactive personality is new, it is wide in scope with varied studies focusing on multiple perspectives of the phenomenon in terms of leadership (Hao et al., 2019; Porath et al., 2012), change management (Sylva et al., 2019), work engagement (Lebel et al., 2021; Tian et al., 2022), job satisfaction (N. Li et al., 2010), career adaptability (Vashisht et al., 2021; Wang et al., 2021), well-being, (Wong et al., 2020) and job performance (Crant, 1995; Peral & Geldenhuys, 2020) as well as many other emphases. This volume of exhaustive literature provided insights into

the variety of ways that proactive personality presents in the workplace, the origins and motivations of proactivity, and potential means of the development of proactive personality.

The literature on the skills gap is more recent than that of proactive personality but also wide and varied given that a deficiency in skills affects industries across the global market. Despite the difficulty in measuring or coming to a common definition of a soft skills gap in the literature, a consensus is apparent in that organizations are struggling to find talent with the skills required to give them a competitive advantage in the marketplace driven by IR 4.0 (Lyons et al., 2019; McKenney & Handley, 2019; Novakova, 2020; Sevinc et al., 2020; Singh Dubey et al., 2021).

Despite the depth of proactive personality literature, most studies have focused on the quantitative aspects of the phenomenon. A gap in the knowledge of proactive personality that could benefit industrial and organizational psychology was an understanding of the lived experiences of proactive personality, particularly around deficiencies in shifting organizational skill requirements in the face of IR 4.0. Although there was considerable literature on the skills gap, there was a much smaller sample of studies on how to bridge or close the gap, particularly with a focus on soft skill development. A gap in the literature was a focus on the development of existing talent to proactively upskill or reskill themselves to mitigate the soft skills gap organizations are currently facing.

Addressing the issue of a global skills gap is essential because it not only impacts individual employability but also hinders future talent pool supplies as well as

minimizing future prosperity (Olson, 2015; Singh Dubey et al., 2021). Bridging the skills gap is essential for a more inclusive economy, workplace, and society (Guitert et al., 2020). The current study on understanding, developing, and leveraging proactive personality to mitigate the organizational soft skills gap was necessary to ensure individual employability, organizational profitability, and societal viability. The effects of bridging the skills gap would be decreased unemployment, decreased poverty, decreased inequality of income, and the provision of equitable social resources (Daniela et al., 2019).

#### **Problem Statement**

The research problem addressed in this study was how existing employees' proactive personality can be developed to identify opportunities for changing their skill set, to take action to implement the necessary changes, and to persevere through obstacles to be leveraged as mitigation to the soft skills gap. Lee Hecht Harrison (2022) estimated a shortage of skilled workers will cost the 14 largest economies in the G20 \$11.5 trillion in lost gross domestic product growth by 2030. A second staffing agency found that 80% of companies across industries and geographies in the United States recognized a serious gap in workforce skills, with the most missing skills being those hardest to measure: soft skills (Adecco, 2022). In 2000, jobs requiring soft skills were about 50% of the roles in the market; in 2030 that requirement is estimated to rise to 75% (Horstmeyer, 2020). Proactive personality can be developed to provide an organization's existing talent with the tripartite set of skills necessary to recognize and identify when skills are becoming insufficient, to take the necessary steps to upskill or reskill their own diminishing skills,

and to persist in the face of challenges to ensure that they remain employable and a relevant asset to the company's pursuit of competitive advantage (Belwalkar & Tobacyk, 2018; Bhagat & Jain, 2020).

This drive for relevance is encompassed in industrial and organizational psychology's mission to ensure that individual workers remain as employable as possible to retain their livelihood and wellness and that organizations remain profitable and effective (American Psychological Association [APA], 2022). The current labor pool does not possess the skills required in the face of an industrial revolution to ensure that organizations can meet the increased demand for volume, variety, and innovation (G. Li et al., 2021). Examining the lived experiences of proactive personality, its development, and its potential to mitigate the skills gap was relevant to the discipline of industrial and organizational psychology to fill a literature gap in which this soft skill has not yet been studied as a potential mitigator of a critical gap in soft skills affecting individual, organizational, and societal productivity, and profitability.

#### **Purpose of the Study**

The purpose of this qualitative study was to use the agentic perspective of Bandura's (2001) social cognitive theory (SCT) to understand how existing employees' proactive personality is seen and experienced in the workplace. Further, using the human capital view on existing talent along with talent management theories, this study explored how the soft skill of proactive personality can be developed in existing employees for the self-identification of opportunities for upskilling or reskilling when faced with skills obsolescence or shifting skill requirements. Leveraging the classification of Belwalkar

and Tobacyk's (2018) tripartite model of proactive personality has enabled the creation of a final conceptualization of developing existing employees to persist through obstacles in attainment of the skills organizations need. This understanding and resulting development can be aimed at bridging the current soft skills gap brought on by IR 4.0, among a variety of causes, to ensure continued productivity and employability for employees, organizations, and macro environments of global markets.

#### **Research Questions**

The following research questions guided this study to deepen the understanding of the presence or impact of existing employees' proactive personalities, the development of those levels of proactive personality, and leveraging that development to bridge the soft skills gap:

RQ1: What are the lived experiences of employees with proactive personalities with regard to the ways that they perceive opportunities?

RQ2: What are the lived experiences of employees with proactive personalities with regard to the ways that they implement change?

RQ3: What are the lived experiences of employees with proactive personalities with regard to the ways that they persevere through obstacles when faced with shifting skill requirements?

RQ4: What are the ways that proactive personality might be developed in existing organizational talent?

RQ5: What are the ways that proactive personality development might help to improve soft skills in employees?

#### Theoretical/Conceptual Framework

#### **Theoretical Foundation**

This study was underpinned by several theories that provided the foundation for the examination of the current gap in skills required compared to what is available in the labor market, an understanding of the soft skill of proactive personality in the workplace, and the development of proactive personality as a means of mitigating the soft skills gap. Human capital theory (HCT) posits that there is intrinsic value in the productive capabilities and skills, both tangible and intangible, an individual brings to an organization and should be regarded as a means of creation, innovation, and profitability by employers (Alamu, 2016; Daniela et al., 2019; Wingreen & Blanton, 2018). This examination of human capital and skills as an asset was combined in the study with an investigation of the relevance and durability of those skills through skills obsolescence, particularly as the workplace moves toward the requirement of protean workers in the face of IR 4.0 (see Caratozzolo et al., 2020; Santandreu Calogne et al., 2019).

Once the skills gap was explained through these theories, an understanding of proactive personality through the lens of Bandura's (1999, 2001) SCT with an agentic perspective aimed to explore how people can intentionally overcome, change, and create alternative circumstances that lead them to success in the face of skills obsolescence (see Prabhu, 2018; Shaw, 2005). With an emphasis on career adaptability, the study relied on the career construction (CCT) and talent management (TM) theories as a means of developing soft skills in existing organizational employees instead of seeking external talent, which is scarce in the labor force, to bridge and mitigate the soft skills gap. To

create successful careers, human soft skills such as proactive personality can be developed and leveraged to position employees to continuously reskill, upskill, and develop themselves (Dash et al., 2019). Used in conjunction, SCT, HCT, CTT, skills obsolescence, and talent management theories provided the necessary structure to understand proactive personality, the behaviors that are associated with people who have high levels of proactivity, the skills that have lowered durability, and the means of developing existing talent to be proactive in affecting their environment by continuously upskilling and reskilling themselves.

#### **Conceptual Framework**

Throughout the literature, there was a consensus that across industries in the global workforce a deficiency exists between the skills that organizations need and the capabilities that talent possesses (McKenney & Handley, 2019; Sevinc et al., 2020). To understand and propose a potential mitigator of this deficiency, the skills gap, proactive personality, and the development of proactive personality are conceptualized in depth in Chapter 2. This conceptualization begins with an examination of skills, or competencies, that are defined in this study through the lens of human capital and market orientation as being either hard (occupation specific), academic, or soft (human and interpersonal) skills (Nikadimovs & Ivanchenko, 2020; Sun et al., 2021).

A soft skill conceptualized for the focus of the current study was proactive personality. Proactive personality was defined by Bateman and Crant (1993) as a personality trait that is a "relatively stable tendency to effect environmental change" (p. 103). Personality, proactivity, proactive behavior, and personal initiative are all captured

throughout the proactive personality literature and defined, compared, and contrasted in Chapter 2 to operationalize proactive personality through the tripartite model. Belwalkar and Tobacyk (2018) posited that proactive personality consists of three main components: having the ability to recognize an opportunity for change (perception), planning and executing that change (implementation), and persisting through obstacles or challenges until the change is realized (perseverance). The conceptualization of proactive personality by the tripartite model and the focus on the soft skills category of the skills gap through both a skills obsolescence and a human capital framework aided the current study in determining the most effective means of developing proactive personality to bridge the soft skills gap.

#### **Nature of the Study**

Qualitative phenomenological research was the best method to answer the research questions in this study aimed at examining the lived experiences of proactive personality in the face of shifting skill requirements. Qualitative research is often the best approach for obtaining meaning and an understanding of feelings and behaviors (Frankfort-Nachmias et al., 2015). Additionally, phenomenology focuses on individual perceptions of the world in relation to a particular phenomenon to situate those concepts within a particular context (Burkholder et al., 2016). The phenomenon being investigated in the current study was proactive personality as a stable tendency to affect a person's environment as defined by Bateman & Crant (1993). This conceptualization of proactive personality was further developed by Belwalkar and Tobacyk (2018) as a tripartite model consisting of the ability to affect a person's environment by perceiving opportunities to

change, the ability to implement changes around those opportunities, and the ability to persevere through obstacles to bring the change to fruition. In the current study, the phenomenon of proactive personality was set within the context of the soft skills gap as a potential mitigator and bridge to existing talent's agency to upskill their diminishing skill relevance (see Burkholder et al., 2016).

To examine the lived experience of proactive personality, I investigated the workplace actions and impacts of those who had recently experienced shifting skill requirements. The data for this study were collected via interviews with participants selected through a LinkedIn recruiting post (see Appendix A) and vetted through a poll to determine qualifying hiring managers or employees whose organizations have undergone shifting skill requirements within the past 2 years. Additionally, the interview data were complemented by archival documents from the corresponding organizations that contained information on job orders and job fills within the time period of shifting skill requirements. The analysis of the interview and archival data was done iteratively to determine patterns and themes in relation to proactive personality in the workplace in face of shifting skills requirements, the development of proactive personality, and its potential use as a mitigator to the soft skills gap.

#### **Definitions**

The concepts and constructs associated with the skills gap and proactive personality are defined for the purposes of this study:

Industrial Revolution 4.0 (IR 4.0): The set of evolving, converging, fusing, and amplification of technologies that create digital transformation to generate, automate, and

analyze data yielding a higher output with less human effort (Azmat et al., 2020; Cotet et al., 2017; Dash et al., 2019; Doyle, 2020; Horstmeyer, 2020; Kamaruzaman et al., 2019).

Personality: A filter that assists in understanding, making sense of, and adapting to an environment composed of diverse traits (intellect, character, temperament, and disposition), which help clarify why individuals act differently in similar situations (Doan et al., 2021; Vashisht et al., 2021; Woo, 2018).

Proactive behavior: A dispositional construct differentiating the extent to which individuals move from proactive tendencies to taking definitive, discretionary action influencing the environment and challenging the status quo (Bateman & Crant, 1993; Parker & Collins, 2010; Sonnentag, 2003; Trifiletti et al., 2009).

Proactive personality: A dispositional, compound personality trait and value factor that is the stable tendency in which individuals have the agency to effect environmental change by scanning for and recognizing opportunities, showing initiative, taking action, and persevering through challenges to solve problems (Bateman & Crant, 1993; Greguras & Diefendorff, 2010; Hao et al., 2019; Rohma & Zakiyah, 2022; Spitzmuller et al., 2015).

*Proactivity*: A self-directed anticipatory action in which control is taken to cause personal and environmental change through planning and striving (De Vos et al., 2009; Grant et al., 2009; Parker & Collins, 2010; Thomas et al., 2010).

Protean workers: Workers with technical expertise who are also in possession of a proactive and dynamic attitude with mastery of the soft skills to self-direct, problem solve, interact, and communicate with all others (including artificial intelligence and

digital platforms) to achieve their goals (Arcelay et al., 2021; Hyrnsalmi et al., 2021; Touahmia et al., 2020).

Skills: The competencies employees possess as examined in contrast to the competencies required in the marketplace for an organization to become or remain competitive (Fachrunissa & Hussain, 2020; Sevinc et al., 2020).

Skills gap: The distance between the current capability of employees and the requirements of organizations to be successful leading to the creation of job requisitions that are increasingly harder to fill (Apergis & Apergis, 2020; Duong et al., 2020; Shivaramu et al., 2019).

Soft skills: Human skills that artificial intelligence and digitization cannot replace, which are clusters of learned personality traits and qualities, characteristics, and attitudes (Burns, 2020; Coates, 2020; Cotet et al., 2017; Shivaramu et al., 2019; Singh Dubey et al., 2021).

#### **Assumptions**

There were certain aspects of this study that were believed to be true but could not be demonstrated to be true including the assumption that respondents to the LinkedIn invitation for potential participants answered the survey questions honestly and without embellishment. Additionally, I assumed that those selected for participation understood the interview questions and chose to answer truthfully to share their lived experiences. These ontological assumptions were necessary in the context of the study to gain an understanding of the perceived reality of those employees and managers who have faced shifting skill requirements for themselves or their teams. Through follow-up vetting and

questioning, I made every effort to ascertain the truth of their statements. To encourage understanding and truthful responses, I used open-ended questions to avoid influencing participant responses, and confidentiality and privacy were emphasized to maximize participant comfort with sharing details and experiences. Additionally, archival data were requested, and job requisitions compared to job fills were reviewed to confirm the accuracy of the participants' perception of skills gap due to shifting skill requirements at their organization.

#### **Scope and Delimitations**

The research problem addressed in this study focused on how existing employees' proactive personality can be developed to identify opportunities for changing their skill set, to take action to implement the necessary changes, and to persevere through obstacles to be leveraged as mitigation to the soft skills gap currently occurring in the workforce in reaction to IR 4.0 and the need for protean workers. This focus was chosen to increase existing organizational talent's individual employability and viability, to increase the profitability and competitive advantage of the company, and to increase the sustainability of living standards throughout communities. The initial boundaries of this study were the American organizational work populations included in the research focus as hiring managers and employees of organizations who have experienced shifting skill requirements within the past 2 years. This study aimed to be transferable to organizations that have not yet experienced these shifts but might in the future as the development of proactive personality maximizes employees' abilities to recognize any opportunity for change and improvement to the environment or self. The larger scope for this study was

the global labor markets and communities that have benefited from their talent pools' lifelong attention to the relevance of their skills and career adaptability. Although the study contained interviews of employees at American-based organizations, the scope of the teams identified was focused on global organizations when possible. This focus on global teams produced a potential transferability of understanding, developing, and leveraging proactive personality as a mitigator of the soft skills talent gap in global markets, global organizations, and global employees.

#### Limitations

Due to the use of a phenomenological design, one limitation of this study was that its findings may be hard to replicate because the data analyzed came from particular lived experiences that may not be true of other lived experiences (see Burkholder et al., 2016). An additional limitation of conducting qualitative research was the potential bias of the researcher. Working as a talent development professional and organizational psychologist, my lived experiences and personal insight into existing talent in organizations could have had an impact on the perception of interview responses and data analysis. To address these issues, I followed an interview protocol (see Appendix B) to guide a semistructured and consistent approach to asking the interview questions.

#### **Significance**

Industrial and organizational psychology focuses on the scientific study of behavior in the workplace to solve organizational, group, and individual problems to improve the quality of work life, structures, and relationships (APA, 2022). The current study addressed the research and organizational problem of how existing employees'

proactive personality can be developed to identify opportunities for changing a skill set that is becoming obsolete, to take action to implement the necessary changes, and to persevere through obstacles to that change to be leveraged as mitigation to the soft skills gap. As detailed throughout the literature and verified by current labor statistics, the skills gap is impacting organizations in varied industries, geographies, emerging economies, and labor markets with financial and socioeconomic consequences such as profitability and employability issues at the individual, organizational, and societal levels (Adecco, 2020; BLS, 2021; Shivaramu et al., 2019; Singh Dubey et al., 2021; World Economic Forum [WEF], 2020). Finding a solution in existing talent through the development of their own proactive personality empowers individuals to become and remain relevant and employable throughout their careers and increases organizational profitability and innovation, which contributes to a more robust economy for the communities in which organizations exist and those that they serve (Arcelay et al., 2021; Bhagat, 2020; S. Brown et al., 2019).

#### **Summary**

The world of work is changing in the face of IR 4.0, and the need for a new, protean worker has emerged that is not being met by the talent in the labor market (Belschak et al., 2010; Fuller & Marler, 2009; Thomas et al., 2010; Van Ronk, 2021). Underpinned by the theories of SCT, HCT, skills obsolescence, CCT, and talent management theory, the constructs of proactivity, soft skills, and the skills gap were conceptualized to provide a framework with which to examine the phenomenon of proactive personality. I used this framework to understand how proactive personality

affects an existing employee's ability to perceive an opportunity to change in the face of shifting skill requirements, to plan an implementation for that change to take place, to persevere through obstacles to realize a change in upskilling or reskilling their competencies, and to mitigate a deficiency in those skill sets for organizations. This understanding has come through an examination of the lived experiences of hiring managers and employees whose organizations have faced shifting skill requirements within the last 2 years. With the intent of maximizing an individual's potential for employability and relevance, the organization's potential for profitability, and competitive advantage, this study sought to have a societal and economic impact on the workplace and labor markets. Chapter 2 includes a review of the literature on the skills gap due to the advances of IR 4.0, proactive personality as a soft skill that employees can use to affect change in their environment, and the development of proactive personality as a means of mitigating that soft skills gap.

#### Chapter 2: Literature Review

Rapid and consistent changes that impact employees and organizations are creating an imminent need for a unique combination of skills that are not being found by organizations but may be developed by activating the proactive tendencies of existing talent to improve themselves and their environment. Changes to the world of work are coming from forces that are external to the organization, such as the labor and product markets, as well as forces that are emanating internally from the organization, their labor force, and rapidly changing environmental situations. These changes can be met by developing and leveraging soft skills such as proactive personality from existing employees enabling self-management of upskilling and reskilling to remain relevant regardless of the changes that are faced.

Critical issues that contribute to the gap in skills required are the technological and digital advancements around IR 4.0, an aging workforce, outdated workforce planning, and the changing nature of work that is leading to skills becoming obsolete at a rapid pace (G. Li et al., 2021). Contributing factors to what Adecco (2020) estimated could be a global lack of 85 million workers include this new and emerging technology in IR 4.0 meeting the broader job descriptions that came out of the previous recessions' leaner payroll and smaller team structures. As the means of working continue to change, this evolution alters working methods, tasks, activities, and the perception of the concept of what work is (Valenti, 2021).

The massive technology changes in the 1990s includes a major restructuring of labor markets with routine-cognitive jobs decreasing by an estimated 7 million jobs from

1996 to 2015, from about 25% of the workforce to 21% of German employees who were left without the necessary cross-disciplinary skills (Restrepo, 2015). Additionally, 80% of companies across industries and geographies in the United States who participated in a staffing survey acknowledged that there is a serious gap in workforce skills and that the most missing skills are those that are hardest to measure: soft skills (Adecco, 2020). Commensurately, 88% of manufacturers responded that missing skills were the biggest barrier to their ability to roll out new solutions, and 2 out of 3 companies struggled to fill vacancies for digital roles due to a gap in skills that continues to widen (Azmat et al., 2020). In 2000, jobs that required soft skills were at about 50% of roles; in 2030 that requirement is estimated to rise to 75% (Horstmeyer, 2020). Novakova (2020) agreed and found that in Slovakia 33% of all current jobs are automated and are replacing the work traditionally done by individuals creating new types of professions and applying pressure to employees to adapt, change, and become increasingly more digitally literate so that their skills remain valuable, and their organizations remain sustainable. Two thirds of decision makers have reported a gap in the disparity between the skill level of their teams and the knowledge or competency required to ensure that organizations achieve their goals (Jones, 2020).

The scarcity of skilled talent is also a critical problem in emerging economies such as India and China, according to Singh Dubey et al. (2021), which has led to employability issues. Eighty percent of companies responding to Willcocks's (2020) survey reported changes such as an increased reliance on mobile technologies and the Internet of Things, which have accelerated the pace of work requiring 313 organizations

to reskill 54% of their workforce in alignment with the estimation that by 2030 up to 14% of global workers will be required to change occupations and that 9% of jobs will be newly formed. By the year 2022, nearly one third of skills required 5 years prior, or 35% of previous skills, had changed (Cotet et al., 2017). Guitert et al. (2020) found that 35% of the labor market in the European Union lacked the basic skills that organizations required to meet these shifting skill requirements.

These company estimates have been verified by the Bureau of Labor Statistics (BLS, 2021), which showed the number of job orders hit a historic high of 9.3 million in April of 2021, while during the same period hires were nearly unchanged at 6.1 million with a hire rate of 4.2%. Seventy-five percent of professionals in the human resources space reported a shortage of candidates with 83% having trouble recruiting those candidates as well as a one third decrease in applicant quality and a 45% decrease in specific qualifications (BLS, 2021; Society for Human Resource Management, 2019). Worldwide, it is estimated that moving forward 9 out of 10 jobs will require IR 4.0 skills while less than half of currently employed talent possess those skills and are able to meet the challenges being posed (Lyons et al., 2019).

Organizations now seek talent who perform at consistently high levels as well as those who can be trained to perform new tasks and who possess the types of skills required to solve fundamental and complex unknown problems (Bhatnagar, 2021). In a 2019 Romanian study, an estimated deficit of 600,000 people was found, which created a need to import labor forces; in studies from 2018, it was shown that Japan and Taiwan were countries in which employers reported finding the appropriate skills difficult in the

labor market, the United States had above-average difficulty, and Switzerland found it the least difficult to find workers with the appropriate skills (Daniela et al., 2019).

This gap in the required skills, whether hard or soft, can affect both the employees in the labor force and organizations through lowered employability and decreased profitability, as shown by Azmat et al.'s (2020) study presenting a potential loss of 63 billion pounds per year to companies in the United Kingdom. Organizational as well as economic growth and the ability to realize the potential of new technologies are also hampered by a gap in skills in both the local and the global labor markets (Novakova, 2020). In the United States, there is a growing skills gap that is threatening the nation and its long-term economic prosperity leaving 7 million open jobs with 6.3 million unemployed, unqualified workers having a tremendous impact on both the economy as well as innovation demands (Society for Human Resource Management, 2019). Looking forward, G. Li et al. (2021) related a projected skills gap for manufacturing and engineering that would leave an anticipated 2.4 million American positions unfilled by 2028.

At the individual level, the effect of the skills gap is palpable. Current employees are overworked because they are picking up the slack of unfilled jobs (Jones, 2020). The skills gap is also threatening to displace workers who have not developed IR 4.0 skills and is creating situations in which those individuals are struggling with income insecurity and are striving to achieve economic stability and self-sufficiency (Burns, 2020; Guitert et al., 2020; Santandreu Calonge et al., 2019). As IR 4.0 continues to evolve technologies, markets, and workplaces, the levels and types of skills needed for these new

jobs and development throughout an employee's career are also changing (Santandreu Calonge et al., 2019). The pace and scale of change resulting from IR 4.0 have created an environment in which technology has begun to outpace employees' and organizations' ability to adapt (Whysall et al., 2019).

The inefficiencies experienced in a skills gap have led to decreased organizational productivity and profitability, which poses a threat to economic progress around the world affecting not only individual employability but also the prosperity of the organization and the nations they are a part of or serve (Fachrunnisa & Hussain, 2020; Olson, 2015). The skills gap costs between 3 and 8 hours per employee per week at an average of \$22,000 per employee per year, which equates to a long-term shortage of skilled labor to upwards of a \$2.5 trillion negative impact on the global economy (Jones, 2020; G. Li et al., 2021). In addition to fiscal productivity, a deficiency of competent workers has and will continue to constrain organizations' abilities to grow, innovate, and produce quality products and services (Kranov & Khalaf, 2017; Sevinc et al., 2020; Sing Dubey et al., 2021).

