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# **Role of Internship quality and Proactive Personality in Job Search Success: A Moderated-mediation Model Through Career Adaptability**

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## **Abstract**

**Purpose:** The job and internship search process requires individuals to make critical decisions. The present study proposes and tests the career decision science job search model. The model is derived from a career-based motivational model and combines it with the theoretical stream of career construction theory, a theory on psychological resources to make career adjustments.

**Method:** A quantitative survey study on employment success was conducted on a sample of graduate students (N = 944), and SEM analysis was done using LISREL.

**Findings:** This study investigated how proactive personality and the quality of an internship experience affect job search success. The researchers analyzed primary data on SEM using LISREL and discovered that there is indeed a relationship between proactive personality and internship quality. Additionally, this relationship positively and significantly impacts job search success, which is mediated by career adaptability. A moderated mediation test was conducted to confirm these findings and was found to be significant. The study highlights the importance of a proactive personality and internship quality in shaping individuals' career outcomes.

**Originality/value:** Previous studies have focused mainly on quantitative aspects of the internship, with little or no focus on the quality of the internship. The present study examines the effect of the quality of internship on job search success.

**Implications:** These findings carry implications for internship and career adaptability literature. And the study findings carry practical significance for both career counselors and universities.

**Keywords:** Personality, Graduate internship experience, Career adaptability, Proactive, Moderated-mediation model, Career construction theory, Career, Job search, Psychological resource theory

**Classification JEL :** D23, D91, M12, M10

## 1 Introduction

Several studies have linked internships with the job search success of university students. An internship is a pre-graduation work experience that is structured and professional and offered by an organization for a limited time to students before graduation (Pan, et al., 2018). Work-related activities contribute to job search success (Maskooki, et al., 1998; Pan, et al., 2018; Perry, 1989; Raymond, et al., 1993). Internships serve as a bridge between college and work, significantly increasing students' chances of employment. The number of internships completed by a graduate is directly linked to future job search success (Callanan & Benzing, 2004; Gault, et al., 2000; Knouse, et al., 1999; Pan, et al., 2018). The current study aims to investigate the impact of internships, proactive personality, and job characteristics on the job search success of university students.

Past researchers focused mainly on the characteristics of interns, and the onus of learning, and successful outcomes from internships were matched mostly with interns' characteristics (Savickas, 2013,2020). Past studies had multiple outcomes of job success and internship success associated with the intern's characteristics, such as discipline and commitment (Baruch & Vardi, 2016; Lent & Brown, 2013) and the big five personality trait dimensions, mainly conscientiousness and extraversion (Pan, et al., 2018). It was largely overlooked that there are good and bad internship experiences due to the characteristics of the internships and not just due to the characteristics of interns (Gamboa, et al., 2013; Pan, et al., 2018). The point is well highlighted in the Job Characteristics Model, which focuses on the characteristics of the job rather than on the characteristics of employees (Hackman & Oldham, 1974). Past researchers and educational practitioners alike believed that experience and exposure gained through internships help students find jobs primarily by increasing key brownie points in their job resumes (Coco, 2000; English & Koeppen, 1993; Knechel & Snowball, 1987). Numerous studies have concentrated on the quantitative measurable elements of internships, such as the frequency and length of internships. Thus, internships were mainly considered as impression management tools for strengthening their resumes, which helps in finding a job for university students, and hence, the focus was on the number of internships done (quantity of internships) (Knouse & Fontenot, 2008; Knouse, et al., 1999).

However, for these studies and practitioners, the question remains underexplored as to how the real benefit of internship experience and internship quality translates into success with job search outcomes. The present study focuses on the qualitative characteristics of internships along with the characteristics of interns. Many job characteristics allow interns to apply classroom concepts in real-life situations. During their internships, they learn about discipline, organization, coordination, and other aspects of organizational life. Numerous studies have concentrated on the measurable elements of internships, such as the frequency and length of internships. However, the quality of internship experiences, particularly their role in helping individuals gain a deeper understanding of their career specialization, has been relatively understudied (Brooks, et al., 1995; Gamboa, et al., 2013; Pan, et al., 2018). However, these studies are incomplete because they do not examine the job characteristics that help interns develop their skills and work attitudes (Brooks, et al., 1995; D'Abate & Wenzel, 2009; Oehlert, et al., 2002).

Deriving from career construction theory (Savickas, 1997, 2005, 2013), the present study's findings establish one of the important psychological mechanisms through which internships could indirectly affect job search success. The career decision science job search model proposed in the present study is based on integrating the theories on career and motivation. The job characteristics model suggests that individuals are more likely to be satisfied and perform well when the job has certain characteristics, such as skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1974). On the other hand, career construction theory proposes that individuals have psychological resources, such as self-efficacy, hope, optimism, and resilience, which they use to make career adjustments (Savickas, 2020).

The proposed career decision science model of job search posits that individuals use their psychological resources and coping strategies (career adaptability) to evaluate job characteristics during the job and internship search process. Past studies suggest that individuals evaluate the job or internship based on its objective characteristics, such as pay, location, and job duties (Callanan & Benzing, 2004; Gault, et al., 2000). Next, individuals evaluate the job or internship based on its subjective characteristics, such as the degree of fit between their skills and the job requirements, the level of challenge the job presents, and the level of support they will receive from their colleagues and supervisors (Gamboa, et al., 2013; Pan, et al., 2018).

