

Future Educational and Occupational Concerns and Career Decision-Making Among Secondary School Students

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ABSTRACT: Career decision-making is a critical developmental task during secondary education and may be influenced by students' concerns about their educational and occupational futures. This study examined the relationship between future educational and occupational concerns and career decision-making among 384 secondary school students. Career decision-making was measured using the Career Decision Clarity dimension of the validated Future Readiness Questionnaire (FRQ), while future concerns were assessed through a multiple-response questionnaire. Multiple linear regression with HC3 robust standard errors and Benjamini–Hochberg False Discovery Rate (FDR) correction was used to examine the predictive effects of students' concerns.

Students reported an average of 2.77 concerns, with choosing the wrong university major (62.0%) emerging as the most common concern. The regression model was significant ($R^2 = .163$, $p < .001$). After controlling for multiple comparisons, concern about choosing the wrong university major was the only significant predictor of Career Decision Clarity ($B = -0.450$, $p < .001$), indicating lower confidence in educational and occupational decision-making among students expressing this concern. No other educational, occupational, financial, social, or personal concerns remained significant.

The findings suggest that immediate educational concerns exert a stronger influence on career decision-making than broader future uncertainties. The study highlights the importance of early, evidence-based career guidance interventions that support informed university major selection and strengthen adolescents' confidence in making educational and career decisions.

KEY WORD: Career; Guidance; Decisions; Concerns; Adolescents; Future; School.

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I. INTRODUCTION

Career decision-making represents one of the most important developmental tasks during adolescence, as students begin making educational choices that may influence their future academic, professional, and personal lives. Selecting a university major, identifying potential career pathways, and preparing for higher education require students to evaluate their interests, abilities, aspirations, and available opportunities while simultaneously coping with considerable uncertainty about the future. Unlike many decisions encountered during adolescence, educational and career choices are often perceived as having long-term consequences, making this transition particularly demanding for secondary school students^{[1][2]}.

Although educational systems increasingly recognise the importance of career guidance, many adolescents continue to experience uncertainty when making educational and occupational decisions. Limited knowledge of university programmes, insufficient exposure to labour-market opportunities, rapidly changing employment environments, and concerns regarding future success may reduce students' confidence in making informed career decisions. As educational pathways become increasingly diverse and labour markets more dynamic, understanding the factors that shape adolescents' career decision-making has become an important priority for educators, counsellors, and policy makers^[3].

Career decision-making is influenced by a complex interaction of personal, educational, social, and contextual factors. Previous research has demonstrated that students' interests, self-efficacy, family support, academic achievement, and access to career information all contribute to the quality of educational and occupational decisions. However, beyond these relatively stable influences, students frequently experience specific concerns regarding their future that may interfere with their ability to make confident career decisions. Such concerns may relate to selecting an inappropriate university major, uncertainty regarding future career goals, fear of academic failure, employment opportunities, financial challenges, labour-market competition, family expectations, or perceived personal inadequacy. These concerns represent immediate psychological and

contextual challenges that may influence how students approach educational decision-making during the transition from secondary school to higher education^{[4][5]}.

While previous studies have examined constructs such as career indecision, career decision-making self-efficacy, future anxiety, and perceived career barriers, comparatively fewer studies have investigated how specific future educational and occupational concerns relate to adolescents' confidence in making career decisions. Many existing studies conceptualise future uncertainty as a broad psychological construct, making it difficult to determine which concerns are most closely associated with students' decision-making processes. Distinguishing between different types of future concerns may provide more actionable evidence for designing targeted career guidance interventions that address the concerns most relevant to adolescents during educational transitions^[6].

Addressing this gap, the present study examines the relationship between future educational and occupational concerns and career decision-making among secondary school students. Using Career Decision Clarity as an indicator of students' confidence in making educational and occupational decisions, the study investigates both the prevalence of different future concerns and their contribution to explaining differences in career decision-making. By identifying the concerns that most strongly influence students' confidence in educational and occupational decision-making, this study contributes to a more nuanced understanding of adolescent career development and provides evidence to support more targeted career guidance programmes within secondary education^[5].

Accordingly, the study addresses the following research questions:

RQ1. What are the most common future educational and occupational concerns reported by secondary school students?