The effects of the skills gap are not limited and can apply in nearly every industry, geographic region, and organization and, if left unchecked, can cripple progress economically, which puts a strain on governments whereby unemployment is a possibility for millions of employees around the world (Lyons et al., 2019; Malik & Venkatraman, 2017; Morris et al., 2020; Olson, 2015). Businesses in all industries are finding the disparity between the skills needed to remain viable and the skills possessed by employees difficult to overcome for productivity to remain sustainable (Shivaramu et

al., 2019; WEF, 2020). This deficiency of employees with the required combination of skills will lead to a noticeable decrease in performance, economic strength, and competitiveness in organizations (Combs, 2019; Maisiri et al., 2019). A lack of skilled workers leads to decreased levels of productivity, product or service quality, organizational performance, and profitability (Morris et al., 2020; Ņikadimovs & Ivanchenko, 2020). Due to a lack of skills in the workforce, Jones (2020) estimated that 90% of all organizations have been forced to adjust their project plans, halt or delay product and service releases, incur increased or unexpected costs, and lose revenue equating to \$390 billion annually.

Bridging the skills gap is essential for a more inclusive economy, workplace, and society (Guitert et al., 2020). Addressing the issue of a global skills gap is essential because it not only impacts individual employability but also hinders future talent pool supplies and global prosperity (Olson, 2015; Singh Dubey et al., 2021). Finding a means of bridging this gap by developing the soft skills of existing talent has been a key driver for organizations to maintain their profitability and drive their competitive advantage (Prabhu, 2018). Toffler (1970) explained that "the illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn" (p. 414). Competencies required for the modern work environment are those that are reflective, proactive, and interactive within and without networks (Akkermans et al., 2013). Proactive personality is a soft skill that can provide a means for employees to influence their environment and develop their skills throughout their careers (Zhang, 2020).

The effects of bridging the skills gap would be decreased unemployment, decreased poverty, decreased inequality of income, and the provision of equitable social resources (Daniela et al., 2019). This bridge would contribute to social change by keeping people gainfully employed and engaged with their work, increasing their individual and societal dignity, and decreasing the undesirable effects of unemployment (Alamu, 2016). The consistent thread of work throughout previous industrial revolutions was that work is always changing, and that change is dynamic and uncertain, which makes proactivity a necessity for organizations and employees to survive and thrive (Prabhu, 2016, 2018). Workers in the turbulent IR 4.0 environment have to combat challenges such as managing change, especially in their skills and work contexts, to remain employed (Fugate et al., 2004). In an environment marked by volatility and uncertainty, employees are required to be more resourceful and able to acclimatize to unanticipated changes rather than simply completing assigned tasks (Grant et al., 2009; Vashisht et al., 2021; Wu et al., 2018). When an employee can proactively self-start their job and career, take initiative, and actively pursue learning opportunities, there are great benefits in a labor market marked by uncertainty and insecurity (Kuo et al., 2018; Plomp et al., 2016; Sonnentag, 2003).

As individual responsibilities increase and structures shift to be less rigid, employees are required to be self-reliant to ensure their motivation and instill their decision-making policies (Frese & Fay, 2001). Employers expect their talent to fix things they see as wrong (Prabhu, 2016). Project-based and remote work are changing the supervisory channels and hierarchical structures of authority and direction and are

shifting the onus of development to the employees to proactively develop their knowledge, skills, and competencies as well as their career progression by recognizing and seizing opportunities, taking self-directed actions, and persevering in the face of obstacles (Meyers, 2020).

The changes that are affecting the workplace and leading to a lack of relevant skills require employees to use personal initiative, detect and solve problems, and identify and capitalize on opportunities in the face of greater decentralization, globalization, and demand for innovation (Sears et al., 2018; Spitzmuller et al., 2015). The interdependencies among nations, regions, and communities that have come from decentralization and globalization have influenced the way work is performed and managed, and there is now a global demand for a self-starting approach to work with less or remote supervision (Parker et al., 2006; Spitzmuller et al., 2015; Unsworth & Parker, 2003). In a longitudinal study, T. Y. Kim et al. (2009) found that the workplace was rapidly changing and becoming so decentralized that managers could not anticipate situations that could arise or forecast employees' needed behaviors or skills, and that responsibility had come to fall on the employees themselves in their moment of need.

In this decentralized, globalized world, organizations are shifting from mostly manufacturing and production profitability to prevalent knowledge economies (Daniela et al., 2019; Grant et al., 2009), causing an increased need for employees to display proactive tendencies such as identifying opportunities for change, the ability to innovate, and a drive for creation (Grant & Ashford, 2008). Tornau and Frese (2012) concurred that there is a shift away from work structures based on traditional hierarchies to an increased

reliance on work that is team based, temporary or gig based, or planned around projects. This shift creates a need for employees who are developed to influence their environment, have the ability to proactively identify problems, and can work to implement changes to solve them (Tornau & Frese, 2012). Knowledge work is volatile, uncertain, complex, and ambiguous, requiring more theoretical and analytical skills than the world of hands-on production and labor-focused work previously required (Van Ronk, 2021).

These origins of proactive personality apply to more than individual work as heterogeneous patterns have emerged for careers across industries and regions seen in shifts in organizational structures, psychological contracts, and economic factors requiring employees to proactively adapt and construct their meaning for their work and their careers from a less conventional view (Rudolph et al., 2019; Uy et al., 2015). Individuals' previously homogeneous work experience is changing to one with multiple employers over a career and a variety of work contracts and expectations coming from different types of organizations for which employees are expected to manage and transition their careers proactively and resourcefully to be successful and to create their opportunities for growth and development (Hirschi et al., 2013; Seibert et al., 2001; Thompson, 2005). This shift away from traditional career pathing means that employees and employers need to adapt to a new way of managing careers if those careers are to be successful for the individual and productive for the organization (Vande Griek et al., 2020).

Taking the origins and effects of the skills gap and proactive personality into account, it should be imperative that the proactive personality of existing organizational employees be developed to identify change opportunities, take action to implement the identified change, and persevere through obstacles and challenges (Belwalkar & Tobacyk, 2018; Brown et al., 2019). This developed proactive personality can then be leveraged as a mitigation to the soft skills gap in the workforce (Bhagat & Jain, 2020). Skill gaps can be closed using curiosity by recognizing, pursuing, and exploring unfamiliar, unclear, and complex events (Horstmeyer, 2020).

As explored, the literature on proactive personality is moderately new but incredibly wide in scope with the concept studied in terms of leadership (Porath et al., 2012; Hao et al., 2019), change management (Sylva et al., 2019), work engagement (Lebel et al., 2021; Tian et al., 2022), job satisfaction (Li et al., 2010), career adaptability (Vasisht et al., 2021; Wang et al., 2021), well-being (Wong et al., 2020) and job performance (Crant, 1995; Peral & Geldenhuys, 2020) among many other perspectives. The literature on the skills gap is also growing amid changes in the workforce, job concepts (WEF, 2020), organizational structuring (Novakova, 2020), globalization (Singh Dubey et al., 2021), and digitization/automation (Cukier, 2019; Dash et al., 2019; Horstmeyer, 2020).

An overview of the theories supporting proactive personality, the current soft skills gap, and the development of proactive personality will be outlined in this literature review. The literature review then focuses on the operationalization of both proactive personality and the skills gap to lay the foundation for the understanding of lived

experiences of proactive personality. The key concepts found in the literature review connect to the examination of the development of proactive personality in existing employees to bridge the soft skills gap affecting individuals and organizations.

## **Literature Search Strategy**

The research presented in this literature review was derived from three main sources: Walden University's comprehensive Thoreau library database, the ProQuest dissertation and theses database, and Google Scholar's article repository. Literature on both proactive personality and the skills gap was abundant. A keyword search of the term 'proactive personality' yielded 368,000 results and required narrowing the focus of date published to the last five years (lowering the results to 27,400) as well as significant refining through the addition of such terms such as 'development' (23,900 results), 'organizational' (17,200 results), and 'skills gap' (16,900 results). A keyword search of the term 'skill gap' yielded a smaller but still significant amount of research with 113,000 results in the past five years. Refining the search by narrowing the term to 'soft skills gap' yielded a more manageable 25,400 results. By an examination of the gap in the literature through a combination of both 'proactive personality' and 'bridge(ing) skill(s) gap' a search of the literature from the previous five years yielded 176 results which formed the basis for this literature review.

#### **Theoretical Foundation**

The notion that people can intentionally overcome, change, and even create the circumstances that can lead them to success is at the heart of what it means to be human (Bandura, 2001; Prabhu, 2018; Shaw, 2005). This proactive intention of effect and

change over the environment is of critical importance in developing existing talent for the modern way of work (Tournau & Frese, 2013).

Proactive personality is supported by Bandura's (2001) social cognitive theory with an emphasis on an agentic perspective of personality. The central tenets of SCT examine and describe individuals as active agents in their environments who intentionally make things happen (Bandura, 1999). A main principle of the agentic perspective is that people are not just reactive or passive recipients of environmental situations but rather that people have the agency of being less constrained to affect and change their environments to better suit their needs and purposes (Zhou et al., 2021). Agency is comprised of the ways, beliefs, capabilities, and structures through which individuals exercise influence and are empowered to take a self-starting approach to development and change adaptation rather than simply undergo experiences (Bandura, 2001). Bandura (2001) delineated that SCT is the examination of the cognitive processes which emerge to exert influence while the agentic perspective examines the social constructions of how the brain functions to wield human agency through intentionality, a proactive realization to bring about future action, through forethought as self-motivation, through selfreactiveness as the ability to transform intention to appropriate action, and through selfreflectiveness to choose the appropriate action.

People with proactive personalities can activate and maintain their agency through a triadic reciprocal causation of the environment affecting the individual which also affects the environment and is rooted in human adaptation and change (Bandura, 1999; Bateman & Crant, 1993). The triadic reciprocal causation cycles between interrelated

personal factors, behaviors, and the factors brought by the environment to mutually impact each other (Anwar et al., 2019). Through this reciprocity, individuals can select situations, interpret their meaning through an individual context, and make plans to alter them (Crant, 1995). As the work environment cycles through continuous change, SCT posits that individuals can and do affect and shape the environmental outcomes of that change to develop themselves, meet job demands, and fully exploit opportunities (Sylva et al., 2019). Individuals do this by leveraging uniquely human characteristics and soft skills such as proactivity to be both producers and products of their environments and shape them in service to a desired future state (Bandura, 1999).

Another central tenet of SCT is an exploration of how environmental factors such as geography, culture, and socio-economic circumstances mix with personal factors such as trust and motivation to impact behavior by an individual (Anwar et al., 2019). SCT is used to further examine how employees cognitively process this information from the environment and use it to construct awareness which may turn into acted behavior (Pervaiz et al., 2021). According to SCT, individuals form expectations and then create action plans based on the situation or environment and their ability to self-manage and influence (Yao et al., 2021). This triadic reciprocal causation of people and the attributes of their work environment affecting and changing each other over a course of time is dynamic and happens cyclically (W. D. Li et al., 2014).

Work agentic capabilities are a means of showing proactivity in employees as human agents of their self-development; those capabilities are significant resources for lifelong learning attitudes, psychological capital, and an ability to promote or adapt to change

(Cenciotti et al., 2020). The resulting resources are sorely needed during the rapid evolution of the skills required for IR 4.0 which provides a critical opportunity for employees to self-initiate and maintain their continual development to remain employable and productive (Wang et al., 2021). Employees with higher levels of proactive personality are better poised to take on challenges such as the skills gap because proactive characteristics and behavior reflect the complementary tendencies and actions SCT posits that individuals use to shape themselves and their environment (Bandura, 2001; Zhang, 2020). A main component of SCT is that in agentic transactions, people are not only the products of social systems, but they also proactively produce those systems (Bandura, 2001). When facing the challenges posed by the soft skills gap, human qualities need to be developed and then leveraged by proactive employees to continuously reskill, upskill, and develop themselves (Dash et al, 2019).

The skills gap is braced by the theory of human capital which encompasses the intrinsic value in all the productive capabilities, skills, and knowledge that an individual brings to an enterprise to engage in a reciprocal relationship of professional, economic, and financial development (Alamu, 2016; Daniela et al., 2019; Wingreen & Blanton, 2018). As first conceptualized by Gary Becker and Theodore Schultz in the early 1960s, the tangible and intangible skills that individuals possess relate directly to the profitability and competitive advantage of organizations (Combs, 2019; Krieger et al., 2021; White, 2017). The origin of human capital was rooted in the routines and competencies of the workforce, however, with the shift away from a production economy, the capital now valued is the knowledge those employees possess, both individually and socially

(Cañibano & Potts, 2019). Human capital refers to the essential productive capability of an individual and an organization's workforce, especially a highly qualified one, as its means of creation, innovation, and profitability (Daniela et al., 2019). As such, human capital contains the substantial, yet intangible resources required by the changes in the markets and workforce such as mental, social, physical, and personal traits that are developed and embodied by people (Brown et al., 2019; Pervaiz et al., 2021). Human capital becomes increasingly critical as the challenges of IR 4.0 increase in volume and severity to create and maintain an organization's competitive advantage through an appropriately skilled workforce I contrast to artificial intelligence and digitization (WEF, 2020).

Underlying skill relevance is one of the main ingredients of HCT (Shivaramu et al., 2019). Without the proper skills in place as organizations move into IR 4.0, their profitability, productivity, and competitive advantage suffer (Arcelay et al., 2021; Morris et al., 2020). Alamu (2016) found that human capital and the abilities, knowledge, skills, and social assets it encompasses, are acquired, and can be developed through an educational process, on-the-job training, and experience (Krieger et al., 2021). Taking the initiative to understand employees' distinct personalities allows organizations the opportunity to leverage the behaviors and outcomes that can shape an organization by continually enhancing their human capital and increasing retention (Aftab & Waheeb, 2021; Peral & Geldenhuys, 2020; Pervaiz et al., 2021).

While human capital investments help individual workers in the form of employment, wages, and earnings, and are beneficial to the profitability of organizations,

the macroeconomic perspective of HCT views those investments as the foundation for economic growth and prosperity in local communities, wider regions, nations, global markets, and socially responsible states (Brown, 2017; Kim & Park, 2020; Malik & Venkatraman, 2017; Pravdiuk et al., 2019). A belief relevant to this study of HCT is that an organization's productivity can be positively changed by investments in its most asset, the education, skills, and knowledge of its employees (Adecco, 2020; White, 2017).

A focus on the gap of skills that are needed in the current workforce, such as soft skills, can additionally be understood through the skills or occupational obsolescence framework in which the degree of skill capacity is examined and compared to the skills necessary to maintain effective performance, employability, and organizational competitive advantage (Caratozzolo et al., 2020; Santandreu Calogne et al., 2019). With work begun by Rexford Tugwell (1931) and later enhanced by the changes of the post-World War II-era workforce, the focus of obsolescence theory is the requirements for employees to remain effective and employable through the relevance of their skills and knowledge. Brown (2017) found that 75% of respondent employers cited a negative impact on their company through an inability to develop products and services due to a shortage of the skills required.

As the dynamics of the workplace and workforce evolve through IR 4.0, trends such as globalization, demographics, and project-based work skills are continually changing, and their durability grows increasingly shorter leading to the continuation of a soft skills gap (Singh, 2019). A major technical revolution, IR 4.0 exploits the convergence of emerging technologies and digital transformations and encompasses the

merging of computers and automation (Azmat et al., 2020; Doyle, 2020). IR 4.0 is essentially the set of rapidly evolving and converging technologies in which digital transformation results from the fusion and amplification of these technologies in addition to the increased connectivity of mobile devices providing unprecedented access to data and knowledge which is integrated and leveraged (Cotet et al., 2017; Kamaruzaman et al., 2019). The focus of IR 4.0 is an end-to-end digitization of assets that were once solely physical and is accomplished by generating, analyzing, and automating data that yields a higher output with less human effort (Dash et al., 2019; Horstmeyer, 2020). This merging of technologies can empower organizations to make quicker, smarter, and more profitable decisions as well as the ability to reduce or minimize previous costs (Dash et al., 2019).

The changes brought by IR 4.0 have meant drastic structural changes in business operations, with the work executed by humans leading to an alteration of employee requirements across industries and processes and has uncovered missing combinations of basic, soft, and hard skills that are newly required (Moldovan, 2019). IR 4.0 increases the amount of routine and manual tasks that are being automated, however, that does not equate to all employees losing those jobs as there are an abundant number of new job types being created (Lyons et al., 2019). The benefits of IR 4.0 can only be leveraged, however, if there are the appropriate number of workers with the correct skills to realize its adoption which has become a challenge for today's organizations (Fachrunissa & Hussain, 2020).

The increasingly rapid development in technologies leads to a faster depreciation of skills than in the past creating ever-widening gaps in the skills that employees bring to

their work and the need for the acquisition of more appropriate skills along with a dynamic lifelong learning attitude (Kim & Park, 2020). In addition to new skills being required, another reason for the skill gap is that the skills employees currently possess are deteriorating at an historically rapid rate leading to perpetual skills obsolescence (Singh, 2019). With a dramatic shift in the way work is organized and performed, there is an increased demand for hot or soft skills which are focused on non-robotic capabilities such as social and emotional skills as well as proactivity in identifying issues and implementing solutions (Horstmeyer, 2020). The results of a study by Touahmia et al. (2020) showed that there is an emphasized need for new skill sets to be effective in a new era of rapidly changing technological changes.

Skills obsolescence occurs when the usefulness of an employee's skills decays and can be viewed as either an economic issue in which the skills previously demanded are no longer required or appropriate or skills obsolescence can be viewed through the perspective of an organization's outdated opinions and beliefs about work and the labor environment (Apergis & Apergis, 2020; Caratozzolo et al., 2020). The decaying of skills can occur through the physical aging of a workforce, through technological and economic changes such as those seen in IR 4.0, through the underutilization or atrophy of skills, and is affected by global environmental factors posing a global risk creating a crucial need to determine strategies to bridge the skills gap through upskilling or reskilling (Caratozzolo et al., 2020; McGuinness et al., 2018).

The bridging of the soft skills gap through the development of soft skills such as proactive personality in the existing human capital has been examined through the lens of

CCT (AlKhemeiri, et al., 2021). CCT seeks to explain the dynamics in work and adaptability behaviors such as proactivity and an employee's willingness to focus on future abilities and work engagement to ensure person-environment fit over the span of their career which will assist in the achievement of individual and organizational goals (Cai et al., 2015). CCT is beneficial in explaining an employee's changing aspects in work behavior throughout their career through the process of adaptability and development (Rudolph et al., 2019). Through CCT it is explained that these behavioral changes through an examination of adaptive readiness, adaptability, adapting responses, and adaptation results as the means for employees to proactively manage their careers (van der Horst & Klehe, 2019). The more adaptable an individual, according to CCT, the more competence and psychosocial resources they are likely to possess (Bi et al., 2021). Among those psychosocial resources, career adaptability is a core construction of CCT and is defined as readiness in which one engages to achieve person-environment fit by demonstrating adaptivity or the willingness to change; the adaptability of change; and adapting or engaging in the change (Cai et al., 2015; Haenggli & Hirschi, 2020). Personenvironment fit then allows for the employee to derive career meaning and adapt to environments more effectively (Peng, et al., 2021).

People with proactive personalities who exhibit proactive work behaviors provide meaningful benefits not only to themselves and their work life but also to their teams, department, and the organization at large (Spitzmuller et al., 2015). Those benefits can be examined in three distinct categories: proactive personality is positively related to career success, it is a proven determinant of individual well-being exhibited by job satisfaction,

commitment, and affect, and people with higher levels of proactive personality have been shown to perform better than non-proactive employees (Belschak et al., 2010; Rank et al., 2007). Because proactive individuals do not remain passive and accepting of the situation, they can succeed in areas such as the management of their career, creating situations for their well-being, and performing in situations they have crafted (Thomas et al., 2010).

CCT provides a framework to examine why individuals gain new skills and develop resilience which allows them to influence their career outcomes and employability (Peng et al., 2021). The focus CCT places on the personal agency of individuals to control their resources in the attainment of meeting demands allows for the examination of the role proactive personality plays as an important component of career adaptability and competencies and aligns with the agentic perspective of SCT agentic perspectives (AlKhemeiri, et al., 2021).

As CCT specifically examines adaptability, readiness, and self-management, the theory can provide a framework for why and how individuals gain new skills in the face of obsolescence and how employees develop resilience and the ability to influence their outcomes through personal agency through an alignment with proactive personality (Peng et al., 2021; Wong et al., 2020). As a core construction of CCT, career adaptability maps onto the development of proactive personality by examining the willingness, ability, and engagement aspects of adaptability and has been useful in understanding interventions that can contribute to the three proactive career behavior characteristics of can-do, reason-to, and energized-to (Haenggli & Hirschi, 2020; Hirschi et al., 2013).

The determination of interventions that are in alignment with these workplace behavioral dynamics and the development of proactive personality can also be managed and supported by talent management theory. Talent management theory is comprised of the specific practices in human resources management that aim to maximize employee talents, abilities, and skills through interventions, training, development, upskilling, and reskilling to attract, select, develop, and retain high performers with high potential in critical organizational positions and, as such, is a key driver of firm performance, growth, and competitive advantage (Doyle, 2020; Meyers, 2019). The main aim of talent management practices is to ensure that human capital is used efficiently, and that the quality of personnel is continually improved (Nikadimovs & Ivanchenko, 2020).

Talent management theory also proposes a strategic process for meeting talent needs and identifying critical positions that can be an additional impetus for organizational performance (Cross Walker, 2020; Meyers, 2020; Singh Dubey et al., 2021). More than simply hiring and retaining employees, the emphasis has shifted for talent management to become a process organizations undertake to forecast and proactively meet the needs for talent in strategically critical roles as well as develop talent appropriately to fill those needs (Cross Walker, 2020). Talent management theory can advance this study by guiding the selection of human resources practices that would best develop and retain employees who can, in turn, be pivotal to the innovation and profitability of the company.

Used in conjunction, SCT, HCT, CTT, skills obsolescence, and talent management theories have been foundational for this study. These theories have provided

the necessary structure to understand proactive personality, the behaviors that are associated with people who have high levels of proactivity, the skills that have lowered durability, and the means of developing existing talent to be proactive in affecting their environment by upskilling and reskilling themselves.

# **Conceptual Framework**

Reviewing the literature has assisted with the establishment of an understanding that across industries in the global workforce there currently exists a significant gap between the skills that organizations need to achieve their goals and the capabilities possessed by candidates and existing employees which decreases an organization's ability to grow (McKenney & Handley, 2019; Sevinc et al., 2020). The skills gap is the distance between the current capability of employees and organizations and where both need to be to achieve their goals (Duong et al., 2020; Shivaramu et al., 2019). Studies in the literature revealed that a gap in skills is not necessarily the result of a lack of quantity in the workforce but of an inability to find appropriately skilled candidates or existing talent within an organization (Singh Dubey et al., 2021). Hard, technical skills and knowledge are no longer sufficient to make candidates effective or employable (Bhatnagar, 2021).

Skill shortages or mismatches created by skills obsolescence lead to unfilled or hard-to-fill vacancies without qualified candidates or existing talent to fill them which can be difficult to both provide accurate accounting and reasoning around (Apergis & Apergis, 2020; McGuinness et al., 2018). While the research points to the difficulty in measuring and quantifying the actual gap in skills given the breadth of impact across

industries, sectors, geographic regions, and skill types there is consensus that a critical skilled talent supply deficiency will continue to fail to meet employers' demand (Lyons et al., 2019, McKenney & Handley, 2019, Novakova, 2020, Sevinc et al., 2020; Singh Dubey et al., 2021). Skills or competencies, as part of human capital, are an integral part of the means for an organization to become or remain competitive by driving innovation, creativity, and production (Fachrunnisa & Hussain, 2020; Sevinc et al., 2020). Because the skills gap is an internal issue that affects employees' abilities to perform their jobs effectively and productively, a basic understanding of what constitutes skills, then, is required for an examination into how to bridge a skills gap (Morris et al., 2020).