Based on these evaluations, individuals use their psychological resources to decide whether to pursue a job or an internship. For example, if an individual perceives that a job has high levels of task variety, task significance, and autonomy, they may use their self-efficacy and optimism to decide to pursue the job (Lent & Brown, 2013, 2020). On the other hand, if an individual perceives that a job has low levels of task variety, task significance, and autonomy, they may use their resilience and hope to decide to continue their job search (Lent & Brown, 2013, 2020).

Career construction theory, as proposed by Savickas in 2013 and 2005, emphasizes the concept of career adaptability, which is an individual's preparedness to take action in the face of repetitive tasks and encompasses the ability to respond effectively and flexibly to evolving circumstances within one's career path (Pan, et al., 2018). Career adaptability relates career adaptability to career success and career exploration (Li, et al., 2015; Teixeira, et al., 2012). A study by Koumoundourou, et al. (2012) on university students found that adaptability impacted career decisions.

People pursuing self-directed, independent careers face uncertainty and ambiguity as they maneuver their careers (Baruch & Vardi, 2016). Past research has argued that individuals with high career adaptability can handle the vagaries of ups and downs in their careers and face the uncertainty and ambiguity in their careers (Judge & Kammeyer-Mueller, 2011). The included contextual factors are organizational support towards employees (Koen, et al., 2012), external interferences in their careers (Guan, et al., 2016), and the behavior of parents (Guan, et al., 2015). As far as we know, the literature on the role of contextual factors on career adaptability is incomplete when an individual has no working experience in a different working environment (Greenhaus, et al., 2000). Information received from an individual's work experience shows the importance of training or human involvement on the site.

Overall, the career decision science model of job search proposed in the present study suggests that individuals use their psychological resources to evaluate job characteristics during the job and internship search process. By doing so, individuals can make informed decisions that lead to job satisfaction and performance. The job and internship search process requires individuals to make critical decisions. The present study proposes and tests the career decision science job search model. The model is derived from career adaptability, which provides psychological resources and coping strategies to handle career transitions (Savickas, 2020). This study was conducted to examine the quantitative aspects of internships.

The job process requires individuals to make critical decisions. The present study proposes and tests the career decision science job search model. The model is derived from career adaptability, which provides psychological resources and coping strategies to handle career transitions (Savickas, 2020). Moreover, this research aimed to explore the effect of internships and individual characteristics on career adaptability following job search success, which reveals the connection between internal and external forces on students' internship and job search approach. Data was collected using a quantitative survey technique, and the sample consisted of graduate students.

Many graduate students seek internships during their two years of graduate school, and these internships can be obtained from various sources, including company websites, recruitment sites, and, in most instances, their universities. The findings of this study may assist businesses in providing a more beneficial internship experience that aids students in transitioning from academic to professional life. The research suggests that contextual factors, such as organizational support, external interferences, and parents' behavior. Companies can benefit from this research by providing graduate students with high-quality internship experiences that help them transition from school life to work life. The study investigates the quality of their internships and their career adaptability. Ultimately, this study seeks to identify effective strategies students can use to successfully navigate the job search process.

## **2 Theoretical Foundation**

Recent studies have extended Career Construction theory by including other contextual factors, such as organizational support, external interferences, and parental behavior, that affect individual career adaptability and success (Guan, et al., 2015, 2016; Koen, et al., 2012). Similarly, individuals pursuing self-directed independent careers often face uncertainty and ambiguity in navigating their careers, and those who are high in career adaptability are better able to handle the ups and downs of their careers (Judge & Kammeyer-Mueller, 2011; Koumoundourou, et al., 2012).

According to Greenhaus, et al. (2000), the literature on the role of contextual factors in career adaptability is incomplete when an individual has no working experience in a different environment. Thus, information gathered from an individual's work experience is crucial in highlighting the importance of training and human involvement in shaping career adaptability.

## ***2.1 Literature Review and Hypothesis Development***

Internships provide graduate students with a unique opportunity to gain practical experience in their chosen field, develop a proactive attitude (Peng, et al., 2023) and career adaptability (Leung, et al., 2022), which can be highly valuable when entering the job market. Through internships, graduate students can develop a range of competencies that are highly valued by employers (Ocampo, et al., 2020). Additionally, internships provide students with competencies that enable them to understand and take action on the problems they face during their transition from school to work (Ocampo, et al., 2020).

Career construction theory (Savickas, 2005, 2013, 2020; Xu & Savickas, 2022), emphasizes the importance of developing competencies. One such resource is career adaptability, encompassing four aspects: career concern, career control, career curiosity, and career confidence (Xu & Savickas, 2022). Graduate students who develop career adaptability are better equipped to cope with the various challenges they may encounter in their careers, which can increase their chances of finding and succeeding in a job that aligns with their career goals (Mittal, 2021).

Proactive personality is another key factor in developing career adaptability (Leung, et al., 2022). It refers to an individual's readiness to initiate change, find opportunities, and shape the external environment (Leung, et al., 2022; Peng, et al., 2023). This, in turn, can increase their chances of finding a new job that aligns with their career goals and interests.

In conclusion, internships are essential for graduate students to develop competencies (Ocampo, et al., 2020). A proactive personality is a key factor that can help graduate students develop career adaptability and increase their chances of finding and succeeding in a job that aligns with their career goals (Leung, et al., 2022). Therefore, it is essential for graduate students to actively seek out internships and develop a proactive personality to enhance their career success.

