

A Preliminary Study on Atheism and Agnosticism Tendencies among Malaysian University Students based Ethnicity and School Orientation

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Abstract

This preliminary study explores tendencies toward atheism and agnosticism among Malaysian university students, emphasizing variations by ethnicity and school orientation. In Malaysia where religion, particularly Islam, is central to ethnic and national identity, open atheism remains rare and stigmatized. Using survey data from 397 respondents, we developed an Atheism and Agnosticism Tendency Score based on agreement with statements expressing doubt or disbelief in God. Overall, the level of irreligious inclination was low ($M = 2.04$, $SD = 0.84$, on a 1-5 scale). However, significant differences were found across groups: male students scored higher than females, and non-Malay students (especially Chinese and Indian) showed stronger irreligious tendencies than Malay or indigenous peers. Students from vernacular and international schools also exhibited higher nonreligious orientation than those from national religious schools. Field of study was another factor, students in science and medicine scored higher than those in religious or social sciences. Family and peer religiosity correlated negatively with atheism and agnosticism, while social-media exposure showed no significant association. These findings suggest that educational environment and ethno-religious background are central influences shaping secular attitudes among Malaysian youth. The study highlights the importance of cultural context in understanding secularization and recommends dialogical and educational engagement to address emerging doubts among students.

Keywords: Atheism, Agnosticism, Malaysia atheist, Higher Education Student, Secularism

Introduction

In Malaysia's multi-ethnic society, open identification as an atheist or agnostic remains rare and highly sensitive. The country's official ideology and institutions strongly emphasize

religiosity, for instance, the *Rukun Negara* (National Principles) includes “Kepercayaan kepada Tuhan” (Belief in God) as a core tenet, and the National Education Philosophy explicitly aims to develop individuals “based on a firm belief in and devotion to God”. As a result, atheism is often viewed as antithetical to national identity and social harmony (Ramli, et al. 2024). High-ranking officials have at times openly condemned atheism; for example, in 2017 a government minister suggested “hunting down” atheist groups, underscoring the climate of intolerance towards open atheism (Ramli, et al. 2022). Given this environment, those who harbor atheistic or agnostic beliefs may do so quietly, making systematic research on the phenomenon challenging.

Despite these cultural and legal constraints, indications of irreligiosity do exist among Malaysians, particularly within certain demographics. Official statistics report that about 1.8% of Malaysia’s population (approximately 580,000 people) professed no religious affiliation in 2020 (Department of Statistics Malaysia 2020). Meanwhile, an international survey by WIN-Gallup in 2014 found that 3% of Malaysian respondents identified as “convinced atheists” and an additional 20% described themselves as “not religious”. Although these proportions are small compared to the overwhelmingly religious majority, they suggest a minority current of skepticism. Notably, the WIN-Gallup survey hinted at demographic patterns: the percentage of atheists was slightly higher among younger adults (18-34 years) and those with higher education, compared to older or less-educated groups. Such trends align with global observations that younger generations tend to exhibit lower religiosity than their elders, and that higher education correlates with more questioning of religious doctrines.

In the Malaysian context, ethnicity and religion are closely intertwined, which may influence patterns of nonbelief (Foong & Teoh 2022). By constitutional definition, Malays are Muslims and deviations from Islam (such as atheism) are socially and legally proscribed for this group. In contrast, Chinese Malaysians traditionally practice Buddhism, Christianity, or Chinese folk religions, and a subset identify as freethinkers or secular; Indian Malaysians predominantly practice Hinduism or Christianity. For non-Malay minorities, identifying as irreligious, while still uncommon, is not illegal and may carry somewhat less stigma than for Malays. Indeed, anecdotal evidence and qualitative reports suggest that Malaysia’s small atheist community includes individuals from various ethnic backgrounds, with ethnic Chinese and Indians represented alongside ex-Muslim Malays (Ramli, et al. 2022). Given these differences, one might expect ethnicity to play a significant role in students’ willingness to express agnostic or atheistic leanings.

Another potentially important factor is educational environment, especially at the pre-university level. Malaysia’s education system is heterogeneous: most Malay students attend national public schools which incorporate Islamic studies and a government-mandated ethos of faith, whereas many Chinese and Indian students attend vernacular schools (Chinese or Tamil medium schools) which, while still following the national curriculum, may have a more secular or multi-religious atmosphere. Some students attend religious secondary schools (e.g., Islamic boarding schools or *madrasahs*) where religious instruction is intensive, while others attend international schools that often espouse liberal or Western-style educational approaches. These differing school orientations could shape a young person’s outlook on religion. Students from more pluralistic or secular-oriented schooling might be more exposed to diverse worldviews and critical thinking about religion, potentially fostering higher

likelihood of questioning religious tenets. In contrast, those from religious schools might internalize faith more deeply and be less inclined to doubt. Prior qualitative research on Malaysian ex-believers provides some support for the role of educational exposure: many atheist individuals report coming from academically advanced or “elite” educational backgrounds and being influenced by scientific and philosophical ideas encountered through schooling or media (Ramli, et al. 2022). This suggests that the schooling context, along with higher education in science-related fields, may encourage a more questioning, skeptical stance toward religious claims.

Given the background above, this preliminary study aims to explore how Malaysian university students vary in their inclination toward atheism/agnosticism, particularly as a function of ethnicity and educational background. We focus on two broad research questions: (1) Are there significant differences in atheism/agnosticism tendency among students of different ethnic groups (Malay, Chinese, Indian, etc.)? (2) Does prior school orientation (such as attending a national school, vernacular school, Islamic religious school, or international school) relate to differences in atheistic/agnostic inclination? In addition, we examine other demographic and contextual factors, gender, age, field of study, and social influences (family, peers, media) to develop a more comprehensive understanding of what factors accompany higher or lower irreligious tendencies. By integrating literature insights with empirical survey findings, we hope to shed light on the nascent but important phenomenon of youth secularization in Malaysia. This study is preliminary in nature, but it offers a data-driven starting point for discussing the interplay of culture, education, and religious belief among Malaysian young adults.

In conceptual terms, this article understands atheism as the absence of belief in the existence of God or gods, which may range from a firm conviction that no deity exists to a more diffuse stance of non-belief. Agnosticism is taken to refer to the view that the existence of God is unknown or unknowable (Bradley et al., 2018; Sevinç, 2023), encompassing various degrees of epistemic uncertainty or suspension of judgment. In practice, many individuals occupy positions along a continuum of non-religiosity, combining elements of disbelief, doubt, indifference and critique of institutional religion. Rather than treating atheism and agnosticism as rigid identity categories (Silver, 2013), this study employs the notion of atheism/agnosticism tendency to capture a spectrum of attitudes oriented toward disbelief or doubt about God and religion more generally.

Against this backdrop, the central research problem addressed in this article is the lack of systematic, empirical knowledge about how tendencies toward atheism and agnosticism are distributed among Malaysian university students, and how these tendencies vary along key social cleavages such as ethnicity and school orientation. Public and policy discourse often frames atheism as an imported, marginal and largely homogeneous phenomenon, but there is very little quantitative evidence showing which groups of young people are more likely to exhibit non-religious orientations, and how these orientations intersect with the institutional pathways through which they are socialised—for example, through national, vernacular, religious or international schooling and different types of universities. Existing scholarship on Malaysian religiosity tends to focus either on levels of religious commitment among Muslims, inter-religious relations, or state–Islam dynamics. As a result, the specific phenomenon of non-belief among youth remains empirically under-specified.

This research problem is significant because it speaks directly to three ongoing debates in contemporary social science. First, it contributes to global discussions on secularisation and post-secularity, which increasingly question whether secularisation is a universal trajectory or a regionally differentiated process. Muslim-majority societies such as Malaysia are frequently portrayed as resistant to secularisation; by providing fine-grained data on atheism/agnosticism tendencies among students, this study tests how far secularising dynamics may nevertheless be present within specific generational and institutional niches. Second, the article intervenes in debates on youth, higher education and religious change, which highlight that universities can function both as sites of religious reproduction and as incubators of doubt, critical thinking and alternative worldviews. By focusing on ethnicity and school orientation, the study refines these debates for a multi-ethnic, multi-religious context, showing how educational trajectories may channel young people into different religious or non-religious outcomes. Third, the findings speak to scholarship on ethnicity, nation-building and the governance of religious difference. In Malaysia, religion is tightly coupled to ethnic identity and to projects of moral citizenship; mapping variations in non-belief across ethnic and institutional lines therefore offers insight into how national projects of religious and moral citizenship are being reproduced, contested or quietly renegotiated among the emerging generation of graduates.

Accordingly, this article pursues three interrelated objectives: (i) to measure the overall level of atheism/agnosticism tendency among a sample of Malaysian university students; (ii) to analyse how this tendency varies by ethnicity, gender, age, type of secondary school, type of higher education institution and field of study; and (iii) to interpret these empirical patterns in light of wider debates on secularisation, youth religiosity and ethno-religious governance in Malaysia. By integrating literature and original quantitative data, the study aims to move beyond anecdotal or moral panic narratives and to offer a sociologically grounded account of how and where non-belief is emerging within Malaysia's educated youth population.

Atheism and Agnosticism in Context

Atheism and agnosticism have been subject to extensive philosophical (Martin, 1990) and sociological discussion (Bullivant, 2008). As noted, atheism can be defined in a strict sense as the affirmative belief that no God exists, or more broadly as the absence of belief in any deity (Bradley et al., 2018; Sevinç, 2023). Agnosticism, a term coined by T.H. Huxley in the 19th century, denotes the position that one cannot know for sure whether God exists or not (Dockrill, 1971). In practice, many individuals who refrain from religious identification might simultaneously exhibit atheistic tendencies (in rejecting traditional gods) and agnostic caution (in acknowledging uncertainty). Modern surveys often capture such individuals under categories like "no religion" or "non-religious," which can include a mix of atheists, agnostics, secular humanists, and those who are simply unaffiliated with organized religion.

Globally, the prevalence of atheism/agnosticism varies widely by society. Secularization trends in Western and some East Asian countries have led to growing proportions of youth identifying as having no religion. However, in many Muslim-majority countries like Malaysia, overt irreligion remains very low due to social and legal pressures (Ramli, et al. 2022). The WIN-Gallup International study (2014) ranked Malaysia among the more religious countries, with 78% of respondents saying they were religious and only 3% atheist (for comparison, the global average of self-identified atheists was 11%). This reflects how deeply ingrained

religious identity is in the national fabric. Scholars have pointed out that in Malaysia, ethnicity and religion often form a single “package” of identity. For example, to be Malay is by definition to be Muslim; Chinese and Indian Malaysians are historically associated with Buddhism, Taoism, Christianity, Hinduism, etc. in a more pluralistic sense (Awang et. al., 2022). Declaring oneself an atheist, therefore, not only rejects a personal faith but can be perceived as breaking from one’s ethnic community norms, especially for Malays who face apostasy taboos and legal impediments.

The stigma surrounding atheism is reinforced by Malaysia’s legal-political context. Islam is the official religion, and while freedom of religion is constitutionally guaranteed for non-Muslims, Muslims are generally not legally permitted to renounce Islam. High-profile cases and rhetoric from officials have signaled that atheism is viewed as a threat to societal values (Ramli, et al. 2022). Consequently, any expression of atheist or agnostic beliefs tends to be discreet. This climate has limited open research on non-religious Malaysians, though recent qualitative works have begun to explore the experiences of ex-Muslim atheists (Ramli, et al. 2022). These studies reveal themes such as intellectual doubts (e.g., conflicts between scientific knowledge and religious teachings) and personal grievances (e.g., negative experiences with religious authorities or theodicy issues) as catalysts for leaving religion.

