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# DECIPHERING THE STUDENT DILEMMA: THE QUEST FOR PASSION AND PURPOSE ON ADDMISION OF TADRIS BIOLOGY DEPARTMENT A RELIGIOUS HIGHER EDUCATION INSTITUTIONS

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**Abstract:** The primary objective of this study is to scrutinize the underlying factors that inform students' choices when selecting the Tadris Biology major at a Religious Higher Education Institution located in Jambi. The research adopts a qualitative, remarkably grounded theory approach as its methodological framework. The central aim is to comprehensively examine the justifications and rationales that steer students toward their decision to pursue the Tadris Biology major. The research methodology is firmly anchored in qualitative paradigms, and grounded theory provides the overarching structure for this investigation. The data collection technique in this research is by using a questionnaire. Data analysis is systematically carried out through thematic analysis, allowing for extracting key themes and insights. The sample selection process is methodically executed, utilizing the theoretical sampling method. The samples were 98 students registered in the Tadris Biology department at an Islamic college. The research findings collectively underscore the significant influence of Gender-Based Considerations, Parental and Familial Influence, Personal Interest in Biology as a Major Field of Study, an Exploration into the Impact of School Background, and Prospects for Future Careers in steering students' decisions within this academic domain.

**Keywrods:** *Academic Choices, Biology Students, Major Selection, Religious Institutions*

## INTRODUCTION

The prospective student has the prerogative to exercise informed judgment in pursuing higher education, thereby embarking on a significant educational journey. The selection process of the institution of higher learning and the specific academic program is intricately intertwined with many variables and deliberations. These determinations are shaped by internal and external factors, encompassing intrinsic inclinations, competencies, and exogenous considerations, which collectively influence the student's choice of educational path [1-3].

Typically, prospective students make their academic decisions based on a singular program of study, drawing upon personal biases, interests, aptitudes, and, in some instances, gender norms within their chosen profession [4-5]. The choices they make invariably carry significant consequences for their future trajectories. Students pursuing a degree in Biology present a spectrum of rationales and cogent arguments underpinning their academic pursuits at the university level.

Selecting an academic path at the university level is intricate and rarely solely determined by autonomous choices [6-7]. It is subject to a multitude of external factors that exert considerable influence on prospective students. These factors encompass the role of parental guidance, individual interests, the educational background of the originating institution, and career prospects [8]. This intricate interplay frequently engenders a sense of perplexity among potential students when confronted with various choices, spanning the selection of a university and a specific field of study. Such a scenario can potentially yield consequential complications during education. For instance, it may result in students disengaging from learning, ultimately impairing their academic performance and achievement due to a mismatch between the chosen major and their intrinsic aptitudes and inclinations.

Parental involvement significantly impacts the educational pathways of their offspring, as parents serve as both guardians and evaluative references for their children's achievements [9]. Parental influence varies, with some parents wholeheartedly endorsing their children's decisions and choices, while others may lack support for their children's chosen paths [10]. Notably, regardless of their educational attainments, parents typically aspire for their children to attain advanced levels of education, underpinned by the belief that higher education facilitates enhanced employment prospects and broader access to valuable resources [11].

The selection of the university and the academic major is invariably subject to the influence of the prospective student's prior educational background. Sure, students opt for a significant field of study that aligns with their previous educational experiences in high school. This choice is often predicated on a foundational understanding of the chosen field, thereby rendering the assimilation of collegiate-level course materials more accessible and comprehensible [12]. Notably, as a general trend, students majoring in Biology typically emanate from high schools specializing in the natural sciences. This thematic unity naturally facilitates the transition to studying Biology at the tertiary level.

Selecting an academic major congruent with one's interests and preferences is paramount in the educational trajectory [13-14]. It is well-documented that individuals tend to exhibit heightened motivation, contentment, and academic achievement when they choose a major that resonates with their intrinsic passions and interests. This innate source of profound inspiration fosters a stronger work ethic and propels individuals to engage more deeply in the subjects they find intellectually stimulating. Furthermore, the alignment of one's academic major with personal interests not only augments the development of one's intellectual capacities but also enhances one's effectiveness in contributing to one's chosen field. Recognizing that such alignment enhances academic pursuits and augments the spectrum of professional opportunities is imperative.