Internships are a valuable tool for graduate students to gain work experience and develop career competencies (Pan, et al., 2018;). This practical experience provides students with an understanding of career tools, which enables them to understand and take action on the problems they face during their transition from school to work (Mittal, 2021). The quality of internships is crucial for job search success, as it is more important than career adaptability and a proactive personality. Internships help graduate students adjust to sudden changes and allow them to take action against these changes.

A proactive personality is a key factor in developing career adaptability. It refers to an individual's readiness to initiate change, "find opportunities, and shape the external environment" (Bateman & Crant, 1993; Crant, 2000; Pan, et al., 2018). Graduate students with proactive personalities are more engaged in career-related investigations and exhibit competencies, increasing their chances of finding a new job (Brown, et al., 2006). Based on these findings, this paper proposes that the quality of internships and personal components, such as career adaptability and proactive personality, play a vital role in career success.

*Hypothesis 1: This hypothesis proposes that a Proactive personality is directly and positively associated with career adaptability.*

Adaptability refers to an individual's ability to adjust to changing job market conditions and to effectively navigate career transitions (Savickas, 2020; Xu & Savickas, 2022). On the other hand, job-search success refers to an individual's ability to secure suitable employment that meets their needs and goals. Research has found that individuals who demonstrate higher levels of career adaptability are more likely to engage in proactive job-search behaviors and are more effective in their job-search efforts (Savickas, 2020; Xu & Savickas, 2022). These individuals tend to have a clearer understanding of their strengths and weaknesses, are more confident in their abilities, and are better equipped to identify and pursue job opportunities that align with their interests and skills (Gamboa, et al., 2013; Pan, et al., 2018). Career adaptability has four aspects (Savickas, 2020):

1. Career concern (being prepared for future possibilities),
2. Career control (capability to make bold decisions),
3. Career curiosity (capability to venture into information and opportunities), and
4. Career confidence (effective beliefs that maintain individuals' efforts in reaching their goals).

Moreover, individuals with high levels of career adaptability tend to be more resilient in the face of job market challenges such as job loss, economic downturns, and industry shifts (Savickas, 2020; Xu & Savickas, 2022). They can better adapt to changing job market conditions, identify and pursue new career opportunities, and take advantage of emerging trends. The research suggests that career adaptability is important in job-search success (Callanan & Benzing, 2004; Pan, et al., 2018). More adaptable individuals tend to be more successful in their job searches and are better positioned to thrive in today's rapidly changing job market.

This study delves into transitioning from school to work and how university students can effectively navigate the job search. The job search process involves multiple activities (Gamboa, et al., 2013). The job search process is essential for students as it has implications for their future financial independence and investments. Therefore, effective job searching is crucial to secure well-paying jobs that contribute to future financial stability (Hon, et al., 2021; Moslehpour, et al., 2021; Moslehpour & Pham, et al., 2018; Wong, 2021).

Career adaptability is a critical factor that impacts career satisfaction and performance, as adaptable individuals can adjust to new situations and environments. Career adaptability is characterized by four aspects, including curiosity and efficacy (Cai, et al., 2015; Zacher, 2014).

*Hypothesis 2: This hypothesis proposes that Career adaptability is directly and positively related to job success.*

*Hypothesis 3: This hypothesis proposes that career adaptability mediates the relationship between proactive personality and job-search success.*

In other words, a proactive personality influences an individual's ability to adapt to their career, affecting their job search success. Career adaptability is seen as how a proactive personality impacts job-search success.

Internships have become an increasingly important aspect of preparing university students for the professional world. An internship is not only an opportunity to gain practical experience in a specific field but also to better understand the demands and expectations of a given career path. According to previous research, internships are considered a job-oriented experience that offers students the chance to understand and experience the working environment meaningfully (Callanan & Benzing, 2004).

In this study, the authors aim to address this gap in the literature by focusing on the quality of internships. The JCM suggests that an employee's performance and attitudes are influenced by five core job characteristics: skill variety, task identity, task significance, autonomy, and feedback.

This model suggests that employees' performance and attitudes are affected by certain qualitative aspects of an internship:

1. Skill variety (set of skills that are needed for the performance of a job),
2. Task identity (to what level the work is done from starting till the end in a way that it has a noticeable outcome),
3. Task significance (how important the work is for the organization and its employees),
4. Autonomy (the freedom the employees have in selecting their tasks and how they go through with the work), and
5. Feedback (the performance feedback the employees get from the company).

So, in this study, we say that internship quality can be positively related to a student's career adaptability. The high-quality internship offers students information on work and work-life. Task identity helps individuals understand the relationship between different tasks to identify the overall view of the work. Task significance helps them understand the work's importance, and autonomy gives individuals the power to make plans. Feedback gives individuals an idea about how they work, where they are good, and where they are bad, and this helps them in their career possibilities. High-quality internships that provide opportunities for skill development and exposure to various tasks and responsibilities can help students understand how the working world operates. Furthermore, tasks that offer a clear sense of identity and significance help individuals understand the overall purpose of their work. At the same time, autonomy and feedback provide opportunities for self-reflection and growth.

Ultimately, these experiences can help students develop a sense of career control and help students make better career choices, and provide greater financial freedom (Alghalith, et al., 2021; Jaiswal, et al., 2022; Thanh, et al., 2021; Wong, 2020), while a low-quality internship may lead students to take control of their careers by being more proactive and deliberate in their decisions.

*Hypothesis 4: This hypothesis suggests that there is a positive relationship between internship quality and career adaptability, even after accounting for the effects of proactive personality.*

In other words, a proactive personality does not mediate or explain the relationship between internship quality and career adaptability. Instead, the quality of the internship itself directly influences an individual's ability to adapt to their career.

