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ARTICLE

Faith Blocks Fiber: The Effect of Religiosity on Internet Adoption among Indonesia's Digital Immigrants

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Abstract
Indonesia has experienced a rapid increase in internet adoption over the past decade, including among older adults often labeled as digital immigrants. Despite this growth, limited research has explored how sociocultural factors, particularly religiosity, shape digital engagement among this demographic. This study investigates the extent to which religiosity affects internet adoption among digital immigrants in Indonesia, while controlling for welfare, happiness, education, gender, and employment status. Adopting a quantitative design, the research employs data from the fifth wave of the Indonesian Family Life Survey (IFLS 2014–2015), focusing on individuals aged 35 to 69. Core variables were operationalized using validated survey instruments and analyzed through binary logistic regression via STATA 15. The finding reveals a significant negative correlation between religiosity and internet use, indicating that higher levels of religious commitment may inhibit digital engagement. Conversely, education, welfare, and happiness exhibit positive associations, with formal education emerging as the most robust predictor. The implication of this finding is that digital inclusion initiatives must be attuned to cultural and religious contexts to promote equitable and meaningful access to digital technologies.
Keywords: Digital Immigrant; Digital Sociology; Internet Adoption; Religiosity

Penggunaan internet di Indonesia meningkat pesat dalam satu dekade terakhir, termasuk di kalangan digital immigrants, yaitu orang dewasa yang mulai mengenal teknologi di usia lanjut. Meski jumlah pengguna dari kelompok usia ini terus bertambah, faktor-faktor sosial budaya yang memengaruhi keterlibatan mereka dalam dunia digital, khususnya aspek religiusitas masih jarang diteliti. Penelitian ini bertujuan untuk melihat sejauh mana religiusitas memengaruhi penggunaan internet di kalangan digital immigrants di Indonesia, dengan mempertimbangkan juga faktor kesejahteraan, kebahagiaan, pendidikan, jenis kelamin, dan status pekerjaan. Penelitian ini menggunakan pendekatan kuantitatif dengan data dari Indonesian Family Life Survey (IFLS) tahun 2014–2015, yang mencakup responden berusia 35 hingga 69 tahun. Variabel-variabel kunci dianalisis menggunakan regresi logistik biner dengan bantuan STATA 15. Hasil penelitian menunjukkan bahwa tingkat religiusitas yang tinggi berkaitan dengan kemungkinan lebih rendah untuk menggunakan internet. Sebaliknya, pendidikan, kesejahteraan, dan kebahagiaan berhubungan positif dengan penggunaan internet, dengan pendidikan menjadi faktor paling kuat. Implikasi dari temuan ini adalah bahwa strategi perluasan akses digital sebaiknya mempertimbangkan nilai-nilai budaya dan agama sehingga dapat mendorong pemanfaatan teknologi yang lebih inklusif dan diterima masyarakat.

A. INTRODUCTION

Indonesia has witnessed a rapid expansion in internet usage over the past decade. In 2014, 88.1 million people, approximately 34.9% of the total population, were active internet users. APJII (2016, 2018) reported that the number of internet users surged to 132.7 million, accounting for 65 percent of the population in 2016, and recorded that 64.8 percent of the population was online by 2018. Interestingly, while younger digital-native age groups remain dominant total users, a striking growth occurred among older users. Internet adoption among individuals aged 46 and above, commonly called digital immigrants, rose significantly, from just 2.6% in 2013 to 28% in 2016. This demographic shift signals a broader diffusion of technology a departure from the stereotype that older generations are inherently resistant or incapable of adapting to digital environments.

Digital immigrants are generally defined as individuals born before the proliferation of digital technology, those who did not grow up in a digital environment but adopted digital tools later in life (Prensky 2001). Although they may become proficient in digital platforms, their mindset and behavioral patterns often reflect pre-digital norms. Scholars have proposed varying age thresholds to define this group, including those born before 1980 (Jarrahi and Eshraghi 2019; Kesharwani 2020), before 1975 (Zhao et al. 2014), or between 1964 and 1980 (Soroya, Al-Obaydi, and Rehman 2023). In Indonesia, internet access became publicly available around 1995, further reinforcing the relevance of these classifications (Jurriens and Tapsell 2017; Yangyue 2014).