RQ2. To what extent do future educational and occupational concerns predict Career Decision Clarity among secondary school students?

RQ3. Which future educational and occupational concerns demonstrate the strongest relationship with students' career decision-making?

II. LITERATURE REVIEW

2.1 Career Decision-Making During Adolescence

Career decision-making is widely recognised as one of the central developmental tasks of adolescence, requiring students to make educational and occupational choices that influence subsequent academic pathways and future career opportunities. During the final years of secondary education, adolescents begin evaluating university programmes, exploring occupations, and considering long-term professional aspirations while simultaneously developing a stronger understanding of their personal interests, abilities, and values. Because many educational systems require students to make important academic decisions before entering higher education, the quality of career decision-making during this period may significantly influence future educational satisfaction, career development, and employability^{[1][7]}.

Career decision-making extends beyond selecting a university major or occupation. It represents a complex cognitive and psychological process through which individuals evaluate alternatives, integrate information from multiple sources, consider personal and contextual factors, and commit to educational and occupational choices. Effective career decision-making therefore requires not only access to accurate career information but also confidence in one's ability to evaluate alternatives, manage uncertainty, and make informed decisions aligned with personal goals and capabilities^[8].

Previous research has identified numerous factors associated with successful career decision-making among adolescents. Personal characteristics such as career decision-making self-efficacy, vocational interests, outcome expectations, adaptability, and confidence have consistently been associated with more effective educational choices. Social influences—including parental support, teachers, peers, and school career guidance services—also contribute by shaping students' awareness of educational opportunities and strengthening confidence in decision-making. In addition, contextual influences such as labour-market conditions, university admission requirements, technological change, and access to career information further affect how adolescents evaluate future educational and occupational alternatives^{[9][10]}.

Despite these influences, many secondary school students continue to experience considerable uncertainty when approaching educational transitions. Career decisions are frequently made under conditions of incomplete information, limited experience, and uncertainty regarding future labour-market conditions. Consequently, students often experience varying levels of confidence regarding whether they are making appropriate educational choices. Such uncertainty may reduce commitment to career decisions, increase hesitation when selecting university majors, and delay educational planning. Understanding the factors contributing to this uncertainty therefore remains an important objective for career guidance research and practice^{[2][11]}.

Career decision-making should therefore be viewed as a dynamic developmental process influenced by multiple interacting personal, social, and contextual factors rather than a single educational choice. While previous studies have extensively examined individual determinants of career decision-making, less attention has been given to the specific future educational and occupational concerns that students experience while approaching these important educational transitions. Examining these concerns may provide additional insight into the psychological challenges influencing adolescents' confidence in making educational and occupational decisions^{[4][5]}.

2.2 Future Educational and Occupational Concerns

Future educational and occupational concerns refer to the apprehensions, uncertainties, and perceived challenges that individuals experience when considering their future educational pathways and career opportunities. During adolescence, these concerns become increasingly salient as students approach major educational transitions that require them to make decisions regarding university studies, vocational pathways, and long-term career aspirations. Although a certain degree of uncertainty is considered a normal part of career development, persistent or unresolved concerns may influence students' confidence, decision-making processes, and readiness to engage in effective educational planning^[4].

Educational concerns frequently emerge from students' uncertainty regarding academic choices and future study opportunities. Among the most common concerns is the possibility of selecting an inappropriate university major, a decision often perceived as having long-term consequences for career success and personal fulfilment. Students may also question whether their academic abilities are sufficient for their preferred programmes, whether they will succeed in higher education, and whether they possess adequate information to make informed educational decisions. These concerns may become particularly pronounced during the final years of secondary education, when educational decisions become increasingly immediate and consequential^[12].

Occupational concerns represent another important dimension of adolescents' future uncertainty. Rapid technological change, evolving labour-market demands, economic instability, and increasing competition for employment have made future career opportunities more difficult to predict than in previous generations. Consequently, many students express concerns about finding meaningful employment, achieving financial stability, or entering occupations that remain relevant within changing labour markets. Such concerns may shape students' educational preferences by encouraging them to prioritise perceived employment security, income potential, or occupational prestige when evaluating alternative career pathways^[13].