Overall, this study highlights the importance of focusing on the qualitative aspects of internships and suggests that high-quality internships can positively impact a student's career adaptability and sense of career control. By providing meaningful experiences and opportunities for growth, internships can help students navigate the transition from academia to the professional world and prepare for successful careers (Maskooki, et al., 1998; Perry, 1989; Raymond, et al., 1993).

High-quality internships offer students many opportunities to learn and gain valuable skills, which might make it less necessary for students to proactively seek out additional learning opportunities by increasing human agency (Lent & Brown, 2013, 2020). In this case, individuals with low proactive personalities can still benefit from the quality of the internship and develop their skills, which can contribute to their career adaptability and employment success.

Overall, proactive personality, internship quality, and career adaptability are interconnected. A proactive personality can help individuals take control of their career development and seek growth opportunities, particularly in situations where the quality of the internship is low. However, individuals with low proactive personalities can benefit from high-quality internships, providing valuable skills and experiences to develop career adaptability and employment success.

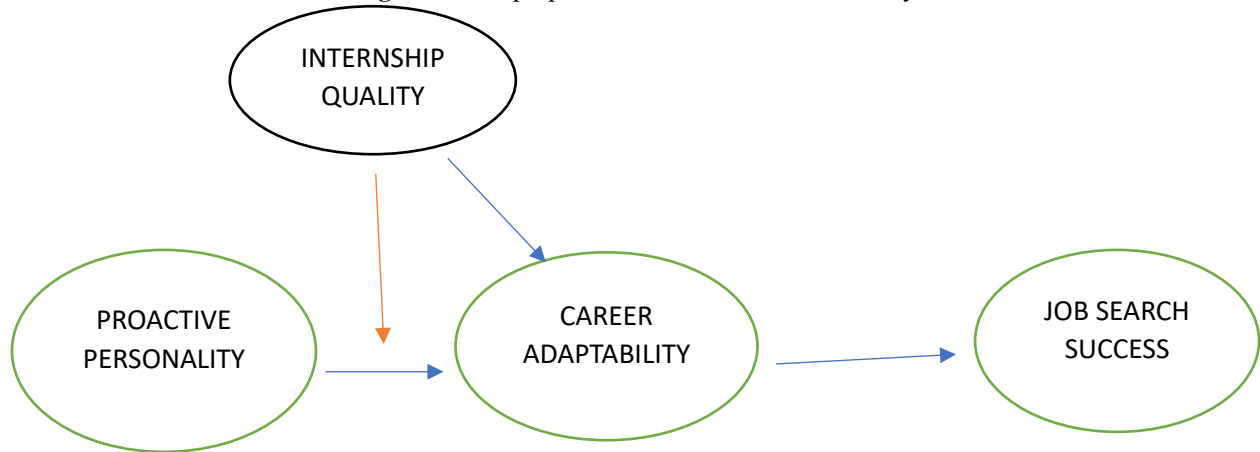
*Hypothesis 5: This hypothesis suggests that the quality of an internship can moderate the relationship between proactive personality and career adaptability. Specifically, the relationship between proactive personality and career adaptability is not as strong when internship quality is higher. However, the relationship between proactive personality and career adaptability is stronger when internship quality is lower.*

*Hypothesis 6: This hypothesis proposes that the relationship between internship quality, proactive personality, and job search success is moderated by career adaptability. Specifically, the indirect effect of proactive personality on job search success through career adaptability is stronger when internship quality is lower than when it is higher.*

In other words, when internship quality is low, the relationship between proactive personality and job search success is mediated by career adaptability to a greater extent.

The following is the proposed research model.

**Figure 1:** The proposed research model in this study.



Note: The proposed Moderated-mediation career decision science model of job search is based on the relationship between proactive personality and job search success and the mediation role of career adaptability and moderation role of internship quality.

### 3 Empirical Analysis

#### 3.1 Methodology

Common method variance is reduced (CMV), which can affect the reliability and validity of research findings, we followed the data collection procedures recommended by Podsakoff, et al. (2003) and used in several recent studies (Mittal, et al., 2018, 2019; Singh & Mittal, 2019; Singh, et al., 2019). Specifically, we collected data twice from post-graduate management students in India who were pursuing their program at B-schools with at least 100 students in a batch and operational for at least five years. The participants were informed about the purpose of the study and asked to participate voluntarily. To minimize social desirability bias, which can occur when participants feel pressure to respond in ways that are socially acceptable or desirable, we collected data on the independent variables (internship quality, career adaptability, proactive personality) immediately after the participants completed their summer internship, and on the dependent variable (job-search success) approximately two months after they finished their degree and had likely secured a job. The final sample included 944 participants, 57.72% males, and a mean age of 24.97 years. Tables 1a and 1b give the gender and age statistics of the participants

**Table 1a-**Gender characteristics

	Frequency	Percent
Female	399	42.28
Male	545	57.72
	944	100

**Table 1b-**Age

	Frequency	Percent
Less than 24	663	70.2
25-29	231	24.5
30-35	50	5.3

More than 35	0	0
	944	100

The validity of the hypothesized model was assessed with the help of convergent and discriminant validity using confirmative factor analysis (CFA) using LISREL (Liao & Wong, 2008; Liao, et al., 2012, 2014; Moslehpour, et al., 2017, 2018a, 2019). Structural equation modeling (SEM) was used to test the proposed hypotheses, and LISREL was used as a data analysis tool. (Aminah, et al., 2022; Arokiasamy, et al., 2022; Ramadan & Safavi, 2022; Sengupta & Mittal, 2022). The mediation technique of Frazier, et al. (2004), which uses four sub-parts, was used, and it is based on Baron and Kenny (1986). These methods allowed the researchers to gain a more nuanced understanding of the relationships between variables and to provide a more robust test of the statistical significance of these relationships (Preacher & Kelley, 2011).