Recent scholarship has shown increasing interest in how digital immigrants engage with online platforms, particularly in diverse cultural contexts. Studies in Indonesia highlight a shift in how older generations integrate digital tools into daily life, often contradicting early assumptions that they are inherently resistant to technology. Kurniawati, Maolida, and

Anjaniputra (2018) found that Indonesian teachers, many of whom fall into the digital immigrant category, demonstrated adaptive attitudes toward digital technologies in educational settings. Globally, similar patterns emerge. In Denmark, digital immigrants have incorporated ICT into everyday routines, making it an integral part of their social and professional lives (Jæger 2004; Min 2010). Meanwhile, in South Africa, students' low interest in Web 2.0 technologies suggests that generational labels alone cannot to explain technology usage (Thinyane 2010). These findings suggest that the behavioral gap between digital natives and immigrants may be narrowing, with contextual and cultural factors playing a more decisive role in digital engagement than age alone.

Research on digital literacy and generational divides has frequently focused on the perceived dichotomy between digital natives and digital immigrants. Prensky (2001) argued that digital immigrants create barriers in educational settings due to their dependence on outdated, 'pre-digital' frameworks. However, more recent evidence has increasingly challenged this binary. For instance, Waycott et al. (2010) observed no substantial differences in ICT engagement between students and instructors in Australia. McLaren (2007) similarly found that students in the United States continued to appreciate traditional teaching methods. In South Africa, Thinyane (2010) noted a general disinterest among students in Web 2.0 technologies, suggesting that age may not be the primary determinant of digital receptivity. In the Indonesian context, Kurniawati, Maolida, and Anjaniputra (2018) reported that teachers actively embraced digital tools, while studies from Denmark revealed that ICT has become seamlessly embedded in the everyday lives of digital immigrants (Jæger 2004; Min 2010). Considered collectively, these findings challenge earlier generational assumptions and underscore the importance of contextual and cultural factors in understanding digital engagement.

Despite the growing body of research, a notable gap remains in understanding how religiosity shapes digital behavior among digital immigrants. Most studies have focused on factors like age, education, and infrastructure (Puspitasari and Ishii 2016; Sujarwoto and Tampubolon 2016; Min 2010), while neglecting the role of religious values as potential motivators or inhibitors of digital engagement. In Indonesia, religious norms profoundly influence social behavior, including digital conduct. Users frequently navigate the internet through the lens of religious ethics, from favoring Sharia-compliant apps to avoiding content deemed spiritually harmful (Kailani and Slama 2020; Nisa 2018; Majid 2024). Existing frameworks have not adequately integrated these sociocultural dimensions, making it imperative to explore how religiosity, alongside welfare and happiness, affects internet adoption among older adults.

This research investigates the extent to which religiosity affects internet adoption among digital immigrants in Indonesia. By incorporating welfare and happiness as covariates, the study seeks to isolate the unique influence of religiosity, beyond the confounding effects of socioeconomic well-being and life satisfaction. This approach offers a nuanced understanding of how spiritual and cultural values intersect with digital adoption in a rapidly transforming society, ultimately contributing to a more localized and culturally sensitive technology acceptance model. While traditional frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) have provided essential insights into individual-level and technical predictors of internet adoption, they often neglect sociocultural dimensions that are particularly salient in non-Western contexts. In response to this limitation, the current study introduces welfare, happiness, and religiosity as critical variables that may explain internet adoption patterns among digital immigrants in Indonesia.

Welfare, broadly defined as fulfilling basic material needs—including income, education, and health—is a foundational prerequisite for accessing digital technologies. Internet usage is contingent on digital and media literacy and depends on one's capacity to purchase the required hardware and services. Individuals with limited income and educational backgrounds are therefore less likely to become internet users, especially among older generations. *Thus, this study posits that welfare is positively associated with internet adoption among digital immigrants (H1)*.

Happiness, conceptualized as an individual's subjective evaluation of life satisfaction and emotional well-being, also influence digital behavior. While some studies argue that internet overuse can diminish happiness, others suggest moderate, purposeful use—such as for information-seeking or social interaction—can enhance it. Internet adoption has been linked to improved well-being and reduced feelings of isolation among other adults, suggesting that digital engagement can support emotional health. Accordingly, this study hypothesizes that *happiness is associated with internet adoption among digital immigrants (H2*).