Influence of Ethnicity and Culture on Irreligiosity

Ethnicity in Malaysia strongly correlates with religious socialization (Krauss, 2012). From a young age, Malay Muslim children undergo religious instruction both at home and in school, inculcating Islamic tenets as part of daily life. Minority ethnic children (Chinese, Indian, indigenous groups) have more varied religious upbringings, some devout in their respective faiths, others relatively secular, especially in urban settings. Research has noted that urban middle-class Chinese Malaysians, for instance, often prioritize secular education and may practice religion more as cultural tradition than deep conviction (Goh, 2009). It is within these segments that non-religious outlooks can more easily take root. A qualitative overview by Ramli et al. (2022) observed that Malaysian atheist communities encompass multiple ethnicities, implying that the path to atheism is not exclusive to any single group. However, the *meaning* of professing no religion differs: for an ethnic Malay, it represents a dramatic breach of identity and is often done anonymously, whereas for a Chinese or Indian Malaysian, it may be seen more as an individual’s personal stance not governed by law (though still possibly frowned upon by family).

Cross-national studies have frequently found gender and age differences in religiosity that likely also play out within each ethnic group. Women tend to be more religious than men on average, a pattern documented in Western populations and some Asian contexts (Smith et. al., 2025). Men are statistically over-represented among atheists and agnostics in many surveys (Trzebiatowska, 2012). Researchers theorize this may relate to differences in socialization (women being encouraged toward piety in many cultures), risk preferences, or social support structures provided by religion.

In Muslim communities, additional factors like patriarchal norms and differential consequences for apostasy by gender could influence who is more willing to stray from religious observance. Age-wise, younger people globally show higher religious disaffiliation rates, possibly reflecting generational value shifts and greater exposure to secular ideas via

education and the internet. In Malaysia, the younger generation came of age in an era of global connectivity and has witnessed political uses of religion, which some youths critique or become cynical about (Ramli, et al. 2022). Stapa (2016) argued that modernization and education could lead some Malaysian youths to a more critical stance on traditionally “fixed” cultural-religious identities. Thus, we might expect Malaysian university students (who are mostly youth) to show more skepticism than the general older population, though still within low absolute levels.

Education, School Orientation, and Field of Study

Education is often cited as a double-edged influence on religiosity. On one hand, higher education, especially in scientific and critical-thinking disciplines, can encourage questioning of religious dogmas and exposure to secular worldviews (Walker, et. al. 2023). On the other hand, educational institutions can also reinforce religious values, especially if they are religiously affiliated or operate in a religiously saturated environment. In Malaysia, both dynamics are present. The public education system at primary and secondary levels incorporates Islamic values as mentioned, yet the country also has vernacular schools and private institutions that provide alternative environments. Many Chinese families send their children to Chinese-type schools (SJK(C)), which uphold Confucian and Buddhist cultural elements but generally emphasize academic achievement and may treat religion as a less central school activity compared to national schools’ Islamic assemblies (Xia, 2018). Likewise, Tamil schools for Indian students incorporate moral education but are not Islamic in character (Anggraini et. al., 2025 & Marimuthu et al 2020). International schools often have secular curricula and encourage open discussion, potentially allowing students to form independent views on religion (Velarde & Ghani 2019). In contrast, Islamic religious schools (whether state-funded religious schools or private madrassas) immerse students in religious instruction and worldview from early on, possibly reducing exposure to secular perspectives (Hamid, 2018).

The influence of these school orientations on later irreligiosity has not been quantitatively studied in depth before, to our knowledge. However, anecdotal evidence suggests that students who later identify as nonreligious often recall having questioned things early, sometimes finding their school environment either as a catalyst (if it was very strict, prompting rebellion) or as a nurturing ground (if it encouraged critical inquiry). A recent study of Malaysian Muslim apostates claimed that many of them had strong educational backgrounds and engagement with scientific reasoning; participants often cited conflicts between what they learned in science classes or on the internet and what was taught in religious classes (Ramli, et al. 2022). This aligns with classic secularization theory which posits that scientific education can undermine literal religious beliefs (Moniz, 2023), without denying the psychological-emotional as part of the main contribution (Beit-Hallahmi, 2006; Streib & Klein, 2013; Karim & Saroglou, 2025). Indeed, the *perceived* conflict between science and religion is frequently reported as a reason for disbelieving (e.g., questions about evolution, cosmology, or the lack of empirical evidence of the divine).

At the university level, the field of study might also correlate with religiosity. Previous research in Western contexts has sometimes found that students in the natural sciences and engineering are less religious on average than those in social sciences or humanities (Roberts, 1997), although findings are mixed. In the Malaysian setting, the effect of field may intertwine with student demographics: for instance, certain fields (like engineering or business) might

have more Malay students due to quota policies, whereas others (like medicine or some science programs) have significant non-Malay enrollment. If nonreligiosity is higher among the non-Malay students, this could manifest as differences by field indirectly. Moreover, students in religious studies programs (e.g., Islamic studies) would likely be among the most religious, whereas those in secular fields (e.g., pure sciences, technology) might be more prone to doubt, especially if their curriculum emphasizes empirical evidence and critical inquiry. One study in the U.S. found that college education in general did not drastically liberalize religious beliefs compared to non-college peers, except for specific subgroups and contexts (Scott & Cnaan 2020), suggesting that the content and peer culture of the academic program matter more than just attending college per se. We anticipate that in our sample, science and technology students and those in cosmopolitan university campuses might exhibit slightly more atheist/agnostic tendency than students of religious education or those in institutions with strong religious ethos (like Islamic universities).

Family, Peers, and Media Influences

Beyond formal education, social environment through family and peers is known to be a crucial influence on religiosity. Classic studies have shown that individuals raised in religious households with regular faith practices are far more likely to remain religious into adulthood, whereas those with minimal religious upbringing often become nonreligious (Gervais et. al., 2021). Family religiosity during childhood, sometimes measured by parental religious attendance or the importance of religion in the home is one of the strongest predictors of an individual's later religious orientation (Petts, 2015). In Malaysia, family expectations can be very strong, particularly for Malays for whom leaving the faith would bring severe familial disapproval (Morgan & Sulong 2020; Yusof et. al., 2012). Even among Chinese or Indian families, elders may expect the younger generation to uphold certain religious or cultural traditions (Medora, 2014). Thus, a student heavily influenced by their family (or by devout friends) might be less inclined to adopt atheist or agnostic views, due both to internalized belief and to fear of straining those relationships. On the other hand, a youth who experiences a more permissive or nominally religious family environment might feel freer to question and even diverge in belief.

Peer influence during the university years can also shape one's religious questioning. Forming friendships with peers who are skeptical or secular could reinforce similar attitudes, while being surrounded by strongly religious peers can reinforce faith adherence. In a multi-religious campus, students might for the first time encounter close friends of different faiths or no faith, which could either relativize their own beliefs or, conversely, make them cling more tightly to identity. Sociological theories of religion (e.g., social network theory) suggest that having nonreligious or differently religious friends can decrease the social cost of adopting a nonreligious identity (Cragun, 2021; Cheadle & Schwadel 2012).

The rise of the internet and social media in recent decades introduced a new factor often hypothesized to promote irreligiosity. Online platforms provide access to diverse viewpoints, including atheist thinkers, critiques of religion, and support communities for doubters. Some commentators have argued that the internet serves as a "secularizing agent" for youth globally, by diluting the authority of traditional religious sources (Hesapci, 2013; Smith & Cimino 2012).

In Malaysia, despite censorship of some content, young people are quite active on social media and may come across atheist perspectives (e.g., famous atheists' quotes, debates on religion) that are rarely voiced openly in their offline community. Indeed, Malaysian atheists often congregate in private Facebook groups or online forums to discuss their views anonymously (Ramli, et al. 2022). However, it is important not to overstate this effect: online content can also bolster religiosity (through exposure to religious lectures, peer pressure in social networks, etc.), and not everyone seeks out or is persuaded by secular content. A qualitative finding by Duile et. al (2025), Razali et. al (2023) and Ramli et al. (2022) was that while young Malaysian atheists do use social media to express their thoughts, they often come to atheism primarily through personal experiences and reflections, using social media more as an outlet than the original cause. Thus, empirical data is needed to determine if heavy use of social media or internet actually correlates with greater atheist/agnostic tendencies in this context.

In summary, the literature suggests that any inclination toward atheism or agnosticism among Malaysian youth likely results from a complex interplay of personal background factors: ethnicity (and its entailed religious socialization), gender and age cohort effects, education and cognitive exposure, and the reinforcement or deterrence from family, friends, and media. We now turn to the present study's methodology for examining these factors in a sample of university students.

Methodology

Research Design

This research employed a quantitative survey design using a cross-sectional sample of Malaysian university students. The goal was to measure each participant's tendency towards atheism/agnosticism and examine how this relates to various demographic and background factors. The study is exploratory and correlational in nature, as it seeks to identify significant associations and group differences rather than establish causation.

Participants and Sampling

The sample consisted of N = 397 university students in Malaysia. Respondents were recruited via an online survey link disseminated through academic networks and social media, targeting a range of universities. Participation was voluntary and anonymous. The sample included students from multiple ethnic backgrounds and various institutions, in order to capture Malaysia's diversity. Based on self-reports, approximately half the sample identified as ethnically Malay, with the remainder being predominantly Chinese, Indian, or other indigenous ethnicities (e.g., Bumiputera Sabah and Sarawak), along with a few international students. This composition ensured representation of both the majority and minority groups of interest. The gender breakdown was roughly balanced (about 50% women and 50% men), reflecting the general university population. Ages ranged from late teens to mid-20s for most participants, with a smaller number of mature students up to their 30s or 40s. Because the focus was on university-attending youth, the 18-24 age group was the largest contingent in the sample.

In terms of educational background, participants had attended a variety of secondary schools prior to entering university. They were asked to indicate their type of secondary school: categories included national public schools (Sekolah Kebangsaan), vernacular schools

(Sekolah Jenis Kebangsaan, Chinese or Tamil), religious schools (Islamic-oriented secondary schools), fully residential schools (Sekolah Berasrama Penuh), international or private schools, or other types. This variable, termed *school orientation*, is a key independent variable in our analysis. The respondents were currently enrolled in a range of universities, including major public research universities, Islamic universities, technical universities or polytechnics and private colleges. We captured their field of study as well, broadly grouping into categories such as Health/Medicine, Pure Sciences/Professional (engineering, technology, etc.), Social Sciences/Humanities, and Religious Studies (if any).

Measures and Instruments

The survey instrument consisted of several sections measuring demographic information, personal attitudes, and social influence factors. The central outcome measure was the Atheism/Agnosticism Tendency Score, a composite index created from six Likert-scale items. These items were statements reflecting doubt in God's existence or rejection of religious claims, drawn from a larger questionnaire about beliefs. Examples of these items included: "I doubt the existence of God" ("Saya ragu-ragu terhadap kewujudan Tuhan."), "Belief in God's existence is a delusion of the mind" ("Kepercayaan terhadap kewujudan Tuhan merupakan khayalan minda."), "I emphasize rational-scientific and skeptical thinking" ("Saya menekankan kepentingan rasional-saintifik dan skeptikal."), "I firmly reject religious assertions about God's existence" ("Saya tegas menolak dakwaan agama terhadap kewujudan Tuhan."), and similar statements capturing an atheistic or agnostic stance. Participants rated their agreement with each statement on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). For analysis, these six items were combined (by taking their mean) to form a single continuous score representing each participant's degree of atheism/agnosticism tendency. The internal consistency of this composite was adequate (all items positively correlated; Cronbach's alpha was acceptable at ~0.88 as per preliminary analysis, indicating a unidimensional construct).

Demographic and background variables measured included: gender (Male or Female), age (in years, later categorized into age groups for analysis), ethnicity (Malay, Chinese, Indian, Bumiputera Sabah, Bumiputera Sarawak, and others), marital status (over 95% were single, so this was not a differentiator), area of upbringing (categorized as Urban, Suburban, or Rural), and household income bracket (using Malaysian classifications B40 = bottom 40%, M40 = middle 40%, T20 = top 20% income).