A central tenet of HCT is that the workforce that an organization accumulates can be its most asset as it is the foundation of productivity, innovation, and sustained competitive advantage through the knowledge, skills, and capabilities those employees utilize to achieve established goals (Adecco, 2020; Malik & Venkatraman, 2017). The literature revealed that defining skills can be challenging and is dependent on the perspective of the researcher (Maisiri et al., 2019). For this study, the market-oriented perspective of skills has been used in which the competencies employees possess are examined in the context of the competencies required by IR 4.0 (Sun et al., 2021). Skills can be categorized into those that are hard, occupation-specific, or industry-specific, those that are academic, and soft skills that are non-cognitive and interpersonal (Nikadimovs & Ivanchenko, 2020). The skills a workforce possesses are a key driver for the individual's employability, the team's productivity, for an organization, an industry, or even a region (Sevinc et al., 2020). If those skills are lacking, the individual, team,

organization, industry, and region can suffer economic and employability losses (Brown, 2017). A combination of aligned hard and soft skills is needed for the employability of today's workforce across industries and regions which may not yet be possessed by those employees, or which may be in short supply (Fachrunnisa & Hussain, 2020; Kamaruzaman et al., 2019; Manjunath et al., 2019; Moldovan, 2019).

To be successful in this new world of work, employees need, in addition to solely technical skills, to have soft skills and lifelong capabilities focusing on how humans connect with technology such as creativity, emotional intelligence, and proactive thinking (Cotet et al., 2017; Maisiri et al., 2019). The increased interaction between humans and machines has required and will continue to require, different, higher-level cognitive and socio-emotional combinations of skill sets (Kim & Park, 2020). This rise in dependence on machines that can process data and perform advanced analytics will showcase the difference between human and artificial intelligence (Brown et al., 2019). The key to bridging the IR 4.0 skills gap is to identify and develop those capabilities that cannot be done by a machine by a 'smart' employee who has hot, technology-aligned skills which are enhanced by performance that is innovative, creative, collaborative, and flexible (Dash et al., 2019; Fachrunnisa & Hussain, 2020).

The intersection of the literature reviews of the origin of the skills gap and the origin of the need for proactive personality merges at the understanding of the new necessity for protean workers. The workplace, an environment that is usually changing rapidly, is in the midst of transforming, uncertain times where flattening hierarchies and more complex work tasks have led to the requirement of a new type of employee who is

primarily categorized by having the ability to be self-starting and able to work proactively without the need for close supervision (Belschak et al., 2010).

Protean, or versatile, frequently agile changers and boundaryless careers require proactive individuals (Fuller & Marler, 2009). Problems and challenges that are dynamic and shifting will require more proactive solutions than managers and organizations can forecast, and successful employees has been able to proactively challenge the status quo for positive organizational growth (Thomas et al., 2010; Van Ronk, 2021).

Hard skills are those teachable, specific, and technical skills that can be transferrable by employees (Burns, 2020). Hard skills have been the domain of past demands on the workforce but with the changes brought by the IR 4.0 leading to increasingly shortened skill durability, more attention is paid in the recent literature to the skills necessary for work that is increasingly becoming more digitized and automated (Azmat et al., 2020; Doyle, 2020; Park & Kim, 2020; Shivaramu et al., 2019). There is an increased need for employees to have the soft skills that those digitized and automated processes lack (Arcelay et al., 2021).

Soft skills are explained as clusters of learned personality traits and qualities, characteristics, and attitudes that translate to societal improvements, being able to communicate effectively, and marked individual positivity such as flexibility, adaptability, and interpersonal skills (Burns, 2020; Cotet et al., 2017; Singh Dubey et al., 2021). Soft skills are described in the literature as quintessentially human skills that digitization and artificial intelligence cannot replicate such as interpersonal skills or

having the social qualifications to successfully interact with others and communication or the successful transmission of information (Coates, 2020; Shivaramu et al., 2019).

As a specific soft skill, the concept of proactive personality was introduced by Bateman and Crant (1993) as a personality trait that is a "relatively stable tendency to effect environmental change" (103) in which individuals have the agency to intentionally alter their environments through the dispositional construct of proactive behaviors (Bandura, 2001). There are multiple aspects of proactive personality as a trait that have been useful to this study and the operationalization of proactive personality, its measurement, and its relation to the skills gap are necessary for a foundational understanding of each. The foundational understanding this operationalization has provided allowed for the examination of lived experiences of proactive personality in the face of skills obsolescence to determine the most effective means of developing proactive personality to bridge the soft skills gap.

### **Personality**

Personality is a filter that assists people in understanding, making sense of, and adapting to their environment which is composed of diverse traits including intellect, character, temperament, disposition, and temper as well as stable motives, attitudes, and individual experiences, actions, or behaviors (Doan et al., 2021; Vasisht et al., 2021; Woo, 2018). Personality traits help to clarify why individuals act differently in similar situations, why some employees are better able to mobilize job resources than others even as consistent change approaches, and how interactions or reactions can differ depending on the people involved (Bakker et al., 2014; Presenza et al., 2020; Sari Najmudin, 2021).

Defined as a personality trait, which is the dynamic structure of mental processes, proactive personality is seen as a filter or measure of an individual's proclivity to affect or accept their environment or situation (Doan et al., 2021; Vashist et al., 2021).

While defined through the lens of personality, proactive personality has been shown to be uniquely distinct from the universally accepted hierarchical taxonomy of personality which seeks to explain individual differences in work and career outcomes defined by the big five factors (B5) (Guan et al., 2017; Peral & Geldenhuys, 2020). The B5 factors include openness, conscientiousness, extraversion, agreeableness, and neuroticism (Doan et al., 2021; Maurer & Chapman, 2018). It has been determined in multiple studies that proactive personality has unique, stand-alone, predictive effects over and above B5 for important outcomes such as employee motivation and job performance (Major et al., 2006; Maurer & Chapman, 2018; Rodrigues & Rebelo, 2019). Spitzmuller et al. (2015) found that 50% of the variance in proactive personality is not related to the B5 traits but accounts for overall unique variance in areas such as job performance, task performance, organizational citizenship behaviors, and learning performance (Liu et al., 2019).

With the personality aspect of proactive personality understood, determining what proactivity includes is critical in its examination. As a group, proactive constructs include proactive personality, personal initiative, proactive behavior, taking charge, and voice (Prabhu, 2016; Tornau & Frese, 2013). The conceptual difference lies in whether the concept is inherent in the individual, as proactive personality lies on a continuum as a personality trait, while initiative is behavior and leads to action (or inaction) (W. D. Li et

al., 2014). Research by Trifletti et al. (2009) helped to explain that this distinction lies in the differences of an individual versus the differences in their actions or behaviors. Increases in either the trait or the behavior tends to lead to a reciprocal increase in the other in that people with a greater amount of proactive personality tend to take more personal initiative and vice versa (Wu et al., 2018).

### **Proactivity**

As the basis of proactive personality, proactivity has been identified as self-directed anticipatory action wherein control is taken to cause personal and environmental change through planning and striving (De Vos et al., 2009; Grant et al., 2009; Parker & Collins, 2010; Thomas et al., 2010). The phenomenon of proactivity is a personal resource that involves expectancy, preparation, being change-oriented and future-focused, and is characterized by initiative and assertiveness (Aftab & Waheed, 2021; Bjorkelo, et al., 2010; Callea et al., 2022; Tornau & Frese, 2013). Taking an active role is key in proactivity to solve problems ahead of them becoming an issue, soliciting feedback to improve performance, proposing innovative, unique ideas, and seeking out the means for personal development (Zhang, 2020). Proactivity is a personal resource that enables the employee to promote their lifelong self- and relational management (Callea et al., 2022).

Proactivity has been observed and measured in individuals through proactive personality, proactive behaviors such as personal initiative, taking charge and voice, as well as job crafting at the job level and competency development at the career level (Bjorkelo, et al., 2010; Fugate et al., 2004; Plomp et al., 2016). Team proactivity is the

elevation of these behavioral tendencies to a collective level (Zhang, 2020). At the individual level, proactivity is seen in anticipating and acting on the external environment to achieve personal goals; from a team member it is the self-structuring and future-oriented behavior to change a team situation; and from an organizational member, it can be observed as a change to the way the organization or its processes works (Griffin et al., 2007). The movement from personality to behavior and effect is an important aspect of the studied phenomenon to understand when seeking to develop proactive personality.

### **Proactive Behavior**

Proactive behavior is a dispositional construct differentiating the extent to which individuals move from proactive tendencies to taking definitive, discretionary action which will influence their environment and challenge the status quo (Bateman & Crant, 1993; Parker & Collins, 2010; Sonnentag, 2003; Trifiletti et al., 2009). Proactive behaviors are anticipatory actions emanating from an employee's proactive personality and are potentially combined with personal initiative which impacts and improves the self and/or the environment or creates a new environment more conducive to success at the individual, team, or organizational level (Callea et al., 2022; Grant & Ashford, 2008; Kuo et al., 2018; Lebel, 2017; Tornau & Frese, 2013; Van Ronk, 2021). In alignment with proactivity, proactive behaviors are characterized by their self-starting, anticipatory nature aimed at improving work or individual situations and bringing about positive change for oneself, others, or the entire organization (Fay & Sonnentag, 2012; Sylva et al., 2019; Unsworth & Parker, 2003; Van Ronk, 2021). Aimed at preventing problems, identifying and grasping opportunities, and focusing on constructive improvements,

proactive behaviors can be seen in organizational performance and production results as well as in individual self-development and upskilling efforts (Kuo et al., 2018; Meyers, 2020). Proactive behaviors are the result of a person acting on their proactive personalities to create a new, improved, and more beneficial environment (Callea et al., 2022). These behaviors are intended to bring improvements to one or more of three intended targets: work behaviors affecting the internal organizational environment, strategic behaviors which affect the external organizational environment, and/or the behaviors that impact the well-being which is generated from the ideal personenvironment fit (Parker & Collins, 2010; Sylva et al., 2019).

Proactive behaviors are the means for employees to intentionally take action to change an existing situation which usually results in positive outcomes, environments, and experiences for those who display it (Bjorkelo, et al., 2010; Maurer & Chapman, 2018). Characteristics of proactive behavior are exhibited when a person is spontaneous, has foresight, and seeks to transform situations (Yao et al., 2021). The operationalization of proactive work behaviors can be seen when employees seek to take charge, prevent problems, innovate, and use voice to positively improve aspects of work or self (Meyers, 2019; Urbach et al., 2021).

Because work is becoming ever more dynamic and decentralized, these types of proactive behaviors become more important drivers of an organization's success (Crant, 2000). More definitively, for the organization, proactive citizenship behaviors are an explicit form of organizational citizenship behaviors that encompass positive change-oriented behaviors such as initiative, voicing opinions, and suggesting change for the

benefit of the team, department, or organization at large (DenHartog & Belschak, 2012). These behaviors can be operationalized as proactively seeking out feedback, taking initiative in their role and their career, networking, expanding, and acting outside of their role or expected responsibilities, and/or revising and crafting their job (Grant & Ashford, 2008; Hirschi et al., 2013).

Personal initiative is a specific form of proactively behaving and is a syndrome, or a set of co-occurring behaviors, which results in taking an active, self-starting approach to work, going beyond formal job requirements in a way that is consistent with the organization's mission, is focused on the long-term, is directed towards goals and action, is proactive and persistent, and constructively challenges the status quo (DenHartog & Belschak, 2012; Frese et al., 1997; Grant & Ashford, 2008; Ohly et al., 2006). Being ready for adaptation is another means of demonstrating proactive behaviors by demonstrating creativity and innovation in an employee's role as well as successfully self-manage their careers (Green et al., 2020).

Proactive behaviors, personal initiative, and proactive personality as supported by the SCT conception of individuals as agents who seek to improve work situations without external directives (Fugate et al., 2004). Proactive behaviors can vary and depend on socioeconomic factors, cultural backgrounds, and the employee's placement in their career or talent life cycle (Aftab & Waheed, 2021; Zhang, 2020).

# **Proactive Personality**

Taking those foundational conceptualizations into consideration, proactive personality, then, is defined as a dispositional, compound personality trait and value

factor that is a stable tendency in which one is relatively unconstrained by situational forces and is able to effect change on their environment by scanning for opportunities, showing initiative, taking action, and persevering through challenges and obstacles to solve problems and is observable at the individual, team, and organizational levels (Bateman & Crant, 1993; Greguras & Diefendorff, 2010; Haoet al., 2019; Rohma & Zakiyah, 2022; Spitzmuller et al., 2015). The adaptive readiness examined in CCT is operationalized as proactivity and a self-starting approach (Green et al., 2020; Spitzmuller et al., 2015). Through the development of self-regulating and adaptability resources people are enabled by proactive personality to successfully manage diverse, unexpected situations, persist despite challenges, and create favorable conditions to improve work (Zhang, 2020; Zhu & Li, 2021).

Proactive behaviors are shown when an employee takes initiative to improve their environment or challenge the situation by creating an entirely new one in opposition to passively accepting what is happening (Zhang, 2020). People with proactive behaviors tend to make a positive impact on their work world as they are more apt to look for methods of improvement to realize their own goals and those of their organization (Bateman & Crant, 1993; Vignoli & Depolo, 2019). Attunement to their environment, a heightened tendency to engage in learning, and putting oneself in or creating situations for thriving are some of the ways in which proactive personality propels an individual toward success in the workplace (Jiang, 2017; Young et al., 2018).

Proactive personality can be operationalized in the form of confronting, directly facing change, and/or transforming by recognizing and acting upon opportunities (Rohma

& Zakiyah, 2022). Additional operationalizations come in the form of motivation to change, the ability to respond to the environment with change, and improvements to create something new through persistence, being unyielding, and actively implementing (Honet al., 2009; Mubarak et al., 2021; Sari Najmudin, 2021).

Proactive people display SCT's agentic capability to identify and act upon opportunities to intentionally pursue self-improvement prospects and proactively put themselves in positions to thrive despite situational constraints (Greguras & Diefendorff, 2010; Porath et al., 2012; Rodrigues & Rebelo, 2019). Proactive personality consists of setting a goal, striving to achieve it, and anticipating and preventing problems until the change has been implemented (Doan et al., 2021; Parker et al., 2010) as proactive people are the master of their destiny, risk-takers who are on the lookout for challenging situations, and intentionally manipulate environmental conditions so that they run according to expectation or long-term need (Caniëls et al., 2018; Kusuma et al., 2021; Mubarak et al., 2021; Van Ronk, 2021). Shying away from situations and simply responding to environments are not limitations of proactive people as they are pathfinders that think critically and speak up to improve their workplace to find a unique way forward (Kim & Park, 2017; Mubarak et al., 2021; Wu et al., 2018; Zhu & Li, 2021). By putting themselves in positions to thrive, proactive individuals are dynamic agents who are better able to handle intentional change by identifying and pursuing opportunities for self-improvement and the means to excel in current and future-forward, unknown situations (Greguras & Diefendorff, 2010; Mubarak et al., 2021; Porath et al., 2012).

To examine and develop existing talents' proactive personality, it is important to understand how proactive personality is quantitatively measured. The seminal measurement of proactive personality was introduced and validated through Bateman and Crant's (1993) proactive personality scale (PPS). The PPS is a measure of a personal disposition or inclination to act and make a change to an environment in the pursuit of realizing goals that has been validated and found to be reliable in studies such as Trifletti et al.'s (2009) (Crant, 1995). The PPS and resulting measurements of proactive personality seek to rate a person's tendency for proactivity on a continuum from passive to proactive. The original PPS has also been updated in several notable instances such as Seibert et al.'s (2001)10-statement PPS, Baer and Frese's team-level proactivity scale (Zhang, 2020), and Belwalkar and Tobacyk (2018) through the development of the tripartite model of proactive personality.

This study has relied upon the tripartite model's conceptualization of proactive personality as a blueprint for an individual's development of proactivity which has three main characteristics: perception as the ability to recognize an opportunity for change, implementation which includes the planning and execution of that change, and the perseverance to persist through obstacles or challenges until the change is realized (Belwalkar & Tobacyk, 2018). Viewing proactive personality through the tripartite lens assisted in the examination and categorization of lived experiences of how this personality trait can be developed to help bridge the skills gap.

The successful professional in today's workforce is a protean worker with technical expertise but is also in possession of a proactive and dynamic attitude with

mastery of the soft skills to self-direct, problem-solve, interact, and communicate with all others (including AI and digital platforms) to achieve their goals (Arcelay et al., 2021; Hyrnsalmi et al., 2021; Touahmia et al., 2020). The conceptualization of proactive personality by the tripartite model and the focus on the soft skills category of the skills gap through both a skills obsolescence and human capital framework has aided this study in determining the most effective means of development of proactive personality to bridge the critical soft skills gap.

#### Literature Review

Given that measuring proactive personality has been most prevalently accomplished through self-report questionnaires such as the PPS (Bateman & Crant, 1993) as well as the tripartite model (Belwalkar & Tobacyk, 2018) and that the skills gap has been captured in terms of productivity and jobs unfilled (BLS, 2021; Sevinc et al., 2020), most studies for both streams of the literature review have been quantitative in nature. Quantitative examinations have analyzed measurements of proactive personality in longitudinal studies such as W. D. Li et al.'s (2014) study in which it was found that job demands and control have positive lagged effects on reciprocal proactive personality development; Prabhu's (2016) study of 900 nonprofit employees which determined that proactive personality leads to robust positive job outcomes; Sylva et al.'s (2019) examination of how person-job fit and proactive career behaviors align; multiple surveys of how proactive personality presents (Zhu & Li, 2021); the impact of proactive behaviors in Pakistan (Aftab & Waheed, 2021); a determination of the effects of proactive personality interventions by Heuvel et al. (2015); and the relationship between

the skills gap and performance in the design industry was found to be significant in Shivaramu et al.'s (2019) study. Meta-analytic reviews were also quantified by Chamberlin, Newton, and Lepine (2017), Fuller and Marler (2009), Spitzmuller et al. (2015), and Vasisht et al. (2021). Additional quantitative studies have examined the measurements of the validity of the various proactivity scales and their alignment to related concepts (Crant, 1995; Seibert et al., 1999; Tornau & Frese, 2013).

Several studies in this literature review have used mixed methods to capture both the quantitative nature of proactive personality as well as the qualitative descriptions given in long-form answers of questionnaires and surveys. Van Ronk's (2021) dissertation provided quantitative data which showed that employees without proactive personality were more change-resistant than those who have higher levels of proactivity and the qualitative stories from semi-structured interviews of knowledge workers at Amazon was able to demonstrate what the experience of working with those colleagues was like. Johnson (2015) also used mixed methodology through quantitative and qualitative survey data to examine and describe the phenomenology of being proactive through lived experience and documented the essence of that proactivity. Questionnaires on the proactive personality scale have used mixed methods to explore its alignment to work states and behaviors such as psychological capital and the well-being of employees in the study by Hao et al. (2019).

Utilizing a qualitative approach has allowed this study to examine the descriptions and narratives of managers and employees experiencing skill requirement changes and their effects as well as exploratory organizational data that could provide further insight

into lived experiences. The use of face-to-face interviews such as those Brown (2017) conducted with hiring managers paired with exploring company documents was also exemplified in Bindl's (2019) qualitative study of 92 proactivity episodes in multinational organizations explored and described the differing emotional journeys of proactivity through an iterative process of collecting data, analyzing the data, and theorizing to connect the individuals' perceptions of past, present, and future events.

Qualitative case studies such as those conducted by Combs (2019) present lived experiences through interviews of South Carolina business leaders who demonstrated successful fulfillment as well as a focus group of skilled manufacturing employees and a review of company documents, Kranov and Khalof's (2017) study of the employment gap in Abu Dhabi, and a case study on filling the skills gap through undergraduates' internships by Lynch and Aqlan (2016). Literature reviews were the main source of qualitative data with examples seen in Santandreu Calonge et al.'s (2019) literature reviews of 19 studies, Nikadimovs and Ivanchenko's (2020) integrative literature review, and a review of the literature on qualification requirements in the information technology and systems industry by Ngo et al. (2021).

While the studies listed are a good example of found qualitative data, the volume of qualitative studies is significantly lower than quantitative data and there is, consequently, a gap in the literature around the qualitative aspect of proactive personality and its development. This study has attempted to fill that gap by focusing on the descriptions of proactive personality from managers and employees as they navigate impactful changes in the world of work which require a new set of soft skills.

The problem that the skills gap is wreaking on individuals and businesses has been approached from multiple perspectives which include a focus on the attraction of talent in new and creative methods (Combs, 2019), through the guise of career competency and adaptability strategies (AlKhemeiri et al., 2021), through an examination of the alignment between academia and the workforce (Burns, 2020), and from a resource-based and leadership examination (Barnes et al., 2021). Most useful to this study, the skills gap has been studied from the perspective of understanding the skills needed to be successful in IR 4.0 (Arcelay, 2021; Azmat et al., 2020; Enders et al., 2019; Maisiri et al., 2019) along with developing the human capital organizations currently possess (Alamu, 2016; Ostmeier & Strobel, 2022). While soft skills are mentioned and examined in the literature, there is a gap in studying the use of proactive personality as a specific soft skill that could bridge the gap in organizational requirements versus employees' possession of skills.

The means of bridging the skills gap through the development of existing talents' proactive personality depends on the conceptualization of the soft skills gap as the inability to find professionals who can perform effectively and efficiently (Singh Dubey et al., 2021). The deficiency and the resulting gap in soft skills affect individuals' ability to remain employable and affect organizations' ability to maintain a competitive advantage to remain economically viable (Burns, 2020). The tripartite model of proactive personality has guided this study in examining how an employee perceives an opportunity for change based on the obsolescence of their skills, then plans and executes an implementation for that change to occur such as upskilling or reskilling themselves,

and how that employee finally perseveres through obstacles until that change or development is realized (Belwalkar & Tobacyk, 2018).

An understanding of proactive personality and its development has led to an explanation of how employees already employed by an organization can remain effective and productive and will serve as a blueprint for employee development to ultimately bridge the soft skills gap. Employability is the end goal and is a context-dependent examination of an employee's ability to identify their skills' durability, identify those skills' relevance in the labor market, and improve those skills that are deteriorating (Brown et al., 2019). Those skills include technical aptitude but also include soft skills such as communication, emotional intelligence, critical thinking, and interpersonal skills (Bhatnagar, 2021).

The combination of Bateman and Crant's (1993) identification of proactive personality and its place in organizational behavior along with Belwalkar and Tobacyk's (2018) conceptualization of proactive personality as a tripartite model of behavior has assisted in answering the key research questions of this study. The first three research questions of how employees exemplify proactive personalities by perceiving opportunities, implementing change, and persevering through obstacles when faced with shifting skill requirements was scaffolded from Belwalkar and Tobacyk's tripartite model to conceptualize what exactly proactive personality is and how to identify the concept.

The fourth research question of how proactive personality can be developed in existing talent relied on the motivational states that Parker et al. (2010) outlined as antecedents and promoters of proactivity: that employees feel they can-do, have self-

efficacy beliefs, and are capable of development; that they have a reason-to and see value in their development through autonomy and goals; and that employees are energized-to develop and have a positive affect (Hirschi et al., 2013; Lebel et al., 2017; Ontrup & Kluge, 2022). Self-efficacy, finding meaning in work through activities such as job crafting, having a sense of autonomy, and psychological empowerment have all been shown to facilitate much-needed proactivity in employees (Heuvel et al., 2015; Sung et al., 2017; Thomas et al., 2010; Tian et al., 2022; Zia et al., 2020). The way that employees feel while working, their affect, has been shown to be an important intrinsic motivator and predictor of proactivity and success on the job in which felt responsibility and perceived meaningfulness or a reason-to leads to commitment and performance (Bindl, 2019; Lebel & Kamran-Morley, 2021). Affectivity is a state composed of the trait sources of emotions that can be elicited from causes, events, and situations and involves global positive or negative feelings such as work engagement or being energized-to be proactive which leads to proactive work behaviors such as job crafting (DenHartog & Belschak, 2012; Lebel & Kamran-Morely, 2021; Tian et al., 2022). However, it has been found that negative emotions and states such as fear and anger can also spark the proactive need to change the status quo which can be useful if harnessed appropriately (Lebel, 2017).