Religiosity is another potentially powerful determinant, particularly in culturally and spiritually oriented societies such as Indonesia. Religious norms can shape attitudes toward technology, guiding users toward or away from certain content or platforms. While religiosity may promote digital participation through Sharia-compliant financial services or online religious education, it may also discourage engagement with morally ambiguous content. Given this duality, the study advances the hypothesis that *religiosity is associated with internet adoption among digital immigrants (H3)*, with the direction and strength of this relationship subject to further empirical testing.

In addition to these sociocultural variables, individual demographic factors also play a role. Gender continues to influence internet access and usage across various contexts. In Indonesia, barriers such as unequal

domestic responsibilities, lower English proficiency, and higher access costs contribute to a gendered digital divide. Consequently, this study hypothesizes that *gender is associated with internet adoption among digital immigrants (H4).*

Finally, employment status may affect internet use by shaping financial capacity and daily routines. While working individuals may have a more consistent income to afford digital devices and internet subscriptions, retired or non-working individuals may still be digitally active if supported by pensions or family income. Nonetheless, employment is often a proxy for broader structural access. This narrative is the basis for researchers to formulate the fifth hypothesis: *employment status is associated with internet adoption among digital immigrants (H5).*

B. METHODOLOGY

This study employs a quantitative approach. The research data comes from the results of the 5th Indonesian Family Life Survey (IFLS) collected by the Rand Corporation in 2014-2015 (Strauss, Witoelar, and Sikoki 2016). The research respondent is the head of household/the spouse of the head of household/household member who was aged 35 - 69 years old in 2014 (timing for data collection in IFLS 5). The age range of these respondents (minimum 35 years old) was chosen to align with the timing of the Internet's introduction in Indonesia in 1980. When the IFLS 4 data was collected in 2014-2015, respondents aged at least 35 were those born before 1980. Since the internet development in Indonesia accelerated in the 2000s, those born between 1979-1980 likely did not have intensive access to or exposure to digital technology during their teenage years.

The key constructs in this study (religiosity, welfare, and happiness) were carefully operationalized to ensure their relevance and applicability within the Indonesian context. Religiosity was measured through the question: "How religious are you?" (question TR 11, section EP, book 3A),

which provided seven answer options: very religious (1), religious (2), somewhat religious (3), not religious (4), and refused (7). This data was converted into a binary variable: 1 for religious and 0 for non-religious.

The variable measuring respondents' level of welfare was derived from question SW01 (section SW, book 3A), which states: "Please imagine a six-step ladder where on the bottom (the first step), stand the poorest people, and on the highest step (the sixth step), stand the richest people. On which step are you today?" Respondents were asked to select a number between 1 (poorest) and 6 (richest), with an additional option of 8 (don't know). Responses were recoded into two categories: 1–3 as 0 (not welfare) and 4–6 as 1 (welfare).

Happiness was measured through the question: "Taken all things together, how would you say things are these days, would you say you were very happy, pretty happy, or not too happy?" (question SW12, section SW, book 3A), which provided four answer options: very happy (1), happy (2), unhappy (3), and very unhappy (4). The respondents' answers were recoded into two categories: happy (1) and unhappy (0).

The operationalization of the dependent and independent variables is shown in Table 1. The unit of analysis in this study is an individual. The research data were processed and organized using STATA 15 software and analyzed using binary logistic regression techniques. Data analysis was carried out in two stages: bivariate analysis and multivariate analysis. This study selects independent variables with p <0.25 during the bivariate analysis to perform multivariate analysis (Hosmer Jr, Lemeshow, and Sturdivant 2013). This study uses the Hosmer-Lemeshow ($\hat{C}$) for performing the goodness-of-fit test.

Table 1.
Research Variables

Variable	Operationalization
Dependent variable	
Internet adoption within digital migrant	1 = adopted internet; 0 = not adopted internet
Independent variable	
Age	1 = old; 0 = young
Gender	1 = male; 0 = female
Level of education	1 = > high school; 0 = < high school
Type of household	1 = farmer household; 0 = non-farmer household
Level of income	1 = >Rp5 million; 0 = <Rp5 million
Employment status	1 = working; 0 = not working
Religion	1 = Islam; 0 = not Islam
Level of welfare	1 = wealth; 0 = not wealth
Level of happiness	1 = happy; 0 = not happy
Level of religiosity	1 = religious; 0 = not religious

C. RESULT AND DISCUSSION

1. Characteristic of Respondent

The total number of respondents in this study is 11,439 people. The mean respondent's age is 37,20 years old, and the standard deviation is 14,91 years old. The lowest age of the respondents was 15 years old, and the oldest is 109 years old. The number of male respondents was 5,435 people (47.51%), and female respondents are 6,004 people (52.49%). Respondent has various marital status such as married (71.11%), single (19.81%), separated (0.59%), divorced (2.47%), and widow/widower (6.01%). Based on the status of respondents in the household, the respondents can be

classified into three groups: the head of the household (48.01%), the spouse of the household head (29.93%), and the household members (22.06%). The majority of respondents are Muslim (89.41%). The rest of the respondents were Hindu (4.51%), Protestant (4.34%), Catholic (1.51%), Buddhist (0.17%), and Confucian (0.05%).