For educational factors, we recorded the type of secondary school as described, the name/type of current institution (which we later grouped into categories such as *major public university*, *Islamic-oriented institution*, *technical institute*, etc.), the level of program (pre-university/Foundation, Diploma, Bachelor's, Master's, or PhD), and the academic field/major (grouped into broad disciplines: Health/Medical Sciences, Pure Sciences/Engineering, Social Sciences/Humanities, Religious Studies, etc.).

We also included measures of social and media influence on the respondent's religious views. Family and peer influence were each assessed with a survey item asking how much influence those groups have had on the respondent's religious or non-religious orientation (each likely on a scale, e.g., 1 = no influence, 5 = very strong influence). Similarly, exposure to digital media was gauged with items about the influence of social media, internet, and online influencers

on the respondent's thinking about religion. These items allowed us to quantify whether higher exposure to online content correlates with atheism/agnosticism tendency.

Additionally, to enrich interpretation, the survey contained a section on perceptions of religion (Section C of the questionnaire) and a self-rating of changes in personal religiosity (e.g., "How has your religiosity changed in the past 10 years?"). Though not the primary focus of this paper, these items provide context on whether the respondent sees religion as positive or negative and whether they have become less or more religious over time. A factor analysis was performed on the perception items to identify underlying attitudinal dimensions toward religion, which will be mentioned in the Findings for deeper insight.

Data Collection Procedure

The survey was administered online. After giving informed consent, participants completed the questionnaire, which took approximately 15-20 minutes. The responses were automatically recorded in a spreadsheet format. The data were screened for completeness and any respondents who gave inconsistent answers (or straight-lined all items) were excluded. Since the topic of atheism can be sensitive, efforts were made to assure respondents of anonymity; no names or identifying information were collected. The study followed ethical guidelines for research on human subjects, with approval obtained through an academic institutional review process. Participants were informed they could skip any question or withdraw at any time.

Data Analysis

After data cleaning, we computed the composite atheism/agnosticism score for each respondent as described. We then conducted statistical analyses to address the research questions:

- **Descriptive Statistics:** We first examined the overall distribution of the atheism/agnosticism scores (mean, standard deviation, range, quartiles) to gauge the general level of nonreligious tendency in the sample. We also tabulated frequencies for key categorical variables and looked at bivariate relationships (e.g., mean score by gender, by ethnicity, etc.) to spot initial patterns.
- **Group Comparison Tests:** To formally test differences in the atheism/agnosticism score across categories, we used t-tests for binary variables (e.g., male vs female) and one-way ANOVA for multi-category variables (e.g., ethnicity groups, school types, field of study). Where an ANOVA showed a significant overall effect, post-hoc comparisons were planned to identify which groups differed significantly from each other. A significance level of $p < .05$ was used for hypothesis testing, with $p < .01$ and $p < .001$ noted for stronger significance. We checked assumptions (normality, homogeneity of variances) and found the Likert-based score to be approximately normally distributed, though slightly skewed due to many low values (which was expected given most students remain religious). ANOVA was deemed robust enough given reasonably balanced group sizes in most comparisons.
- **Correlation Analysis:** For continuous or ordinal predictors like age (treated as continuous in some analyses), degree of family influence, and social media influence scores, we calculated Pearson correlation coefficients with the atheism/agnosticism score. This assessed the direction and magnitude of association (positive correlation meaning higher

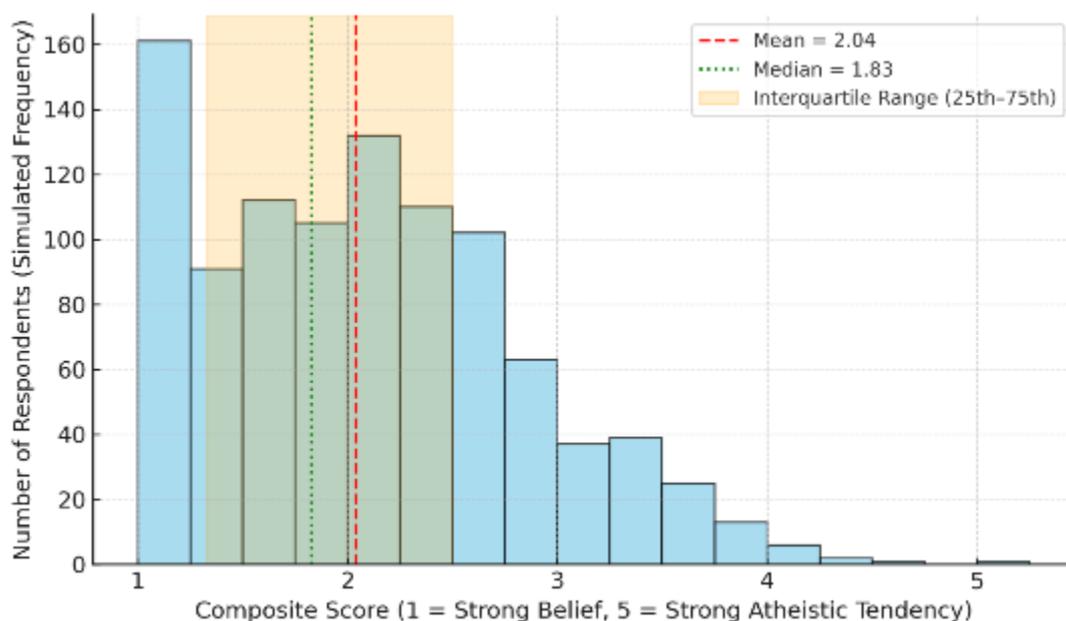
exposure or influence corresponds to higher irreligious tendency, negative meaning it corresponds to lower irreligious tendency).

- Exploratory Factor Analysis (EFA): We performed an EFA on the set of items related to perceptions of religion (Section C of the survey) to understand the structure of attitudes that might be driving atheistic tendencies. Using principal axis factoring and a varimax rotation, we identified a small number of factors (themes) such as negative evaluation of religion, scientific rationalism, and religious skepticism. We then looked at how the composite atheism/agnosticism score correlates with these factor scores.
- Additional Analyses: We examined an item about change in religiosity (e.g., whether the student felt they have become less religious in recent years) and its relationship with the atheism tendency score. We also considered a potential multiple regression model including all significant predictors to see which factors remain significant when controlling for others; however, given sample size and exploratory aims, we primarily report bivariate results in this paper for clarity.

All analyses were conducted using statistical software (SPSS). The results are presented with relevant statistics (means, p-values, correlation coefficients) to substantiate claims. In the following section, we detail the key findings from these analyses.

Findings

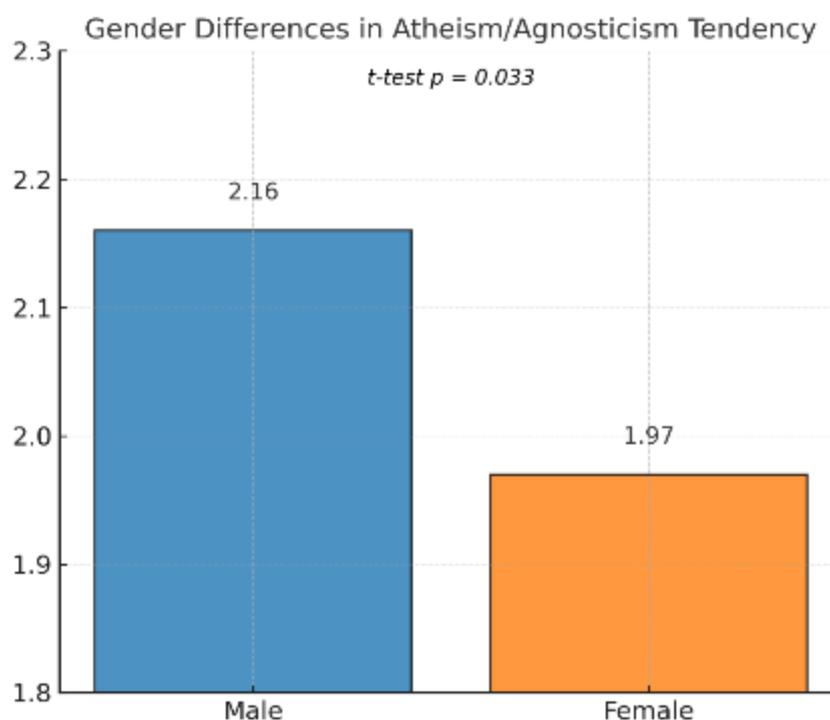
Overview of Atheism/Agnosticism Tendency in the Sample



Overall, the level of atheism/agnosticism tendency among Malaysian university students was low to moderate. The composite score ranged from 1.00 to 5.00 (with 1 indicating strong religious belief and 5 indicating strong atheistic tendency). The mean score was 2.04 (SD = 0.84). This means that, on average, students leaned toward the disagree/unsure side on statements that challenge the existence of God. In fact, the median score was 1.83, and the 25th to 75th percentile range was 1.33 to 2.50, indicating that the middle 50% of students scored between “Strongly Disagree/Disagree” and “Not Sure” on these irreligious statements. A large portion of respondents selected 1 (strongly disagree) on many of the atheism-related items, reflecting a continued dominance of theism among them. Only a relatively small subset

scored on the high end (above 4.0). Thus, while outright rejection of God's existence was uncommon, there is a minority with notable skepticism or nonreligious stance. These aggregate results align with expectations in a religious society, the majority of university students still identify as believers, with only perhaps 10-15% showing strong atheism/agnosticism inclination (as inferred from the upper end of the score distribution). However, the aim of this study was to discern how this tendency varies across groups. Indeed, our analyses revealed significant differences by ethnicity, gender, age, and educational background, which we detail below.