To fill roles, hiring new talent is a go-to practice in human resources management, however, organizations are not finding the talent they are looking for externally and this practice omits a critical need to have employees who excel across all levels of the organization that can best be accomplished through the training and

development of existing talent (Brown et al., 2019). Many desired soft skills may not come from an innate ability but, rather, can be developed through training and the development of awareness (Combs, 2019). A workforce that has been able to successfully address the changes and challenges of IR 4.0 can be shaped by re-skilling existing workers to accomplish more of the work that is uniquely human and by tapping into employees with 30% of the skills needed and then upskilling them instead of searching for non-existent external talent (Card & Nelson, 2019; WEF, 2020). Indeed, SHRM (2019) found that the most effective remedy for addressing the skills gap is to provide training which, in turn, improves retention. Upskilling the existing talent pool through training and development to the necessary labor market's demanded skills is a supply-side approach that is socially responsible in service of the future of work for communities at large (Adecco, 2020; Sevinc et al., 2020; Woolf et al., 2020).

Maintaining skill relevance is not a static need; changing trends in the market will require a continual adaptation throughout an employee's work life and improving their ability to adapt and seek resources now will build lifelong learners who continuously seek out ways to improve their skills (Santandreu Calonge et al., 2019; Valenti, 2021). Proactive skill development accesses a self-initiated, future- and change-orientation that people with proactive personality possess to acquire the knowledge and soft skills they need to master changing and future jobs (Ostmeier & Strobel, 2022). Proactivity is a soft skill that can be trained by developing context-specific knowledge and skills and people with proactive personality may be uniquely poised at taking advantage of such development due to their motivation to learn and interest in affecting their environment

(Belwalkar & Tobacyk, 2018; Seibert & Kunz, 2016). Proactive individuals are best able to strategize how to invest in their training to satisfy employer expectations, successfully navigate career interruptions, and respond to the changing skills needs of a digital world (Duong et al., 2020).

Skill development is the process of enabling a professional to do their jobs more effectively and efficiently and can bridge the soft skills gap by tapping into the development of employees already in role who know the organization and its processes to become competent in more relevant tasks and has been especially embraced by proactive individuals who want to improve and learn more (Bhagat, 2020). Training policies are necessary to begin to bridge the gap between the demand for soft, human skills in the face of massive technological changes and the deficient supply of those skills in the labor market as well as in the creation of a suitable workplace (Arcelay et al., 2021; Touahmia et al., 2020).

The research question of how proactive personality can be leveraged to bridge the soft skills gap has relied on the conceptualization of soft skills as uniquely human and a main ingredient in creating a workforce with the appropriate skills to meet the challenges of IR 4.0 (Coates, 2020; WEF, 2020). Workers have begun to assume this increased responsibility for reskilling and as the soft skills gap will only continue to widen, teaching not only the employees but their managers and leaders in the organization to be more effective developers has been a crucial component (Jones, 2020; Stephany, 2021; Tulgan, 2016).

### **Summary and Conclusions**

Workforce study results confirm that the capacity of talent has not met the requirements of organizational needs and that skills development can be the means of bridging those gaps (Bhagat, 2020; Duong et al., 2020). Underlaid by the HCT view that a company's workforce is its greatest asset in the continued effort for competitive advantage a review of the literature showed a conclusive need to ensure the viability and employability of the workforce (Brown, 2017; Jones, 2020; Malik & Venkatraman, 2017; Singh Dubey et al., 2021; Woolf et al., 2020). This study on proactive personality has furthered the examination of accomplishing maintained viability of the workforce through the development of soft skills (Grant & Ashford, 2008; Jiang, 2017). Studies in the literature resulted in findings that showed that the development of the skills needed for employees in IR 4.0 can be the bridge between a deficiency of the capability of existing talent and the unmet necessities of job requirements (Bhagat & Jain, 2020; Combs, 2019; Maisiri et al., 2019). What has not been conclusively researched is whether proactive personality can be that soft skill to bridge the soft skills gap. Through qualitative exploration of the lived experiences of managers and employees who have first-hand knowledge of the shortened durability of skills, this study has attempted to understand how employees exemplify proactive personality by perceiving, implementing, and persevering through changing skill requirements, how proactive personality can be developed within existing organizational talent, and ultimately, how that developed proactive personality can be leveraged to bridge the soft skills gap which will enable existing talent to remain employable and organizations to remain financially viable.

There is no single cause for the soft skills gap the global workforce is currently experiencing but, rather, the gap is a consequence of organizational reactions to global trends emanating from the changes posed by IR 4.0 (Olson, 2015). Digital technologies in IR 4.0 are transforming work environments and while some jobs may become automated, there is an increasing demand for new skills that master new ways of working and many employers are finding it difficult to keep their talent up to date (Stephany, 2021). The rapid pace of incoming information, the changes to social networks and interactions, and technological advances are placing a premium on individual ability to adapt, to be self-motivated to develop, and to recognize and act upon opportunities for self-renewal (Bandura, 2001).

Additionally, a core issue for social change lies in socio-economic transformation and the full development of humans and the resources they bring to their work environment which should be a key factor in determining not only individual and organizational success but also economic growth and the ability to decrease poverty (Duong et al., 2020). Education can be the key differentiator to face the radical and constant changes in the workforce where organizations need to be proactive and ensure that their workforce is able to reap the benefits of IR 4.0 by upskilling and retraining their existing workforce (Brown et al., 2019). It has been found that this can be accomplished by preparing the company to become a learning organization and preparing employees to continuously and proactively engage in development which this study will attempt to examine, address, and provide recommendations for through the lens of proactive personality (Cotet et al., 2017; Dash et al., 2019).

### Chapter 3: Research Method

In Chapter 3, I describe the research design and the rationale behind the selection of a qualitative design; the role of the researcher; the methodology of the study, which includes participant selection, instrumentation, and procedures for recruitment, participation, and data collection; and the data analysis plan. Chapter 3 also addresses issues surrounding the development of trustworthiness through credibility, transferability, dependability, and confirmability. Ethical considerations are explored in the last section of Chapter 3. The chapter ends with a summary and a preview of Chapter 4.

## **Research Design and Rationale**

The purpose of this qualitative phenomenological interpretivist and descriptive study was to examine and better understand the lived experience of proactive personality in employees facing changing skill requirements. Gaining this understanding of proactive personality required an examination of how proactive personality is developed and whether it can be leveraged to bridge the gap in skill requirements for an organization's existing talent. The research questions that guided this study are:

- RQ1: What are the lived experiences of employees with proactive personalities with regard to the ways that they perceive opportunities?
- RQ2: What are the lived experiences of employees with proactive personalities with regard to the ways that they implement change?
- RQ3: What are the lived experiences of employees with proactive personalities with regard to the ways that they persevere through obstacles when faced with shifting skill requirements?

RQ4: What are the ways that proactive personality might be developed in existing organizational talent?

RQ5: What are the ways that proactive personality development might help to improve soft skills in employees?

To address the research questions in this qualitative study, I chose a phenomenological, interpretivist design using an iterative data collection and an analysis process of narrative highlighting the lived experience of proactivity and its development (see Dunn & Moore, 2020). An understanding of how employees proactively identified potential areas of opportunity for upskilling or reskilling was explored through interviews of employees who had faced shifting skill requirements and their managers. The real-life experience of these employees and their managers provided insight into how proactive changes were implemented and how obstacles were overcome to mitigate the need to search for nonexistent or limited external talent. Narrative was used to explain situations in which those employees were successful in fulfilling their organizations' shifting requirements and bridging the soft skills gap.

Qualitative phenomenological research was the best method to answer the research questions for this study. Frankfort-Nachmias et al. (2015) explained that a qualitative approach should be taken to obtain meaning and behavioral understanding of feelings and experiences from study participants. I chose a phenomenological research design to examine the lived experiences of proactive personality over other designs such as an ethnographic design, which was not deemed appropriate because understanding cultural symbols or traditions was not the goal of the study. A grounded theory design

was also deemed inappropriate because the theory of proactive personality had already been established and tested, and my study was not focused on theory development but rather on explanation and insight (see Creswell & Creswell, 2018).

Phenomenology is the study of an individual's perception of the world about a particular phenomenon, which is useful to put concepts into situational context (Burkholder et al., 2016). This research tradition allowed me to study individuals from a first-person perspective and allowed for the exploration of determining why people react in specific ways and how transferable those reactions may be (see Burkholder et al., 2016). In qualitative studies, there are several methods used for research and data gathering, which include analyzing content from one-on-one interviews (MacLure, 2017). The use of one-on-one interviews was appropriate in my study given that this method allowed for the lived experiences of proactive personality in the face of changing skill set requirements to be probed as deeply as possible, which would not have been possible through quantitative methods (see MacLure, 2017).

#### Role of the Researcher

In qualitative research, the role of the researcher can include formulating the research questions; designing the research plan to support them; recruiting, vetting, and selecting participants; conducting interviews; analyzing data, and reporting findings (Saldaña, 2016). For the current study, I carried out all these functions. I had been able to evaluate talent at a global staffing agency for over 7 years, which led to an interest in why some talent excel in uncertain or ambiguous situations and others do not. In my tenure, I was a performance consultant and corporate trainer as well as a learning and talent

manager with a role intended to coach, train, develop, review, and calibrate existing talent within an organization. In this professional capacity, I was tasked with overcoming and handling varying degrees of proactivity in my students, users, colleagues, and teammates. These experiences gave me an inside perspective on how proactivity can impact career development and growth. My insight into the evaluation of proactive talent may have affected my views as a researcher on how proactivity is exemplified in the workplace, how and whether existing colleagues can be developed to be more proactive, and how that development of proactivity can be leveraged to mitigate the soft skills gap I have seen at my organization and that our customers experience.

My professional endeavors and the personal connections I have made with colleagues within my organization served as the motivation for this study. As a researcher, I sought to understand the lived experiences of proactivity and its development to ensure that the global staffing organization has existing talent who can recognize, implement, and persevere through opportunities to upskill or reskill to be as employable as possible, to make their skills relevant and durable, and to make the organization retain their competitive advantage. Two of the potential participants who were in consideration for the study were former coworkers who had moved to new companies as hiring managers and team leads outside the global staffing firm where I was employed. Each of these participants had gone through significant skill requirement changes during the last 2 years and had to build and reorganize teams with existing and external talent. This change had been communicated anecdotally to me and had not been impacted by the global staffing organization where I was employed. A plan was put in

place to reach out to these potential participants and other hiring managers and employees through my LinkedIn community, which spans varied industries. Interest generated in this way would ensure diversity in the participant sample.

Issues of ethics that can arise in qualitative research were taken into consideration and addressed in the planning stages of this study. Letters of invitation were sent once interest was generated and was accompanied by consent forms with the approval of the Walden University Institutional Review Board (IRB Approval # 04-14-23-0985275) that has been collected before each interview ameliorating confidentiality concerns. Additionally, no names or identifying characteristics were included in the report on the study. Each participant was notified throughout the interview process that their participation was voluntary and that their interview could be terminated at any time.

Through an interview process that was fair, consistent, and structured, I sought to mitigate my personal biases on proactive personality. This objectivity was taken into consideration in the data analysis phase in which bracketing helped to moderate my personal opinions, biases, and assumptions. Additionally, a journal was kept allowing my personal feelings to be monitored and checked consistently. At the end of the data collection process, a debriefing was sent to each participant for confirmation of the content of the transcriptions as well as a request for feedback on all aspects of their participation.

Methodological triangulation was also considered to increase the credibility of the study through the use of multiple data collection methods (see Noble & Heale, 2019). In addition to interviews of participants, archival data from the participants' organizations

were studied to verify the retention, job orders filled, veracity, and width of the skills gap. Although this additional methodology increased validity and credibility, it also added to the complexity of the study and the potential for inconsistencies in qualitative data (see Noble & Heale, 2019). All measures were taken to mitigate researcher bias from professional and personal experience working with talent in the staffing industry. Throughout the participants' selection process, interviews, archival data collection, data analysis, and findings reporting, researcher bias was checked and minimized through methodological triangulation and bracketing to ensure the most credible and valid study findings.

## Methodology

## **Participant Selection Logic**

The population identified for this study was hiring managers and employees in U.S. organizations who had to rebuild or were part of a team that had been rebuilt within the last 2 years due to shifting skill requirements. Sampling in qualitative research relies on procedures for participant selection, which are less defined than those in quantitative research because the selection process is dependent on the discretion of the researcher as well as the reason or purpose behind the study (Kalu, 2019). The purpose of this choice of population was to gain an understanding of proactivity when encountering changing skill sets in the work environment through descriptions of lived experience and what that proactivity looked like in participants' organizations.

Purposeful sampling was used to recruit the study sample. Because qualitative samples are small, researchers have a responsibility to find information-rich cases that

bolster credibility and trustworthiness based on their ability to answer the research questions and meet the research objective (Kalu, 2019; Patton, 2015). A good participant in the current study was able to provide a clear articulation of what is and what is not proactivity in the face of shifting skill requirements. Because qualitative research sample sizes can be as small as a single case, participants were chosen based on their ability to share reliable, productive, and valuable information about the study phenomenon (see Patton, 2015). Participants were known to meet the selection criteria by their responses to a poll intended to vet all interested contributors. This poll was used to identify, contact, and recruit hiring managers and employees via my LinkedIn network, and requests were made to reach as many people as possible. This poll was specific enough to include people who were either hiring managers or employees at an organization that had seen a shift in skill requirements in the past 2 years, with deference for global organizations. Once interested, prospective participants provided demographic data for me to decide whether to send out a formal request to join the study by email, including all necessary confidentiality information and waivers.

The establishment of sample size was based on the value of the respondents' breadth and depth of experience with proactive personality and shifting skill requirements in their workplace, and their ability to reflect on and share those experiences. Because no rigorous rules apply to qualitative sample sizes, the size for this study was dependent on what was useful from the interviews, what the participants shared that was credible, and whether a meaningful understanding of proactive personality was gained from the experiences shared (see Kalu, 2019). The quality and usefulness of the data obtained by

interviews and the quality of archival data were used to determine data saturation (see Kalu, 2019).

### Instrumentation

For this study, there were two main instruments to collect data: a researcherproduced semistructured interview protocol with targeted demographic questions (see
Appendix B) and organization-produced archival data. The interview protocol guide
included open-ended interview questions along with a detailed script for interview
briefing and debriefing (see Creswell & Creswell, 2018). The semistructured interviews
began with targeted demographic questions to gather data on gender, race, age, tenure,
and role within the organization which, according to Fink (2000) allows the researcher to
recognize connections among the experiences of participants that could help to explain
the phenomenon. The open-ended interview questions were designed to allow the
participants to explain their experiences regarding proactive personality in the face of
shifting skill requirements. Additionally, the guide allowed for participants to be
interviewed in a consistent manner while including potential follow-up questions to
increase the depth of knowledge.

The questions asked during the interviews were designed to elicit the knowledge gained about proactive personality and the soft skills gap. Semistructured interviews addressing the lived experiences of hiring managers and employees helped me answer the research questions regarding how proactive personality is exemplified in the challenge of shifting skill requirements and how proactive personality can be developed in existing

talent at organizations. The archival data assisted in determining how participants had leveraged the development of proactive personality to bridge the soft skills gap.

## Procedures for Recruitment, Participation, and Data Collection

The semi-structured interviews have been arranged by sending 60-minute Outlook calendar invitations to each participant who has consented to participate in a 30-minute follow-up debriefing session scheduled one month later. The interviews were conducted and recorded by the researcher via the Zoom video conferencing platform and transcribed through Otter ai software with the participant's consent. A reminder was sent to each participant a day prior to the scheduled interview time via email and text (if possible). The interview began with a briefing on the researcher, an overview of the purpose of the study, and an explanation of their role and rights as a participant (Appendix B). Demographic questions prefaced the study interview questions with the participant's consent. Interview questions and sub-questions followed the sequence in the interview protocol which is meant to guide each step of the interview to ensure consistency in the participants' involvement and to mitigate any researcher bias or assumptions. The interview concluded with the researcher summarizing their time together and reminding the participant of the next steps of the process. These next steps included sending the participant a transcript of their session for review and confirmation and the 30-minute debriefing to confirm the archival data and to explain their exit from the participant process. Note-taking by the researcher occurred during the one-on-one interview and journaling took place after taking note of any researcher biases, assumptions, or judgments that could cloud the data analysis process.

Archival data was to be procured by the researcher through a formal request to the human resources department of the participants' organizations identified through the interview process as having navigated a skills gap within the last two years. Job opening and job fill data was requested to gain an understanding of the organizations' navigation of a skills gap to corroborate the participants' lived experiences of facing a shortage or shift in skill requirements.

## **Data Analysis Plan**

Content analysis has been performed after the participant gave consent, the interview was recorded (via video and/or audio) and then transcribed to be coded through analysis using Belwalkar and Tobacyk's (2018) tripartite model taxonomy of proactive personality. Utilizing an open coding process, content categories and patterns were discerned and synthesized from the interview process to answer the research questions the study is focused on to determine how proactive personality is exemplified in the face of shifting skill requirements and how it can be developed in existing talent (Dunn & Moore, 2020). Subsequently, the data categories and patterns from the interviews were compared to the archival data retrieved and categorized for corroboration or opposition to determine how proactive personality can be used to mitigate the soft skills gap.

Coding, or the process in qualitative research that assembles, categorizes, and sorts for themes and patterns, took place for both the interviews and the archival data researched to enable the construction of meaning around the phenomenon of proactive personality (Williams & Moser, 2019). Manually reviewing data and using the open, axial, and selective coding strategy has enabled interaction, comparison, and

consolidation throughout the analysis process (Williams & Moser, 2019). Discrepant cases were to be reviewed, and a request was to be made, if necessary, to re-interview the participant to determine if the lived experiences were captured accurately. If the experiences were captured correctly, the case was to be removed from the study.

#### **Trustworthiness**

The rigor with which a qualitative study is conducted affects the degree of confidence or trust that readers have in the methods used, the interpretation of findings, and in the data itself (Connelly, 2016). Establishing and maintaining this trustworthiness is of the utmost importance in qualitative studies and can be built through agreed-upon criteria which are reviewed in this section in detail: credibility, transferability, dependability, confirmability, and attention to ethical procedures and concerns (Dunn & Moore, 2020).

## Credibility

Whether or not a reader can be confident in the truth of the study and what the researcher has found by performing the study is referred to as internal validity in quantitative studies and credibility in qualitative research (Connelly, 2016). Appropriate measures were taken throughout the planning of the study to ensure that this credibility is established by considering the sample size and its relation to saturation. Additionally, credibility was considered by instituting triangulation methods by using multiple data sources, having the participants conduct member checks, and finally through the review by committee members and peers (Patton, 2015).

## **Transferability**

Another criterion for building trustworthiness in qualitative studies is the transferability of the findings. Akin to the external validity threshold for quantitative studies, transferability speaks to whether the findings have been useful and applicable to people or situations in other contexts, cultures, geographies, etc. (Connelly, 2016). Transferability was considered in this study during participant selection as participants were chosen for their involvement with proactive personality and skills gaps leading to the ability to gather interview data that is rich with descriptions and context to impart experiences around the phenomenon under focus as well as to support the study findings. Participant selection also aimed to take into consideration and mirror the makeup of the current American workforce in terms of gender, age, race, and ethnicity.

# **Dependability**

In tandem with the transferability of the results in qualitative studies is the data stability over differing time and conditions, or dependability (Connelly, 2016). By using triangulation in data collection and data types as well as audit trails and attention to the thoughtful detailing of the interview protocol and guides, dependability has been established as much as possible as a counterpart to the quantitative concept of reliability.

### **Confirmability**

As the last criterion of trustworthiness, confirmability considers the researcher's potential for bias and establishes a level of confidence that researcher neutrality or objectivity has been achieved through an accurate portrayal of the participants' narratives and experiences (Connelly, 2016). Reflexivity, or the practice of acknowledging the role

I played in the research process, has been conducted throughout the participant selection, data collection, and data analysis stages by actively examining and probing my mindset to determine if I pointed the participants or the data toward a particular conclusion or path, journaling, reviewing the journal periodically, and including any findings in the study results.

### **Ethical Procedures**

To ensure that all participants' rights have been protected and the integrity of the research process is maintained, ethical procedures for this qualitative study began by detailing all considerations around working with human participants and obtaining the IRB approval before study commencement. Once a respondent was chosen as a participant, a consent form was sent via email to be reviewed and signed by the participant before any conversation took place. The consent form detailed that their participation was strictly voluntary, was not to be recompensed, could be terminated at any time, and continued with their permission throughout the process. These terms, as well as the anonymity of each of the participants, were restated in the brief before the interview as detailed in the interview protocol (Appendix B). No ethical issues around power relationships or dynamics came into play as no one in my current organization has been considered for the study. All data collected will remain anonymous, protecting the participants as well as the organizations they work for and from which the archival data has been reviewed. Upon completion of the study and within the recommended 5 years, all files will be deleted.

## **Summary**

In Chapter 3, the research method, rationale, and the role of the researcher have been outlined. The methodology of selecting participants, detailing instrumentation, delineating data collection, and analysis were also reviewed in detail. Finally, the trustworthiness of the study was examined through the lens of crucial criteria of credibility, transferability, dependability, and confirmability with a special focus on the consideration paid to ethical procedures. In Chapter 4, the results of the study will be presented in detail.

### Chapter 4: Results

The purpose of this qualitative phenomenological interpretivist and descriptive study was to examine and better understand the lived experience of proactive personality in employees facing changing skill requirements. This study allowed for an examination of how proactive personality is developed and whether proactive personality can be leveraged to bridge the gap in skill requirements for an organization's existing talent. These are the research questions that guided this study:

RQ1: What are the lived experiences of employees with proactive personalities with regard to the ways that they perceive opportunities?

RQ2: What are the lived experiences of employees with proactive personalities with regard to the ways that they implement change?

RQ3: What are the lived experiences of employees with proactive personalities with regard to the ways that they persevere through obstacles when faced with shifting skill requirements?

RQ4: What are the ways that proactive personality might be developed in existing organizational talent?

RQ5: What are the ways that proactive personality development might help to improve soft skills in employees?

Chapter 4 presents the details of the study, including where and how the study was conducted and with whom. I also review the data collection and analysis methods and provide the results of the study. The chapter concludes with a summary and preview of Chapter 5.

### **Setting**

The participants were recruited from my LinkedIn network. LinkedIn is a business and employment-focused platform comprising professionals in a wide variety of industries. The professional nature of the participants, their individual diversity, the diversity of their teams, and the variety of their roles and experiences were leveraged to provide a broad representation of the lived experiences of proactive personality in responding to shifting skill set requirements. Once a participant expressed interest in participating in the study, I sent an invitation for an interview via Zoom. This method of collecting data was affected by the state of technology in a post-COVID work environment. With most professionals forced to work remotely during COVID and being given the equipment to do so, the participants were able to use Zoom and were familiar with the medium for interacting.

An additional condition that influenced the participants was the current state of the labor and job market. The post-COVID job and labor market was marked by a skill and talent gap that was also impacted by IR 4.0 (Azmat et al., 2020; Horstmeyer, 2020). Current participants were selected because they were impacted by these conditions and had to respond to the need to shift their skill requirements or those of their team members. Participants had a vested interest in discussing how to upskill and/or retain themselves or their colleagues and were eager to share their experiences. None of the participants indicated any stress in relation to answering the interview questions, but two participants indicated that it was interesting to remember such a challenging time in their professional careers.

## **Demographics**

This qualitative study included interviews with a diverse group of professionals across multiple industries who had experienced a shift in the skills required of either themselves or their teams within the last 2–3 years. The diversity of participants was apparent when considering their ages, roles, tenures, experiences, and locations across the United States. The participants were selected by using purposeful sampling via a LinkedIn recruiting post.

There were seven female and three male participants who ranged in age from 39 to 59 years. All but one participant worked remotely, and all had remote or hybrid teams; for some participants, these work location situations were part of the experiences they described in their interviews. Of the ten participants who were interviewed, four were individual contributors who discussed their personal experiences and six were managers who discussed their own experiences and those of the teams they led. The organizations addressed in the interviews were global companies for all except two of the participants. Table 1 provides an overview of the demographics of the ten participants.