The education level of the respondents is quite varied. However, most respondents only graduated from elementary school (34.39%). The second and third positions were occupied by respondents who graduated from high school (19.65%) and vocational high school (16.45%). The fourth position is occupied by respondents who completed the undergraduate program (13.14%). Respondents' income, mainly from agricultural businesses, ranged from Rp 5.000 – Rp 96.600.000. The average respondent income is Rp 1 million, with a standard deviation of Rp 1,5 million. This income is the total of all household members, not income per household member. The researcher deliberately excludes income from non-agricultural businesses or income from the ownership of assets (for example, land rent, vehicle rental, and many more) so that the data truly reflects agricultural income. Finally, based on the activities carried out by respondents a week ago, the largest proportion is occupied by respondents who work (59.83%) and housekeeping (26.51%). The rest were respondents who were in school (8.65%), retired (2.46%), sick (1.38%), and looking for work/unemployed (1.17%).

2. Bivariate Analysis

The dependent variable in this study is the dummy variable taken from the questionnaire on the *Book IIIA*, section *DL*, especially the *DL03d* question (*do you usually use or accessing the internet?*). This variable is coded one if the respondent owns/uses the internet and coded zero if the respondent does not have access or uses the internet. Of the 11,349 respondents, 4,608 (40.28%) had internet access and 6,831 (59.72%) did not.

The bivariate analysis shows that all independent variables identified as contributing factors to internet adoption among digital immigrants can be included in the multivariate analysis, except for the variable income level, which is not significantly associated with internet adoption. Meanwhile, although it is not significant, the variable gender will still be included in the multivariate analysis because the p <0,25. Table 2 shows a summary of the bivariate analysis.

Table 2.
Summary Of Bivariate Analysis

Variable	**X^2 count**	**X^2 table**	***p***	**Cramer (V)**	**Interpretation**
Age and internet adoption	693,01	3,84	0,000	-0,24	There is a relationship between age and internet adoption. Age will be included into multivariate analysis
Gender and internet adoption	2,52	3,84	0,112	0,01	No relationship between gender and internet adoption. Gender will be included into multivariate analysis because p < 0,25
Level of education dan internet adoption	3,50	3,84	0,000	0,55	There is a relationship between level of education & internet adoption. Level of education will be included into multivariate analysis

Variable	**X^2 count**	**X^2 table**	***p***	**Cramer (V)**	**Interpretation**
Type of household and internet adoption	554,24	3,84	0,000	-0,22	There is a relationship between type of household & internet adoption. Type of household will be included into multivariate analysis
Level of income and internet adoption	0,05	3,84	0,807	-0,00	No relationship between level of income and internet adoption. Level of income will be omitted in multivariate analysis.
Employment status and internet adoption	4,24	3,84	0,039	-0,01	There is a relationship between employment status and internet adoption. Employment status will be included into multivariate analysis
Religion and internet adoption	35,50	3,84	0,000	-0,05	There is a relationship between religion and internet adoption. Religion will be included into multivariate analysis

Variable	X^2 count	X^2 table	*p*	Cramer (V)	Interpretation
Level of welfare and internet adoption	215,35	3,48	0,000	0,13	There is a relationship between level of welfare and internet adoption. Level of welfare will be included in multivariate analysis
Level of happiness and internet adoption	111,17	3,48	0,000	0,09	There is a relationship between level of happiness and internet adoption. Level of happiness will be included into multivariate analysis
Religiosity and internet adoption	53,51	3,48	0,000	-0,06	There is a relationship between religiosity and internet adoption. Religiosity will be included into multivariate analysis

3. Multivariate Analysis

Of the ten factors identified as the contributor to internet adoption, eight factors have an association significantly with internet adoption: age, household type, level of welfare, level of happiness, religiosity, religion, education level, and gender. The final logistic regression model contains eight factors can explain internet adoption of 29.82% significantly, X2 (8) =

4598.94, p <0.001. In the final model, four independent variables have a negative effect on internet adoption: age, household type, religiosity, and religion. Other factors have a positive effect on internet adoption: level of welfare, level of happiness, level of education, and gender. Four variables (age, level of welfare, level of education, type of household) were significant at the p <0.01 level, two variables (gender and religion) were significant at the p <0.1 level, and only the level of happiness was significant at the p <0.05 level.