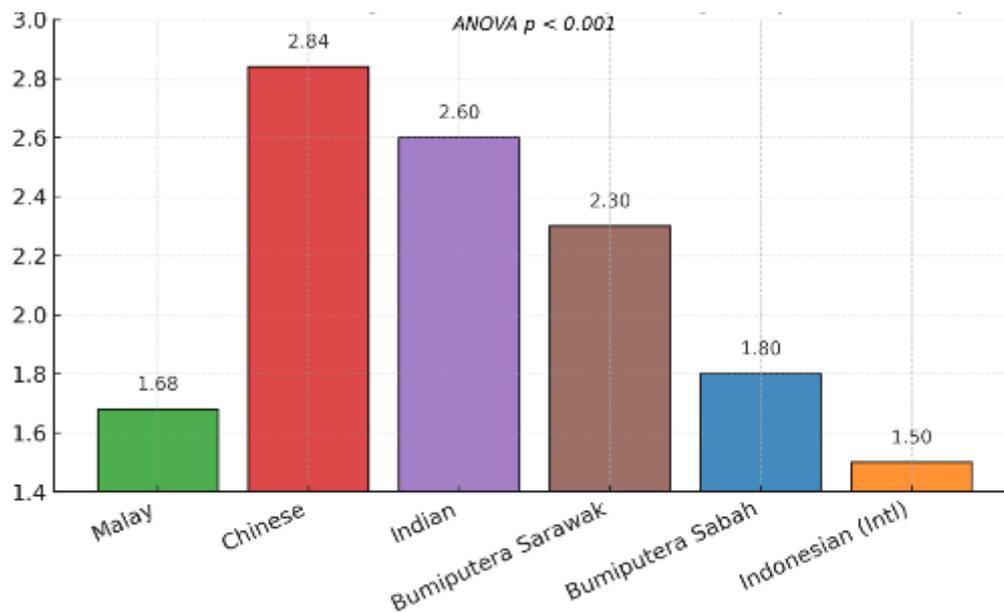
Differences by Demographic Factors



a) Gender

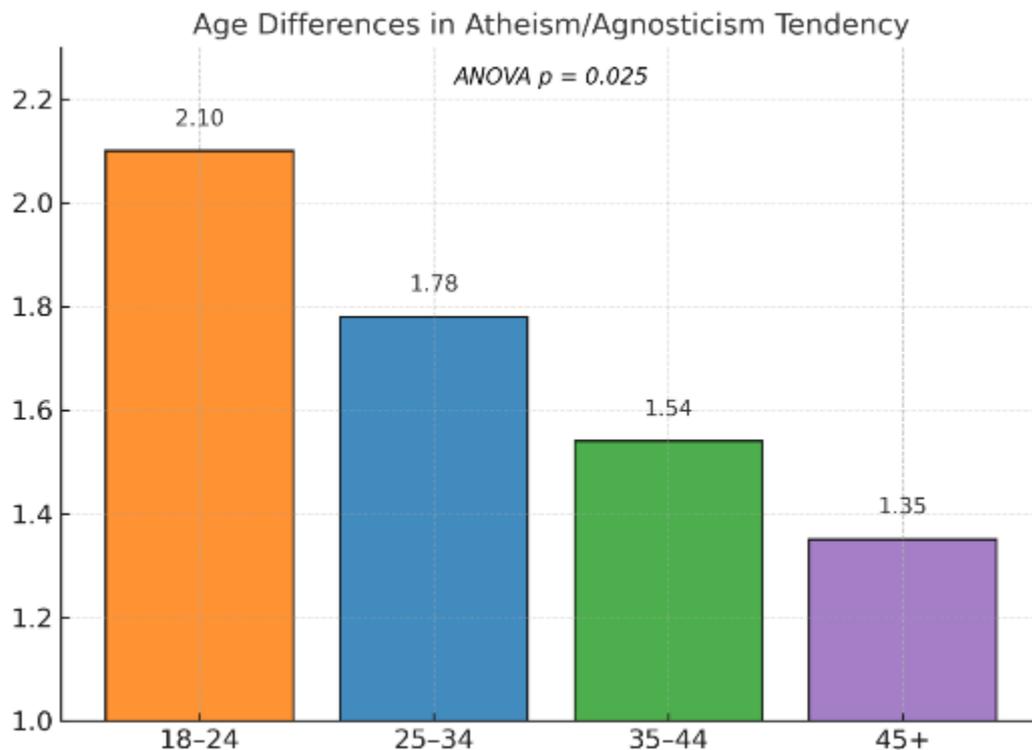
There was a statistically significant difference between male and female students' scores. Male students reported a higher mean atheism/agnosticism tendency (Mean \approx 2.16) than female students (Mean \approx 1.97). An independent t-test confirmed that this gap is significant (t-test $p = 0.033$). Although the difference in means (approximately 0.19 on a 5-point scale) is modest, it suggests that men in this sample were somewhat more likely to agree with irreligious statements. This finding is consistent with general trends observed elsewhere that men tend to exhibit lower religiosity or higher likelihood of atheistic views compared to women (Smith et. al., 2025). In the context of Malaysia, one interpretation is that female students may have slightly stronger religious commitments or perhaps greater social pressure to conform to religious norms, whereas male students might feel more freedom to express doubts.

b) Ethnicity



Ethnic background showed the largest differences in irreligious tendency. An ANOVA revealed a highly significant effect of ethnicity on the atheism/agnosticism score ($p < 0.001$). Post-hoc comparisons indicated that Chinese and Indian students scored significantly higher on average than Malay students (and also higher than the smaller Bumiputera groups from East Malaysia). Specifically, Chinese respondents had the highest mean score (approximate mean ≈ 2.8), followed by Indian students (≈ 2.6). In contrast, Malay students averaged around 1.7, indicating much stronger disagreement with atheistic statements. Indigenous Bumiputera students from Sabah and Sarawak fell in between: those from Sarawak averaged around 2.3 (notably higher than Malays, perhaps reflecting that many are Christians or less bound by Islam), whereas Bumiputera Sabah were closer to 1.8 (more similar to Malays, possibly due to a larger Muslim population among Sabah natives). A small number of *international students from Indonesia* were in the sample and had a very low mean (≈ 1.5), though this is a tiny subgroup; it is noteworthy because Indonesia is also Muslim-majority, suggesting similar religious adherence. Summarizing the pattern: Chinese and Indian students exhibited the greatest tendency toward non-belief, while Malays and other indigenous Muslim groups showed the lowest. These differences are substantial, the mean for Chinese students (2.84) was over one full point higher than for Malay students (1.68), a striking gap on a 5-point scale. This underscores the strong role of ethnoreligious socialization: Malay culture, being tightly interwoven with Islam, likely produces fewer open skeptics (and Malay students may also be more cautious in responding due to potential repercussions), whereas Chinese and Indian students, who are not constrained by an Islamic identity, may find it somewhat more acceptable to question or not personally embrace any religion. It is important to note that even among Chinese/Indian students, a score around 2.6-2.8 still does not indicate majority atheism, it likely reflects a mix of some skeptics and many “unsure” or moderate responders, but comparatively, these groups show a higher openness to nonreligious views.

c) Age



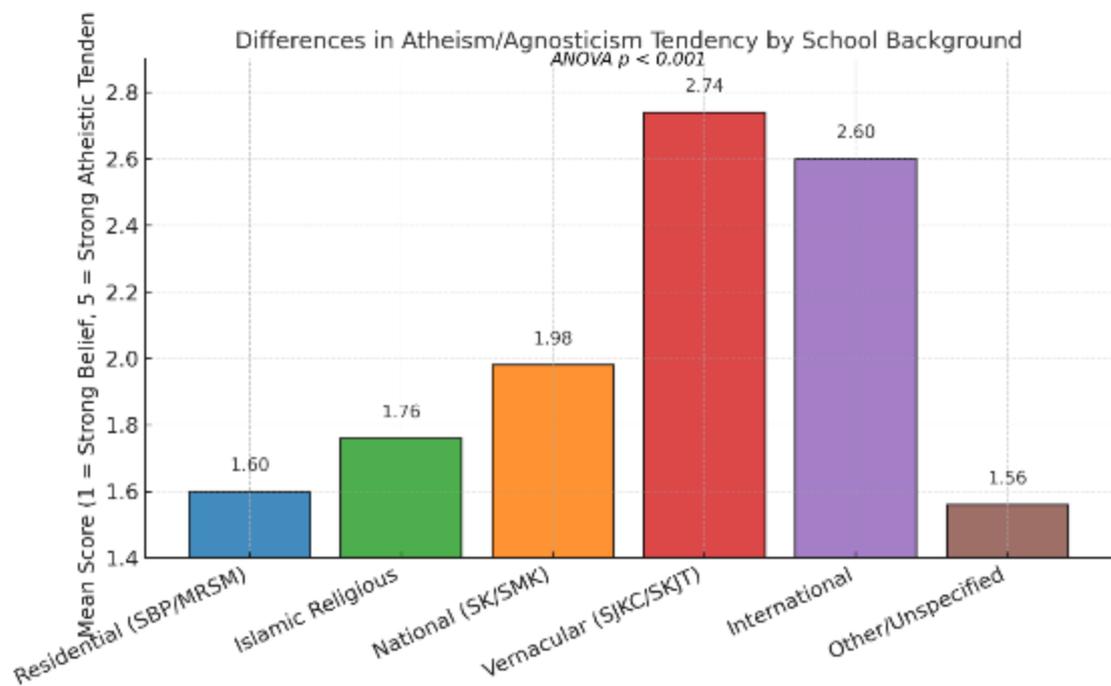
The sample included primarily young adults, but we grouped ages to see if the youngest students differed from older ones (a few postgraduates and mature students were in the mix). There was a significant age effect (ANOVA $p = 0.025$). The 18-24 year old group had the highest mean atheism/agnosticism score (~2.10), whereas those in their late 20s and 30s had progressively lower means (e.g., 25-34: ~1.78; 35-44: ~1.54). The few respondents aged 45 and above had the lowest scores (~1.0-1.7, though small sample). This trend suggests that *younger students are indeed more inclined toward irreligious skepticism than older individuals*. It could reflect a generational shift, or simply the fact that our older respondents likely grew up in a different era or are returning students who remained religious. In any case, within the range of our data, there is a clear pattern: the traditional university-age group (late teens to early 20s) is the most questioning, and religiosity seems to increase with age (or conversely, atheism tendency decreases with age). This aligns with general observations of youth being at a life stage of exploration and possibly lower attachment to religious practice.

In summary, among demographic factors, gender, ethnicity, and age stood out as significant. Male, non-Malay, younger students are more likely to exhibit atheism/agnosticism tendencies than female, Malay, older students. These findings mirror known patterns in other contexts and underscore the importance of cultural background in shaping openness to atheism.

Influence of Educational Background and School Orientation

One of the focal points of this study is how the type of prior schooling influences irreligious tendencies. The results provide clear evidence that educational background is associated with significant differences in the atheism/agnosticism score:

a) Type of Secondary School

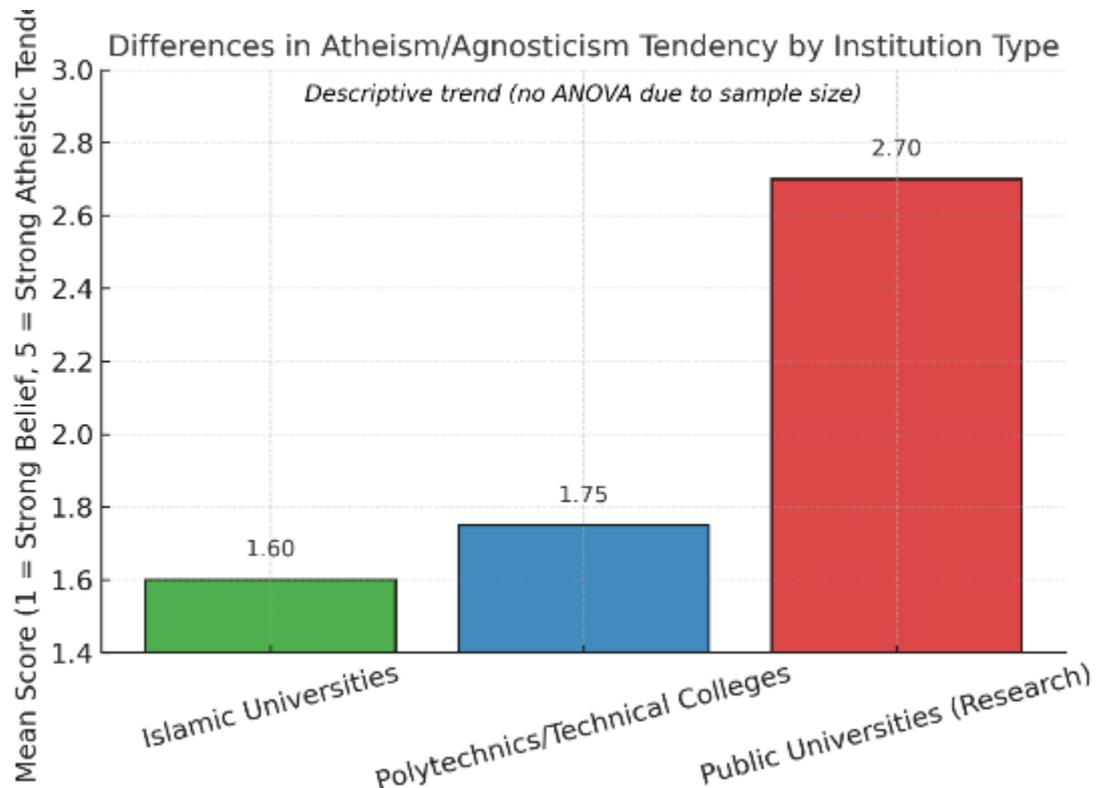


We found a highly significant difference across school categories (ANOVA $p < 0.001$). Students who had attended vernacular schools (Chinese or Tamil medium) or international schools showed the highest levels of atheism/agnosticism tendency. The mean score for graduates of Chinese/Tamil national-type schools (SJKC/SKJT) was approximately 2.74, which was the highest among all groups. Those from international schools had a mean around 2.60, also quite high. In contrast, students who came from Islamic religious secondary schools had much lower scores (mean ~ 1.76), and those from fully residential schools (which in Malaysia are often elite boarding schools with structured and sometimes conservative environments) had the lowest mean of all, around 1.60. Respondents from regular national schools (Sekolah Kebangsaan), where the medium is Malay and the student body is mixed but majority Malay had a middle-range score (~ 1.98). Any respondents who did not specify or had “other” were around 1.56 (though that could include homeschool or unknown cases). The pattern is therefore quite pronounced: Vernacular and international schooling correlates with markedly higher irreligious tendency than national or religious schooling.