Future concerns are also influenced by social and family contexts. Parents, relatives, teachers, and peers frequently provide advice, expectations, and opinions regarding educational and occupational choices. While supportive guidance may facilitate career exploration and informed decision-making, strong external expectations may also increase pressure to pursue particular educational pathways or occupations. Adolescents who fear disappointing their families or failing to meet social expectations may therefore experience additional uncertainty when evaluating educational alternatives, particularly when personal interests differ from perceived external expectations^{[14][15]}.

In addition to educational, occupational, and social influences, adolescents may experience concerns related to their own perceived capabilities. Feelings of self-doubt, uncertainty regarding personal strengths, and concerns about being sufficiently prepared for future academic or professional demands may reduce confidence during educational decision-making. Similarly, uncertainty regarding future goals or difficulty identifying preferred occupations may further complicate the decision-making process by limiting students' ability to compare educational alternatives according to clearly defined career aspirations^[16].

Importantly, future educational and occupational concerns should not be viewed solely as negative experiences. Moderate levels of concern may motivate students to seek additional information, explore educational alternatives, consult career guidance professionals, and engage more actively in career planning. However, when concerns become excessive or remain unresolved, they may contribute to hesitation, delayed decision-making, and reduced confidence in selecting educational pathways. Distinguishing between different types of concerns is therefore important because not all concerns are expected to influence career decision-making to the same extent^[4].

Despite increasing recognition of adolescents' educational and occupational concerns, much of the existing literature has examined future uncertainty using broad constructs such as career anxiety, perceived career barriers, or future orientation. Comparatively fewer studies have investigated how specific concerns—including choosing the wrong university major, uncertainty regarding future goals, employment prospects, financial challenges, labour-market competition, family expectations, and perceived personal inadequacy—relate to adolescents' confidence in making career decisions. Examining these concerns individually may provide more precise evidence to guide the design of targeted career guidance interventions that directly address the issues most relevant to students during educational transitions^[17].

2.3 Future Educational and Occupational Concerns and Career Decision-Making

Career decision-making requires adolescents to evaluate educational alternatives while managing uncertainty regarding future academic and occupational outcomes. Although access to career information, self-awareness, and social support contribute to informed decision-making, students rarely make educational choices in the absence of concerns. Instead, educational and occupational decisions are frequently accompanied by uncertainty regarding future consequences, making specific concerns an important psychological context within which career decisions are formed^{[18][19]}.

Career development theories suggest that individuals make educational and occupational decisions by integrating personal characteristics with their perceptions of future opportunities and potential risks. When students perceive greater uncertainty regarding the consequences of their educational choices, they may experience increased hesitation, reduced confidence, and greater difficulty committing to a particular educational pathway. Conversely, students who perceive fewer uncertainties or who are better able to manage future concerns are generally more confident in evaluating alternatives and making educational decisions^{[8][10]}.

Not all future concerns are expected to influence career decision-making equally. Concerns directly associated with educational choices—particularly the possibility of selecting the wrong university major or uncertainty regarding future career goals—are likely to have the strongest influence because they relate directly to the decision students are required to make. These concerns may reduce students' willingness to commit to a particular educational pathway by increasing perceptions of risk and fear of making irreversible decisions. In contrast, broader concerns such as labour-market competition, financial stability, or future employment opportunities may be perceived as more distant challenges that become increasingly relevant after educational decisions have already been made^{[16][20]}.

Social concerns may also influence career decision-making, although their effects are likely to vary across individuals. Family expectations, cultural values, and advice from significant others may provide valuable guidance and emotional support during educational transitions. However, when external expectations conflict with students' personal interests or aspirations, they may increase uncertainty and complicate educational decision-making. Similarly, concerns regarding personal competence or feelings of inadequacy may reduce confidence in evaluating educational alternatives, particularly among students who underestimate their abilities or question their capacity to succeed in higher education^{[14][20]}.

Despite growing interest in adolescent career development, relatively limited empirical evidence has examined the simultaneous influence of multiple future educational and occupational concerns on career decision-making. Previous studies have commonly focused on broad constructs such as career indecision, future anxiety, or career decision-making self-efficacy, providing valuable insight into overall career development while offering less understanding of the relative importance of individual concerns. Identifying which concerns exert the strongest influence on career decision-making may enable schools and career guidance practitioners to design interventions that address the specific issues most likely to undermine students' confidence during educational transitions^{[21][22][23]}.