If sorted based on the magnitude of the odds ratio (OR) value, then the arrangement of the independent variables consists of: level of education (1.684,12), level of welfare (145.92), level of happiness (123.89), gender (109), religion (87.86), religiosity (81.80), household type (41.15), age (40.49). Meanwhile, if sorted based on the magnitude of the coefficient score, then the composition of the independent variables is level of education (282.38), age (-90.30), type of household (-67.05), level of welfare (37.77), level of happiness (21.42), religiosity (-19.97), religion (-12.93), and gender (8.82). The contribution of all independent variables can be formulated into the general formula for logistic regression as follows: g(x) = -1.8302 + -0.9040*age + -0.6705*type_household + 0.3779*welfare + 0.2149*happiness + -0.1997*Xreligiosity + -0.1294*religion + 2.8283*education + 0.0863*gender.

Table 3.
The Final Model of Logistic Regression

Independent Variable	**Dependent Variable: Internet Adoption**
Age	-0.904***
	(0.0479)
Level of wealth	0.378***
	(0.0514)

Religiosity	-0.200***
	(0.0561)
Religion	-0.129*
	(0.0741)
Level of education	2.824***
	(0.0621)
Level of happiness	0.214**
	(0.0977)
Type of household	-0.671***
	(0.0543)
Gender	0.0863*
	(0.0475)
Constant	-1.830***
	(0.136)
Observations	11,439

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The final model produces a Ĉ value of as much as 336.98 at 208 degrees of freedom. This value is greater than the chi-squared (X2) value (242.65) at degrees of freedom equal to 208 and $p < 0.05$. Because of the value of $\hat{C} > 0.05$, the regression model is appropriate. However, this model is not significant because $p < 0.001$. In other words, there is no difference between the predictions generated by the model and the observation. However, this prediction is less convincing because it is not fit.

This research found a negative effect (Coef.: -0.904, OR: 40.49, $p < 0.01$) between the variable age and internet adoption. It indicates that the odds of not adopting the internet for >35 years old respondents are 40,49 times when holding other predictors constant. Because the group of >35 years old represents digital immigrants, this finding means that digital immigrants in Indonesia are less likely to adopt the internet. This finding

reinforces previous research confirming age's effect on internet adoption (Chen et al. 2015; Joiner et al. 2013; Min 2010; Sujarwoto and Tampubolon 2016; Yanti and Alamsyah 2014). However, it differs from the situation of several other Asian countries, which show the high internet adoption among digital immigrants (Cooper-Chen 2016; Dholakia 2006). Finally, it cannot be concluded that Indonesia's digital migrant is generational incompetence (Prensky 2009).

Gender positively affects internet adoption (Coef.: 0.0863, OR: 109, $p < 0.1$) with internet adoption. The odds of adopting the internet for males are 109 times the female odds when holding other predictors constant. This finding is the basis for researchers to accept the fourth hypothesis: gender status is associated with internet use among digital immigrants (H4). This result aligns with previous researchers' arguments showing the influence of gender status on explaining internet adoption (Reisdorf 2011; Vijayalakshmi and Bhavani 2016; Wahid 2017).

The level of education has a positive effect (Coef.: 2.824, OR: 2040.19, $p < 0.01$). It means that that of adopting internet for >High school/equivalent are 2040,19 times the odds of <High school/equivalent. This finding reinforces previous research indicating a positive effect between education level and internet adoption (Chen et al. 2015; Joiner et al. 2013; Min 2010; Sujarwoto and Tampubolon 2016; Yanti and Alamsyah 2014). The high level of education gives internet users with conventional literacy (read, write, and count) that facilitate them to adapt with a variety of skills in the internet era, such as digital literacy, media literacy, and information literacy (Bawden 2001; Koltay 2011; Pinto et al. 2013).