Such alignment between one's chosen primary and personal interests engenders a sense of contentment and satisfaction during the educational journey. This unity between academic pursuits and personal predilections fosters a positive emotional state, including joy and happiness. Significantly, this emotional state can profoundly impact the quality of one's education and academic achievement. As a direct result of this alignment, individuals are more likely to excel academically. Furthermore, pursuing a major that resonates with personal interests can significantly enhance future career prospects, thus further substantiating the pivotal role of this alignment in shaping an individual's academic and professional trajectory [15].

Choosing a major is a very tough decision because there are so many factors to consider. This research aimed to assist students and facilitate their decision-making process while selecting a major. As a result, the researcher believes this research is necessary to advance knowledge and assist underprivileged pupils and society.

## RESEARCH METHODS

This research employs qualitative methods within a framework guided by the Grounded Theory approach. The Grounded Theory approach represents an inductive approach to theory discovery, facilitating the concurrent development of theoretical explanations derived from observations grounded in the collected data [16]. The grounded theory qualitative research methodology departs from conventional qualitative research through its fundamental approach. Grounded theory research commences with the exploration of empirical data, progressing towards the formulation of conceptual frameworks. Conversely, conventional qualitative research methods typically commence with conceptual exploration before embarking on empirical investigations [17].

The sampling procedure employed the theoretical sampling method, integral to theory development, and complements the grounded theory approach applied in the research [18]. The sample selection was based on the development of students' arguments in choosing a biology major. The sample was flexibly selected based on theoretical considerations. Finally, 98 students were selected to have their arguments analyzed in choosing a biology major.

The data collection method in this research is by using a questionnaire. A questionnaire is a series of questions to collect respondents' information [19]. Questionnaires can reveal various types of information, including facts, opinions, or perceptions. It is commonly used in scientific research, surveys, or social studies to collect data from many people or groups to understand a particular topic or phenomenon. In this research, the researcher distributed questionnaires to the sample that the researcher chose, namely students majoring in biology. The aim was for the researcher to get correct and accurate research results.

In a questionnaire, questions can be designed in various ways, such as closed questions that ask for responses in multiple choice form. Open questions allow respondents to provide answers in narrative form or a combination of the two [20]. The primary purpose of a questionnaire is to collect data that can be analyzed systematically to understand the problem or topic under study better.

In this instance, the researcher formulated a composite questionnaire, amalgamating multiple-choice questions and narrative-based inquiries into a single survey instrument. The questionnaire was created in the digital format of a Google Form, and subsequently, the survey will be disseminated through a hyperlink to the chosen sample participants.

## RESULTS AND DISCUSSION

The data analysis methodology employed in this research is Thematic Analysis, a well-established approach within qualitative research. Thematic analysis is characterized by its capacity to scrutinize and interpret data without imposing a predetermined theoretical framework. [21]

### Gender-Based Considerations

The selection of a major by students, specifically focusing on the Tadris Biology program, offers an intriguing perspective on the influence of gender dynamics. The empirical evidence from Religious Higher Education research offers compelling insights into the discernible gender disparity that characterizes this academic sphere. Notably, the collected data cast a spotlight on the distinct gender distribution observed among students who have opted for the biology major at Religious Higher Education. The research findings underscore the presence of a pronounced gender imbalance within this academic domain. Concretely, the data elucidate that the preponderance of students who have chosen the biology major is female, constituting 75% of the

total. At the same time, their male counterparts represent a distinct minority, accounting for a mere 25% of the student population enrolled in the program.

This gender-based disproportion raises questions regarding the underlying factors and influences propelling this conspicuous pattern. The gender dynamics in the choice of major, particularly in Tadris Biology, invoke a complex interplay of sociocultural, psychological, and educational variables. These variables collectively contribute to the crystallization of the observed gender disparity, thereby warranting in-depth investigation to unravel the intricate layers of causation [22-23]. The gender composition within the Tadris Biology program holds critical implications for the educational landscape at the institute and the broader socio-economic and gender dynamics within the community. Understanding the underpinnings of this gender-related preference in primary selection is pivotal, as it encapsulates the multifaceted dimensions that shape students' academic choices, thus representing a salient aspect of the academic milieu.

The gender-related incongruity discernible in primary selection unfolds as an intriguing facet, inviting further scrutiny into the foundational elements that shape academic choices within the precincts of the Tadris Biology program. The observance of this conspicuous gender divide in primary selection within biology education is a poignant impetus for an in-depth examination. This disparity beckons for a nuanced investigation that delves into the complex network of overt and subtle factors influencing students' academic decisions [24]. A thorough exploration of the contributing determinants is imperative, as it provides a platform for unraveling the intricate mosaic of causative elements that give rise to this gender-driven academic preference.