Interpretation of this is illuminating, Chinese and Tamil schools likely provided environments where Islam was not the central ethos (most students being non-Muslim) and where perhaps secular worldviews were more normalized; this, combined with cultural factors in those communities, resulted in higher skepticism. International schools, often attended by urban, affluent families (and various ethnicities), tend to encourage Western liberal education ideals and critical thinking, which may foster questioning of religion. On the flip side, religious schools embed students in devout practices and worldview, thus it is unsurprising that their alumni show the least doubt. Residential schools (SBP), while not explicitly religious in curriculum, are known for disciplined environments and historically have a majority Malay population and sometimes an Islamic ethos due to many Malay administrators and teachers. They also often select high-achieving students who might also be more conformist (just speculating). Thus, those from SBP appear quite low on the atheism scale, potentially

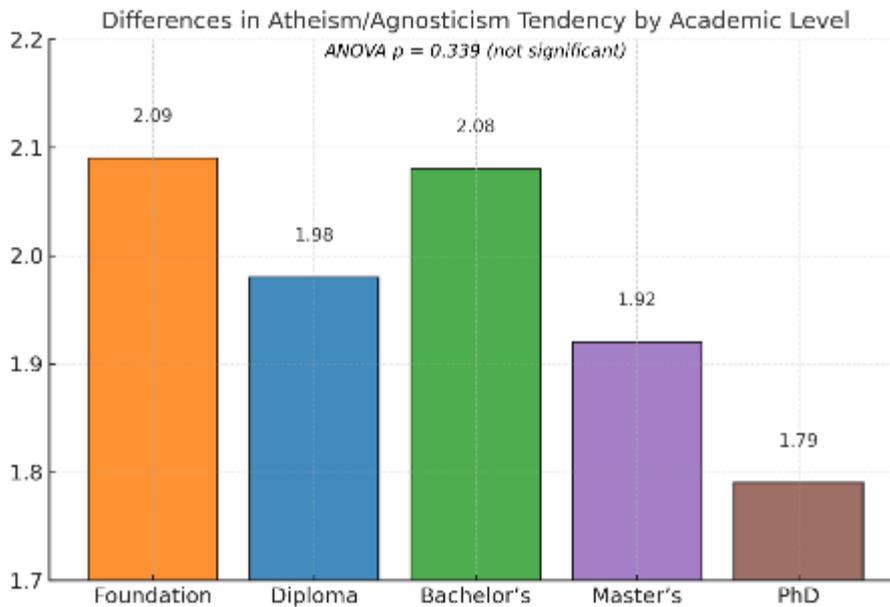
reflecting a continuity of their earlier environment's influence or perhaps peer influence from those schools continuing into university.

b) Institution of Higher Learning



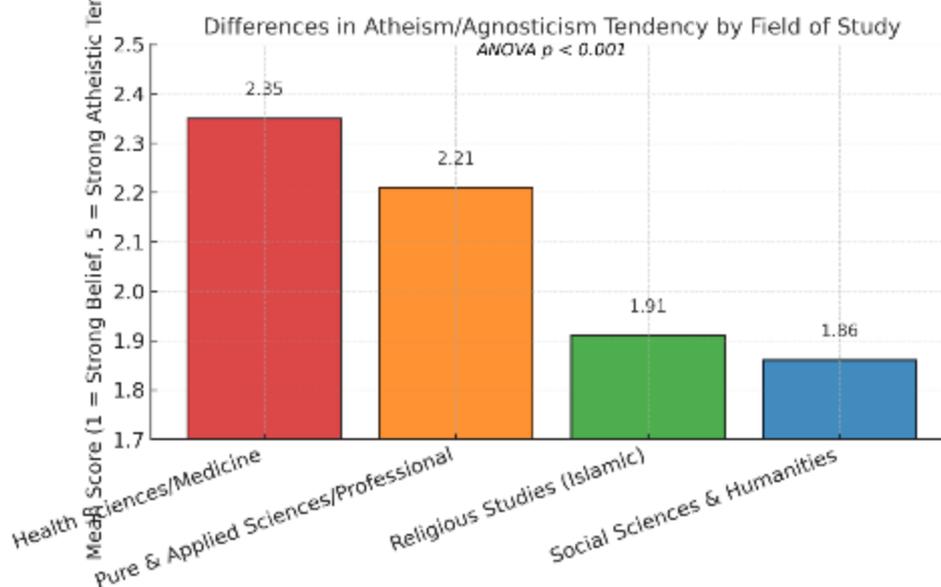
We also compared the respondents by the institution or type of university they were attending (or had attended for older ones). While not every individual institution had enough sample for statistical comparison, some patterns emerged from the data. Students from Islamic-focused universities showed very low atheism/agnosticism scores on average. Similarly, those at polytechnics or technical colleges (which often have a more homogeneous local student body and practical focus) were on the lower end (~1.7-1.8). In contrast, students from major public universities had higher average scores, ranging approximately from 2.4 up to 3.0. These differences imply that students at secular, large public campuses exhibit more nonreligious tendency than those at explicitly religious or technical institutions. It might be that big campuses in urban areas foster more diverse thought and have more non-Muslim students proportionally, which raises the irreligiosity average. Islamic universities by design cultivate Islamic values, thus it makes sense their students remain very religious (and perhaps those inclined toward religiosity choose those institutions in the first place). While we did not run a formal ANOVA for every institution due to sample size concerns, the general contrast between “public research universities” vs “Islamic universities” is clear and aligns with our other findings on environment.

c) Level of Study (Program)



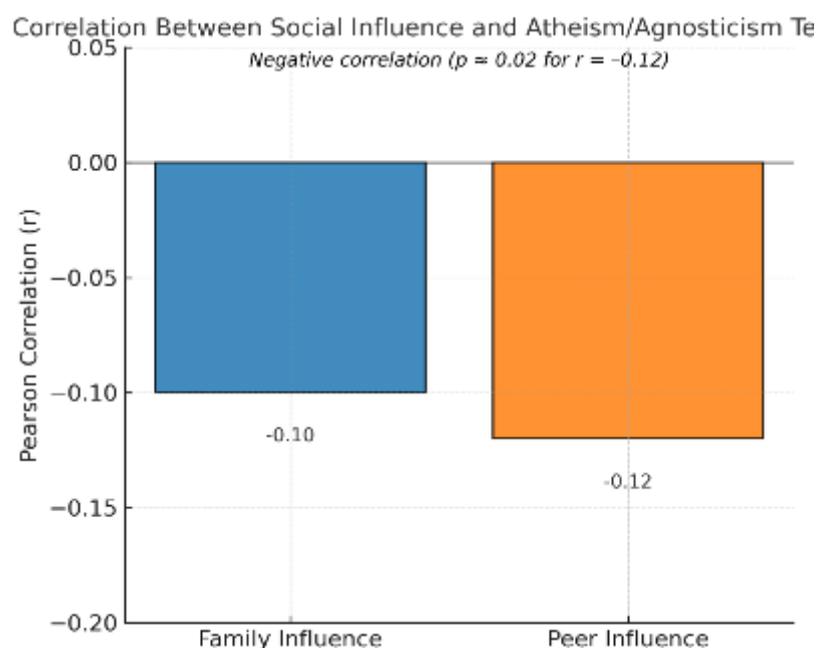
We looked at whether being a foundation vs undergraduate vs postgraduate student made any difference. The means were: Foundation (pre-university) ~2.09, Bachelor's ~2.08, Diploma ~1.98, Master's ~1.92, PhD ~1.79. Statistically, these differences were not significant (ANOVA $p = 0.339$). Thus, the *academic level or stage* of higher education did not show a meaningful effect on atheism/agnosticism tendency. There is a slight trend that the highest level (PhD) had lower scores, but our sample of PhD students was small and possibly older (hence age could be the factor). Undergraduates and foundation students were a bit higher, maybe reflecting the younger age more than the program per se. We can conclude that being earlier vs later in one's university education wasn't a major factor once other things are accounted for, aside from any age-related effect.

d) Field of Study



The student's major or field did show a significant association with irreligious tendency (ANOVA $p < 0.001$). Among broad fields, those in Health Sciences/Medicine had the highest mean score (~ 2.35), closely followed by those in Pure and Applied Sciences/Professional fields (combined average ~ 2.21). These science-related students scored well above those in other fields. Students studying in Religious Studies (Islamic studies) scored lower (~ 1.91), which is not surprising given their interest in religion. Unexpectedly, the Social Sciences and Humanities group had the lowest average in our data (~ 1.86). This is a notable finding, as one might have hypothesized social science/humanities students to be among the more critical thinkers about religion. However, in Malaysia, many in social sciences or humanities could be in education, literature, or other fields that might include a large number of Malay students or a curriculum that doesn't necessarily challenge religious viewpoints. It's also plausible that this category included students in fields like Malay studies, history, or other areas where local culture (often intertwined with religion) is emphasized. By contrast, health sciences students (medicine, pharmacy, etc.) not only engage deeply with scientific methodology but also often face moral and scientific questions (like evolution, bioethics, etc.) that might prompt them to question religious dogma. Furthermore, these fields in Malaysia have high numbers of non-Malay students (e.g., many Chinese Malaysians in medicine), which could partly drive up the nonreligious score. The science and engineering (Sains Ikhtisas, which includes pure sciences and professional science-based fields) also showed elevated scores, consistent with the idea that a scientific outlook correlates with skepticism of religious claims. The lowest scores in social sciences/humanities and religious studies reflect that those disciplines might attract or be composed of more religiously-inclined individuals (for example, someone interested in Islamic studies is likely devout; humanities might include Islamic civilization courses, etc.). To summarize, students in scientific and technical disciplines demonstrated higher atheism/agnosticism tendencies than those in social sciences or religious fields, which supports the notion that a rationalist or scientific training can coincide with less religiosity.