**Table 1**Participant Demographics

ID	Age (years)	Sex	State	Tenure (years)	Title	Role	Industry	Global? (Y/N)
A1	59	F	GA	1.5	Project manager, implementation	IC	Staffing	Y
A2	46	M	ОН	1.2	Associate manager, consulting services	Manager	IT	Y
A3	44	F	FL	1833	Director of digital strategy solutions	Manager	Finance	Y
A4	52	F	NJ	26	VP, talent	Manager	Insurance	Y
A5	45	F	KY	0.8	Sr. talent strategy advisor	IC	Employment	Y
A6	45	M	FL	3	Sr. manager, consulting services	Manager	IT	Y
A7	52	M	FL	9	VP, talent	Manager	Staffing	Y
A8	43	F	FL	5	Consultant, executive recruiter	IC	Staffing	Y
A9	54	F	CA	1.5	Sr learning specialist	IC	Insurance	N
A10	39	F	PA	0.8	HR director	Manager	Consulting	N

*Note.* IC=Individual Contributor

## **Data Collection**

From those who responded to the LinkedIn recruiting post and gave consent, six managers and four individual contributors at U.S. organizations were chosen to participate in semistructured interviews to relay their lived experiences of responding to shifting skill requirements. Each interview was scheduled via an Outlook appointment and took place over the span of 6 weeks for 60–80 minutes via Zoom with consented audio recording. The interviews were conducted following the interview protocol and guide, which included follow-up questions that were asked when necessary to gain an

understanding of the complete experience (see Appendix B). To maintain confidentiality, I gave each participant an identifier number (e.g., A1, A2) that was assigned to their audio recording as well as any notes taken in my reflexive journal. The audio recordings were transcribed using Otter.ai. Once all interviews were conducted, I emailed the transcripts to each participant asking them to ensure that their experiences and perceptions were accurately captured. Each participant responded with confirmation that the data were correctly transcribed and that I was authorized to use the data in my analysis with no corrections needing to be made. I stored the data in an encrypted file on my personal computer to be held for the requisite period and then disposed of.

A variation in data collection from the plan presented in Chapter 3 was the decision not to use the archival data from participants' organizations regarding job requisitions and fills. An internet search of job requisition versus job fill data was conducted for the organizations with which the participants were affiliated during the time of the experiences they relayed. This information, however, proved either difficult to obtain or did not lend any additional insight into the data analysis. Beyond that, there were no unusual circumstances encountered in data collection because each of the interviews was attended and conducted smoothly with no follow-up interviews necessary.

### **Data Analysis**

Once the interview data was collected, I used Otter.ai software to transcribe the recordings and put them into a Word document that was reviewed by the corresponding participants. I followed Clarke et al.'s (2015) thematic analysis approach when analyzing data. This approach consisted of familiarizing myself with the data by reading and

highlighting the transcriptions and assigning open codes to the participants' responses in relation to their experiences of reacting to shifting skill requirements. The interview questions from the interview protocol and guide (see Appendix B) were manually uploaded into an Excel spreadsheet, and the responses for each participant were manually entered along with the initial codes. From this process multiple codes emerged as relevant to each of the research questions and are detailed in Table 2.

Table 2

Initial Coding

RQ	Proactivity	Code	Number
1	Perceived opportunity by	COVID and post-COVID demands	5
		Recognizing shifting manager expectations	3
		Being brought onto new projects/stretch assignments	2
		Shifts in organizational leadership	2 2 2
		Changes in organizational/team strategy	2
2	Implemented change by	Training (offered, requesting, additional education)	7
		Asking for help, listening to answers	6
		Delivering training while educating self	4
		Learning on the job, job shadowing	3
		Voluntary solutioning with organization (recrafted job	2
		description, took unofficial leadership role)	2
		Inventorying resources (creating repositories)	2
		Taking on stretch assignments/broadening scope	2
3	Persevered through	Leveraging Emotional Intelligence (self-awareness,	7
	obstacles by	creating psychological safety, communication)	
		Making attempts	5
		Creating plan to combat challenges such as time, bandwidth	4
		Role modeling behavior, bringing others along	3
4	Development by	Creating psychological safe space to try and fail	4
	1 3	Having a supportive environment	
		Coaching	3
		Training	3
		Allowing time for adoption	2.
		Less manager bias	2
5	Improving soft skills by	Creating continuous learning environment	3 3 2 2 2 3 2
•		Creating habit of proactive thinking and behavior	2
		Creating new, agile mindset	2

With the data initially coded, the next step in the process was to use axial coding accomplished by Excel pivot tables and filtering to identify and organize the initial codes and search for categories and relationships between the participants whose lived experiences were proactive and those that were not proactive. The results of this analysis from the raw data produced two or three major themes for each research question as shown in Table 3.

Table 3

Themes

RQ	Proactivity	Theme
1	Perceived opportunity by	Recognizing organizational changes
		Recognizing shifting manager expectations
2	Implemented change by	Understanding & utilizing available resources
		Communication (asking, listening, within org, training others)
		Taking action (on the job learning, job shadowing, broadening scope)
3	Persevered through	Leveraging Emotional Intelligence (self-awareness, creating
	obstacles by	psychological safety, communication)
		Continued action
4	Development by	Having or creating a conducive environment
		Offering effective resources
5	Improving soft skills by	Creating sustainable mindset shifts
		Creating sustainable shifts in habits and behavior

The lived experiences of employees with proactive personalities in the face of the shifting skill requirements shared common themes as described by participants in their interviews. In the context of Belwalkar and Tobacyk's (2018) tripartite model of proactive personality, the responses could be categorized into two major themes representing the ways that the opportunities were perceived. The first theme was employees tended to recognize that there were differences happening across the organization, such as shifting leadership and strategies, and realized that these changes would impact the way they were going to work going forward. Proactive employees were

more likely to notice and take into consideration shifts in their managers' expectations of them or their team, including new projects they were assigned to, and new processes being rolled out.

The second component of the tripartite model focused on in the interviews was how proactive employees implemented those changes. Although the responses varied, three major themes emerged: (a) proactive employees identified and used the resources that were available to them, including training that was offered or asked for as well as continuing education outside of their organization; (b) proactive employees relied on communication to ask questions and obtain feedback from their network; and (c) proactive employees took action such as training others to understand the change, job shadowing, and taking unofficial leadership roles.

During implementation of the changes, obstacles posed challenges, and employees with proactive personalities persevered through those challenges by adopting behaviors categorized in two major themes: (a) leveraging emotional intelligence to increase their awareness of their strengths and weaknesses and to create psychologically safe spaces for their teams and (b) communicating in ways to obtain the best information and continue acting through failed attempts or misfires. These experiences also provided insight into some common recommendations for how proactive personality was developed, which were categorized in two main themes: (a) ensuring that the environment in which employees are attempting to be proactive is conducive to the themes outlined for implementing change and (b) persevering through obstacles an offering the appropriate resources so that the employee is successful. The soft skills of

existing talent if be improved if the organization is cognizant of two main themes: (a) creating a sustainable mindset shift in employees, teams, and managers and (b) encouraging role modeling and rewarding sustainable shifts in proactive habits and behaviors.

All the participants recounted experiences with shifts in skill requirements for themselves, their teams, or their clients. One of the interviewees also offered insight into the current labor market and the dearth of soft skills as clients and candidates are facing new ways of working brought about by the post-COVID climate, artificial intelligence in technical and creative roles, and the digitization in IR 4.0. Although there were experiences with nonproactive employees that were shared, they were used as reference and comparison to the lived experiences of proactive personality. There were no instances of discrepant cases to be factored into the analysis.

### **Evidence of Trustworthiness**

Throughout the planning, data collection, and data analysis phases of this study, I followed the guidelines identified in Chapter 3 for establishing and maintaining the trustworthiness of the study to ensure that readers would have the highest degree of confidence in the methodology, data collected, and interpretation of the findings (see Connelly, 2016). The trustworthiness of a qualitative study was ensured by focusing on credibility, transferability, dependability, and confirmability (see Dunn & Moore, 2020).

### Credibility

Confidence in the study and the truth of its data, findings, and interpretation were considered in the measures that were taken in the planning phase of the study to ensure

that the sample size was appropriate. During the data collection phase, after seven interviews had taken place, an additional post for recruitment was sent for at least three more participants to ensure that saturation was achieved. It was at this point that multiple participants began to share similar experiences and were answering the questions in a similar manner which provided credibility that no additional themes or insights were emerging (Chitac, 2022). Additionally, member checking was utilized to confirm that the data collected and transcribed was the responses of the study participants with no requests made to adjust or change the transcription and no follow-up interviews necessary.

## **Transferability**

The ability to extend or generalize the findings and results of this study to other settings, contexts, geographies, or employees was considered during the planning stage of recruitment and selection to maximize the potential for finding participants that would be able to provide rich descriptions and wide-ranging experiences around the phenomenon of proactive personality (Enworo, 2023). In addition, participant recruitment and selection were focused on mirroring the makeup of the current American workforces in terms of gender, age, and race with the final demographic make-up detailed in Table 1. While not a part of the original recruitment or selection criteria, all but two of the participants that were interviewed work for global organizations and one of those participants' organizations is based outside of the United State with headquarters in the United Kingdom. Although this study's contributors were all American employees and shared experiences within the American workforce, it is hoped that the since those

participants are the recipients of global leadership and decisions this will allow for the transferability to workforces outside of the United States.

# **Dependability**

Data stability over time and condition differentials was also taken into consideration for the dependability of this study (Connelly, 2016). Through triangulation, or the combination of multiple approaches to the data collection and analysis, I spoke with participants in their interviews, had the audio of those interviews transcribed, read those transcriptions, and asked that the participants also review the transcriptions. I then analyzed the data through multiple rounds to ensure that other researchers would be able to confirm or corroborate the findings (Enworo, 2023).

## Confirmability

Confirmability was considered throughout this study in both the planning stage and during the data collection stage. As I completed my IRB application in the planning stage, multiple means of acknowledging the role my bias may play in the study were built into the study plan that were then carried out during the interviews and when analyzing the findings.

As part of that plan, through reflexivity, I worked to maintain a level of neutrality and objectivity by providing an accurate portrayal of the experiences and perspectives shared during the interview process and kept a journal of notes that were reviewed prior to and post each interview (see Enworo, 2023). This journal allowed me to be aware of the instances in which I may have asked the participant leading questions or shared my own personal thoughts or perspectives on the stories they were sharing.

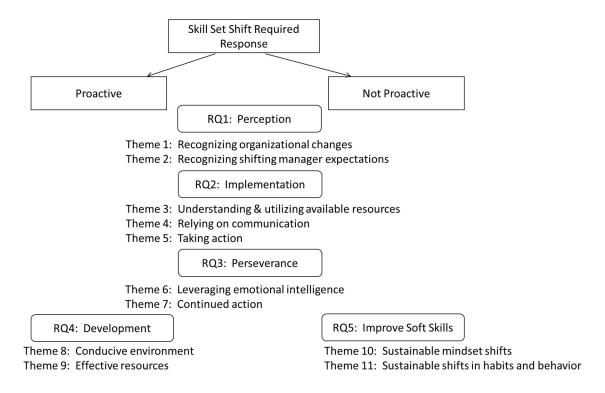
Another avenue of reflexivity I discovered after my first interview was that the Otter.ai software's analytics captured and displayed the amount of time each person spoke during the interview. In my first interview I spoke 20% of the time and upon reflection and reading of the transcript, I was able to clearly pinpoint which of the questions or answers I inadvertently elaborated on with the participant. Moving through the next nine interviews, my aim was to talk only to ask questions or probe into their answers a little deeper. I ultimately achieved as little as 15-17% of the talk time in subsequent interviews decreasing the potential for my own views and bias to affect the experiences that were shared around the lived experience of proactive personality.

#### Results

The central research questions guiding this study leveraged the three classifications of Belwalkar & Tobacyk's (2018) tripartite model of proactive personality to deepen the understanding of the presence and impact of existing employees' degrees of proactivity in response to shifts in the requirements of their work skills. Additionally, the last two research questions focus on how to maximize and utilize those characteristics to address the gap in soft skills in the current labor market. In both the data collection and data analysis phases, these research questions remained at the heart of what questions were asked of the interviewees, the sequence of asking those interview questions, and how the answers were coded, categorized, and analyzed as shown in Figure 1.

Figure 1

Responses to Shifting Skill Set Requirements



The participants interviewed were asked initially to share a time when either their skills or the skills of a team member became less relevant or were shifting to new skills and needed to be upskilled and/or reskilled. The ten interviews resulted in a wide variety of skill shifts with the most prevalent being a necessity for strategic rather than transactional thinking; a heightened need for emotional intelligence, specifically in influencing others, relationship management and effective communication; a shift to a learning, curious, and agile mindset; and a need for employees to be proactive rather than reactive and to take the initiative rather than waiting for direction. The results of the skills that were requiring a shift are detailed in Table 4. The responses to those new

requirements were categorized into the first seven themes and provided the foundation for understanding the recommendations made in themes 8-11 detailed in Figure 1.

**Table 4**Skill Set Shifts Required

Skill shift needed	Number of	
	responses	
Emotional intelligence to manage relationships (peers, stakeholders, etc.)	4	
Strategic thinking over transactional (considering larger scope)	4	
Emotional intelligence to influence others (with and without authority)	3	
Learning and curiosity	3	
Taking initiative and being proactive versus reactive	3	

## RQ1

What are the lived experiences of employees with proactive personalities with regard to the ways that they perceive opportunities? There were two major themes that emerged from the shared experiences of how proactive employees perceived that there was an opportunity for change when it came to the skills that would be necessary in their job and supported directly by the theoretical foundation of agency caused by a triadic reciprocity between the employee, their environment, and contextual factors (Anwar et al., 2019; Bandura, 2001; Bateman & Crant, 1993). While several of the respondents came into the role knowing that the skills would be shifting or were directly told so during their tenure, the majority of those who shared experiences that were proactive, relayed instances when those affected scanned the environment and recognized that there were changes happening in the organization either external to their team or internally (Belwalkar & Tobacyk, 2018). Most of the respondents agreed with A10 that "scanning and recognizing the need for change or an opportunity was the most challenging" part of

the shifting skill set requirements, especially for those who took that on before being told it was a necessity. As Theme 11 will illustrate, perception may be the most challenging part of developing proactive personality as well.

#### Theme 1

The first theme that emerged was that proactive individuals perceived a change in the organization itself. In two instances, leadership at the global and local levels were changing and new leaders were either announcing their intention to or were instituting changes in personnel, processes, etc. Existing employees who exhibited proactive tendencies directly faced these changes and saw in them an opportunity to do something more or something different (Rohma & Zakiyah, 2022). As participant A4 relayed, "some people were really excited for what they saw as an opportunity" in the changes coming from leadership, especially around COVID and post-COVID reaction while others "didn't like the way [the changes] were handled...so they couldn't see the opportunity in front of them."

#### Theme 2

The second theme that emerged around the perception of proactive employees was that they recognized changes that were occurring internally in their team and with their own manager's expectations of their work. One interviewee relayed an experience in which they noticed that the language their manager used was changing from responding to local needs versus a broadened scope of demand. In this instance, what previously met expectations was changing and they realized that a more strategic and agile mindset would be what was needed going forward. Another participant saw a

pattern of being given stretch assignments or projects outside of their normal purview and network and they perceived that this was a signal that they were being prepared for new processes.

### RQ2

What are the lived experiences of employees with proactive personalities with regard to the ways that they implement change? Once a change was perceived, the participants were asked to share if and how those employees implemented the necessary changes. While these experiences were varied, there was also a lot of commonalities about how proactive employees took the reins on implementation which includes the planning as well as the execution of those and they were synthesized into three main themes changes (Belwalkar & Tobacyk, 2018).

### Theme 3

The most prevalent theme that emerged from the implementation experiences was that proactive employees identified, understood, and utilized the resources that were available to them or that they needed access to. Most of these resources centered around the ability to upskill or reskill themselves whether they were trainings that were officially offered by their organization, trainings they requested or that they learned about the opportunity to gain additional education outside of the organization. Participant A1 relayed a prime example of this behavior as they utilized the company's tuition reimbursement program and went back to school for a master's degree as well as created a cheat sheet repository of the resources that they and their team could access.

### Theme 4

The second main theme that showcased the experience of proactively implementing the necessary changes centered around communication. Proactive employees asked questions about the change and how to accomplish it, they listened to not only the answers to those questions but the answers to questions posed by others, to what was being said in meetings and around the organization, in their new projects and the new networks created by stretch assignments. These questions were focused on gaining new knowledge by seeking to understand what worked, what was not working, and how people were responding. In several cases, this communication took the form of training others as a means of learning new information for themselves. As professionals and managers of trainers, participants A3, A5, and A9 "killed two birds" by learning the information to upskill themselves while enabling others in their organization to be upskilled in their training as well. Asking for feedback was another component of the communication theme with several respondents using the responses they received as a springboard for action.

#### Theme 5

The final theme that emerged around proactively implementing the necessary changes was all about moving out of the planning stage and into the execution of putting those plans into action. Some of the respondents relayed occurrences of this action taking the form of voluntarily taking on stretch assignments or broadening the scope of their role to proactively learn or practice the new, necessary skills. Both participants A2 and A4 described actively "leaning into what you don't know" by observing others, job

shadowing, workshopping new actions to determine if they would be appropriate ahead of them being prescribed by leadership, and taking unofficial leadership roles.

## RQ3

What are the lived experiences of employees with proactive personalities with regard to the ways that they persevere through obstacles when faced with shifting skill requirements? While perceiving the need for change was particularly challenging to employees who were facing shifting skill requirements, putting those plans into action in the implementation phase of proactivity was also met with obstacles (Belwalkar & Tobacyk, 2018). Proactive employees who met obstacles as they tried to upskill or reskill themselves reacted in two common ways among the participants interviewed: they either leveraged emotional intelligence practices to overcome those obstacles or they persisted with continued action despite setbacks, often with a combination of both. Participant A1 relayed that while facing obstacles and setbacks were "challenging, [it was] easier than not making the changes."

#### Theme 6

Emotional intelligence, or the ability to identify and manage our own and others' feelings, was leveraged by seven of the ten employees whose experiences and behaviors were shared during their interviews (Dirican, & Erdil, 2020). Participant A2 found it effective to inventory their own strengths and weaknesses and have the self-awareness to honestly evaluate how they fit with the new way of working. Other participants focused on effective communication and relationship management to continue to ask questions and to get and provide feedback when setbacks occurred. Individual contributors and

managers found psychologically safe spaces for themselves or created them for their team to explore options and try solutions if their original plans were not able to be implemented. Three participants leveraged their awareness of others to bring them along with the changes and role modeled behavior showing resilience in the face of challenges so that action could continue to be implemented.

#### Theme 7

Continuing action was the final theme that emerged from the perseverance phase of proactive personality experiences. Five of the participants cited continuing to make attempts to change as a common element of proactivity rather than being discouraged and going back to the previous way of working. Rather than fighting the changes or the challenges that the new processes and requirements posed, employees such as A6 continued action in the form of providing input to their leaders on the reality of the environment and continued providing voluntary solutioning to the organization rather than passively accepting the situation if it was not working.

## RQ4

What are the ways that proactive personality might be developed in existing organizational talent? The underlying theory of human capital, which provides foundational support for the skills gap research in this study, posits that there is intrinsic value in the productive capabilities, skills, and knowledge that employees possess and bring to their organization (Daniela et al., 2019). As such, there is an impetus for those human capabilities to be acquired and developed through education, on the job training, and providing appropriate resources and experiences (Krieger et al., 2021). When posed

with questions regarding how that development has successfully taken place for the interviewees or their employees, two main themes emerged.

#### Theme 8

The first theme that emerged was almost unanimously relayed by the participants which was that there needed to be a conducive environment in which to develop proactive personality. The psychologically safe spaces discussed in theme six were the most cited element for the successful development of proactive personality so that employees could try to implement change and feel a sense of safety and self-efficacy. As a manager of a team facing changes, Participant A2 found the greatest results when "empowering others to be subject matter experts" and providing spaces for them to make mistakes without fear of retribution. Supportive environments were also created by allowing employees time to adapt to the changes or new requirements and through a focus on the reduction of manager bias in managing employees who need development of their proactive personalities. Participant A5 shared that knowing less about their manager's feelings and biases about the changing situation would have made them more confident and more apt to attempt different ways of working.

#### Theme 9

The second theme emerging around the development of proactive personality mirrors Krieger et al.'s (2021) findings that for capabilities such as proactive personality to be developed employees need to be provided with the appropriate and effective resources. The most mentioned examples of these resources were seen by the participants in applicable training and coaching programs. The participants were clear that the

development of a soft skill such as proactive personality is not an easily transferrable skill, especially when it comes to the perception component. Several of the participants shared that they have experienced proactive personality as an innate skill. Participant A3 shared that they have often counseled employees on how to be more proactive and perceive opportunities but "it's hard to get them to see it." Participant A5 has seen that role modeling combined with proper motivation has been the most effective means of developing the ability to perceive opportunities and participant A10 added that they were successful at working with employees to "recognize cues…look at [situations] and ask questions."

### RQ5

What are the ways that proactive personality development might help to improve soft skills in employees? The final research question investigated the ways in which the development of proactive personality might be used to improve soft skills to bridge or lessen the current gap in the workforce. With the world of work changing more rapidly each day, the need for protean workers with enhanced human skills is increasing (Adecco, 2022). Two themes emerged from the interview responses on how this development of proactive personality enabled their organizations to lessen the soft skills gap with their own existing talent.

#### Theme 10

The first theme that emerged focused on how the development or leveraging of proactive personality created a shift in mindset in existing employees that was sustainable across multiple changes in their environments. Shifting employees from passively being

told how and when to change, organizations that successfully create a continuous learning environment and habits of proactive thinking were most able to retain employees instead of having to search for external talent in an under-supplied workforce. Participant A8 shared that in their experience, "the best companies always look within first before they would ever engage with somebody externally." Having employees that are continually curious, proactive, and strategically thinking has been seen by five of the participants to mitigate their need to bring in external talent.

#### Theme 11

The final theme focused on shifting those mindsets then into the creation of sustainable habits and behavior that are proactive and support continual, self-motivated upskilling and reskilling. Participant A3 emphasized that employees with proactive personalities who exhibit proactive behaviors are those that are going to remain during challenging and changing times at organizations with "proactivity [being] on one of the key things going into retention choices." For individuals, remaining employable in this current workforce is also a crucial element of leveraging the development of soft skills such as proactive personality (Olson, 2015). Participant A8 echoed that sentiment for remaining employable as an external hire as well by sharing that "if it comes down to two candidates that are almost identical...[companies] are favoring the person that has that better overall match...in terms of softer skills."

### **Summary**

The eleven themes generated from the data collected and analyzed adequately answered the five research questions which guided this study. In answering questions

related to the lived experiences of employees with proactive personalities when faced with a shifting skill set requirement, participants revealed that there were definitive characteristics along all three components of Belwalkar and Tobacyk's (2018) tripartite conceptualization of proactive personality.

With regard to how opportunities are perceived, participants shared exhibitions of recognition by proactive employees of changes that were happening either externally in the organization or internally on their team. Rather than waiting for leadership to tell them what was happening or what the underlying context or motivation might have been, proactive employees scanned their environment, noticed a change, and drew conclusions around what that might mean for themselves, their teams, and their work. It was shared that proactive employees did not stop merely at recognizing an opportunity for change, but they worked to put that change into action.

Rather than fight the change or "dig their heels in" as Participant A3 shared, to keep the status quo, employees with higher levels of proactive personality identified what resources were available to them and used them, they relied on communication to ask questions, ask for feedback, listened to answers, and made a point to understand what was being said. Participants shared that proactive employees then took this knowledge and put it into action by working on projects outside of their scope, delivering training, recrafting job descriptions, and voluntarily solutioning with the organization.

Implementation did not always happen smoothly or correctly on the first attempts but employees with higher degrees of proactive personality persevered through those obstacles.

While their counterparts might have been uncomfortable being challenged and chose to remain "set in their ways" as Participant A7 relayed, proactive employees leveraged their knowledge of themselves and the people around them to move forward with continued action. By examining their strengths and weaknesses, creating psychologically safe environments, and driving effective communication, these employees were able to continue action even in the face of challenges on their bandwidth, having a lack of time, or failing the first time.