Furthermore, this gender asymmetry beckons the critical interrogation of its potential consequences and implications within biology education. Notably, it kindles inquiries about how this pronounced gender imbalance may influence the trajectory of academic and career pursuits among male and female students. Investigating these ripple effects encapsulates the domains of educational and career trajectories, shedding light on whether this gender-driven primary selection harbors broader socio-professional disparities. As such, it raises pertinent questions regarding the lasting implications of this phenomenon on the academic and professional experiences of male and female students pursuing the Tadris Biology program [25-26].

An exhaustive and systematic exploration of these empirical insights, steeped in a robust theoretical framework, can enrich our comprehension of the complex sociocultural and individual underpinnings that channel students into specific academic pathways based on gender. The resultant knowledge can be leveraged for informed policy formulation and educational practices. A comprehensive understanding of the multifaceted forces that underlie gender-related primary selection is vital for constructing equitable educational environments where academic choices are guided by individual proclivities rather than gender-driven determinants.

Research on female students' interest in science majors has become an increasingly relevant and important topic in higher education today. Various studies have shown significant changes in female students' interest in science majors over the past few decades [27]. One of the factors influencing this interest is a shift in the understanding and promotion of science as an inclusive field.

Recent studies indicate that many female students are interested in science majors when they can see how science can be applied to solve problems relevant to society [28]. Female students ' interest in science increases when science is connected to global issues such as climate change, public health, or technological innovation. Additionally, the role of successful female role models in the fields of science and technology also has a positive impact on female students' interest in science majors. While challenges such as gender bias and harmful stereotypes still exist, this research helps us understand the dynamics of female students' interest in science majors. It can assist in designing more inclusive strategies to attract more female students to this discipline.

**Parental and Familial Influence**

A child's educational journey is intricately intertwined with parents' pervasive influence, guidance, and authoritative agency, manifesting significantly during the crucial juncture of choosing higher education paths [29]. In this intricate interplay of factors, the process of selecting a major by students is inextricably linked with the roles and control exerted by their families and parents. It is commonplace for parents to harbor lofty aspirations for their offspring, driven by the desire to secure promising career prospects and a prosperous future. This aspiration is underscored by their active financial involvement in their child's educational odyssey. Consequently, parents are invariably cast in a dual role characterized by receptivity to their children's proclivities and interests, irrespective of the alignment with parental preferences, as well as the provision of emotional support to navigate the multifaceted terrain of university and significant selection [30].

The pervasive ambivalence and anxiety experienced by students during the decision-making process concerning the choice of university significantly underscore the indispensable role of a nurturing environment and emotional sustenance rendered by their parents. Parents, irrespective of their educational backgrounds, invariably share the common aspiration of securing a heightened level of

education for their progeny. This shared objective underscores the collective desire to facilitate enhanced employment opportunities and the acquisition of valuable resources [31]. The parental role within the decision-making process is characterized by a nuanced duality, wherein some parents wholeheartedly endorse their offspring's decisions and choices. In contrast, others adopt a more ambivalent stance, leading to discordance with the decisions made by their children. These intricate familial dynamics surrounding educational and career choices represent a salient component of the broader academic landscape.

The empirical insights from the research endeavor shed light on a noteworthy pattern observed within a specific cohort of informants, wherein they embark on majoring in Biology, underpinned by considerations deeply rooted in familial and parental influences. This phenomenon aligns cohesively with the extensive body of prior research, which accentuates the pervasive trend that places parents in the vanguard of sculpting the educational trajectories of their progeny [32]. The parental impetus driving the selection of a major for their wards invariably orbits around the aspiration to engender an enriched educational odyssey, ultimately paving the way for a more promising, prosperous, and fulfilling future. This narrative resonates harmoniously with antecedent research, underscoring parents' pivotal and enduring role in the decision-making dynamics governing their children's educational pursuits. It underscores the profound significance of parental aspirations for their offspring's academic and career ascendancy.

This paternal and maternal guidance transcends the boundaries of socio-economic strata, mirroring a shared commitment among parents, regardless of their educational backgrounds, to foster elevated educational achievements for their descendants. The collective ambition hinges on anticipating broader employment opportunities and acquiring indispensable resources for their children's prospects [33]. The intricate interplay of parental guidance and familial aspirations creates an indelible imprint on the intricate fabric of educational and career choices, encapsulating a prominent facet of the academic landscape.