Accordingly, the present study investigates whether different future educational and occupational concerns contribute differently to adolescents' career decision-making. Rather than assuming that all concerns influence educational decisions in a similar manner, the study examines the relative contribution of individual concerns to identify those most closely associated with students' confidence in making educational and occupational decisions.

2.4 Research Hypotheses

The literature suggests that career decision-making is a multifaceted developmental process influenced by students' perceptions of future educational and occupational opportunities, uncertainties, and potential barriers. While previous studies have established that future-oriented perceptions influence educational and career development, relatively little empirical evidence has examined whether specific future educational and occupational concerns contribute differently to adolescents' career decision-making. Existing research has frequently treated future uncertainty as a broad construct, providing limited understanding of which concerns are most influential during the transition from secondary school to higher education^{[19][21][24]}.

Building upon the theoretical perspectives discussed in the preceding sections, the present study proposes that future educational and occupational concerns are associated with adolescents' confidence in making educational and career decisions. However, because these concerns represent different sources of uncertainty, they are not expected to exert equal influence on the career decision-making process. In particular, concerns directly related to educational choices are expected to have a greater impact than broader occupational, social, or personal concerns because they relate more closely to the immediate decisions students are required to make.

Accordingly, the following hypotheses were formulated:

H1: Future educational and occupational concerns are significantly associated with career decision-making among secondary school students.

H2: Different future educational and occupational concerns contribute differently to career decision-making among secondary school students.

H3: Educational concerns exert a stronger influence on career decision-making than occupational, social, or personal concerns among secondary school students.