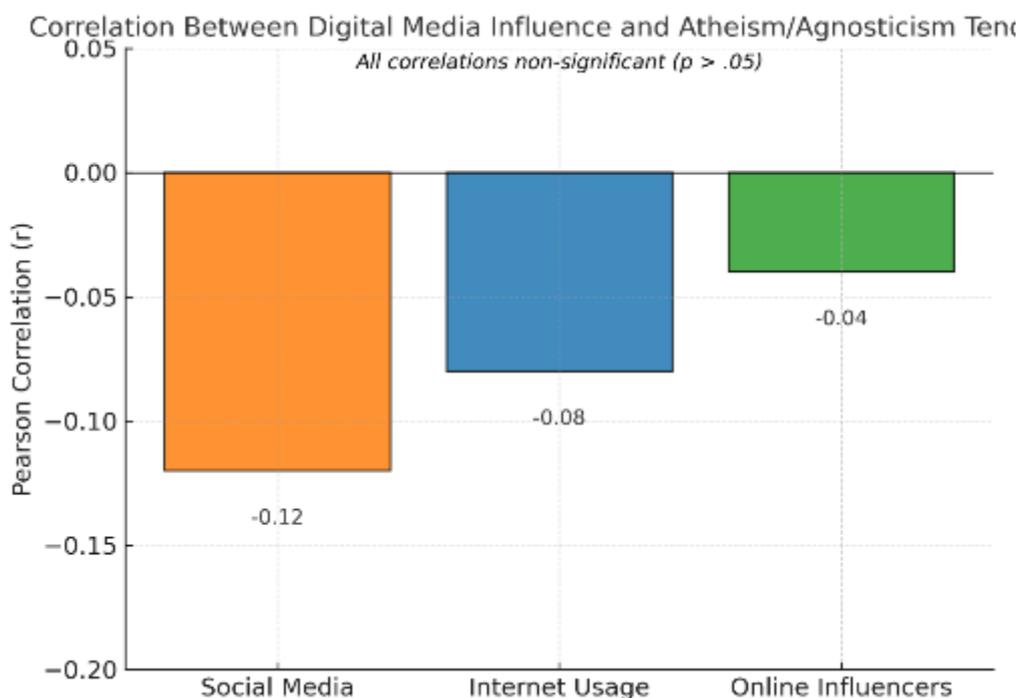
Role of Family and Peer Influences



We investigated how social influences correlated with the atheism/agnosticism tendency. Participants rated the influence of family and friends on their religious outlook. Pearson correlation analysis yielded a negative correlation for both: approximately $r = -0.10$ for family influence and $r = -0.12$ for peer influence. These correlations, though weak in magnitude, suggest an inverse relationship: students who reported strong family influence in their lives tended to have slightly lower irreligious tendency scores, and similarly with strong influence from friends. In other words, the more a student is influenced by their family or close friends, the more likely they are to remain religious (or the less likely to be atheist/agnostic). This makes intuitive sense, as strong family influence often includes religious upbringing and expectations, which can restrain a person from drifting into open disbelief. Similarly, if one's friends are religious or one is strongly tied to a religious community, expressing atheistic views might be discouraged. Conversely, those who indicated that family or friends have little influence on their belief might be more independently minded or perhaps distant from religious family expectations, which could allow them more freedom to question faith.

Although the correlations are not large (and in fact -0.12 is relatively small), in a sample of ~ 397 it was borderline significant (p around 0.02 for $r = -0.12$). The small size also indicates that not all non-religious students are simply those without family ties; many other factors are at play. But the direction aligns with the idea that strong social bonds to religious family/friends act as a protective factor against atheism, as found in other studies of religious retention. It's worth noting that the measure here didn't differentiate whether the influence was specifically religious or general influence; presumably, those with strong family influence likely had families who emphasized staying in the faith. If a student had nonreligious family or peers, the dynamic might differ (we suspect that most respondents had religious families given Malaysia's demographics).

Influence of Social Media and Internet Exposure



One question of interest was whether heavy exposure to social media, internet, or secular influencers correlates with higher atheistic tendency. Our data did not find evidence supporting a strong positive influence of digital media on irreligiosity. In fact, the correlations with the atheism/agnosticism score were slightly negative and very close to zero: for social media influence, $r \approx -0.12$; for internet usage, $r \approx -0.08$; and for influence of online “influencers”, $r \approx -0.04$. None of these correlations were statistically significant (all $p > .05$), indicating essentially no linear relationship between amount of social media influence reported and one’s atheism score.

Interestingly, the direction was negative (though extremely weak), implying that if anything, more perceived influence from social media/internet was associated with *slightly lower* atheism tendency. This counterintuitive result might reflect several things. It could be that Malaysian students who are very active on social media consume a lot of *religious or normative content* (given that religious messaging is also prevalent online), or that being very socially connected might keep individuals within community norms. It might also be that those who are already skeptical don’t necessarily attribute it to social media, they might credit personal reasoning or education, whereas those who feel influenced by what they see online might often be influenced by popular religious content as well. Another possibility is that these measures were not granular enough mere frequency of social media use is not the same as *what content* one engages with. A student might use social media heavily but mostly for entertainment or interacting with friends, not for reading about religion. Thus, our findings suggest no evidence that social media or internet exposure per se is driving atheistic tendencies in this sample. This aligns with the idea that offline factors (education, family, personal experiences) are more determinant, and that media can be a double-edged sword. Notably, participants did not report that influencers or online figures had much sway on their belief about God (the “influencer” influence correlation was almost zero), meaning the rise of global atheist spokespeople (like Dawkins, etc.) might not strongly penetrate the Malaysian youth context, or at least youths might not explicitly credit them. These results counter a common narrative that “the internet is making young people atheists.” At least in this preliminary analysis, digital media influence appears minimal in explaining who becomes less religious. The findings echo some scholarly views that it is often deeper social and intellectual factors, rather than just media consumption, that lead to religious deconversion.

In summary, our empirical findings highlight a notable, if minority, presence of atheistic/agnostic tendency among Malaysian students and illuminate the profiles and factors associated with it. The key quantitative results can be concisely recapped as follows:

- i. Ethnicity & Religion Tie: Chinese and Indian students show significantly higher nonreligious tendency than Malay/Bumiputera students ($p < .001$).
- ii. Gender: Men higher than women in irreligiosity ($p < .05$).
- iii. Age: Younger students (late teens/early 20s) are more irreligious than older students ($p < .05$).
- iv. School Background: Vernacular and international school alumni have far higher atheism scores than religious or boarding school alumni ($p < .001$).
- v. Field of Study: Science and health majors more likely to be irreligious than religion or social science majors ($p < .001$).

- vi. University Type: Students in secular public universities have higher scores than those in Islamic institutions.
- vii. Family/Friends Influence: Inverse relationship, strong family/friend influence corresponds to lower atheism tendency (negative correlations).
- viii. Media Influence: Essentially no positive correlation with atheism tendency; if anything, minimal negative association.
- ix. Attitudes: Those who view religion as outdated or irrational are much more likely to be atheistic (strong positive correlation ~0.6).
- x. Religiosity Change: Those who have become less religious or never were religious are at the highest end of the atheism spectrum.

These findings form the basis for the discussion on what they mean in cultural and theoretical context.

Discussion

This study set out to explore patterns in atheism and agnosticism tendencies among Malaysian university students, focusing on the roles of ethnicity and educational background. The findings provide empirical evidence for several important trends, many of which resonate with broader theoretical perspectives on secularization, religious socialization, and identity, while also highlighting unique aspects of the Malaysian context.

Interpreting key findings in context

Perhaps the most striking result is the strong ethnic disparity in irreligious tendencies. Chinese and Indian students exhibited markedly higher scores for atheism/agnosticism tendency than Malay students. This can be interpreted through the lens of *religious socialization and identity*. For Malay Muslims, religion is not just a personal choice but an identity enshrined by law and reinforced by community norms. From childhood, Malay Muslims are taught that being Malay entails being Muslim, and there are significant social and even legal repercussions for renouncing or questioning Islam openly. Therefore, Malay students who harbor doubts might internalize them or express them very cautiously, leading to overall lower scores (some might have answered neutrally or disagreed with atheistic statements due to social desirability bias).

In contrast, Chinese and Indian Malaysians generally have more liberty (socially and legally) to choose their religion or lack thereof. A Chinese student becoming an atheist might upset religious family members if they are Buddhist or Christian, but it is not illegal nor as culturally shocking as a Malay doing so. Moreover, surveys have shown that a segment of the Chinese Malaysian population identifies as having no religion or being “free-thinker,” a stance with some degree of acceptance in Chinese culture (which historically includes strains of Confucian rationalism and secular worldviews). The higher tendency among Indian students was somewhat surprising (as Indian communities are often religious), but it could be that those Indians who attend university (perhaps many in urban settings or in certain fields) are more cosmopolitan in outlook. Indian Malaysians also include a significant Christian subset and English-educated segment who may adopt more secular perspectives akin to Western trends. It’s also conceivable that in a Muslim-dominated society, some non-Muslim minorities become more skeptical of religion in general if they perceive religious politics as infringing on

their lives (for example, seeing religious tensions or favoritism might breed cynicism about religion per se).

Our findings also underscore the gender gap, prove that male students are modestly more inclined to irreligiosity than females. This aligns with many studies worldwide where men often report lower religiosity than women (Smith et. al., 2025). Several theories could explain this. One is the differential socialization hypothesis: women are often socialized to be nurturing, obedient, and community-oriented, which can correlate with higher religiosity, whereas men are encouraged to be independent and perhaps question authority more, including religious authority. In a conservative society, women may also face stronger disapproval for deviating from religious norms (a religious woman who becomes atheist might be judged more harshly than a man, as it violates expectations of piety attached to femininity). Additionally, women might derive stronger social support from religious participation, whereas men may not rely on it as much. Our result ($p = .033$) indicates this gap exists among students, but the relatively small difference suggests many female students are also questioning, it's not a huge divide, which could imply that as education levels equalize, gender differences in religiosity might be narrowing for the younger generation (as some global studies have noted an increasing share of women among the nonreligious over time).

The age effect observed with the youngest students being the most irreligious is consistent with generational change theories. Younger Malaysians have grown up in an era of internet access, globalization, and also in a time where they witness religion being used in politics (both the Islamization trends and the reactions against it). Some youths become disillusioned by what they see as *hypocrisy or conflict associated with religion* (Ramli, et al. 2022). The fact that irreligious tendency declines with age in our cross-sectional data might also reflect a life-cycle effect: people often become more religious as they marry and have children, or simply as they age and face existential questions. It's possible that some of the irreligious youths will later return to faith or become more religiously inclined with maturity (a common pattern in many societies). Alternatively, it might reflect that older people who are irreligious simply did not pursue further studies or were not captured in our sample. Nonetheless, the current cohort of university-aged individuals clearly shows more skepticism than their seniors, suggesting a *potential secularizing shift* in the coming generation, albeit from a very religious baseline.

One of the most novel contributions of this study is highlighting how school orientation and educational environment correlate with religiosity. The results strongly suggest that students educated in more secular or non-Islamic-centric environments (vernacular and international schools) are more prone to question or not adhere strongly to religious belief. This can be interpreted through the concept of *differential socialization*: in vernacular schools, the student body is majority non-Muslim, and the ethos is more about cultural and language preservation than religion per se. These schools likely foster a sense of ethnic identity and focus on academic achievement; religion is taught (in moral or elective classes) but not in an immersive way as in Islamic schools. Thus, students might not form as strong a religious identity early on. International schools usually encourage critical thinking, liberal values, and exposure to global perspectives; students might discuss evolution, philosophy, and comparative religion more openly, potentially leading them to adopt a more skeptical mindset. In contrast, Islamic schools and boarding schools embed youth in a controlled

environment with daily prayers, religious curriculum, and limited exposure to alternative viewpoints. This produces students who either remain devout or at least do not question fundamentals by the time they enter university. Our data support this: alumni of religious and boarding schools were the least likely to agree with atheistic statements.

From a policy perspective, this suggests that early educational setting has a lasting impact on worldview. It raises interesting questions: Are vernacular and international schools inadvertently fostering secular outlooks, or is it more about the kind of student and family that chooses those schools (selection effect)? Likely both. Many Chinese families choosing SJKC want a strong academic foundation and Chinese culture, not necessarily irreligion, in fact, Chinese schools often have Confucian or Buddhist extracurricular exposure. But these systems do not enforce one religion, leaving belief as a personal matter. Similarly, parents who send kids to international schools might be more liberal or secular-minded themselves, which influences the child both at home and school. Meanwhile, families that choose religious schools are usually those who prioritize faith, so the child gets a double dose of religiosity at home and school. Therefore, the schooling effect is entangled with family background. Even so, our findings provide preliminary evidence that a more pluralistic or secular educational environment correlates with higher likelihood of atheistic thinking later on. This resonates with global research that finds higher education can correlate with reduced religiosity, but it nuances it by pinpointing that it's the *content and context* of education (pluralism, scientific emphasis, critical pedagogy) that matters most.