In practice, a noticeable disjunction exists between parents' expectations and their children's genuine interests when deciding their college majors. Educational Psychologists affiliated with the Integrity Development Flexibility (IDF) conducted research that elucidates this incongruity. The research reveals a prevalent phenomenon wherein many students opt for college majors that do not align with their interests and inclinations. This apparent misalignment can be attributed to the dominant influence of parental aspirations, which supersedes the students' intrinsic talents and personal desires. In many instances, the choice of college major appears to be driven by the heightened expectations parents harbor for their children's prospects, thereby eclipsing the consideration of the student's unique talents and passions.

**Interest in Majoring in Biology**

The Tadris Biology major frequently attracts students with a profound affinity and aptitude for the subject matter. Foremost among their motivations is a genuine passion for the field of biology. These students typically exhibit an enduring and deep-seated interest in biology, which may have originated in their earlier educational experiences. Such enthusiasm is often cultivated through active engagement with biology classes, research endeavors, or science-related extracurricular activities like science clubs. For these individuals, the driving force behind the decision to major in Biology is the desire to align their academic and professional pursuits with their innate passion and penchant for the subject. As the primary determinant in selecting the Tadris Biology major, the profound interest in biology signifies the convergence of academic and personal aspirations. It symbolizes the students' aspiration to embark on a career path that harmonizes with their profound passion for the subject, underpinning their commitment to their academic and professional pursuits.

The research findings scrutinized by the researchers underscore the pivotal role of individual interests and aptitudes as compelling factors for students in choosing their college majors. The notion that selecting a major aligned with one's intrinsic interests facilitates ease of academic pursuit and is likely to yield favorable outcomes has been substantiated in academic literature [34]. This paradigm resonates with students in the Tadris Biology department at Religious Higher Education, as the research conducted among 98 informants reveals that a substantial portion, precisely 63 informants, opt for the Tadris Biology major driven by their innate passions and personal inclinations.

The research outcomes further delineate the motivations underpinning students' choices of the Biology major, highlighting the salience of their interests and the desire to delve into the intricate world of living organisms and their environments. Consequently, these rationales accentuate the harmonious confluence between the Tadris Biology major and the student's interests, making it an apt choice for those whose academic pursuits align with their innate proclivities.

The selection of a significant commensurate with students' interests and proficiencies has been linked to favorable learning outcomes, as corroborated by previous research [35]. A conspicuous pattern emerges within the cohort of 63 informants who have chosen the Biology major primarily due to their intrinsic interests and desires. Most of these students, nearly all, have demonstrated academic achievements and learning outcomes that consistently fall within the impressive range of 80% to 100%. This conspicuous

correlation underscores the notion that students who choose the Biology major based on their interests and desires tend to achieve exceptional learning outcomes. These findings underscore the importance of nurturing students' passions and interests as a catalyst for pursuing academic excellence, particularly in the context of significant college decisions.

**Unveiling the Impact of School Background**

At the outset, it is evident that a prevailing trend among students lies in their propensity to align their collegiate major with their prior academic interests and coursework. The selection of a major typically resonates with the discipline they have actively engaged with during their pre-collegiate years. In this context, personal interest is a pivotal factor that significantly shapes students' decisions regarding their academic pursuits. The intrinsic fascination and affinity for a specific major profoundly influence students, compelling them to elect to continue their educational journey in the same academic domain.

The role of school background in primary selection is instrumental as it instills a profound and enduring motivation in students. This fervent interest is a potent catalyst, propelling them to invest arduous effort and dedication in their academic endeavors, fostering exceptional performance within their chosen field. The alignment of academic pursuits with personal interest is predicated on the intrinsic drive to excel and excel extensively within the selected major. Consequently, this resonance between personal passion and academic choice engenders profound satisfaction and nurtures a climate for outstanding achievement and advancement. This multifaceted dynamic underscores the critical role of personal interest as an influential determinant in the decision-making process regarding college primary selection.

Students originating from the academic domain of Mathematics and Natural Sciences at the secondary education level often exhibit a notable penchant for the field of biology. This inclination is underpinned by their unique educational background, meticulously designed to equip students with a comprehensive grasp of biological concepts, life processes, and foundational scientific principles. The curriculum prescribed for students within this academic domain is inherently tailored to give them a profound comprehension of the multifaceted terrain of biological sciences [28]. The comprehensive coverage encompasses an extensive array of subjects, spanning the realms of genetics, ecology, taxonomy, biochemistry, and anatomy.