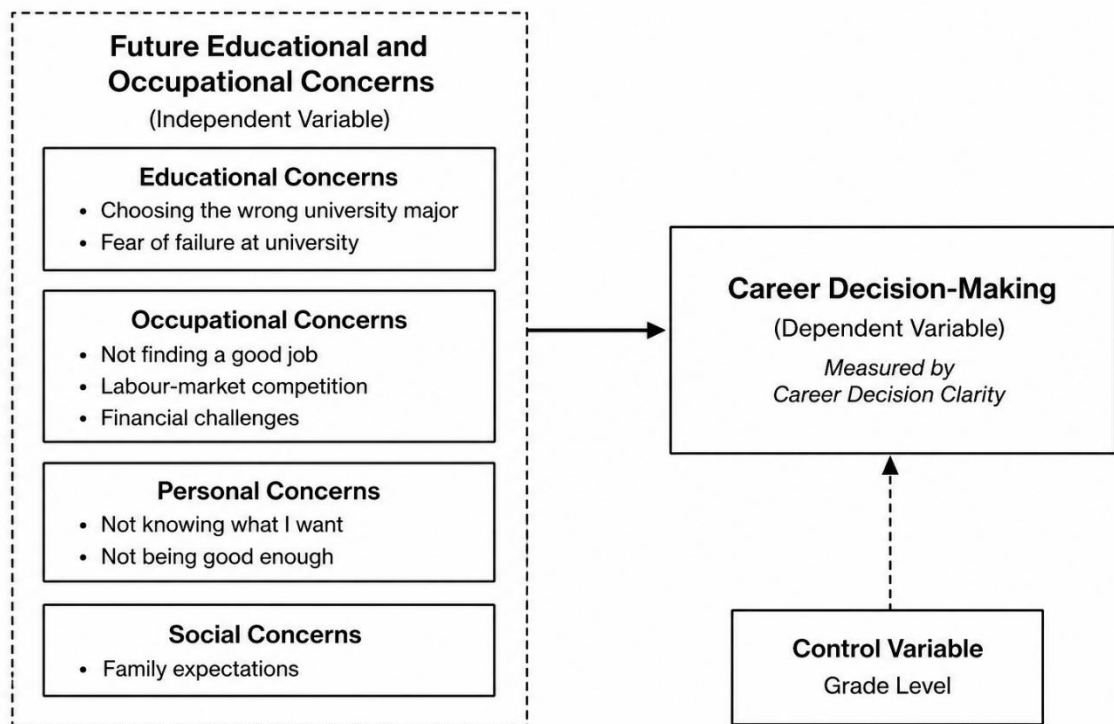
2.5 Proposed Research Model

Based on the reviewed literature, the present study proposes a conceptual framework linking future educational and occupational concerns to career decision-making among secondary school students. The model assumes that adolescents' concerns regarding their educational and occupational futures influence their confidence in making educational and career decisions. However, rather than treating future concerns as a single, homogeneous construct, the study recognises that different concerns may exert varying degrees of influence on the decision-making process.

The independent variables comprise nine future educational and occupational concerns reported by students, including concerns related to choosing the wrong university major, uncertainty regarding future career goals, employment opportunities, university failure, labour-market competition, financial challenges, family expectations, perceived personal inadequacy, and other concerns. These concerns represent distinct sources of educational, occupational, social, and personal uncertainty that may influence adolescents' confidence during educational transitions.

Career decision-making is operationalised using the Career Decision Clarity dimension of the validated Future Readiness Questionnaire (FRQ), which assesses students' confidence in making educational and occupational decisions. Grade level is included as a control variable to account for developmental differences associated with progression through secondary school.

The proposed conceptual model is presented in **Figure 1**.



III. METHODOLOGY

3.1 Research Design

The present study employed a quantitative cross-sectional research design to examine the relationship between future educational and occupational concerns and career decision-making among secondary school students. A cross-sectional approach was considered appropriate because it enables the simultaneous examination of multiple educational, occupational, personal, and social concerns associated with students' confidence in making career decisions at a specific stage of educational development^{[25][26]}.

Data were collected using a structured self-administered questionnaire distributed to students enrolled in secondary education. The questionnaire combined a validated measure of career decision-making with questions assessing future educational and occupational concerns and demographic characteristics. Participation was voluntary, responses were anonymous, and all data were analysed in aggregate to ensure confidentiality.

The study adopted an explanatory research approach, seeking to identify which future educational and occupational concerns were associated with career decision-making rather than merely describing the prevalence of students' concerns. This design was considered appropriate for addressing the study objectives and testing the proposed hypotheses.

3.2 Participants

The study included 384 secondary school students enrolled in Grades 10, 11, and 12. Participants were recruited through their schools using a voluntary participation approach. These grade levels were selected because students at this stage are actively preparing for higher education and are expected to make important educational and career decisions regarding university studies and future occupations.

The sample included students from different academic levels to capture variation in career decision-making across the later stages of secondary education. Grade level was therefore included as a control variable in the regression analyses to account for developmental differences associated with educational progression.

Prior to data collection, participants were informed about the purpose of the study, assured that participation was voluntary, and advised that responses would remain anonymous and confidential. Completion of the questionnaire indicated informed consent to participate in the study.

3.3 Research Instrument

The questionnaire consisted of three sections designed to collect demographic information, assess career decision-making, and identify students' future educational and occupational concerns.

The first section collected demographic information, including participants' grade level.

The second section measured career decision-making using the Career Decision Clarity dimension of the validated Future Readiness Questionnaire (FRQ). The scale consists of items assessing students' confidence in making educational and occupational decisions. Responses were recorded using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating greater clarity and confidence in career decision-making.

The third section assessed future educational and occupational concerns using a multiple-response question that asked students to identify the concerns they currently experienced regarding their educational and occupational future. Participants were allowed to select more than one concern from a predefined list, including choosing the wrong university major, not finding a good job, uncertainty regarding future goals, fear of university failure, labour-market competition, financial challenges, family expectations, perceived personal inadequacy, and other concerns.

3.4 Variables

The present study examined the relationship between future educational and occupational concerns and career decision-making among secondary school students.

The dependent variable was career decision-making, operationalised using the Career Decision Clarity dimension of the validated Future Readiness Questionnaire (FRQ). Higher scores indicated greater confidence and clarity in making educational and occupational decisions.