### 3.2 Data and variables used

The validity of the hypothesized model was assessed with the help of convergent and discriminant validity using confirmatory factor analysis using LISREL in the first step. Structural equation modeling (SEM) uses LISREL as a data analysis tool to test the proposed hypotheses.

#### 3.2.1 Testing validity and reliability

Tables 1 and 2 exhibit that the standardized loading value of each variable was more than 0.50, and values of Cronbach's alpha coefficient range between 0.796 and 0.885, well above 0.70, which signifies the constructs were reliable (Hair, et al., 2010). The average variance extracted (AVE) and composite reliability of each construct were more than 0.50 and 0.70, respectively, specifying the internal validity and reliability of the constructs (Hair, et al., 2010). The Discriminant validity was supported as the  $v^2$  difference for each pair was significant, which meant that  $p$  was less than 0.01. Second, a comparison table was developed for AVE and squared correlation estimates. The results show that AVE estimates are greater than squared correlation estimates. Thus, the results show that discriminant validity exists for each construct.

**Table 1.** Factor loading and reliability test

Questions	Constructs	Factor Loadings	Cronbach's alpha
IQ1	Internship quality	0.827	0.847
IQ2	Internship quality	0.839	
IQ3	Internship quality	0.882	
IQ4	Internship quality	0.766	
IQ5	Internship quality	0.774	
IQ6	Internship quality	0.755	
IQ7	Internship quality	0.784	
IQ8	Internship quality	0.745	
IQ9	Internship quality	0.731	

IQ10	Internship quality	0.721	
IQ11	Internship quality	0.703	
IQ12	Internship quality	0.763	
IQ13	Internship quality	0.746	
CA1	Career Adaptability	0.712	0.885
CA2	Career Adaptability	0.723	
CA3	Career Adaptability	0.863	
CA4	Career Adaptability	0.833	
CA5	Career Adaptability	0.743	
CA6	Career Adaptability	0.842	
CA7	Career Adaptability	0.741	
CA8	Career Adaptability	0.81	
CA9	Career Adaptability	0.84	
CA10	Career Adaptability	0.821	
CA11	Career Adaptability	0.866	
CA12	Career Adaptability	0.741	
CA13	Career Adaptability	0.821	
CA14	Career Adaptability	0.818	
CA15	Career Adaptability	0.808	
CA16	Career Adaptability	0.826	
CA17	Career Adaptability	0.802	
CA18	Career Adaptability	0.788	
CA19	Career Adaptability	0.718	
CA20	Career Adaptability	0.732	
CA21	Career Adaptability	0.803	
CA22	Career Adaptability	0.694	
CA23	Career Adaptability	0.812	
CA24	Career Adaptability	0.705	
PP1	Proactive Personality	0.739	0.812
PP2	Proactive Personality	0.813	
PP3	Proactive Personality	0.793	
PP4	Proactive Personality	0.735	
PP5	Proactive Personality	0.745	
PP6	Proactive Personality	0.723	
PP7	Proactive Personality	0.722	

PP8	Proactive Personality	0.742	0.796
PP9	Proactive Personality	0.81	
PP10	Proactive Personality	0.82	
JSS1	Job Search Success	0.801	
JSS2	Job Search Success	0.773	
JSS3	Job Search Success	0.811	

**Table 2.** Composite Reliability (CR), Average Variance Extracted (AVE), Means, Standard deviations (sd), reliabilities, and intercorrelations of variables

Variables	CR	AVE	mean	sd	variables			
					1	2	3	4
1. proactive personality	<b>0.882</b>	<b>0.576</b>	3.12	0.75	<b>0.812</b>			
2. internship quality	<b>0.911</b>	<b>0.513</b>	2.94	0.84	.204**	<b>0.847</b>		
3. career adaptability	<b>0.922</b>	<b>0.649</b>	3.58	0.69	.448***	.311**	<b>0.885</b>	
4. job-search success	<b>0.938</b>	<b>0.637</b>	3.27	0.89	.342**	.246**	.291**	<b>0.796</b>

### 3.2.2 Convergent validity test results

The Confirmatory Factor Analysis (CFA) test results show that the critical ratio values were greater than 1.96 for each item at the p less than 0.05 level, suggesting strong convergent validity. The square root of the total variance was used to compute the average variance extracted (AVE) for all study constructs. Results show that AVE was greater than 0.5 for each of the study constructs, suggesting a strong convergent validity for each construct. These two results confirm that the constructs have convergent validity. Please refer to Table 1 and Table 2.

### 3.2.3 Discriminant validity test results

Confirmatory Factor analysis was done using LISREL to ascertain the validity of the four-factor measurement model. All the fit indices values like CMIN/DF =2.01, GFI =0.903, CFI =0.951, IFI =0.953, and RMSEA 0.06 of the measurement model are well above the cut-off value, implying a good fit (Hair, et al., 2010). The results showed that the original measurement model included multiple factors. Specifically, the  $X^2/df$  value was 2.14, the CFI was 0.97, the TLI was 0.95, and the SRMR was 0.06.