Moreover, Mathematics and Natural Sciences students can navigate the intricate terrain of scientific inquiry and experimentation. Their educational journey imbues them with a profound familiarity with scientific research methodologies, data analysis techniques, and experimental protocols germane to biology. This competence extends to the execution of experiments within diverse ecological and biological settings, reflecting their holistic preparedness to engage actively within biology [36]. The confluence of their extensive curriculum and rigorous scientific training primes them as academically and experientially endowed individuals, inherently prepared to undertake advanced studies and careers in biology.

In addition to cultivating theoretical knowledge, students enrolled in the Tadris Biology program also undergo a rigorous regimen that sharpens their practical proficiencies across diverse domains. This multifaceted practical orientation is pivotal in fostering a holistic and comprehensive skill set beyond theoretical realms. The practical training is inherently interdisciplinary and encompasses a spectrum of domains, notably encompassing laboratory practices, observing natural ecosystems, and the acquisition of essential skills for data collection in open environments.

One of the notable facets of this practical orientation lies in incorporating small-scale research projects within the curriculum. These projects function as invaluable conduits for students to actualize the theoretical concepts they have acquired within the controlled environment of the school and apply them in the dynamic milieu of the college setting [36], [37]. The diverse research endeavors enable students to navigate the practical intricacies of scientific inquiry, experimental design, and data analysis, bridging the gap between theoretical knowledge and real-world applications. The experiential dimension of these research projects augments students' capacity to translate academic learning into tangible outcomes, such as the diversity of research topics in thesis writing, equipping them with a profound understanding of the nuances inherent to scientific exploration [38]. This experiential component not only enriches their educational experience but also nurtures a reservoir of practical skills that are invaluable for their future endeavors within biology.

Students from the Mathematics and Natural Sciences department at school already have a strong foundation of information and applicable skills, whether they choose to continue their studies at a university or choose an appropriate major, such as Biology [39]. As a result, transfer to the tertiary level becomes easier because students from the school's Mathematics and Natural Sciences department already have a strong foundation in biology. Not only do they understand biological concepts, but they also know how to instruct students in them. They are prepared to become competent and dedicated biology instructors because they have experience developing curricula and teaching strategies. In addition, because the field of biology is continually developing and producing discoveries, courage and a willingness to learn more and become better are essential qualities in this situation.

This is in line with the research results that researchers obtained. Of the 98 student informants majoring in biology, 81 people chose the biology major because they came from the science department when they were in school. From this data, several reasons why students chose the biology major are because this major is in line and linear with their major in high school so that it can be a provision for students when they are in college and will make it easier for students to understand the material.

**Prospects for Future Careers**

The choice of a biology major in higher education is often perceived as an intellectually stimulating and compelling option by many students. This choice frequently results from a deliberate and informed decision-making process that considers various considerations, with the anticipation of promising career prospects serving as a paramount influence. The conviction that graduates with a biology major are well-positioned for a robust employment landscape in the future stands as one of the central factors driving student decisions.

Many logical arguments and rationalizations substantiate this inclination towards a biology major. To begin, the interdisciplinary nature of biology equips students with a broad skill set that applies to various professional domains, ranging from healthcare and biotechnology to environmental conservation [40]. The relevance and versatility of biology as a field of study underscore its significance in addressing critical global challenges, further amplifying its potential for yielding favorable job opportunities. Moreover, the exponential growth in the life sciences sector and advancements in biotechnology underscore the ever-expanding demand for professionals well-versed in biology, auguring well for future career opportunities in this discipline. Consequently, students are drawn to the biology major, expecting intellectual engagement and assurance of a promising and fulfilling career trajectory. The evolving value of science education in contemporary society further accentuates the pertinence and resonance of this career choice.

Graduates holding a degree in Tadris Biology possess a spectrum of opportunities within the realm of education, extending beyond traditional roles as biology instructors [40-41]. One notable avenue for their professional engagement lies in curriculum development, whereby they play an instrumental role in shaping the educational landscape. Their expertise equips them to design and craft curriculum materials that are both stimulating and responsive to the dynamic landscape of recent advances in biological sciences. This capacity for curriculum innovation extends beyond conventional teaching. It entails the development of educational resources that are not only pedagogically effective but also aware of the evolving trends within the discipline.

Such graduates, through their contributions to curriculum development, wield a far-reaching influence on how students perceive the natural world and appreciate the role of science in addressing pressing global issues, notably in the domains of environmental conservation and public health [42], [43]. The curriculum materials they devise have the potential to reshape students' cognitive landscapes by fostering a profound and nuanced understanding of the intricate interplay between the biological sciences and contemporary societal challenges. In effect, these professionals serve as pivotal catalysts in cultivating scientifically informed and conscientious individuals who are primed to contribute meaningfully to the solutions of pressing environmental and health dilemmas that reverberate on a global scale. This multifaceted role not only underscores the importance of graduates from the Tadris Biology major but also accentuates the far-reaching implications of their educational contributions.