The independent variables consisted of nine future educational and occupational concerns reported by participants. Each concern was treated as a separate binary predictor, coded as 1 = Selected and 0 = Not Selected. The concerns included:

- Choosing the wrong university major
- Not finding a good job
- Not knowing what I want for my future
- Fear of failure at university
- Labour-market competition
- Financial challenges
- Family expectations
- Not being good enough
- Other concerns

To account for potential developmental differences, grade level was included as a control variable in all regression analyses.

IV. RESULTS

4.1 Participant Characteristics

A total of 384 valid questionnaires were included in the final analysis. Participants were secondary school students enrolled in Grades 10, 11, and 12, representing the educational stage during which adolescents begin making important educational and occupational decisions regarding higher education and future careers. Grade level was included as a control variable in subsequent regression analyses to account for developmental differences associated with educational progression.

4.2 Future Educational and Occupational Concerns

Students reported multiple concerns regarding their future educational and occupational pathways, selecting an average of 2.77 concerns from the available response options. The number of concerns selected ranged from one to seven, indicating substantial variation in the degree of uncertainty experienced among participants.

As presented in Table 1, the most frequently reported concern was choosing the wrong university major, identified by 238 students (62.0%). This was followed by not finding a good job (164 students; 42.7%), not knowing what they wanted for their future (154 students; 40.1%), and fear of failure at university (152 students; 39.6%).

Moderately reported concerns included family expectations (102 students; 26.6%), labour-market competition (74 students; 19.3%), and financial challenges (74 students; 19.3%). The least frequently reported concern was not being good enough, selected by 54 students (14.1%), while 50 students (13.0%) identified other concerns not included among the predefined response options.

Overall, the descriptive findings indicate that concerns directly related to educational decision-making were more prevalent than broader occupational, financial, or personal concerns. In particular, fear of choosing the wrong university major emerged as the dominant concern among secondary school students approaching educational transitions.

Table 1

Concern	%
Choosing the wrong university major	62.0
Not finding a good job	42.7
Not knowing what I want for my future	40.1
Fear of failure at university	39.6
Family expectations	26.6
Labour-market competition	19.3
Financial challenges	19.3
Not being good enough	14.1
Other concerns	13.0

4.3 Future Educational and Occupational Concerns and Career Decision-Making

A multiple linear regression analysis was conducted to examine whether future educational and occupational concerns predicted career decision-making, operationalised using the Career Decision Clarity dimension of the Future Readiness Questionnaire. Grade level was entered as a control variable, and heteroskedasticity-consistent (HC3) robust standard errors were estimated. The overall regression model was statistically significant, $F = 4.54$, $p < .001$, explaining 16.3% of the variance in career decision-making ($R^2 = .163$; Adjusted $R^2 = .116$).

Among the nine future educational and occupational concerns examined, choosing the wrong university major emerged as the only statistically significant predictor after applying the Benjamini–Hochberg False Discovery Rate (FDR) correction. Students reporting this concern demonstrated significantly lower Career Decision Clarity than those who did not report this concern ($B = -0.450$, HC3 SE = 0.128, $t = -3.51$, $p < .001$, 95% CI $[-0.702, -0.199]$, FDR-adjusted $p = .004$). This finding indicates that concern about selecting an inappropriate university major is associated with substantially lower confidence in making educational and career decisions.

Concern about not knowing what I wanted for my future initially demonstrated a significant negative association with Career Decision Clarity ($B = -0.281$, HC3 SE = 0.119, $t = -2.36$, $p = .018$, 95% CI $[-0.514, -0.048]$). However, this relationship did not remain statistically significant after adjustment for multiple comparisons (FDR-adjusted $p = .082$) and should therefore be interpreted with caution.

None of the remaining concerns—including employment opportunities, fear of university failure, labour-market competition, financial challenges, family expectations, perceived personal inadequacy, and other concerns—demonstrated statistically significant relationships with Career Decision Clarity after FDR correction. Similarly, grade level was not significantly associated with Career Decision Clarity ($B = -0.023$, $p = .716$), indicating that differences in confidence regarding educational and career decision-making were not explained by students' grade level within the present sample.

Overall, the findings support the view that concerns directly related to educational choices exert a stronger influence on career decision-making than broader occupational, financial, social, or personal concerns.

4.4 Evaluation of the Research Hypotheses

The findings provided partial support for the proposed hypotheses.