What all these characteristics and behaviors that the participants have relayed have in common is that the employees themselves took on responsibility. Whether it was the responsibility of recognizing and connecting what was happening in the organization and on their team to what that would mean for future work or deliverables, whether it was taking the initiative to catalog resources, communicate with the right people, or join a new project, the participants shared that the lived experiences of proactive personality were self-generated and self-directed.

The final two research questions sought to answer how these lived experiences can be leveraged to develop this soft skill in employees and whether that development might help mitigate the current soft skills gap in the labor market. The overwhelming consensus among the participants that were interviewed was that proactive personality could be developed if the conditions were appropriate and that development needed to be sustained to make a difference in closing the skills gap by creating shifts in thinking, habits, and behavior.

Chapter 5 will present an interpretation of the research findings as well as a discussion around the limitations of the study. The chapter will conclude with recommendations for further research that would help supplement knowledge around the phenomenon of both proactive personality and the skills gap. The implications for social change will also be examined.

## Chapter 5: Discussion, Conclusions, and Recommendations

This chapter provides an interpretation of the findings of the lived experiences of proactive personality in the face of shifting skill requirements, limitations that arose from the execution of the study, recommendations for further research, and implications for social change. Although many quantitative studies had examined calculable degrees of the phenomenon of proactive personality, the purpose of this qualitative study was to examine and better understand the lived experience of proactive personality in employees facing changing skill requirements, examine how proactive personality is developed, and explore whether proactive personality can be leveraged to bridge the gap in soft skill requirements for an organization's existing talent.

The findings revealed common behaviors and experiences that impact the workplace when proactive employees respond to changing situations, particularly when there is a need to upskill or reskill the ways existing employees perform their jobs. With regard to the three components of the tripartite model of proactive personality, proactive employees recognize changes in the organization and their manager's or team's expectations. Employees with proactive personalities then implement changes to address those perceptions by understanding and using available resources through effective communication and by acting using what they know. When obstacles present challenges to employees' ability to follow through with that implementation, proactive employees leverage emotional intelligence to ensure that action is continued through the execution of those necessary changes.

The presentation and understanding of these experiences allowed for a deeper understanding of how proactive personalities are developed. Through data collection and analysis of the participants' lived experiences with developing proactive personalities, I discovered that the two most common means were (a) creating or operating in a conducive environment that is psychologically safe and (b) providing effective and appropriate resources that the employee can use. The development of proactive personality has been seen to improve soft skills and close the gap in organizations by encouraging mindsets of continuous learning and turning knowledge into sustainable new habits and behaviors.

## **Interpretation of the Findings**

From the data collected in 10 interviews with individual contributors and hiring managers who had to respond to shifting skill requirements, 11 main themes emerged that answered the five research questions. Findings confirm the knowledge in the discipline of organizational psychology while extending an understanding of the lived experiences of proactive personality through qualitative, rich descriptions of behaviors, characteristics, and practices that were successful (see Burkholder et al., 2016; Frankfort-Nachmias et al., 2015). Participants also shared experiences of nonproactive behaviors and experiences that helped to provide a contrast between effective and ineffective responses and development methods.

In Chapter 2, I reviewed the literature addressing skills gap in the labor market and the phenomenon of proactive personality. The two streams of literature intersected at the need for protean workers, a new type of employee who is self-starting and able to

work proactively without the need for close supervision (see Belschak et al., 2010). All 10 participants in the current study relayed that the skills gap and the obsolescence of skills posited in the literature review are seen in their workplace and in attempts to create pipelines of qualified talent (see Apergis & Apergis, 2020; Bhagat 2020; Caratozzolo et al., 2020; Duong et al., 2020). One participant who works with clients to find qualified talent confirmed that there is a deficiency of candidates who have the soft skills to meet the changing demands brought about by artificial intelligence and digitization. This confirms the assertions in the literature that as organizations are flattening and traditional hierarchies are transforming into work that is becoming project or gig based, there is a need for employees to be more self-directed and to have the ability to anticipate an opportunity for change (see Santandreu Calogne et al., 2019; Singh Dubey et al., 2021).

The components of the tripartite model put forth by Belwalkar and Tobacyk (2018) as an elaboration on Bateman and Crant's (1993) original definition of proactive personality guided the research questions and interview questions in the current study. Bateman and Crant defined proactive personality as one in which an individual is consistently changing their environment rather than merely operating in a subpar space defined by others. Belwalkar and Tobacyk subdivided that tendency into three components: an ability to perceive an opportunity, an ability to implement necessary changes around that opportunity, and the perseverance to overcome obstacles that challenge the ability to implement change. The answers shared by the current participants confirm that the tripartite model accurately outlines the three components of what

proactive experiences are and provides evidence of what those tendencies look like in a challenging workplace environment.

Proactive personality was also shown to be strongly girded by Bandura's (1999, 2001) agentic perspective of the social cognitive theory. What was most relayed as a proactive experience in the current study was that the responsibility for recognition, action, and continued development was taken on by proactive individuals without direction from outside forces. The individuals and managers who shared experiences of proactive personalities also contrasted that experience by describing employees with less proactivity, which confirms the definition of proactivity as self-directed, anticipatory actions meant to cause environmental change (see De Vos et al., 2009; Grant et al., 2009; Parker & Collins, 2010; Thomas et al., 2010).

The first two themes that emerged from the shared experiences of how proactive employees perceived that there was an opportunity for change when it came to the skills that would be necessary in their job are supported by the theoretical foundation of agency caused by a triadic reciprocity among the employee, their environment, and contextual factors (see Anwar et al., 2019; Bandura, 2001). Bateman and Crant's (1993) definition of proactive personality as a reliable and continuing tendency to affect environmental change is confirmed in the answers to the interview questions addressing Research Questions 2 and 3 involving the implementation of change and the perseverance through obstacles. The responses shared by participants indicated that proactive individuals were focused on Belwalkar and Tobacyk's (2018) planning and execution in the form of identifying resources, using, and providing effective and difficult communication, asking

for feedback, using identified resources, taking on voluntary stretch assignments, job shadowing, and moving into unofficial leadership roles without being told to.

As outlined in Chapter 2 and reiterated in Chapter 4, the underlying theory of human capital, which provides foundational support for the skills gap addressed in this study, posits that there is intrinsic value in employees' productive capabilities, skills, and knowledge and that there is a clear need for those capabilities to be acquired and developed by the organization through the appropriate resources and experiences (see Daniela et al., 2019; Krieger et al., 2021). The current participants' answers in responses to questions about the development of proactive personality mirror Krieger et al.'s assertions that successful development occurs when employees have a conducive environment in which to practice their proactivity and the appropriate resources to train and improve those tendencies.

A major purpose for conducting this study was to work toward an understanding of what would enable organizations to retain existing talent with the appropriate soft skills and enable individuals to remain employable in a changing environment (see Singh, 2019). Current participants provided insight into how the development of proactive personality might help to improve those soft skills by creating sustainable shifts in mindsets, behavior, and habits that would carry employees through not only this shift in their skill sets but any future changes that might be necessary.

### **Limitations of the Study**

In Chapter 1, I shared that using a phenomenological design provided a limitation to the trustworthiness of this study in that its findings may be hard to replicate because

the lived experiences that were shared in this study may not be true of other lived experiences (see Burkholder et al., 2016). My data analysis was conducted on a set of lived experiences regarding shifting skill sets in the workplace that were reported by a particular set of employees and hiring managers and may not be true of the lived experiences of participants in other organizations in the face of circumstances that may or may not be similar. It may be challenging to have different individuals relay those distinct experiences in the same way with the same results. To address these issues and to ensure that a subsequent researcher would be able to conduct a similar study, I developed and followed an interview protocol guiding the semi-structured interviews (see Appendix B).

An additional limitation that occurs when conducting qualitative research is the potential biases the researcher may bring to the data collection and data analysis stages. Given that I spent many years in talent management and training existing employees, I witnessed multiple degrees of proactivity and had certain perceptions of my own. To combat this bias, I adhered to the interview protocol and guide to ensure that all participants received the same treatment and were asked the same questions regardless of my perception of their answers. Moreover, I used transcription and data analysis software to help me say as little as possible so that I would be able to understand the lived experience that the interviewees were sharing.

#### Recommendations

This study increased knowledge about the lived experiences, development, and leveraging of proactive personality in the face of shifting skill requirements as the

workforce trends toward an increased need for protean workers. There are three main recommendations for future research based on the data collection and analysis from this study. First, I interviewed employees in the United States while acknowledging the deficiency in the global workforce regarding the skills that organizations need and the capabilities that talent across the globe possess (see McKenney & Handley, 2019; Sevinc et al., 2020). To ensure that global organizations can leverage the proactivity of their existing talent across markets and that individuals are able to remain employable, it would be advisable to conduct this study with employees and managers in global organizations. Interviewing individual contributors and managers who are experiencing shifting skill requirements in other countries might provide insight into what their responses are to the changes and whether the lived experience of proactive personality differs with regard to geography and/or culture. Most participants in the current study work for global organizations, so a recommended focus could include similar employees who are based in countries outside of the United States.

The second recommendation focuses on how managers and organizations can use the information gathered in this study. In the current study, Participant A4 wanted to know how they could identify proactive personality in their existing talent and in their attempts at attracting talent with higher levels of proactivity when they queried "what questions could I ask to determine whether my employees have proactive tendencies?" Although instrumentation exists to measure levels of proactivity, a future recommendation would be to take the understanding of lived experiences from the current study and create interview guides that managers could use to determine how to

best develop and attract proactive talent. Leaning on talent management theory detailed in Chapter 2, this guide could be part of the practice to attract, select, develop, and retain high performers with high potential in critical positions and drive firm performance, growth, and competitive advantage (see Doyle, 2020; Meyers, 2019).

The final recommendation for further study would be to take the major themes from the current study as a guide to create an intervention for the development of proactive personality to ensure that human capital is being effectively used by improving personnel (see Nikadimovs & Ivanchenko, 2020). Leveraging the major themes of recognizing changes in the perception stage of proactive proactivity, understanding the components of the planning and execution phases of the implementation stage, and focusing on emotional intelligence in the perseverance stage of proactive personality would provide a guide to developing proactive personality. This development could serve as a means of providing existing talent with the appropriate resources and conducive environment to face shifting skill requirements.

## **Implications**

The current study, which focused on how proactive personality presents, how proactive personality can be developed, and the potential for proactive personality to mitigate the soft skills gap, carries several implications for positive social change at the societal, organizational, and individual levels. The literature, current labor statistics, and shared experiences by participants in this study showed that the skills gap is impacting organizations around the world, the communities they operate in and serve, and the employees who make up their workforce and talent pools (see Adecco, 2020; BLS, 2021;

Singh Dubey et al., 2021; WEF, 2020). Guitert et al.'s (2020) assertation that the skills gap must be bridged for economies, workplaces, and societies to become more inclusive and remain viable is confirmed by the experiences of hiring managers and individual contributors across U.S. workforces who experienced the impact of their skills deteriorating or changing.

Aside from the profitability that increasing soft skills has been shown to produce, the findings from the lived experiences of proactive personality in the face of shifting skill requirements put forward in the current study confirm that existing talent can be developed by organizational leaders to provide positive social change that would empower individuals to become and remain relevant and employable throughout their careers (see Arcelay et al., 2021; Bhagat, 2020; Brown et al., 2019). The effects of bridging the skills gap with the recommendations found in the current study could decrease unemployment, decrease poverty, decrease inequality of income, increase individual and societal dignity, and decrease undesirable effects of unemployment by keeping people gainfully employed and keeping organizations competitive and profitable (see Alamu, 2016; Daniela et al., 2019).

The examination of the skills gap in the current workforce and how proactivity could be developed to mitigate it was supported by the theories of human capital, skills obsolescence, social cognizance, and agency, as well as career construction theory and talent management. The main assertion of HCT is that the capabilities and skills an individual brings to an organization is the main driver of that organization's creativity, innovation, and profitability (Alamu, 2016; Daniela et al., 2019; Wingreen & Blanton,

2018). These drivers are put at risk when coupled with the lived experiences of the participants in this study confirming the increasing obsolescence of skills in American workplaces as laid out by Singh (2019). The understanding of development which is the focus of talent management, and the agentic perspective of social cognitive theory, particularly in the career construction theories, could work in tandem to nurture and grow the proactive, protean workforce required by IR 4.0 (AlKhemeiri et al., 2021; Fuller & Marler, 2009; Nikadimovs & Ivanchenko, 2020; Peng et al., 2021).

To enhance the knowledge those theories provided, the methodological choice to utilize a qualitative phenomenological interpretivist and descriptive design has allowed for the experiences shared by the interview participants to be highlighted and analyzed (Dunn & Moore, 2020). The garnering of these lived and real-life experiences has provided insight into how proactive changes were perceived, implemented, and how obstacles were overcome to mitigate the need to externally search for talent that does not exist in the limited workforce.

Because industrial and organizational psychology focuses on behaviors in the workplace and how they can be understood to solve organizational, group, and individual challenges, the research in this study has contributed toward providing an improvement on work life and structures by cataloging behaviors and instances that have led to successful upskilling and reskilling proactively (APA, 2022). The empirical implications from the interview responses provide a confirmation that the theories underpinning both the skills gap and the phenomenon of proactive personality have merit in the day-to-day examples employees and managers exhibit in the face of shifting skill requirements.

Whether it is the lived experience of an employee recognizing the implications of being put on a new project that is beyond their current scope, the proactive decision to ask for feedback and interpret changes in expectations, or the leveraging of personal strengths and weaknesses to become effective enough to push through challenges, the behaviors shared impacted the organization, the employees' teams, and themselves favorably.

The participants in this research study comprise a representation of the American workforce who are meeting shifting skill requirements in age, geography, roles, and tenure. The themes found in their shared experiences provide a potential roadmap for identifying proactive personality tendencies and behaviors, the development to maximize those tendencies, a means of sustaining that development and a comparison to avoid non-proactive practices within their existing workforce. Organizations can utilize the main themes that the participants relayed around the three main components of the tripartite model to provide a conducive environment and effective resources for their existing employees' sustainable mindset and behavior shifts that will enable them to increase their ability to recognize organizational and shifting manager expectations, to seek out and utilize resources by relying on effective communication and taking proactive action to implement solutions even in the face of obstacles that may stand in their way.

#### Conclusion

The research in this study was conducted to address the problem of how existing employees' proactive personality can be developed to identify opportunities for changing their skill sets, to take actions necessary to implement those changes, and to persevere through obstacles which could be leveraged as a mitigation to the soft skills gap

impacting the current workforce. The skills required for workers to remain employable and for organizations to remain competitive are changing due to the consequences of IR 4.0's digital and technological advances which require less rote and physical prowess and place a higher premium on the human soft skills that differentiate them from artificial intelligence and algorithms (Arcelay et al., 2021; Azmat et al., 2020; Doyle, 2020; Park & Kim, 2020; Shivaramu et al., 2019).

By studying proactive personality, an understanding was gained of what those soft skills can look like in the face of existing employees' requirements shifting with an aim to identify successful behaviors versus those that have not been successful, to leverage the development of those positive behaviors in an effort perceive and implement change and persevere in a sustainably self-directed and self-sufficient habitual manner rather than relying on managers or supervisors to direct necessary and imminent change. Based on the research in the literature and workforce statistics and confirmation from the experiences shared by managers and individual contributors facing a need to reskill or upskill themselves or their teams, remaining agile, employable, and relevant will be the key to both individual and organizational success as the world of work continues to change and evolve (Cotet et al., 2017; Maisiri et al., 2019).

The participants in this study have relayed that the most common characteristic of successfully handling shifting skill requirements was to demonstrate Bateman and Crant's (1993) definition of proactivity and the heart of being human: intentionally overcoming, changing, and creating new circumstances (Bandura, 2001; Prabhu, 2018; Shaw, 2005). This is not a new philosophy but one that has been continuing to grow in

importance as the world continues to move away from the manufacturing and production economy of the past into an increasing reliance on knowledge and human abilities (Grant et al., 2009).

As this knowledge work moves away from the rote and predictable tasks of the previous iterations of industrial revolutions, the distinctly human abilities relayed by the participants of this study will be relied upon to perceive opportunities that are not implicitly laid out or dictated, to utilize emotional intelligence with others and analytical skills such as asking for and processing feedback, and adjusting behaviors that are challenged to influence others and implement necessary changes. As George Bernard Shaw (2005) relates, "People are always blaming their circumstances for what they are...The people who get on in this world are the people who get up and look for the circumstances they want, and if they can't find them, make them" (p. 64). This portrayal of proactive personality is the soft skill required to keep individuals employed, organizations profitable, and societies prosperous.

### References

- Adecco. (2020). *The skill gap is real* [White paper]. Adecco USA Staffing.

  <a href="https://www.adeccousa.com/employers/resources/navigating-the-job-related-skills-gap/3">https://www.adeccousa.com/employers/resources/navigating-the-job-related-skills-gap/3</a>
- Aftab, S., & Waheed, A. (2021). Proactive employee behaviors and organizational development: The role of self-efficacy as a moderator. *Research Journal of Social Sciences and Economics Review*, 2(1), 232–243<a href="https://ojs.rjsser.org.pk/index.php/rjsser/article/download/245/133">https://ojs.rjsser.org.pk/index.php/rjsser/article/download/245/133</a>
- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. (2013). Competencies for the contemporary career: Development and preliminary validation of the career competencies questionnaire. *Journal of Career Development*, 40(3), 245–267. <a href="https://journals.sagepub.com/doi/abs/10.1177/0894845312467501">https://journals.sagepub.com/doi/abs/10.1177/0894845312467501</a>
- Alamu, A. P. (2016). Human capital development strategies for the tourism, hospitality, and leisure industry [Doctoral Dissertation].
- AlKhemeiri, A. K., Khalid, K., & Musa, N. (2021). The role of career competencies and proactive personality in early-career employee career adaptability. *European Journal of Training and Development*, 45 (4/5), 285–300.

  <a href="https://doi.org/10.1108/EJTD-05-2020-0081">https://doi.org/10.1108/EJTD-05-2020-0081</a>
- American Psychological Association. (2022). *Industrial and organizational psychology*. https://www.apa.org/ed/graduate/specialize/industrial
- Anwar, R., Rehman, M., Wang, K. S., Hashmani, M. A., & Shamim, A. (2019).

  Investigation of knowledge sharing behavior in global software development

- organizations using social cognitive theory. *IEEE Access*, 7, 71286–71298. https://doi.org/10.1109/ACCESS.2019.2912657
- Apergis, E., & Apergis, N. (2020). Long-term unemployment: A question of skill obsolescence (updating existing skills) or technological shift (acquiring new skills)? *Journal of Economic Studies*, 47(4), 713–727.

  <a href="https://doi.org/10.1108/JES-12-2018-0424">https://doi.org/10.1108/JES-12-2018-0424</a></a>
- Arcelay, I., Goti, A., Oyarbide-Zubillaga, A., Akyazi, T., Alberdi, E., & Garcia-Bringas, P. (2021). Definition of the future skills needs of job profiles in the renewable energy sector. *Energies*, *14*(2609), 2609. <a href="https://doi.org/10.3390/en14092609">https://doi.org/10.3390/en14092609</a>
- Azmat, F., Ahmed, B., Colombo, W., & Harrison, R. (2020). Closing the skills gap in the era of industrial digitalisation. 2020 IEEE Conference on Industrial Cyberphysical Systems (ICPS) 1, 365–370.

  https://doi.org/10.1109/ICPS48405.2020.9274788
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389–411.

2/publication/263851330\_Burnout\_and\_Work\_Engagement\_The\_JD-R\_Approach/links/0046353c18cb881c27000000/Burnout-and-Work-

https://www.researchgate.net/profile/Ana-Sanz-Vergel-

Engagement-The-JD-R-Approach.pdf

Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & O. John (Eds.), *Handbook of personality* (2nd ed., pp. 154–196). Guilford Publications.

- http://admin.umt.edu.pk/Media/Site/STD1/FileManager/OsamaArticle/26august2 015/Bandura1999HP.pdf
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1–26.

https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.52.1.1

- Barnes, S., Rutter, R. N., La Paz, A. I., & Scornavacca, E. (2021). Empirical identification of skills gaps between chief information officer supply and demand:

  A resource-based view using machine learning. *Industrial Management & Data Systems*, 121(8), 1749–1766. <a href="https://doi.org/10.1108/IMDS-01-2021-0015">https://doi.org/10.1108/IMDS-01-2021-0015</a>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, *14*(2), 103–118. <a href="https://doi.org/10.1002/job.4030140202">https://doi.org/10.1002/job.4030140202</a>
- Belwalkar, B. B., & Tobacyk, J. J. (2018). Toward a tripartite model and measurement of proactive personality. *Journal of Personality Assessment*, 100(5), 529–538. https://doi.org/10.1080/00223891.2018.1480488
- Belschak, F. D., Den Hartog, D. N., & Fay, D. (2010). Exploring positive, negative and context-dependent aspects of proactive behaviours at work. *Journal of Occupational and Organizational Psychology*, 83(2), 267–273.

  <a href="https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/096317910X501143">https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/096317910X501143</a>
- Bhagat, R. & Jain, A. (2020). Employment in future: Can "skill development" help bridge the gap of (future) jobs? *NCRD's Business Review: E-Journal*, 5(1), 1–7. <a href="http://ncrdsims.edu.in/site/views/pdfs/Business-">http://ncrdsims.edu.in/site/views/pdfs/Business-</a>

- Review2020/6.%20Can%20Skill%20Development%20help%20Bridge%20the%2

  0gap%20of%20(Future)%20Jobs-Employment%20in%20Future
  Rupali%20Bhagat,%20Dr.%20Arjita%20Jain.pdf
- Bhatnagar, N. (2021). Employability and skill gap among MBA graduates in India: a literature review. Industrial & Commercial Training, 53(1), 92–104. <a href="https://doi.org/10.1108/ICT-10-2019-0098">https://doi.org/10.1108/ICT-10-2019-0098</a></a>
- Bi, Y., Zhang, J., Nie, Q., & Wang, M. (2021). Do adaptable employees always display high performance? Dual roles of proactive behavior and self-construal. *Social Behavior and Personality: An International Journal*, 49(8), 1e. <a href="https://doi.org/10.2224/sbp.10464">https://doi.org/10.2224/sbp.10464</a>
- Bindl, U. K. (2019). Work-related proactivity through the lens of narrative: Investigating emotional journeys in the process of making things happen. *Human Relations*, 72(4), 615–645. https://doi.org/10.1177/0018726718778086
- Bjørkelo, B., Einarsen, S., & Matthiesen, S. B. (2010). Predicting proactive behaviour at work: Exploring the role of personality as an antecedent of whistleblowing behaviour. *Journal of Occupational and Organizational Psychology*, 83(2), 371–394. doi:10.1348/096317910x486385
- Brown, C. F. (2017). Strategies used by manufacturing hiring managers to recruit skilled workers [Doctoral dissertation].
- Brown, S., Gandhi, D., Herring, L., & Puri, A. (2019). The analytics academy: Bridging the gap between human and artificial intelligence. *McKinsey Quarterly*. 1-9. <a href="https://www.mckinsey.com/business-functions/quantumblack/our-insights/the-">https://www.mckinsey.com/business-functions/quantumblack/our-insights/the-</a>

# analytics-academy-bridging-the-gap-between-human-and-artificial-intelligence

- Bureau of Labor Statistics (BLS). (2021). *Job openings and labor turnover survey*.

  Economic News Release. Retrieved January 22, 2022 from

  <a href="https://www.bls.gov/news.release/jolts.htm">https://www.bls.gov/news.release/jolts.htm</a>
- Burkholder, G. J., Cox, K. A., & Crawford, L. M. (Eds.). (2016). *The scholar practitioner's guide to research design*. Baltimore, MD: Laureate Publishing.
- Burns. (2020). Aligning workforce training center curricula with local business needs. [Doctoral dissertation].
- Cai, Z., Guan, Y., Li, H., Shi, W., Guo, K., Liu, Y., & Hua, H. (2015). Self-esteem and proactive personality as predictors of future work self and career adaptability: An examination of mediating and moderating processes. *Journal of Vocational behavior*, 86, 86-94.

https://www.sciencedirect.com/science/article/pii/S0001879114001237

- Callea, A., Caracuzzo, E., Costanzi, M., & Urbini, F. (2022). Promoting flow at work through proactive personality: A sequential mediation model with evidence from Italian employees. *Sustainability*, *14*(5), 2477. <a href="https://www.mdpi.com/2071-1050/14/5/2477">https://www.mdpi.com/2071-1050/14/5/2477</a>
- Cañibano, C., & Potts, J. (2019). Toward an evolutionary theory of human capital.