Moreover, graduates with a degree in Tadris Biology possess diverse career trajectories, including roles as scientists and researchers within a spectrum of research institutions and organizations. These roles extend beyond conventional pedagogy's purview and encompass scientific inquiry and technological innovation. This career pathway offers the opportunity to engage in cutting-edge scientific research, technological advancements, and the exploration of intricate biological concepts, thereby contributing significantly to the ongoing expansion of our understanding of the natural world [44].

Embarking on a career as a scientist or researcher typically necessitates pursuing advanced academic qualifications, such as a doctoral or master's degree, demonstrating the rigor and specialized expertise required within this domain. These professionals are well-positioned to contribute to enhancing scientific knowledge, fostering innovation in technological applications, and delving into the intricacies of specific biological phenomena. Their work is instrumental in pushing the boundaries of human comprehension concerning nature, enabling us to garner more profound insights into the complexities of the biological realm. This commitment to scientific inquiry and exploration is integral to the continual evolution of our collective understanding of the natural world. It has far-reaching implications for technological advancements and societal progress [45].

The decision of a student to pursue a major in Tadris Biology is not merely an individual academic choice but also carries significant societal ramifications [46]. The educational pathway of Tadris Biology majors intersects with the realm of education and extends beyond, impacting society as a whole. Biology educators with a degree in this field are pivotal in molding the next generation of learners. They wield the influence to impart knowledge about the instrumental role of science in addressing global

challenges and equipping students with the understanding and skills requisite for meaningful engagement in an increasingly intricate, technological, and knowledge-driven society.

The choice to major in biology at Religious Higher Education symbolizes the student's aspiration to be a catalyst for societal betterment [46]. Such a decision is inherently imbued with the commitment to drive positive change and contribute to cultivating a more promising future. This career pathway reflects a profound sense of purpose, underscoring the profound societal implications of this academic choice. The impact of biology education extends beyond the confines of the classroom, resonating with the broader sociocultural and economic landscape by equipping individuals with the scientific literacy and problem-solving proficiencies essential for addressing the multifaceted challenges of contemporary society. The selection of the Tadris Biology major serves as a testament to the student's intention to play an active role in steering societal development toward a brighter and more sustainable future.

In light of these considerations, students frequently perceive the selection of a biology major as a reasonable and enduring choice, guided by the intertwining considerations of career prospects, educational advancement, and societal influence. The decision to major in biology emerges as pragmatic through the multifaceted prism of future employment opportunities, academic development, and the potential for societal transformation. Beyond the immediate personal benefits, graduates in the field of biology are well-positioned to assume a significant role in the progression of science and education within society. Their contributions extend to cultivating a knowledgeable and scientifically literate generation, encapsulating their academic journey's holistic and far-reaching societal impact.

The salient motivation underlying the choice of a biology major encompasses the recognition of the subject's enduring relevance within the ever-evolving global landscape. Graduates wielding expertise in biology are not only poised to harness promising employment prospects. Still, they are also uniquely equipped to contribute substantively to advancing knowledge and disseminating scientific principles within society. Their role transcends individual career aspirations, extending to education and societal progress. As active participants in the propagation of scientific literacy and knowledge, biology majors play a pivotal role in nurturing an informed and empowered generation capable of addressing the challenges and opportunities of the contemporary world. This multifaceted impact underscores the imperative nature of their academic pursuit and positions biology as a discipline that resonates at the confluence of individual ambition, educational enrichment, and societal betterment [47], [48].

## CONCLUSION

Students' propensity to opt for biology majors within higher education is subject to multifaceted influences. These determinants encompass gender, parental guidance, personal interests, academic provenance, and future career prospects. Within the purview of these factors, it is evident that the most influential criterion shaping students' decisions, as substantiated by the research findings, is their intrinsic interest in biology. The empirical evidence from the research underscores the remarkable statistic that a staggering 75% of students have selected the biology major due to their genuine enthusiasm for this academic discipline. This deliberate choice, driven by genuine passion, not only augurs well for academic achievement but also underscores the profound correlation between personal interest and exemplary learning outcomes. This research was carried out to provide relevant data and knowledge to individuals who experience difficulties in selecting a major at the tertiary level.

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