H1, which proposed that future educational and occupational concerns are significantly associated with career decision-making among secondary school students, was partially supported. Although the overall regression model was statistically significant, only one specific concern remained significant after controlling for multiple comparisons.

H2, which proposed that different future educational and occupational concerns contribute differently to career decision-making, was supported. The findings demonstrated that the concerns varied considerably in their predictive value, with only one concern emerging as a robust predictor of Career Decision Clarity.

H3, which proposed that educational concerns exert a stronger influence on career decision-making than occupational, social, or personal concerns, was supported. Specifically, concern about choosing the wrong university major was the only concern that significantly predicted Career Decision Clarity after FDR correction, whereas occupational, financial, social, and personal concerns did not demonstrate statistically significant effects.

V. DISCUSSION

5.1 Future Educational and Occupational Concerns Among Secondary School Students

The findings demonstrate that secondary school students experience a wide range of concerns regarding their educational and occupational futures. On average, participants reported nearly three concerns, suggesting that uncertainty about future educational and career pathways is common during late adolescence. Among the concerns examined, choosing the wrong university major emerged as the most prevalent, followed by concerns about securing future employment, uncertainty regarding personal career goals, and fear of academic failure at university.

These findings are consistent with previous research indicating that adolescence is characterised by increased educational uncertainty as students approach major academic transitions. Selecting a university programme represents one of the first long-term educational decisions adolescents are required to make, often without extensive knowledge of occupations, labour-market requirements, or their own interests and abilities. Consequently, concerns about making an inappropriate educational choice are expected to become particularly salient during the final years of secondary education.

Interestingly, occupational concerns such as employment opportunities and labour-market competition were reported less frequently than concerns directly related to educational choices. This pattern suggests that students tend to focus first on immediate educational decisions before considering more distant occupational challenges. Such findings support developmental theories of career decision-making, which propose that educational choices often serve as the first critical milestone in adolescents' career development.

5.2 Educational Concerns as Predictors of Career Decision-Making

The principal finding of this study is that concern about choosing the wrong university major was the only future concern that significantly predicted Career Decision Clarity after controlling for multiple comparisons. Students expressing this concern demonstrated lower confidence in making educational and occupational decisions, highlighting the central role of educational uncertainty during adolescence.

This finding supports the theoretical proposition that concerns closely aligned with the decision currently facing students exert the greatest influence on decision-making confidence. While adolescents may worry about future employment, financial security, or labour-market competition, these concerns remain relatively distant. In contrast, selecting a university major is an immediate and unavoidable decision, making uncertainty surrounding this choice particularly influential.

The results also reinforce previous literature suggesting that Career Decision Clarity depends not only on self-knowledge and career exploration but also on students' confidence that they possess sufficient information to make informed educational choices. When students fear selecting an inappropriate university

major, they may postpone decisions, experience increased indecision, or become less confident in evaluating available educational alternatives.

5.3 Why Were Other Concerns Not Significant?

Although several concerns initially appeared related to Career Decision Clarity, only concern about choosing the wrong university major remained statistically significant after controlling for false discovery. In particular, uncertainty regarding future goals demonstrated an initial negative association with career decision-making but did not retain statistical significance following adjustment for multiple comparisons.

One possible explanation is that many educational and occupational concerns overlap conceptually. Students who worry about employment, financial security, or university failure may simultaneously experience uncertainty regarding educational choices. Once these concerns are examined within the same statistical model, the concern most directly related to the immediate educational decision may account for much of the shared variance in Career Decision Clarity.

Another explanation relates to the developmental stage of the participants. Secondary school students have generally not yet entered higher education or the labour market. Consequently, concerns regarding future employment or financial stability may remain relatively abstract compared with the concrete decision of selecting a university major. Immediate educational concerns therefore appear to exert a stronger influence on students' confidence in making career decisions than more distant occupational or financial uncertainties.

5.4 Implications for Career Guidance Practice

The findings have important implications for schools, career counsellors, and educational policymakers. The prominence of concerns related to university major selection suggests that career guidance programmes should prioritise supporting students during educational decision-making rather than focusing exclusively on labour-market information or future employment trends.