The original measurement model (four-factor model) considered in the study showed a good fit for the data. The model fit indices for the full measurement model were higher than the minimum cut-off values ( $X^2/df$ : 2.14; CFI: 0.97; AGF1: 0.97; TLI: 0.95; SRMR: 0.06) (Hair, et al., 2010). The discriminant validity of the constructs was measured by comparing the original model with possible nested models. Please refer to Table 3. The calculated fit indices showed the fit prevalence of the hypothesized model (original model) over nested models (Alfes, et al., 2013). The variance inflation factor (VIF) was also calculated to check for the non-existence of multicollinearity.

**Table 3.** Measurement model and nested model fit indices

Model and Structure	$\chi^2/df$	CFI	AGFI	TLI	SRMR
Original model: internship quality, career adaptability, proactive personality & job search success	2.14	0.97	0.97	0.95	0.06
nested model 1: Internship quality and career adaptability combined in a single factor	2.94	0.72	0.61	0.59	0.071
nested model2: internship quality and proactive personality combined in a single factor	3.26	0.71	0.62	0.59	0.073
nested model 3: Career adaptability, and proactive personality combined in a single factor	3.29	0.69	0.59	0.57	0.074
Harman single-factor test: all factors combined	4.12	0.59	0.51	0.52	0.079

### 3.3 Measures

**Internship quality:** The quality of internships was evaluated using the job characteristics scale, which consisted of 13 items selected from the work of Hackman and Oldham (1974) and Sims, et al. (1976). The 13 items were used to measure five aspects of internship quality. Some examples of the questions asked were "How often did you perform repetitive tasks?" (skill variety), "Did you see any projects or jobs through to completion?" (task identity), "Was there any opportunity to get to know other people?" (task significance), "Did you have the opportunity to work independently?" (autonomy), and "Did you receive feedback on your performance?" (feedback). The Likert scale was used to rate the responses, ranging from 1 ("very little") to 5 ("very much"), with a Cronbach's alpha of 0.847.

**Career Adaptability:** The scale of adaptability by Hou, et al. (2012) was divided into four sub-scales. The Likert scale is used for internship quality; Cronbach's alpha for this measure was 0.885.

**Job search success:** This scale was assessed on three questions adapted from Boswell, et al. (2012). The Cronbach's alpha for this measure was 0.796.

**Proactive personality:** Bateman and Crant's (1993) scale, comprising ten items, was utilized. An exemplar item was formulated: "If I believe in something, I will make it happen." The Likert scale employed for this study was identical to the one utilized for assessing internship quality, and Cronbach's alpha for this measure was 0.812.

**Control variables:** To control for demographic factors, previous studies on internship experiences (Cook, et al., 2004) suggested that age, gender, major, and internship duration should be considered. Further, the big five personalities, career commitment, and discipline, a subjective indicator of internship punctuality, were included as control variables. Therefore, these variables were controlled in the present study (Callanan & Benzing, 2004; Feldman, et al., 1999).

Please refer to Table 4 for construct operationalization, definitions, and scale items.

**Table4-** Construct operationalization, definitions, and Scale items

Measure	Description	References	Scale Items
Internship Quality	The quality of internships was evaluated using the job characteristics scale, which consisted of 13 items and five aspects of internship quality.	Hackman and Oldham (1974) and Sims, et al. (1976).	1.How much variety in work does your internship offer variety? 2. How often do you complete work that has been started by another employee? 3. To what extent do the results of your work influence your co-workers? 4. To what extent are you able to do your internship independently of others? 5.And To what extent do you receive information from your superior on your job performance?
Career adaptability	Career adaptability is a resource that encompasses four aspects: career concern, career control, career curiosity, and career confidence	Savickas, 2020; Xu & Savickas, 2022; Hou, et al. (2012)	1. Thinking about what my future will be like 2. Realizing that today's choices shape my future 3. Preparing for the future 4. Becoming aware of the educational and career choices that I must make 5. Planning how to achieve my goals 6. Concerned about my career 7. Keeping upbeat 8. Making decisions by myself 9. Taking responsibility for my actions 10. Sticking up for my beliefs 11. Counting on myself 12. Doing what's right for me 13. Curiosity 1. Exploring my surroundings 14. Looking for opportunities to grow as a person 15. Investigating options before making a choice 16. Observing different ways of doing things 17. Probing deeply into questions I have

			18. Becoming curious about new opportunities 19. Confidence 1. Performing tasks efficiently 20. Taking care to do things well 21. Learning new skills 22. Working up to my ability 23. Overcoming obstacles 24. Solving problems
Proactive Personality	An individual's readiness to initiate change, find opportunities, and shape the external environment	Leung, et al., 2022; Peng, et al., 2023; Bateman and Crant (1993)	1.I am constantly on the lookout for new ways to improve my life 2.Wherever I have been, I have been a powerful force for constructive change 3.Nothing is more exciting than seeing my ideas turn into reality 4.If I see something I don't like, I fix it 5.No matter what the odds, if I believe in something I will make it happen 6.I love being a champion for my ideas, even against others' opposition 7.I excel at identifying opportunities 8.I am always looking for better ways to do things 9.If I believe in an idea, no obstacle will prevent me from making it happen 10. I can spot a good opportunity long before others can.
Job Search Success	refers to an individual's ability to secure suitable employment that meets their needs and goals.	Peng, et al., 2023; Boswell, et al., (2012).	1.How much time did you spend searching for jobs before you received your first offer? 2.How many offers did you get by the end of your job search? 3.How much was the monthly pre-tax salary for your job?