  \*\*Journal of Evolutionary Economics, 29(3), 1017–1035.\*\*

  https://doi.org/10.1007/s00191-018-0588-y
- Caniëls, M. C., Semeijn, J. H., & Renders, I. H. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth

- mindset for engagement at work. *Career Development International*.

  <a href="https://www.emerald.com/insight/content/doi/10.1108/CDI-11-2016-0194/full/html">https://www.emerald.com/insight/content/doi/10.1108/CDI-11-2016-0194/full/html</a>
- Caratozzolo, P., Sirkis, G., Piloto, C., & Correa, M. (2020). *Skills obsolescence and education global risks in the fourth industrial revolution*. Paper presented at the 2020 IFEES World Engineering Education Forum Global Engineering Deans Council (WEEF-GEDC). Abstract retrieved from <a href="http://10.1109/weef-gedc49885.2020.9293687">http://10.1109/weef-gedc49885.2020.9293687</a>
- Card, D., & Nelson, C. (2019). How automation and digital disruption are shaping the workforce of the future. *Strategic HR Review*, 18(6), 242–245.

  <a href="https://doi.org/10.1108/SHR-08-2019-0067">https://doi.org/10.1108/SHR-08-2019-0067</a>
- Cenciotti, R., Borgogni, L., Consiglio, C., Fedeli, E., & Alessandri, G. (2020). The work agentic capabilities (WAC) questionnaire: Validation of a new Measure. *Revista de Psicologia Del Trabajo y de Las Organizaciones*, 36(3), 195–204. <a href="https://doi.org/10.5093/jwop2020a19">https://doi.org/10.5093/jwop2020a19</a>
- Chamberlin, M., Newton, D. W., & Lepine, J. A. (2017). A meta-analysis of voice and its promotive and prohibitive forms: Identification of key Associations, distinctions, and future research directions. *Personnel Psychology*, 70(1), 11–71.

  <a href="https://doi.org/10.1111/peps.12185">https://doi.org/10.1111/peps.12185</a></a>
- Chitac, I. M. (2022). The rationale for saturation in qualitative research: When practice informs theory. *Cross-Cultural Management Journal*, *24*(1), 29-35. https://seaopenresearch.eu/Journals/articles/CMJ2022\_II\_3.pdf

- Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology:*A practical guide to research methods, 3, 222-248.

  <a href="https://www.torrossa.com/gs/resourceProxy?an=5018480&publisher=FZ7200#page=233">https://www.torrossa.com/gs/resourceProxy?an=5018480&publisher=FZ7200#page=233</a>
- Coates, K. (2020). The value of soft skills: Preparing the next generation of workforce for future work. [Master's thesis].
- Combs, J. L. (2019). Closing the manufacturing skills gap through innovative recruiting practices. [Doctoral dissertation].
- Connelly, L. (2016). Trustworthiness in qualitative research. *MEDSURG Nursing*, 25(6), 435-436.

  https://www.proquest.com/openview/44ffecf38cc6b67451f32f6f96a40c78/1?pq-

origsite=gscholar&cbl=30764

- Cotet, G. B., Balgiu, B. A., & Zaleschi, V. C. (2017). Assessment procedure for the soft skills requested by Industry 4.0. In MATEC web of conferences (Vol. 121, p. 07005). EDP Sciences. <a href="https://www.matec-conferences.org/articles/matecconf/pdf/2017/35/matecconf">https://www.matec-conferences.org/articles/matecconf/pdf/2017/35/matecconf</a> mse2017 07005.pdf
- Crant, J. M. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology*, 80(4), 532–537. https://doi.org/10.1037/0021-9010.80.4.532
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435–462. https://doi.org/10.1177/014920630002600304
- Creswell, J. W. & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and

- mixed methods approaches. SAGE Publications.
- Cross Walker, T. (2020). Inclusive talent management in the public sector: theory and practice. *Transnational Corporations Review, 12*(2), 140–148. https://doi.org/10.1080/19186444.2020.1741296
- Cukier, W. (2019). Disruptive processes and skills mismatches in the new economy:

  Theorizing social inclusion and innovation as solutions. *Journal of Global*Responsibility, 10(3), 211-225. http://dx.doi.org/10.1108/JGR-11-2018-0079
- Daniela, M. L., Oana, V. F., & Carmen, M. M. (2019). Investigating the causes of the current labor shortage in Romania. *Risk in Contemporary Economy*, 1(1), 44–52. https://doi.org/10.35219/rce206705326
- Dash, D., Farooq, R., Panda, J. S., & Sandhyavani, K. V. (2019). Internet of Things

  (IoT): The new paradigm of HRM and skill development in the fourth industrial revolution (Industry 4.0). *IUP Journal of Information Technology, 15*(4), 7–30.

  <a href="https://www.proquest.com/openview/4251618232f32874c61f01a6dbb3431a/1?pq">https://www.proquest.com/openview/4251618232f32874c61f01a6dbb3431a/1?pq</a>
  -origsite=gscholar&cbl=2029987
- Den Hartog, D. N., & Belschak, F. D. (2012). Work engagement and Machiavellianism in the ethical leadership process. *Journal of Business Ethics*, 107(1), 35-47. https://link.springer.com/content/pdf/10.1007/s10551-012-1296-4.pdf
- De Vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. Journal of occupational and organizational psychology, 82(4), 761-777.
  - https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/096317909X471013

- Dirican, A. H., & Erdil, O. (2020). The influence of ability-based emotional intelligence on discretionary workplace behaviors. *Journal of Human Behavior in the Social Environment*, 30(3), 369-382. https://www.tandfonline.com/doi/abs/10.1080/10911359.2019.1687388
- Doan, T., Kanjanakan, P., Zhu, D., & Kim, P. (2021). Consequences of employee personality in the hospitality context: a systematic review and meta-analysis.

  \*International Journal of Contemporary Hospitality Management, 33(10), 3814—3832. https://doi.org/10.1108/IJCHM-03-2021-0349
- Doyle, S. M. (2020). Addressing the skills gap of geospatial professionals in the fourth industrial revolution [Doctoral dissertation].
- Dunn, A.L., & Moore, L.L. (2020). Significant learning of peer-mentors within a leadership living-learning community: A basic qualitative study. *Journal of Leadership Education*, 19(2), 64-75. <a href="https://journalofleadershiped.org/wp-content/uploads/2020/04/19">https://journalofleadershiped.org/wp-content/uploads/2020/04/19</a> 2 Dunn.pdf
- Duong, M. T. H., Nguyen, D. V., & Nguyen, P. T. (2020). Using fuzzy approach to model skill shortage in Vietnam's labor market in the context of industry 4.0. Engineering, Technology & Applied Science Research, 10(3), 5864-5868. <a href="http://www.etasr.com/index.php/ETASR/article/view/3596">http://www.etasr.com/index.php/ETASR/article/view/3596</a>
- Enders, T., Hediger, V., Hieronimus, S., Kirchherr, J. W., Klier, J., Schubert, J., & Winde, M. (2019). *Future skills: six approaches to close the skill gap*. Paper presented at the World Government Summit. Retrieved from <a href="https://dspace.library.uu.nl/handle/1874/377809">https://dspace.library.uu.nl/handle/1874/377809</a>

- Enworo, O. C. (2023). Application of Guba and Lincoln's parallel criteria to assess trustworthiness of qualitative research on indigenous social protection systems.

  \*\*Qualitative Research Journal, 23(4).\*\*

  https://www.emerald.com/insight/content/doi/10.1108/QRJ-08-2022-0116/full/pdf\*\*
- Fachrunnisa, O., & Hussain, F. K. (2020). Blockchain-based human resource management practices for mitigating skills and competencies gap in workforce.

  \*International Journal of Engineering Business Management\*, 1–11.

  https://doi.org/10.1177/1847979020966400
- Fay, D., & Sonnentag, S. (2012). Within-person fluctuations of proactive behavior: How affect and experienced competence regulate work behavior. *Human Performance*, 25(1), 72–93. https://doi.org/10.1080/08959285.2011.631647
- Fink, A. S. (2000, December). The role of the researcher in the qualitative research process. A potential barrier to archiving qualitative data. *Forum Qualitative Socialforschung/Forum: Qualitative Social Research 1*(3).

  http://www.qualitative-research.net/index.php/fqs/article/view/1021
- Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2015). Research methods in the social sciences (8th ed.). Worth Publishers.
- Frese, M., & Fay, D. (2001). 4. Personal initiative: An active performance concept for work in the 21st century. *Research in organizational behavior*, 23, 133-187. http://evidence-based-entrepreneurship.com/content/publications/065.pdf
- Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal

- initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70(2), 139-161.

  <a href="https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8325.1997.tb00639.x">https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8325.1997.tb00639.x</a>
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational behavior*, 65(1), 14-38. https://www.sciencedirect.com/science/article/pii/S0001879103001611
- Fuller, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75(3), 329–345. <a href="https://doi.org/10.1016/j.jvb.2009.05.008">https://doi.org/10.1016/j.jvb.2009.05.008</a>
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. https://doi.org/10.1016/j.riob.2008.04.002
- Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior:

  Supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, 62(1), 31-55. <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.2008.01128.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.2008.01128.x</a>
- Green, Z. A., Noor, U., & Hashemi, M. N. (2020). Furthering proactivity and career adaptability among university students: Test of intervention. *Journal of Career Assessment*, 28(3), 402–424. https://doi.org/10.1177/1069072719870739
- Greguras, G. J., & Diefendorff, J. M. (2010). Why does proactive personality predict employee life satisfaction and work behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology*, 63(3), 539-

- 560. <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.2010.01180.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.2010.01180.x</a>
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance:

  Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, *50*(2), 327–347.

  <a href="https://doi.org/10.5465/AMJ.2007.24634438">https://doi.org/10.5465/AMJ.2007.24634438</a>
- Guan, Y., Dai, X., Gong, Q., Deng, Y., Hou, Y., Dong, Z., Wang, L., Huang, Z., & Lai, X. (2017). Understanding the trait basis of career adaptability: A two-wave mediation analysis among Chinese university students. *Journal of Vocational Behavior*, 101, 32–42. https://doi.org/10.1016/j.jvb.2017.04.004
- Guitert, M., Romeu, T., & Colas, J. F. (2020). Basic digital competences for unemployed citizens: conceptual framework and training model. *Cogent Education*, 7(1), 1748469. <a href="https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2020.1748469">https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2020.1748469</a>
- Haenggli, M., & Hirschi, A. (2020). Career adaptability and career success in the context of a broader career resources framework. *Journal of Vocational Behavior*, 119. <a href="https://doi.org/10.1016/j.jvb.2020.103414">https://doi.org/10.1016/j.jvb.2020.103414</a>
- Hao, T. M., Chen, Y. W., & Yang, S. (2019). Relationship between proactive personality and employee well-being: Mediating effect of psychological capital. 2019 IEEE International Symposium on Innovation and Entrepreneurship (TEMS-ISIE), 1–4. <a href="https://doi.org/10.1109/TEMS-ISIE46312.2019.9074435">https://doi.org/10.1109/TEMS-ISIE46312.2019.9074435</a>
- Hirschi, A., Lee, B., Porfeli, E. J., & Vondracek, F. W. (2013). Proactive motivation and engagement in career behaviors: Investigating direct, mediated, and moderated effects. *Journal of Vocational Behavior*, 83(1), 31-40.

# https://www.sciencedirect.com/science/article/pii/S0001879113000481

- Horstmeyer, A. (2020). The role of curiosity in workplace automation. *Development and Learning in Organizations: An International Journal*, 34(6), 29–32. <a href="https://doi.org/10.1108/DLO-08-2019-0173">https://doi.org/10.1108/DLO-08-2019-0173</a>
- Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention:

  Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational & Organizational Psychology*, 88(3), 511–532.

  <a href="https://www.researchgate.net/profile/Mcw-Peeters-2/publication/280830379">https://www.researchgate.net/profile/Mcw-Peeters-2/publication/280830379</a> the job crafting intervention/links/55c85ee208aea2d9

  <a href="https://www.researchgate.net/profile/mcw-Peeters-2/publication/280830379">https://www.researchgate.net/profile/mcw-Peeters-2/publication/280830379</a> the job crafting intervention/links/55c85ee208aea2d9
- Hyrynsalmi, S., Rantanen, M. M., & Hyrynsalmi, S. (2021). The skill gap and polarization of the software labour force: Early signs of the War of Talents between software professionals and how it threatens wellbeing. *Finnish Journal of EHealth and EWelfare*, 13(2), 113–123. <a href="https://doi.org/10.23996/fjhw.82689">https://doi.org/10.23996/fjhw.82689</a>
- Jiang, Z. (2017). Proactive personality and career adaptability: The role of thriving at work. *Journal of Vocational Behavior*, 98, 85-97. https://doi.org/10.1016/j.jvb.2016.10.003
- Johnson, M. E. (2015). An analysis of proactive personality in US Air Force Academy cadets: A mixed methods study. (Doctoral dissertation). Retrieved from <a href="https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1">https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1</a>
  <a href="https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1">https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1</a>
  <a href="https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1">https://mountainscholar.org/bitstream/handle/10976/308/Johnson\_uccs\_0892D\_1</a>
- Jones, M. (2020). Stress testing the skills gap. Computer Fraud & Security, 2020(5), 9–

- 11. https://doi.org/10.1016/S1361-3723(20)30051-8
- Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest—
  context (EPPiC) framework to reflect on two qualitative research designs and
  questions: A reflective process. *The Qualitative Report, 24*(10), 2524-2535.

  <a href="https://www.researchgate.net/profile/Musarrat-">https://www.researchgate.net/profile/Musarrat-</a>
  <a href="https://www.researchgate.net/profile/Musarrat-">Shaheen/publication/345131737</a> <a href="mailto:Sampling\_in\_Qualitative\_Research/links/60f13b">Sampling\_in\_Qualitative\_Research/links/60f13b</a>
  <a href="mailto:7e9541032c6d42072d/Sampling-in-Qualitative-Research.pdf">7e9541032c6d42072d/Sampling-in-Qualitative-Research.pdf</a>
- Kamaruzaman, F. M., Hamid, R., Mutalib, A. A., & Rasul, M. S. (2019). Comparison of Engineering Skills with IR 4.0 Skills. *International Journal of Online & Biomedical Engineering*, 15(10), 15–28. https://doi.org/10.3991/ijoe.v15i10.10879
- Kim, T. Y., Hon, A. H., & Crant, J. M. (2009). Proactive personality, employee creativity, and newcomer outcomes: A longitudinal study. *Journal of Business and Psychology*, 24(1), 93-103. <a href="https://link.springer.com/article/10.1007/s10869-009-9094-4">https://link.springer.com/article/10.1007/s10869-009-9094-4</a>
- Kim, J., & Park, C. (2020). Education, skill training, and lifelong learning in the era of technological revolution: a review. *Asian-Pacific Economic Literature*, 34(2), 3–19. https://onlinelibrary.wiley.com/doi/abs/10.1111/apel.12299
- Kranov, A. A., & Khalaf, K. (2017). Work in progress: Investigating the employment gap: What employers want from engineering graduates. In 2017 IEEE Global Engineering Education Conference (EDUCON) (pp. 1097-1100). IEEE.

  <a href="https://ieeexplore.ieee.org/abstract/document/7942986/">https://ieeexplore.ieee.org/abstract/document/7942986/</a>

- Krieger, A., Stuetzer, M., Obschonka, M., & Salmela-Aro, K. (2021). The growth of entrepreneurial human capital: Origins and development of skill variety. *Small Business Economics*, 1-20. https://doi.org/10.1007/s11187-021-00555-9
- Kuo, C., Ye, Y., Chen, M., & Chen, L. H. (2018). Psychological flexibility at work and employees' proactive work behaviour: Cross-level moderating role of leader need for structure. *Applied Psychology: An International Review*, 67(3), 454–472. <a href="https://doi.org/10.1111/apps.12111">https://doi.org/10.1111/apps.12111</a>
- Kusuma, H. S., Lestari, E. D., & Marlim, W. F. (2021). Entrepreneurial intentions: The effect of proactive personality in perspective of planned behavior theory as an integrated approach in the Indonesian context. *Conference Series*, *3*(2), 1–17. https://doi.org/10.34306/conferenceseries.v3i2.572
- Lebel, R. D. (2017). Moving beyond fight and flight: A contingent model of how the emotional regulation of anger and fear sparks proactivity. *Academy of Management Review*, 42(2), 190-206.

  <a href="https://journals.aom.org/doi/abs/10.5465/amr.2014.0368">https://journals.aom.org/doi/abs/10.5465/amr.2014.0368</a>
- Lebel, R. D., Kamran-Morley, D., & Parker, S. K. (2021). Igniting initiative: Clarifying the conceptualization of the energized-to pathway of proactivity. *Emotion and Proactivity at Work: Prospects and Dialogue* (pp. 55-77). Bristol, England: Bristol University Press. <a href="https://doi.org/10.2307/j.ctv1ks0hcg.9">https://doi.org/10.2307/j.ctv1ks0hcg.9</a>
- Lee Hecht Harrison. (LHH). 2022. *How to prepare your organization if a talent shortage*and recession collide. <a href="https://www.lhh.com/us/en/insights/how-to-prepare-your-organization-if-a-talent-shortage-and-recession-collide/">https://www.lhh.com/us/en/insights/how-to-prepare-your-organization-if-a-talent-shortage-and-recession-collide/</a>

- Li, G., Yuan, C., Kamarthi, S., Moghaddam, M., & Jin, X. (2021). Data science skills and domain knowledge requirements in the manufacturing industry: A gap analysis.

  \*\*Journal of Manufacturing Systems, 60, 692–706.\*\*

  https://doi.org/10.1016/j.jmsy.2021.07.007
- Li, N., Liang, J., & Crant, J. M. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective.

  \*\*Journal of Applied Psychology, 95(2), 395–404.\*\*

  https://doi.apa.org/doiLanding?doi=10.1037%2Fa0018079
- Li, W. D., Fay, D., Frese, M., Harms, P. D., & Gao, X. Y. (2014). Reciprocal relationship between proactive personality and work characteristics: A latent change score approach. *Journal of Applied Psychology*, 99(5), 948–965.

  <a href="https://doi.org/10.1037/a0036169">https://doi.org/10.1037/a0036169</a>
- Lynch, P., & Aqlan, F. (2016, October). Filling the skills gap in US manufacturing:

  Promoting internships and co-op experiences and integrating industrial engineering courses to improve student design and manufacturing knowledge. In 2016 IEEE Frontiers in Education Conference (FIE) (pp. 1-8). IEEE.

  <a href="https://ieeexplore.ieee.org/abstract/document/7757590/">https://ieeexplore.ieee.org/abstract/document/7757590/</a>
- Lyons, A. C., Zucchetti, A., Kass-Hanna, J., & Cobo, C. (2019). Bridging the gap between digital skills and employability for vulnerable populations. Paper presented at the G20 Summit by T20 Japan, Task

  Force 7: The Future of Work and Education in the Digital Age. Retrieved from <a href="https://t20japan.org/policybrief-bridging-gap-between-digital-skills-">https://t20japan.org/policybrief-bridging-gap-between-digital-skills-</a>

## employability/

- MacLure, M. (2017). Qualitative methodology and the new materialisms. *Qualitative Inquiry in Neoliberal Times, 12*, 48-58. <a href="https://doi.org/10.4324/9781315397788-4">https://doi.org/10.4324/9781315397788-4</a>
- Maisiri W., Darwish H., Van Dyk L. (2019). An investigation of industry 4.0 skills requirements. *South African Journal of Industrial Engineering*. *30*(3), 90-105. doi:10.7166/30-3-2230
- Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of applied psychology*, 91(4), 927. https://psycnet.apa.org/record/2006-08435-014
- Malik, G., & Venkatraman, A. (2017). "The great divide": skill gap between the employer's expectations and skills possessed by employees. *Industrial and Commercial Training*, 49(4), 175–182. doi:10.1108/ict-11-2016-0071
- Manjunath, S., Shravan, M. B., & Dechakka, B. B. (2019). A study on assessment of skill gap to enhance workforce performance. *International Journal of Management Technology and Engineering*, 9(4), 18-34.
  - https://www.researchgate.net/publication/332696978 A Study on Assessment o

    f Skill Gap to Enhance Workforce Performance/citation/download
- Maurer, T. J., & Chapman, E. F. (2018). Relationship of proactive personality with life satisfaction during late career and early retirement. *Journal of Career Development*, 45(4), 345–360. https://doi.org/10.1177/0894845317697381
- McGuinness, S., Pouliakas, K., & Redmond, P. (2018). Skills mismatch: Concepts, measurement and policy approaches. *Journal of Economic Surveys*, 32(4), 985–

## 1015. https://doi.org/10.1111/joes.12254

- McKenney, M. J., & Handley, H. A. (2019). *Identifying and quantifying personnel skill gaps*. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 63, No. 1, pp. 332-336). Los Angeles, CA: SAGE Publications.
- Meyers, M. C. (2020). The neglected role of talent proactivity: Integrating proactive behavior into talent-management theorizing. *Human Resource Management Review*, 30(2). https://doi.org/10.1016/j.hrmr.2019.100703
- Moldovan, L. (2019). State-of-the-art Analysis on the Knowledge and Skills Gaps on the Topic of Industry 4.0 and the Requirements for Work-based Learning. *Procedia Manufacturing*, 32, 294–301. https://doi.org/10.1016/j.promfg.2019.02.217
- Morris, D., Vanino, E., & Corradini, C. (2020). Effect of regional skill gaps and skill shortages on firm productivity. *Environment and Planning A: Economy and Space*, 52(5), 933-952. <a href="https://doi.org/10.1177/0308518x19889634">https://doi.org/10.1177/0308518x19889634</a>
- Mubarak, N., Khan, J., Yasmin, R., & Osmadi, A. (2021). The impact of a proactive personality on innovative work behavior: the role of work engagement and transformational leadership. *Leadership & Organization Development Journal*, 42(7), 989–1003. <a href="https://doi.org/10.1108/LODJ-11-2020-0518">https://doi.org/10.1108/LODJ-11-2020-0518</a>
- Ngo-Ye, T., & Jae Choi. (2021). Qualification requirements for entry-level IT positions and IS curriculum: A literature review. *Issues in Information Systems*, 22(3), 39–51. <a href="https://iacis.org/iis/2021/3">https://iacis.org/iis/2021/3</a> iis 2021 44-57.pdf
- Nikadimovs, O., & Ivanchenko, T. (2020). Soft skills gap and improving business competitiveness by managing talent in the hospitality industry. *Economics* &

- Education, 5(1), 36-48. <a href="https://doi.org/10.30525/2500-946X/2020-1-5">https://doi.org/10.30525/2500-946X/2020-1-5</a>.
- Noble, H., & Heale, R. (2019). Triangulation in research, with examples. *School of Nursing and Midwifery, Queens University Belfast, Belfast, UK*. 22(3). <a href="https://ebn.bmj.com/content/ebnurs/22/3/67.full.pdf">https://ebn.bmj.com/content/ebnurs/22/3/67.full.pdf</a>
- Novakova, L. (2020). The impact of technology development on the future of the labour market in the Slovak Republic. *Technology in Society, 62*, N.PAG. https://doi.org/10.1016/j.techsoc.2020.101256
- Ohly, S., Sonnentag, S., & Pluntke, F. (2006). Routinization, work characteristics and their relationships with creative and proactive behaviors. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 27*(3), 257-279.

  <a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/Job.376">https://onlinelibrary.wiley.com/doi/abs/10.1002/Job.376</a>
- Olson, M. (2015). A Multilateral Approach to Bridging the Global Skills Gap. *Cornell HR Review*, 1–5. https://ecommons.cornell.edu/handle/1813/72990
- Ontrup, G., & Kluge, A. (2022). My team makes me think I can (not) do it: Team processes influence proactive motivational profiles over time. *Team Performance Management: An International Journal* (ahead-of-print). https://doi.org/10.1108/TPM-05-2021-0036
- Ostmeier, E., & Strobel, M. (2022). Building skills in the context of digital transformation: How industry digital maturity drives proactive skill development.