Type of household has a negative effect (Coef.: -0.671, OR: 41.15, $p < 0.01$) with internet adoption. It indicates that the odds of not adopting the internet for farmer households are 41,51 times the odds of non-farmer households. This finding is consistent with the effect of employment status, which is not significantly related to internet adoption. As farmers, ICT

equipment is not a mandatory tool for carrying out their activities in the gardens. Another factor is the availability of internet networks where they live and work. This condition illustrates Indonesia's challenges in integrating ICT-based in agricultural and rural development.

In the bivariate analysis stage, income level does not have a statistically significant relationship with internet adoption. This finding differs from previous research that identified income levels as a contributor to internet adoption (Bawden 2001; Chen et al. 2016). Various causes may contribute to this situation, such as high access costs, slow internet speeds, low English proficiency, and socio-spatial imbalances between regions that trigger Indonesia's digital divide (Sujarwoto and Tampubolon 2016; Wahid 2017).

Status of employment is positively associated with internet adoption. However, this effect is not significant, $p > 0.1$. Based on this finding, the researchers reject the fifth hypothesis: employment status is associated with internet use among digital immigrants (H5). This finding contradicts previous studies' results, which confirmed a positive effect between employment status and internet adoption (Reisdorf 2011; Schleife 2010). Researchers assume this relationship is due to the impact of the research sample from agricultural households. In other words, the relationship between employment status could be significant when the research respondents are not from agricultural households.

Religion has a negative relationship (Coef: -0.129, OR: 87.86, $p <0.1$) with internet adoption. It indicates that the odds of not adopting the internet for Moslem are 87.86 times the odds of non-Moslem respondents. Various factors may contribute to this situation, such as the availability of internet networks, costs, personal skills in using ICT, and negative content (pornography, online prostitution, online gambling) that contradicts religious values (Armfield and Holbert 2003; Short et al. 2015).

The level of welfare is positively associated (Coef.: 0.378, OR: 145.92, p <0.01) with internet adoption. It means that adopting the internet for the prosperous respondent is 145.92 times the odds of non-prosperous respondents. This finding is the basis for researchers to accept the 1st hypothesis: the level of welfare is associated positively with internet adoption among digital immigrants (H1). It supports previous studies confirming internet adoption requires fulfilling a certain welfare level, for example, education and income (Alderete 2019; Scheerder et al. 2017). So far, researchers have found no previous studies that suggest a negative effect between levels of well-being and internet adoption.

The level of happiness is positively associated (Coef.: 0.214, OR: 123.89, p <0.01) with internet adoption. When someone is happy, the odds of adopting the internet are 123.89 times. This study accepts the second hypothesis: the level of happiness is associated with internet adoption among digital immigrants (H2). This finding is in line with the argument of Lissitsa and Chachashvili-Bolotin (2016), who states that internet adoption among digital immigrants can increase the level of happiness. The internet is an essential channel for older people to improve the quality of their happiness. On the contrary, this research results contradict some previous research that stated a negative effect between happiness levels and internet adoption. Longstreet and Brooks (2017) findings, for example, suggest that low levels of happiness can lead to addiction to the internet or social media. Another argument is Hall (2017) research, which shows that the time someone spends on the internet negatively affects happiness levels. That is, the more time someone spends on the internet, the lower the level of happiness a person has. The positive association between happiness and internet adoption found in this study contrasts with prior research that reported negative correlations, often attributed to internet addiction or social isolation (Hall 2017; Longstreet and Brooks 2017). Contextual differences can explain this discrepancy. For digital immigrants in

Indonesia, internet usage may be directed toward fulfilling essential needs, such as maintaining social connections, accessing education, or improving economic opportunities. These activities contribute positively to their quality of life, reflecting the sociocultural dynamics unique to the region. Conversely, studies in more developed contexts may capture the adverse effects of excessive internet usage, less prevalent in Indonesia, where internet adoption remains more functional and goal-oriented.

The level of happiness is positively associated (Coef.: 0.214, OR: 123.89, $p < 0.01$) with internet adoption, meaning happier individuals have 123.89 times higher odds of adopting the internet. This study supports the second hypothesis (H2), which posits that happiness levels influence internet adoption among digital immigrants. The findings align with Lissitsa and Chachashvili-Bolotin (2016), who argue that internet adoption can enhance happiness, providing older individuals a vital channel to improve their quality of life. However, the results diverge from prior studies such as Longstreet and Brooks (2017), which suggest that lower happiness levels may lead to internet addiction or excessive social media use. Similarly, Hall (2017) indicates a negative relationship between online time and happiness, where prolonged internet use is linked to diminished happiness. These contradictions may stem from contextual differences. In Indonesia, digital immigrants often use the internet for purposeful activities, such as maintaining social connections, pursuing education, or enhancing economic prospects—significantly improving their quality of life. In contrast, studies from developed contexts, where internet usage is higher, have reported adverse effects like isolation or addiction due to excessive and less goal-oriented use of the internet.