### 3.4 Testing results of hypotheses

The structural equation model (SEM) using LISREL was used to assess the proposed hypothesized relationships in the proposed model as used by many other studies (Liao, et al., 2014; Moslehpour, et al., 2018a). All six proposed associations (both strength and significance) were tested. From a total of six tested associations, all six were statistically significant (Table 5). Hypothesis 1, which suggested a positive relationship between proactive personality and career adaptability, was supported by significant results ( $\beta = 0.354$ ;  $p < 0.01$ , respectively). Similarly, Hypothesis 2, which proposed that career adaptability is

positively associated with job-search success, received support ( $\beta=0.141$ ,  $p < 0.01$ ). Hypothesis 4, which stated that internship quality is positively related to job-search success, was also supported by significant results ( $B=0.421$ ,  $p<0.01$ ).

**Table 5** Model estimations

			$\beta$	P	Result
Proactive personality	→ H <sub>1</sub>	Career Adaptability	0.354	0	Accepted
Career Adaptability	→ H <sub>2</sub>	Job-search success	0.141	0	Accepted
Proactive personality	→ H <sub>3</sub>	Career Adaptability job-search success	0.219	0	Accepted
Internship quality	→ H <sub>4</sub>	Job-search success	0.421	0	Accepted
Proactive personality X Internship quality	→ H <sub>5</sub>	Career Adaptability	0.531	0	Accepted
Proactive personality X Internship quality	→ H <sub>6</sub>	Career Adaptability job-search success	0.371	0	Accepted

Testing mediation effects, Hypothesis 3 posited that career adaptability mediates the positive relationship between proactive personality and job-search success, and significant results supported the hypothesis ( $\beta=0.219$ ,  $p < 0.01$ ). Hypothesis 5 suggested that internship quality negatively moderates the relationship between proactive personality and career adaptability, and significant results supported the hypothesis ( $B=-0.531$ ,  $p<0.01$ ). Finally, testing moderated-mediation effects, Hypothesis 6 suggested that internship quality interacts negatively with proactive personality to affect job search success through career adaptability. Results from the moderated-mediation analysis supported the hypothesis, where the indirect relationship between the interaction term of proactive personality X internship quality and job-search success through career adaptabilities (indirect effect ( $B=-0.371$ ,  $p<0.01$ )). was found to be significant. From Table 5, it is also witnessed that all goodness of fit indices values are well above/ within the recommended level (RMSEA < 0.08, GFI > 0.90, CFI & IFI > 0.90) (Hair et al., 2010). This implies that the model is good.

#### 4 Discussion

Prior research agreed upon the positive role of internship experience on various aspects of career development and subsequent success in finding jobs, making career adjustments, and various other aspects of career success. However, this body of research primarily focused on quantitative measures as aspects of internship quality (Creed & Patton, 2003), which has several theoretical implications for the kinds of literature on internships, career development, career adaptability, and proactive personality. The study highlights the importance of internships as a valuable tool for graduate students to gain practical work experience and develop career-related skills. Overall, this study contributes to the theoretical understanding of the role of internships, career adaptability, and proactive personality in career development and job search success.

Perceived internship benefits and experiences are generally subjective. It is a subjective assessment of one's internship journey and is a personal construct (Williams, et al., 2020) and thus has a psychological rather than a real notion of skills. It differs from person to person depending on profiles, the labor market, motivational factors, and networking. Perceived internship benefits deal with the possibilities of employment (Sengupta & Mittal, 2022). Possibilities could be very broad, as it deals with the "integration of personal factors, structural factors, and their interactions". Personal factors are experienced at the "individual level," whereas structural factors are at the "abroad policy level or the level of the organization." Something unique to the internship experience is the interaction of personal and structural factors.

## **5 Practical Implications**

The study identified the importance of internship quality in the higher education institution context to make internship quality a directory or index so that focused educational institutions can gain further insights into internship quality. Also, classify internship quality in terms of academics, administration, and facility, so it's easier to understand the strengths and weaknesses of each attribute and assign necessary resources to improve overall perceived quality. To improve satisfaction and trust in students' minds, it is important to invest in internship quality to maintain focused educational institution–student relationships, ultimately resulting in career performance. For the sustainable growth of educational institutions, increasing and gaining student trust and satisfaction is mandatory because these two constructs have substantial mediating effects on job search outcomes. The internship quality mainly includes the dimensions of interactive, informative, and applied on-the-job experiences. Also, the other aspects of internship quality are that internships play a significant role in influencing the perception of job search success outcomes and developing a strong conative attitude for a continued and loyal relationship of students towards the university.

Practitioners can encourage graduate students to seek internships that provide high-quality experiences that align with their career goals and interests. This can involve guiding in identifying suitable internships and developing the necessary skills and competencies to succeed in these roles. Career counselors can help graduate students develop a proactive personality by providing training and coaching on proactive behaviors, such as identifying opportunities, taking the initiative, and shaping the external environment. This can help graduate students become more engaged in career-related investigations and exhibit higher career adaptability, increasing their chances of finding and succeeding in a job that aligns with their career goals. They can help graduate students develop career adaptability by providing training and coaching on the four aspects of career adaptability: career concern, career control, career curiosity, and career confidence. This can involve providing guidance on identifying and preparing for future possibilities and developing decision-making skills. Practitioners can play a crucial role in helping graduate students develop the necessary skills, competencies, and attitudes to succeed in the job market. By providing guidance and support on internships, proactive personality, and career adaptability, practitioners can help graduate students enhance their job search success and achieve their career goals.