  \*Journal of Business Research, 139, 718-730.\*

  https://doi.org/10.1016/j.jbusres.2021.09.020

- Park, C.-Y., & Kim, J. (2020). Education, skill training, and lifelong learning in the era of technological revolution. SSRN Electronic Journal. doi:10.2139/ssrn.3590922
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, *36*(4), 827–856. https://doi.org/10.1177/0149206310363732
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, *36*(3), 633–662. https://doi.org/10.1177/0149206308321554
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of applied psychology*, 91(3), 636. https://psycnet.apa.org/record/2006-07101-010
- Patton, M. Q. (2015). *Qualitative research and methods: Integrating theory and practice*. SAGE Publications.
- Peng P., Yu S., & Guangtao Y. (2021). Cultivating proactive career behavior: The role of career adaptability and job embeddedness. *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.603890
- Peral, S. L., & Geldenhuys, M. (2020). The indirect relationship between personality and performance through job crafting behaviour. *SAJIP: South African Journal of Industrial Psychology*, 46, 1–12. https://doi.org/10.4102/sajip.v46i0.1715
- Pervaiz, S., Li, G., & He, Q. (2021). The mechanism of goal-setting participation's impact on employees' proactive behavior, moderated mediation role of power distance. *PLoS ONE*, *16*(12), 1–20. https://doi.org/10.1371/journal.pone.0260625

- Plomp, J., Tims, M., Akkermans, J., Khapova, S. N., Jansen, P. G. W., & Bakker, A. B. (2016). Career competencies and job crafting: How proactive employees influence their well-being. *Career Development International*, 21(6), 587–602. https://doi.org/10.1108/CDI-08-2016-0145
- Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work: Toward its measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior*, 33(2), 250-275. https://doi.org/10.1002/job.756
- Prabhu, V. P. (2016). Proactive Personality and Organizational Change: Factors

  Affecting Retention. *Journal of Organizational Psychology*, 16(1), 11–23.

  http://www.na-businesspress.com/JOP/PrabhuVP\_Web16\_1\_.pdf
- Prabhu, V. P. (2018). Organizational change and proactive personality: Effect on job performance and job satisfaction. *The Journal of Applied Business and Economics*, 20(4), 178–202. <a href="https://doi.org/10.33423/jabe.v20i4.356">https://doi.org/10.33423/jabe.v20i4.356</a>
- Pravdiuk, N., Pokynchereda, V., & Pravdiuk, M. (2019). The Human capital of an enterprise: Theory and assessment methodology. *Baltic Journal of Economic Studies*, *5*(2), 176–183. https://doi.org/10.30525/2256-0742/2019-5-2-176-183
- Presenza, A., Abbate, T., Meleddu, M., & Sheehan, L. (2020). Start-up entrepreneurs' personality traits. An exploratory analysis of the Italian tourism industry. *Current Issues in Tourism*, 23(17), 2146–2164.

  <a href="https://doi.org/10.1080/13683500.2019.1677572">https://doi.org/10.1080/13683500.2019.1677572</a>
- Rank, J., Carsten, J. M., Unger, J. M., & Spector, P. E. (2007). Proactive customer service performance: Relationships with individual, task, and leadership variables.

- Human Performance, 20(4), 363-390. <a href="https://kops.uni-konstanz.de/bitstream/handle/123456789/11112/Ranketal\_HP2007.pdf?isAllowed">https://kops.uni-konstanz.de/bitstream/handle/123456789/11112/Ranketal\_HP2007.pdf?isAllowed</a>
  =y&sequence=1
- Restrepo, P. (2015). *Skill mismatch and structural unemployment*. Massachusetts Institute of Technology Job Market Paper, 1-94.

  https://pascual.scripts.mit.edu/research/01/PR\_jmp.pdf
- Rodrigues, N., & Rebelo, T. (2019). Predicting innovative performance through proactive personality: Examining its criterion validity and incremental validity over the five-factor model. *International Journal of Selection & Assessment*, 27(1), 1–8. <a href="https://doi.org/10.1111/ijsa.12232">https://doi.org/10.1111/ijsa.12232</a>
- Rohma, F. F., & Zakiyah, R. D. (2022). The moderatinge of proactive personality on role ambiguity and user satisfaction: An experimental under technostress condition.

  \*Riset Akuntansi dan Keuangan Indonesia, 6(3), 280-287.

  https://journals.ums.ac.id/index.php/reaksi/article/view/17028
- Rudolph, C. W., Zacher, H., & Hirschi, A. (2019). Empirical developments in career construction theory. *Journal of Vocational Behavior*, 111, 1–6.

  <a href="https://doi.org/10.1016/j.jvb.2018.12.003">https://doi.org/10.1016/j.jvb.2018.12.003</a>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). CA: Sage Publications.
- Santandreu Calonge, D., Aman Shah, M., Riggs, K., & Connor, M. (2019). MOOCs and upskilling in Australia: A qualitative literature study. *Cogent Education*, *6*(1). <a href="https://doi.org/10.1080/2331186X.2019.1687392">https://doi.org/10.1080/2331186X.2019.1687392</a>

- Sari Najmudin, A. P. (2021) Perceptions of proactive personality and innovative work behavior during the Covid-19 pandemic. *South East Asia Journal of Contemporary Business*, 24(5). <a href="https://seajbel.com/wp-content/uploads/2021/10/SEAJBEL24.ISU-5-869.pdf">https://seajbel.com/wp-content/uploads/2021/10/SEAJBEL24.ISU-5-869.pdf</a>
- Sears, G. J., Shen, W., & Zhang, H. (2018). When and why are proactive employees more creative? Investigations of relational and motivational mechanisms and contextual contingencies in the east and west. *Journal of Applied Social Psychology*, 48(11), 593–607. https://doi.org/10.1111/jasp.12550
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, *54*(4), 845–874. https://doi.org/10.1111/j.1744-6570.2001.tb00234.x
- Sevinc, D., Green, A., Bryson, J. R., Collinson, S., Riley, R., & Adderley, S. (2020).

  Ensuring skills are available in the right locations: Are we there yet? A regional analysis of qualification gaps. *Regional Studies*, *54*(8), 1149–1159.

  <a href="https://doi.org/10.1080/00343404.2020.1740190">https://doi.org/10.1080/00343404.2020.1740190</a>
- Shaw, Bernard. (2005). *Mrs. Warren's Profession*. Retrieved from

  <a href="https://books.google.com/books?hl=en&lr=&id=V49hzq7mfuoC&oi=fnd&pg=P">https://books.google.com/books?hl=en&lr=&id=V49hzq7mfuoC&oi=fnd&pg=P</a>

  <a href="https://books.google.com/books?hl=en&lr=&id=V49hzq7mfuoC&oi=fnd&pg=P">https://books.google.com/books.google.
- Shivaramu, M. & Murthy, M. & Dechakka, B. (2019). A study on assessment of skill gap to enhance workforce performance. *International Journal of Management,*Technology and Engineering, 9(4), 3561-3576.

- https://www.researchgate.net/publication/332696978 A Study on Assessment of Skill Gap to Enhance Workforce Performance/citation/download
- Siebert, J., & Kunz, R. (2016). Developing and validating the multidimensional proactive decision-making scale. *European Journal of Operational Research*, 249(3), 864–877. https://doi.org/10.1016/j.ejor.2015.06.066
- Singh, R. (2019). Skill gap assessment is a key to survive. *International Journal of Advance Research, Ideas and Innovations in Technology*, 5(3).

  <a href="https://www.academia.edu/download/59972744/V5I3-134720190710-5500-1wipyod.pdf">https://www.academia.edu/download/59972744/V5I3-134720190710-5500-1wipyod.pdf</a>
- Singh Dubey, R., Paul, J., & Tewari, V. (2021). The soft skills gap: a bottleneck in the talent supply in emerging economies. *The International Journal of Human Resource Management*, 32(19), 1-32.

  https://doi.org/10.1080/09585192.2020.1871399
- Society for Human Resource Management. (SHRM). (2019). Global skills shortage:

  Bridging the talent gap with education, training and sourcing [White Paper].

  <a href="https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/skills-gap-2019.aspx">https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/skills-gap-2019.aspx</a>
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88(3), 518. https://doi.apa.org/record/2003-00755-014?doi=1
- Spitzmuller, M., Sin, H.-P., Howe, M., & Fatimah, S. (2015). Investigating the uniqueness and usefulness of proactive personality in organizational research: A

- meta-analytic review. *Human Performance*, 28(4), 351–379.

  <a href="https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=6450&context=lkcsb\_r">https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=6450&context=lkcsb\_r</a>
  esearch
- Stephany, F. (2021). One size does not fit all: Constructing complementary digital reskilling strategies using online labour market data. *Big Data & Society*, 8. https://doi.org/10.1177/20539517211003120
- Sun, Y., Zhuang, F., Zhu, H., Zhang, Q., He, Q., & Xiong, H. (2021). Market-oriented job skill valuation with cooperative composition neural network. *Nature communications*, *12*(1), 1-12. https://doi.org/10.1038/s41467-021-22215-y
- Sung, S. Y., Antefelt, A., & Choi, J. N. (2017). Dual effects of job complexity on proactive and responsive creativity: Moderating role of employee ambiguity tolerance. *Group & Organization Management*, 42(3), 388-418. https://journals.sagepub.com/doi/abs/10.1177/1059601115619081
- Sylva, H., Mol, S. T., Den Hartog, D. N., & Dorenbosch, L. (2019). Person-job fit and proactive career behaviour: A dynamic approach. *European Journal of Work and Organizational Psychology*, 28(5), 631-645.
  <a href="https://doi.org/10.1080/1359432x.2019.1580309">https://doi.org/10.1080/1359432x.2019.1580309</a>
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs.

  \*\*Journal of occupational and organizational psychology, 83(2), 275-300.\*\*

  https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/096317910X502359
- Thompson, J. A. (2005). Proactive personality and job performance: A social capital

- perspective. *Journal of Applied Psychology*, 90(5), 1011–1017. https://doi.org/10.1037/0021-9010.90.5.1011
- Tian, Q., Bai, J., & Wu, T. (2022). Should we be "challenging" employees? A study of job complexity and job crafting. *International Journal of Hospitality Management*, 102. <a href="https://doi.org/10.1016/j.ijhm.2022.103165">https://doi.org/10.1016/j.ijhm.2022.103165</a>
- Toffler, Alvin. (1970). Future shock. New York: Random House.
- Tornau, K., & Frese, M. (2012). Construct clean-up in proactivity research: A metaanalysis on the nomological net of work-related proactivity concepts and their incremental validities. *Applied Psychology*, 62(1), 44–96. <a href="http://10.1111/j.1464-0597.2012.00514.x">http://10.1111/j.1464-0597.2012.00514.x</a>
- Touahmia, M., Aichouni, M., Alghamdi, A., Kolsi, L., & Alzamil, H. (2020). A foresight study about the skills and competencies needed for quality professionals in 2030:

  An empirical study of Saudi Arabia. *Engineering, Technology & Applied Science Research*, 10(5), 6176–6182. <a href="https://doi.org/10.48084/etasr.3713">https://doi.org/10.48084/etasr.3713</a>
- Trifiletti, E., Capozza, D., Pasin, A., & Falvo, R. (2009). A validation of the proactive personality scale. *Testing, Psychometrics, Methodology in Applied Psychology,* 16(2), 77-93. http://www.tpmap.org/wp-content/uploads/2014/11/16.2.2.pdf
- Tugwell, R. G. (1931). The theory of occupational obsolescence. *Political Science Quarterly*, 46(2), 171-227. https://doi.org/10.2307/2142744
- Tulgan, B. (2016). Bridging the soft skills gap. *Chief Learning Officer*, *15*(4), 66-70.

  <a href="https://eds-b-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=2fb42b42-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=2fb42b42-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=2fb42b42-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=2fb42b42-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=2fb42b42-com.ezp.waldenulibrary.org/eds/pdfviewer/

#### fee0-4c81-89b9-10b1780edc20%40sessionmgr102

- Unsworth, K. L., & Parker, S. K. (2003). Proactivity and innovation: Promoting a new workforce for the new workplace. The new workplace: A guide to the human impact of modern working practices, 175-196. <a href="http://www.na-businesspress.com/JOP/PrabhuVP\_Web16\_1.pdf">http://www.na-businesspress.com/JOP/PrabhuVP\_Web16\_1.pdf</a>
- Urbach, T., Den Hartog, D. N., Fay, D., Parker, S. K., & Strauss, K. (2021). Cultural variations in whether, why, how, and at what cost people are proactive: A followership perspective. *Organizational Psychology Review, 11*(1), 3-34. <a href="https://journals.sagepub.com/doi/abs/10.1177/2041386620960526">https://journals.sagepub.com/doi/abs/10.1177/2041386620960526</a>
- Uy, M. A., Chan, K. Y., Sam, Y. L., Ho, M. H. R., & Chernyshenko, O. S. (2015).
  Proactivity, adaptability and boundaryless career attitudes: The mediating role of entrepreneurial alertness. *Journal of Vocational Behavior*, 86, 115-123.
  <a href="https://www.sciencedirect.com/science/article/pii/S0001879114001420">https://www.sciencedirect.com/science/article/pii/S0001879114001420</a>
- Valenti, C. (2021). The individual right to continuous training of workers: an analysis of best practices in the international framework. *Labour & Law Issues*, 7(1). https://doi.org/10.6092/issn.2421-2695/12922
- Vande Griek, O. H., Clauson, M. G., & Eby, L. T. (2020). Organizational Career Growth and Proactivity: A Typology for Individual Career Development. *Journal of Career Development*, 47(3), 344–357. https://journals.sagepub.com/doi/abs/10.1177/0894845318771216
- van der Horst, A. C., & Klehe, U. C. (2019). Enhancing career adaptive responses among experienced employees: A mid-career intervention. *Journal of Vocational*

Behavior, 111, 91-106.

https://www.sciencedirect.com/science/article/pii/S0001879118300885

- Van Ronk, S. J. (2021). Thoughtful proactive behavior: Understanding co-worker

  resistance to emergent change (Doctoral Dissertation). Retrieved from

  <a href="http://www.proquest.com/docview/2572577223/abstract/5F164FD38C7A4816PQ/1">http://www.proquest.com/docview/2572577223/abstract/5F164FD38C7A4816PQ/1</a>
- Vashisht, S., Kaushal, P., & Vashisht, R. (2021). Emotional intelligence, personality variables and career adaptability: A systematic review and meta-analysis. *Vision* (09722629), 1. <a href="https://doi.org/10.1177/0972262921989877">https://doi.org/10.1177/0972262921989877</a>
- Vignoli, M., & Depolo, M. (2019). Transfer of training process. When proactive personality matters? A three-wave investigation of proactive personality as a trigger of the transfer of training process. *Personality and Individual Differences*, 141, 62–67. https://doi.org/10.1016/j.paid.2018.12.027
- Wang, S., Mei, M., Xie, Y., Zhao, Y., & Yang, F. (2021). Proactive personality as a predictor of career adaptability and career growth potential: A view from conservation of resources theory. *Frontiers in Psychology*, 3842.
  <a href="https://www.frontiersin.org/articles/10.3389/fpsyg.2021.699461/full">https://www.frontiersin.org/articles/10.3389/fpsyg.2021.699461/full</a>
- White, L. H. (2017). Human capital and its critics: Gary Becker, institutionalism, and anti-neoliberalism. <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2905931">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2905931</a>
- Whysall, Z., Owtram, M., & Brittain, S. (2019). The new talent management challenges of Industry 4.0. *Journal of Management Development*, 38(2), 118–129. https://doi.org/10.1108/JMD-06-2018-0181

- Willcocks, L. (2020). Robo-Apocalypse cancelled? Reframing the automation and future of work debate. *Journal of Information Technology (Sage Publications Inc.)*, 35(4), 286–302. https://doi.org/10.1177/0268396220925830
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review, 15*(1), 45-55. http://www.imrjournal.org/uploads/1/4/2/8/14286482/imr-v15n1art4.pdf
- Wingreen, S. C., & Blanton, J. E. (2018). IT professionals' person–organization fit with IT training and development priorities. *Information Systems Journal*, 28(2), 294–317. <a href="https://doi.org/10.1111/isj.12135">https://doi.org/10.1111/isj.12135</a>
- Woo, H. R. (2018). Personality traits and intrapreneurship: the mediating effect of career adaptability. *Career Development International*, 23(2), 145–162. <a href="https://doi.org/10.1108/CDI-02-2017-0046">https://doi.org/10.1108/CDI-02-2017-0046</a>
- Woolf, B., Ghosh, A., Lan, A., Zilberstein, S., Juravich, T., Cohen, A., & Geho, O. (2020). *AI-Enabled Training in Manufacturing Workforce Development*. [White Paper]. <a href="https://people.umass.edu/~andrewlan/papers/20aaais-direct.pdf">https://people.umass.edu/~andrewlan/papers/20aaais-direct.pdf</a>
- Wong, S. I., Fieseler, C., & Kost, D. (2020). Digital labourers' proactivity and the venture for meaningful work: Fruitful or fruitless? *Journal of Occupational & Organizational Psychology*, 93(4), 887–911. <a href="https://doi.org/10.1111/joop.12317">https://doi.org/10.1111/joop.12317</a>
- World Economic Forum. (WEF). (2020). Closing the skills gap: Key insights and success metrics [White Paper]. World Economic Forum.
  - https://www3.weforum.org/docs/WEF GSC NES White Paper 2020.pdf
- Wu, C. H., Deng, H., & Li, Y. (2018). Enhancing a sense of competence at work by

- engaging in proactive behavior: The role of proactive personality. *Journal of Happiness Studies*, 19(3), 801-816.
- https://link.springer.com/article/10.1007/s10902-016-9827-9
- Yao, X., Li, M, & Zhang, H. (2021). Suffering job insecurity: Will the employees take the proactive behavior or not? *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.731162
- Young, H. R., Glerum, D. R., Wang, W., & Joseph, D. L. (2018). Who are the most engaged at work? A meta-analysis of personality and employee engagement.

  \*\*Journal of Organizational Behavior, 39(10), 1330-1346.\*\*

  https://onlinelibrary.wiley.com/doi/abs/10.1002/job.2303
- Zhang, H. (2020). A review and prospects of literature on proactivity. *Open Journal of Social Sciences (08)*, 211–230. https://doi.org/10.4236/jss.2020.82017
- Zhou, S., Wu, S., Yu, X., Chen, W., & Zheng, W. (2021). Employment stress as a moderator of the relationship between proactive personality and career decision-making self-efficacy. *Social Behavior and Personality: An International Journal*, 49(10), 1. <a href="https://doi.org/10.2224/sbp.1073g">https://doi.org/10.2224/sbp.1073g</a>
- Zhu, Y., & Li, W. (2021). Proactive personality triggers employee resilience: A dual-pathway model. *Social Behavior & Personality: An International Journal*, 49(2), 1–11. <a href="https://doi.org/10.2224/sbp.9632">https://doi.org/10.2224/sbp.9632</a>
- Zia, M. Q., Naveed, M., Bashir, M. A., & Shamsi, A. F. (2020). The interaction of situational factors on individual factors and self-development. *European Journal of Training and Development*. <a href="https://www.researchgate.net/profile/Muhammad-">https://www.researchgate.net/profile/Muhammad-</a>

# Naveed-

80/publication/339549500\_The\_interaction\_of\_situational\_factors\_on\_individual\_factors\_and\_self-development/links/60393c59a6fdcc37a8558e6e/The-interaction-of-situational-factors-on-individual-factors-and-self-development.pdf

#### Appendix A: Invitation and Recruitment

# Linked In Recruiting Post:



# Study Seeks Proactive Employees---Is that You?

I am a researcher studying proactivity in employees who have experienced a shift in skills required of them within the past two years that may potentially help bridge the soft skills gap in the current labor market. You will be asked to share your experiences with facing these shifting requirements in your organization or on your team.

Your participation in the study would include:

One consent form review and initial survey that would take approximately 10 minutes to establish your criteria for inclusion in the study

If chosen to participate, one pre-scheduled 60-minute Zoom interview that will be audio recorded

Your review of the transcription of the interview which would take approximately 15 minutes To protect your privacy, no names of participants or organizations will be included in the study No compensation for the interview or review

Volunteers must meet these requirements:

Be an employee or hiring manager who faced a shift in the requirement of skills that your organization required to be successful

The shifting skill requirement happened within the last two years

This interview is part of the doctoral study for me as a Ph.D. student at Walden University. Interviews will take place during April 2023.

Please message me privately via LinkedIn to let me know of your interest.

# Appendix B: Interview Protocol and Guide

## Briefing

[Relay to interviewee]

Thank you for agreeing to discuss your experience in the face of shifting skill requirements for your team and yourself in the workplace. I have been conducting interviews with other hiring managers and employees as well. As a reminder, your participation is entirely voluntary. At any time during the process, you may opt-out of the interview or decline to answer a question. Each interview has been audio and video recorded as a backup. Through a process researchers call member checking I will send a copy of both the interview transcription and the data findings analysis so you can check for the accuracy of the interpretation.

The confidentiality agreement and consent form were put in place to protect participants during the interview and to assure you that the data I collect will only be used for research and not shared with anyone in a leadership position. As stated in the consent form, all personal information has been safeguarded by the outlined means. To protect your confidentiality, you have been assigned an alpha-numeric identifier, and you will only be addressed by the assigned identifier. Recruiting was done by individual email without knowledge of the organization or leadership teams.

During the interview, if at any time you feel tired, please feel free to ask for a break. You can refuse to answer a question or request or stop the interview at any time.

Are there any questions for me before we begin the interview?

[Turn on recording and transcription software]

[Remember to remain in the role of a researcher and not as a counselor]

## **Demographic Data**

We will start with some demographic information about you so that we can make comparisons across participants of this study:

- 1. What is your age?
- 2. What gender do you identify with?
- 3. Where do you currently live?
- 4. Where is your organization based?
- 5. What is your nationality?
- 6. What is your tenure with the organization?
- 7. What is your current title?
- 8. What was your title at the time period we'll be discussing in the interview? (Organizational skill requirement shift)
- 9. Is your role in-person, remote, or hybrid?
- 10. Is your team in person, remote, or hybrid?

# **Interview Questions**

- 1. Tell me about your role within your organization (hiring manager or employee)
- 2. Tell me about a time when your skills, or those of your team, were no longer relevant or needed to be upskilled in your role

#### [establishment of proactive personality dimension of perception]

Ask for clarification of what the skills were that lost relevance

Ask for clarification for how those irrelevant skills could be upskilled

3. How did you learn/realize that there was a skill deficiency?

- 4. What impact did this shift in skill requirements have on your team?
- 5. How did your organization handle this deficiency between your skills and what was needed?
  - 6. How did you (or your employees) handle it?

## [establishment of proactive personality dimension of implementation]

Probe for clarification on action: were steps taken or just thought of?

# [interview will break into one of two streams: P=potential proactivity or

#### **N=not proactive**]

- 7. P: How did you (or they) go about making the necessary changes?
- 7. N: Why is that the route you chose to go?

# [for N, skip to section on development after this question]

# [establishment of proactive personality dimension of perseverance]

8. P: How easy was it to make the necessary changes?

Probe: if it was 'easy,' how did you handle any obstacles or challenges?

#### [establishment of how proactive personality can be developed]

- 9. What led you (or your team member) to taking action/not taking action?
- 10. How did your organization contribute to the changes you (or they) made?
- 11. What could the organization, your manager, or the team have done differently to help making the change easier?
- 12. Is there anything else you'd like to share about your experience facing a shifting skill requirement?

#### **Debriefing**

# [Relay to interviewee]

Thank you so much for your time today and your thoughtful answers! If you think of anything that might be helpful in the meantime, please feel free to email me that information. Otherwise, my next step is to continue the interviews until \_\_\_\_\_\_. After that, I will analyze all of the information received. You should already have a follow-up appointment on your calendar for one month from today so that we can discuss your review of the transcript from this session as well as my initial analysis and findings. When the study is finalized, you will receive a copy of that as well. Are there any questions or any other information you need?