This research found a negative effect (Coef.: -0,200, OR: 81.80, $p < 0.01$) between religiosity and internet adoption. It indicates that the odds of not adopting the internet for religious respondents are 81.80 times the odds of non-religious respondents. Based on this finding, this study accepts

the third hypothesis: the level of religiosity is associated with internet adoption among digital immigrants (H3). This finding rejects the results of previous studies that indicate a positive association between levels of religiosity and internet adoption, for example, in the case of the adoption of mobile banking (Suhartanto et al. 2019) and participation in online religious activities (Ho et al. 2008). At the same time, this study's findings reinforce the arguments of previous researchers who show a negative effect between levels of religiosity and internet use for numerous reasons such as a lot of internet content contradicts the values taught by religion, pornography, and reduces internet addiction (Armfield and Holbert 2003; Nadeem et al; 2019; Short et al. 2015).

While this study establishes a significant negative association between religiosity and internet adoption, understanding the cultural, social, and contextual mechanisms driving this relationship remains crucial. Religiosity encompasses a set of beliefs, practices, and community dynamics that often shape individuals' worldviews and behaviors, including their engagement with digital technology. Several factors may contribute to this relationship in Indonesia, where religious adherence is a central aspect of social identity. Religious teachings and community leaders may caution against certain aspects of internet use, such as exposure to content perceived as conflicting with moral and spiritual values. These perspectives may foster a sense of skepticism or caution towards adopting the internet, particularly in contexts where online activities are seen as distractions from religious obligations or as potential moral hazards. Socially, individuals within devout religious communities may prioritize interpersonal relationships and traditional communication methods over digital interaction. This cultural preference could lead to a lower perceived necessity or utility of the internet. Furthermore, the broader societal context, including the availability of religiously curated online content or platforms,

may also influence the degree to which religious individuals embrace digital tools.

D. CONCLUSION

Based on logistic regression analysis of data from the Indonesian Family Life Survey V (2014–2015), this study finds that individuals with higher levels of religiosity are less likely to adopt the internet. This suggests that strong religious commitment may be a barrier to digital engagement, potentially due to concerns that online content contradicts moral or spiritual values. In addition to religiosity, variables such as age, household type, and religious affiliation also demonstrate negative associations with internet use. Conversely, education, welfare, happiness, and gender show positive effects, with education emerging as the most powerful predictor—underscoring digital literacy's and formal education's central role in enabling effective participation in the digital age.

These findings reflect the embeddedness of digital behavior within broader social and cultural constructions, particularly in highly religious societies such as Indonesia. In communities with strong religious adherence, the internet is often perceived as a space laden with moral risk, prompting patterns of avoidance or selective engagement. Moreover, these communities frequently prioritize face-to-face interaction and offline communication, further diminishing the perceived utility of the internet. Such cultural dynamics suggest that religiosity is not merely a personal belief system, but a socially mediated force that informs everyday decisions, including whether or how individuals engage with digital technologies.

This study's implications call for culturally and religiously sensitive. Efforts to expand internet access and digital infrastructure must be complemented by inclusive strategies that actively involve religious communities as partners in the digital transformation process. Religious

leaders, who hold significant social authority and public trust, can serve as key advocates for digital inclusion—particularly when digital technologies are framed as tools for advancing education, economic development, or even religious outreach. Recommended initiatives include community-based digital literacy programs facilitated by faith-based organizations, the development of online content aligned with religious and cultural values, and collaborative efforts to establish safe and inclusive digital spaces. These strategies foster broader technology adoption and strengthen the social trust essential for meaningful engagement in a digitizing society. Future studies should incorporate qualitative approaches to better understand this phenomenon. These methods would allow researchers to capture the lived experiences and interpretive frameworks through which religious individuals navigate the opportunities and dilemmas of digital life. Moving forward, future research should integrate variables such as spatial disparities, digital infrastructure, and theoretical perspectives like social constructivism to better understand how religiosity interacts with education, gender, and social class in shaping Indonesia's digital landscape.

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