The differences by field of study also merit discussion. The result that medical and pure science students are more likely to be nonreligious than social science/humanities students is somewhat counterintuitive from a Western perspective (where often humanities scholars are more secular). However, in Malaysia, many humanities or social science students may be enrolled in courses like education, language, or public administration which have a lot of mainstream or conservative influence, and these fields also include more Malay students due to various factors. Meanwhile, medicine and science faculties are coveted and competitive; they tend to have a significant number of non-Bumiputera students (given the quota system in public universities ensures some diversity, and private medical colleges are also full of Chinese/Indian students). Thus, part of the field effect is likely compositional by ethnicity. But beyond that, those in scientific fields literally study empirical evidence and may find supernatural explanations less convincing, aligning with the classic science vs faith tension. Medical students, in particular, deal with life and death in tangible ways and learn scientific explanations for phenomena; some may find fewer gaps for religious explanations. Interestingly, medicine might also expose one to suffering and ethical dilemmas that could challenge faith (e.g., witnessing illness might raise "problem of evil" questions). The data showing religious studies majors are more religious is trivial (they self-selected into that field due to faith interest). The relatively low irreligiosity among social science students could indicate that those disciplines in Malaysia might often incorporate or not contradict religious worldviews (for instance, Islamic perspectives in economics or sociology courses are sometimes integrated). It could also be that many social science students are from backgrounds that did not push them to question religion possibly less urban or less scientifically oriented upbringings. The interplay of field with personal background is complex.

Nonetheless, one theoretical implication is that exposure to scientific and rationalist modes of thought appears to correlate with skepticism towards religion, supporting ideas from cognitive science of religion and secularization theory. This dovetails with the qualitative insight from Ramli et al. that many Malaysian atheists emphasize rational-scientific reasoning and cite conflict with religious teachings as a reason for their disbelief. Our survey's factor analysis reinforces this: the dimension of *rationality and conflict with science* was a prominent theme among irreligious students. Therefore, our findings contribute evidence to the ongoing discussion of whether science education undermines religiosity in this context, it seems to, albeit within a minority.

Turning to family and peer influence, the negative correlations confirm the strong role of social bonds in maintaining religion. This aligns perfectly with the theory of *religious social capital*: those embedded in religious families and communities have social support and norms that encourage continued belief and practice. It appears that students who remain closely tied to family (perhaps living at home, or regularly engaging with parents on values) are less likely to stray into skepticism. Those who reported weak family influence might either be more independent personalities or have less close-knit families, which could make them free to form their own beliefs. This pattern underscores a practical point: interventions to foster religious commitment often emphasize parental involvement and peer groups (like campus religious clubs) our data suggest these indeed correlate with keeping students religious. Conversely, for an individual to adopt atheism, often they have to break away to some extent from these social pressures. Some of the ex-Muslim interviewees in other studies mention periods of concealing their views from family or feeling distant from religious relatives (Ramli, et al. 2022). Our quantitative data can't tell causal direction (it could be that those who become atheist then distance from family), but it likely works both ways in a feedback loop.

The absence of a positive link between social media/internet and atheism tendency is a notable finding that goes against some popular assumptions. One might have expected that heavy internet users become more secular by encountering atheist arguments: a phenomenon observed in some Western studies where internet use predicted religious disaffiliation). In Malaysia's case, a few explanations can be offered: (a) The content algorithm bubbles might ensure religious students see more religious content and secular-minded students seek out secular content, so usage level alone doesn't capture that distinction. (b) Many youth use social media for reasons unrelated to intellectual or religious exploration (entertainment, socializing), so its influence on beliefs is diluted. (c) The negative correlation, albeit weak, could hint that those who are very into social media may also be those strongly integrated in social networks (hence perhaps not loners reading philosophy, but rather busy with social life, which in Malaysia often revolves around shared cultural/religious activities. The data implies that atheism among students is not simply an outcome of being "brainwashed by the internet", but more about personal and educational factors. This is important for the public discourse: it suggests that blaming social media for rising irreligiosity (a common narrative among religious authorities) might be misplaced; rather, deeper issues like how religion is taught and perceived are at play. Our results showed that those with atheist tendencies had very negative perceptions of religion's practicality and morality, which is likely driving both their online and offline behaviors (they may visit atheist sites because they already doubt, not the other way around).

Cultural Implications

The cultural implications of these findings are significant for Malaysia's plural society. The ethnic pattern in particular highlights potential social frictions: if irreligiosity grows primarily among non-Malays (Chinese, Indians), it could be interpreted (by the Malay-Muslim majority) as part of a larger cultural divide. Malays might see atheism as a "non-Malay" phenomenon or even associate it with Westernization brought by other ethnic groups. This could exacerbate mistrust or social distance between communities, especially if not understood properly. On the other hand, if some Malays themselves are quietly becoming agnostic (which surely some are, even if not captured strongly in the survey due to underreporting), it becomes an internal community challenge that is harder to acknowledge due to the taboo. Our study being "preliminary" means we are careful not to over-generalize, but it does raise questions about how each community addresses doubt and secular ideas among their youth. For example, Chinese-based organizations might not treat a loss of religion as critically as Malay institutions would (Ramli et. al, 2024). This could lead to different approaches: the Malay-Muslim establishment is likely to strengthen dakwah (religious outreach) programs targeting youth, especially those in universities, to counter any atheist trends. Indeed, our findings about students in major public universities being more prone to doubt might alarm religious authorities, as these universities are seen as breeding grounds for future national leaders. Already, there have been calls by some officials to ensure public universities produce "balanced graduates" with strong faith, not just technical skills.

The results on schooling might feed into ongoing debates about vernacular schools and national unity. There have been political debates in Malaysia about whether vernacular (Chinese/Tamil) schools should exist or be abolished, often framed in terms of national integration. Our findings inadvertently provide a different angle: these schools also produce different outlooks on religion. Advocates of national Islamic education might use this to argue that vernacular or liberal schooling undermines faith, while proponents of those schools might argue that they encourage critical thinking and personal freedom. It's a delicate implication because it touches on both racial and religious politics.

From a cultural standpoint, the fact that atheism is still overall very low means mainstream culture is still highly religious. The minority who are leaning atheist/agnostic might face social isolation or need to remain anonymous. This is supported by other research where Malaysian atheists often interact in private online groups or small meet-ups away from public eye. Our data showing the importance of perception of religion suggests that those who left faith often did so because they saw religion as not meeting their moral or intellectual needs. For instance, if a student perceives religion as promoting conflict or being irrational, they may detach to find coherence in a secular worldview. This has cultural implications: are religious institutions aware of these perceptions and prepared to address them? There may be a gap in religious education if some students come out of it viewing religion as "kolot" (outdated) or in conflict with science. The implication is that religious authorities and educators might need to *engage with these criticisms* rather than dismiss them, in order to prevent further alienation of intellectual-minded youth. The study by Ramli et al. (2022) suggested that to counter atheism, there should be early education and open discussions that address doubts in a healthy manner. Our findings back that up: simply ignoring the issue or stigmatizing it (like the minister's approach of "hunt them down") could backfire or drive it underground. Instead,

acknowledging that some youth find current religious narratives unconvincing and responding with thoughtful dialogue might be more effective.

Another cultural element is the *role of higher education institutions*. Since our data indicate certain universities have more students with atheistic leanings, those campuses might see different climates. Some campuses might have active religious clubs and a prevailing norm of religiosity, while others have pockets of more secular or freethinking students who might form informal groups or engage in debates. This diversity within the tertiary education landscape means that a one-size-fits-all approach to student affairs or counseling may not work. Culturally, the fact that Islamic universities had almost no students scoring high on atheism might speak to self-selection and effective environment but if any student there did doubt, they'd be extremely isolated. Meanwhile, at a place like public university, a doubting student might find a couple of like-minded peers. Understanding these micro-cultures is important for educators.

Theoretical Contributions

This preliminary study contributes to the theoretical understanding of secularization and religiosity in a Muslim-majority, multi-ethnic society. Secularization theory, which often emphasizes modernization (including education and urbanization) leading to declining religiosity, finds partial support here: the more "modern" segments (urban, highly educated in science, exposed to pluralism) indeed show more secular attitudes. However, the context of an Islamic society adds complexity by heavily regulating and normatively discouraging apostasy, thereby slowing or hiding the secularization process. Our findings suggest that secularization, where it occurs in Malaysia, is uneven and concentrated in subgroups relatively buffered from the dominant religious enforcement (e.g., non-Malay ethnicities, or in cosmopolitan settings). This ties into differentiation theory: in highly religious societies, certain sub-systems (like elite education or certain social circles) can secularize even if the overall society remains religious. We see hints of that in the difference between major public universities vs. Islamic institutions, a differentiation within the higher education system.

Another theoretical angle is the concept of pluralistic competition and "religious market" theories. Stark and colleagues have argued that religious pluralism can sometimes increase religiosity due to competition, but in some cases it can also allow space for no-religion identity to emerge if the competition disillusiones people. In Malaysia's case, pluralism exists (Islam, Buddhism, Hinduism, Christianity all present), but because ethnicity and religion overlap, switching religion is uncommon. Instead, the "none" option might be the choice for someone who loses faith in the religion they were born into but cannot practically convert to another due to identity. For example, a Malay cannot convert out of Islam legally, so their only alternative if they disbelieve is a sort of hidden atheism. For a devout Hindu Indian who becomes disillusioned, converting to Islam or Christianity might be options (and indeed those happen), but some might also choose no religion especially if they moved in secular circles. Our data doesn't deeply probe conversion vs atheism, but by focusing on atheism/agnosticism tendency it highlights that *non-religion is an emerging identity albeit mostly covert*. This contributes to discussions on nonreligious identity development in non-Western contexts, which is an under-researched area. We show that in Malaysia, the nonreligious identity tends to coalesce around shared grievances with religion's rationality and relevance, similar to what is seen in Western atheists (who often cite science and

skepticism). However, the social expression of that identity is constrained by family and ethnic ties.

The study also touches on cognitive approaches to religion by measuring attitudes like seeing religion as paradoxical or weakly evidenced. The strong correlation between those cognitive evaluations and atheism tendency lends support to theories that apostasy often involves an intellectual component (not just a social drift). In a sense, it underscores that at least among university students, becoming nonreligious is often a reasoned decision (or one justified with reason), where they weigh evidence and find religion lacking. This is not to downplay emotional factors, indeed the qualitative studies show emotional triggers too (Ramli, et al. 2022). But academically, it aligns with models where loss of faith can come from *cognitive doubt accumulation*.

By integrating literature and our findings, we also contribute regionally: Most studies on youth religiosity in Southeast Asia focus on those staying religious or on inter-religious tolerance. Here we specifically hone in on atheism/agnosticism, adding to works and academic discussions on how atheism challenges the harmony ideology of the region (Duile and Aldama, 2024). Our results empirically substantiate that atheism is indeed largely a hidden phenomenon but correlated with modernization factors. This could feed into theoretical discussions on whether economic development and education in a Muslim society will inevitably produce some secularization (as classical secularization theory would predict) or whether strong cultural forces can fully resist it. Our data suggests they can resist to a large extent (only small minority become irreligious), but not entirely cracks in the edifice are evident among the youth.