Students often experience career competencies, what they are capable of, and what works for them, as well as a general lack of information about the occupation they want and what it takes to positively gain

the required information (Santos, et al., 2018). Often, there is a mismatch between who the individual is and the job they seek. To help them overcome these difficulties, students may approach career counseling services. Career counseling centers at universities and colleges play a crucial role in helping students make decisions. Career counselors themselves need to understand that an array of factors are associated with difficulty in decision-making on a suitable career.

## **6 Conclusion**

The job and internship search process requires individuals to make critical decisions. We could propose and test the career decision science model of job search from the study. The findings from the decision science model of job search proposed and tested in the present study enriched our understanding of how the job search success of an employee is affected by various other factors, such as internship quality, proactive personality, and the career adaptiveness of a person. The present study increased our understanding of how much and to what extent a prospective employee considers the importance of their internship for their future job. A person's proactive personality helps them get a job even if they do not like their internship. This also showed that people look at their job profiles when looking for a job.

The present study contributes significantly to answering the important question of how internships are associated with job outcomes. Past researchers focused mainly on the characteristics of interns and the onus of learning, and successful outcomes from internships were matched mostly with the intern's characteristics (Savickas, 2013). It was largely overlooked that there are good and bad internships due to the characteristics of the internships and not just due to the characteristics of interns. The point is well highlighted in the Job Characteristics Model, which focuses on the characteristics of the job rather than on employees. Past researchers and educational practitioners alike believed that experience and exposure gained through internships help students find jobs primarily by increasing key brownie points in their job resumes (Coco, 2000; English & Koeppen, 1993; Knechel & Snowball, 1987). Thus, internships were mainly considered as impression management tools for strengthening their resumes, which helps in finding a job for university students, and hence, the focus was on the number of internships done (quantity of internships) (Knouse & Fontenot, 2008; Knouse, et al., 1999).

However, for these studies and practitioners, the question remains underexplored as to how the real benefit of internship experience and internship quality translates into success with job search outcomes. The present study focuses on the characteristics of internships along with the interns. Deriving from career construction theory (Savickas, 1997, 2005, 2013), the present study's findings establish one of the important psychological mechanisms through which internships could indirectly affect job search success. The findings indicate that experiences associated with various aspects of internship quality create exposure for a smooth transition once a student joins the workforce and also facilitate skill development, which helps in finding a new job. More specifically, the study's findings indicate that university students who have undergone multiple high-quality internships are more likely to succeed in finding new job opportunities by developing career adaptability. Internship quality helps create career-related psychological resources and flexibility akin to career adaptability, leading to eventual job search success. The findings of the present study are encouraging, however, the current line of research remains in its

nascent stage. Many more studies may explore other career-oriented psychological mechanisms through which internships positively affect multiple job and career-related outcomes (Homod, et al., 2023; Khalaf, et al., 2023).

In the 1980s, the impact of internships was looked at from a meso-level or an organizational viewpoint. In the present day and age, the individual and not the organization carries forth the responsibility for their career. The modern career has taken over the traditional career. In a traditional career context, the individual was bound by organizational binds and hierarchical ladders. Loyalty and performance brought forth job security (Mittal, 2019, 2021). Whereas the new modern career views a career and an internship where the employee shapes their internship exposure across organizational, departmental, and functional boundaries.

The study intended to make a significant theoretical contribution to the literature on internship, job search success, and career studies. Scholars in the past focused primarily on the quantitative aspects of internships. Many scholars have called for increased focus on qualitative aspects of internships. By focusing on the qualitative aspects of internship quality, the present study addressed a long-standing call for qualitative aspects of internships. The findings indicated that qualitative aspects of the internship together enhanced multiple psychological experiences in the internship, which led to increased job search success (Chang, et al., 2022; Goswami, et al., 2022). The interns were able to make better career adjustments in the form of career adaptability, which led to a better chance of finding a new job. The study findings established the psychological mechanism of career adaptability as the mediation link between proactive personality and job search success, which significantly contributes to career construction theory.

The study findings have important implications for universities, career counselors, graduate students, and educational practitioners. Career practitioners and students believe that experience and exposure gained through internships help students find jobs primarily by increasing key brownie points in their job resumes. The question of how the real benefit of internship experience and quality translates into success with job search outcomes remains less studied. Educational and career practitioners can use the findings to highlight the importance of enhancing core psychological experiences during an internship and focus on the qualitative aspects of an internship. The importance of an internship lies much more than in impression management and brownie points on a CV. It enhances the chances of a successful job search through the key psychological resources of career adaptability. University placement cells and career counselors should make serious efforts not just in the number of internships but more so in the quality of internships (Rana, et al., 2023; Xue, et al., 2023).

This study contributes to the literature on career development by emphasizing the importance of developing career adaptability, which enables individuals to cope with the challenges and uncertainties of their careers. The importance of a proactive personality in developing career adaptability and enhancing job search success has been found in the study. The study contributed to the literature on the factors that influence career adaptability by demonstrating the role of personality traits and work experiences in supporting career adaptability. Further, the findings from current research emphasized the effectiveness of

internships in developing career-related competencies and their role in facilitating the transition from school to work.

The main limitation is the time and number of candidates available for the study. Even though the data was collected from a slightly diverse sample, most respondents were from business schools. We even tried to control the demographic variables, but still, there will be a small uncontrollable factor affecting the respondents' answers. We could not focus more on the respondents' previous knowledge and enthusiasm. For future studies, we should focus more on the changes in an internship's before and after qualities.

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