Schools should provide structured opportunities for students to explore academic disciplines, occupations, and higher education pathways before university application periods. Career counselling interventions that combine self-assessment, career exploration, university information, and individual guidance may help reduce uncertainty surrounding educational choices and strengthen students' confidence in making informed career decisions.

The findings also highlight the importance of introducing career guidance earlier during secondary education. Waiting until the final year of school may limit students' opportunity to explore educational alternatives systematically. Continuous career development programmes beginning in earlier grades may therefore contribute to greater Career Decision Clarity and smoother transitions into higher education.

VI. PRACTICAL IMPLICATIONS

The findings of this study provide several practical implications for educators, career counsellors, schools, and policymakers responsible for supporting adolescents' educational and career development. The identification of choosing the wrong university major as the primary concern influencing Career Decision Clarity suggests that career guidance initiatives should place greater emphasis on supporting students during educational decision-making rather than focusing exclusively on long-term employment outcomes.

Schools should provide structured and continuous career guidance programmes that help students understand the relationship between their interests, abilities, educational opportunities, and future occupations. Activities such as career assessments, university programme exploration, workplace exposure, mentoring, and individual counselling may reduce uncertainty surrounding university major selection and strengthen students' confidence in making informed educational decisions.

Career guidance should also begin before students reach their final year of secondary education. Early exposure to career exploration enables adolescents to develop greater self-awareness, explore different educational pathways, and make more informed decisions over time rather than under the pressure of university application deadlines.

For policymakers, the findings highlight the importance of integrating comprehensive career education within secondary school curricula. Providing students with accurate information about university programmes, occupational pathways, and labour-market opportunities may facilitate smoother educational transitions and contribute to more confident and informed career decision-making.

VII. LIMITATIONS AND FUTURE RESEARCH

Several limitations should be considered when interpreting the findings of this study. First, the research employed a cross-sectional design, which limits the ability to draw causal conclusions regarding the relationship between future educational and occupational concerns and career decision-making. Longitudinal studies would

provide a better understanding of how students' concerns evolve throughout secondary education and influence subsequent educational and occupational decisions.

Second, the study relied on self-reported questionnaire data, which may be influenced by participants' perceptions, response styles, or temporary emotional states. Future research may benefit from combining quantitative measures with qualitative interviews or focus groups to obtain a deeper understanding of the experiences underlying students' educational and occupational concerns.

Third, although the study examined several commonly reported concerns, additional contextual factors such as parental influence, academic achievement, socioeconomic background, access to career guidance services, and personality characteristics were not included in the present model. Examining these factors may provide a more comprehensive understanding of the determinants of career decision-making during adolescence.

Future research should also investigate whether similar patterns are observed across different educational systems, cultural contexts, and age groups. Comparative studies may help determine whether concerns surrounding university major selection remain the strongest predictor of career decision-making or whether other concerns become more influential as students progress into higher education or enter the labour market.

VIII. CONCLUSION

This study examined the relationship between future educational and occupational concerns and career decision-making among secondary school students. The findings demonstrated that adolescents experience multiple concerns regarding their educational and occupational futures, with choosing the wrong university major emerging as the most prevalent concern.

Although students reported concerns related to employment opportunities, financial challenges, family expectations, labour-market competition, and uncertainty regarding future goals, only concern about selecting the wrong university major significantly predicted Career Decision Clarity after controlling for multiple comparisons. This finding suggests that concerns directly related to the immediate educational decisions facing adolescents exert a stronger influence on career decision-making than broader occupational, financial, social, or personal concerns.

The study contributes to the career development literature by demonstrating that not all future concerns influence career decision-making equally. Rather than general future uncertainty, it is the prospect of making an inappropriate educational choice that appears to undermine adolescents' confidence in making educational and occupational decisions. These findings reinforce the importance of timely, structured, and evidence-based career guidance programmes that support students in exploring educational opportunities and selecting university pathways aligned with their interests, abilities, and aspirations.

By identifying the concerns that most strongly influence career decision-making, this study provides evidence that can inform the design of more targeted career guidance interventions within secondary education. Supporting students during this critical educational transition may enhance decision confidence, facilitate more appropriate educational choices, and contribute to successful transitions into higher education and future careers.

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