Implications for Policy and Practice

The findings of this study have practical implications for educators, policymakers, and community leaders in Malaysia. First, the fact that educational background shows such a relationship with religiosity suggests that schools and universities are important arenas for values formation. Educators in national schools and universities might take note that while they instill religious curriculum (for Muslims) and general moral education, students still develop doubts if they are not addressed adequately. There may be a need to modernize religious education to speak to scientifically-inclined minds. For instance, incorporating discussions that reconcile faith with science, or addressing questions about religious teachings' relevance in modern life, could help prevent the perception that religion is "obsolete" or anti-science. As our data indicates, those negative perceptions strongly correlate with atheism. Thus, proactively engaging students on those topics (e.g., through forums, seminars that allow open questions) might mitigate the slide towards irreligiosity for some. Essentially, a recommendation is to foster constructive dialogue in educational institutions: instead of treating skepticism as deviance to be punished, treat it as an intellectual challenge to be met with reasoned discussion and empathy. This aligns with suggestions by some scholars that healthy debate and improved religious literacy could counter shallow understandings that lead to rejection (Ramli, et al. 2022).

For policy makers in religious affairs, the study highlights that focusing solely on blaming external factors like social media may miss the mark. The negligible role of media suggests that strategies like censoring online content or issuing public warnings about the internet's

dangers might not be effective in addressing the root causes of youth doubt. Instead, policy could focus on strengthening community and family support since those clearly keep people religious and on reforming religious outreach to be more in tune with youth mentality. Perhaps employing young religious intellectuals who can speak the language of science and modern values to engage with students would be useful. Campus religious programs might also need to be more interactive and less one-directional preaching, to allow students to air doubts without fear.

Another implication touches on mental health and counseling services at universities. Students grappling with existential doubts or caught between personal beliefs and family expectations might experience distress. University counselors and student support services should be aware that a number of students could be privately struggling with questions of faith and identity, especially those from conservative backgrounds. Having trained counselors who can handle such sensitive issues confidentially (maybe even referral to sympathetic clergy who won't be punitive) could provide an outlet for students. Without that, students may turn only to online forums for support, which might deepen their alienation from local community.

From a social harmony perspective, acknowledging that a small segment of the population is nonreligious and ensuring their rights are respected is a delicate matter in Malaysia. While our study doesn't directly address activism or rights, it does put a spotlight on this minority group. As long as the numbers are small, they might not have any public visibility. But if secular tendencies grow, even marginally, there may be calls (as have already occurred) to legally define "no religion" status or to have public discourse about freedom of belief that includes the right not to believe. Our evidence of youth secular attitudes could be a bellwether that more of such discussion will be needed in the future to maintain social cohesion, i.e., how to integrate those who quietly don't believe while still preserving the overall religious character of society.

Limitations and Recommendations for Future Research

Given the preliminary nature of this study, several limitations must be noted. First, the sample, while diverse, is not necessarily representative of all Malaysian university students. It was obtained via online convenience sampling, which may over-represent students who are more tech-savvy or open to such surveys. The ethnic composition, for instance, might not reflect national proportions (we likely had a higher fraction of Chinese/Indian students than in the actual public university population, since Malay students dominate public universities at around 70% or more). This oversampling of minorities may have inflated the overall atheism score mean slightly. Future studies should aim for stratified sampling or include more institutions to ensure representation, including perhaps more from East Malaysia and private universities.

Second, there is the issue of social desirability and honesty in responses. Especially for Malay Muslim respondents, admitting to doubt in God on a survey (even anonymous) is risky and might be under-reported. It's possible some Malays who scored "low" actually have private doubts but did not feel safe marking agreement with atheistic statements. On the flip side, some non-Malays might overstate their skepticism as an act of youthful rebellion. Without qualitative follow-up or measures to ensure candor (like indirect questioning techniques), we

have to interpret the absolute values with caution. It's likely our findings of differences are correct directionally, but the true gap might be larger if Malays felt more free to express doubt. For future research, qualitative interviews could complement surveys to get deeper insights into how students interpret the questions and to capture those who wouldn't openly tick "Strongly agree I doubt God" but might express nuanced doubt in conversation.

Third, the measurement of "atheism/agnosticism tendency" in our study is based on a composite of six items focusing mainly on disbelief in God. This is a specific (and somewhat narrow) operationalization. Atheism and agnosticism as phenomena can include broader aspects such as rejection of religious authority, lack of religious practice, or identification as "non-religious" culturally. Our measure mostly tapped intellectual disbelief. Therefore, someone might score low (disagree with "I doubt God exists") yet still be secular in lifestyle or indifferent to religion. In our context, a Malay student who is basically non-practicing and indifferent might still not dare say "I doubt God", they'd score as religious by our measure but could be functionally agnostic. Future studies might use a multi-faceted approach: include identity labels (would you call yourself atheist/agnostic?), behavioral measures (do you pray, etc.), and belief measures, to capture a fuller picture of secularity. In addition, including items from Section C (like moral attitudes about religion) into the analysis as part of the construct could broaden the meaning beyond just God-belief.

Fourth, while we did some factor analysis and correlation, the study is largely exploratory and cross-sectional, limiting causal inference. We assume, for instance, that the type of school one attended influenced their current beliefs. It could also be that a student's inherent tendency (and family influence) decided what school they went to. For example, a student predisposed to doubt (due to family or personality) might have chosen a Chinese school or international school precisely because their parents weren't strict about religion. To untangle these factors, longitudinal data would be very valuable following students from secondary school into university to see how their beliefs change (or don't) relative to their environment. Similarly, a longitudinal approach could test if, as students age or move into working life, do some of the doubters revert to religion (maybe when marrying, etc.) or do they continue on a secular path. This would address whether what we observe is mostly an "age effect" or a true generational shift.

Fifth, the study is limited to university students. This is a key scope choice focusing on the educated youth. It would be informative to compare with non-student youth of similar age to see if university attendance itself is a factor. Perhaps those who do not attend university (and stay in more insular communities) have near-zero atheism inclination. If so, then higher education's effect would be even more stark. Also, including slightly older cohorts (late 20s and 30s who have started working) might reveal if the trends persist after leaving the campus environment.

Finally, cultural sensitivity in interpreting atheism in Malaysia is crucial. We approached atheism/agnosticism as tendencies rather than fixed identities in order to capture even mild skepticism. However, some might critique that equating doubt with "atheism tendency" could pathologize normal intellectual curiosity. We do not imply that any doubt makes one an atheist; rather we were measuring a continuum. Future research could refine this by separating out "critical but religious" individuals from truly secular ones. For instance,

someone could agree with “I emphasize rational thinking” yet still believe in God (because they find their faith rational). That nuance may be lost in our composite. Interview-based studies or mixed-method designs can help clarify such subtleties, for example, interviewing some respondents who scored medium (around 3 “not sure”) to see what their mindset is.

In terms of recommendations, we propose the following: - For educators and religious bodies: Develop curricula or workshops that address common intellectual doubts (science, pluralism, etc.) in an open, non-judgmental forum. Encourage critical thinking within faith contexts (e.g., Islamic theology has a tradition of addressing skepticism that could be tapped) to show students that questioning need not lead to loss of faith if handled constructively. - For families: Recognize the role of familial communication. Parents who want to pass on faith should create an environment where the child can question and discuss rather than just imposing beliefs. The finding that strong family influence keeps students religious is double-edged, it keeps them in line, but if too authoritarian, it might lead to quiet rebellion. So a recommendation is for community programs that help parents engage with youth on religious questions in empathetic ways. - For secular and religious NGOs: Perhaps organize interfaith and even “faith and reason” dialogues at campuses. If the non-religious students remain completely underground, polarization can grow. Having safe spaces where believers and skeptics can talk (with ground rules) could humanize both sides and potentially moderate extreme views (whether extreme atheism or extreme religious dogmatism). - Legal/Policy: Maintain the freedom in academia to survey and research these issues. It’s a sensitive topic, but understanding youth perspectives is crucial for policy. Thus, ensuring that universities allow such studies and that students can respond without fear is important. Censorship or denial of the phenomenon won’t make it go away; it would just make it harder to gauge and address.

Conclusion

In conclusion, this study provides a comprehensive initial look at how atheism and agnosticism tendencies manifest among Malaysian university students and what factors are associated with these nonreligious inclinations. The results indicate that while the prevalence of open atheism/agnosticism is low in absolute terms reflecting Malaysia’s strongly religious landscape, there are discernible pockets of youth who exhibit skepticism toward theism. These tend to be male, ethnically Chinese or Indian, younger students, especially those who were educated in more secular or pluralistic school environments and who are pursuing scientific fields of study. Conversely, female students, Malay and other Bumiputera students, those from religious or national schools, and those in religious or humanities fields are more likely to remain firmly religious, scoring very low on atheism tendency. Such divergences point to an ongoing subtle *religious polarization* among the educated youth, largely along ethnocultural lines and intellectual orientations.

The interplay of education and belief stands out: evidently, how and where a young person is educated, both at secondary and tertiary levels can significantly shape their worldview on religion. In Malaysia’s case, the traditional institutions (family, religious schools) still exert a strong hold, but the influence of modern education and global ideas is visible in the attitudes of some students. Importantly, we found that it is not exposure to social media or Internet per se that correlates with nonbelief, but rather deeper influences like intellectual critiques of religion’s role and the lack of strong familial religious socialization. This suggests that the

challenge of atheism/agnosticism (as seen by religious communities) cannot be simply blamed on technology or “Western influence” in a vacuum; it is tied to genuine questions young people have regarding the compatibility of religious teachings with contemporary knowledge and values.

From a societal perspective, our findings imply that atheism and agnosticism, though not mainstream, are emerging as notable minority perspectives among the next generation. They are not confined to any one ethnic or religious background but are more common in contexts where questioning is more enabled. This calls for thoughtful engagement. If unaddressed, misconceptions can grow on both sides, religious authorities might continue to see atheism as a foreign threat and respond with repression, while nonreligious youth might increasingly view religious institutions as rigid and irrelevant. A balanced approach, as indicated by our discussion, would involve open channels of dialogue and addressing the root causes of disillusionment (such as conflicts between religious doctrine and scientific understanding, or negative experiences tied to religious dogma).

It is also worth emphasizing that the majority of students in our sample still affirmed belief in God and religion’s importance. The average leaned more towards belief than disbelief. Thus, Malaysia is far from secular in its youth demographic; however, the data reveal cracks in the facade of uniform piety. Recognizing these nuances is crucial for academia and policymakers: youth religiosity is not monolithic. There exists a spectrum from devout believers to tentative doubters to convinced non-believers even within a religious society.

As with any preliminary study, our results should be built upon with further research. We encourage more extensive surveys, including qualitative follow-ups, to deepen understanding of *why* these students think and feel the way they do about religion. Particularly, hearing the voices of those who scored high on the atheism/agnosticism scale, their personal narratives would be invaluable. Are their reasons mostly intellectual (science, philosophy), or personal (negative experiences, unmet expectations), or a mix? Conversely, understanding how highly religious students navigate a plural campus without doubting could highlight resilience factors.

In closing, this study contributes to a growing body of knowledge on secular trends in Southeast Asia by illuminating the early indicators of secular thought among Malaysian youth. It underscores that even in a country where belief in God is a cornerstone of national identity, secularization processes can subtly take root given certain social conditions. The findings call for preventative strategies in education and community development to overcome the atheism and agnosticism challenges. By doing so, Malaysian society can better navigate the challenges of modernity and pluralism with stressing on the nation pillar. As the data suggests, atheism and agnosticism tendencies are not overwhelming in scale, but they are *non-negligible and meaningful* in what they reveal about the changing mindset of the younger generation. Acknowledging and understanding this trend will be key to ensuring that Malaysia’s future remains one where all citizens feel a sense of belonging and mutual respect.

Disclosure Statement

No potential conflict of interest was reported by the author.

Ethical Considerations

Ethical approval was obtained from The Research Ethics Committee of Sultan Idris Education University approved this project (ref. no. 2023-0814-02). All participants provided informed consent after being briefed about the study's purpose, their rights, and the voluntary nature of participation. Given the risk of social repercussions for disclosure of non-belief, all data were anonymized, and raw datasets were stored in encrypted, access-controlled files.

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