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Article

The dynamic effects of religion: An exploration of religiosity influences on Islamic work ethic over time

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MANAGEMENT | RESEARCH ARTICLE

The dynamic effects of religion: An exploration of religiosity influences on Islamic work ethic over time

Jaya Addin Linando^{1*}, Yunicode Karina Tumewang², Katiya Nahda¹ and Nurfauziah¹

Abstract: As a country with the biggest Muslim population in the world, Indonesia is a fascinating avenue to conduct studies about Muslim behavior, including in the workplace context. The present study focuses on exploring religiosity's effect on Islamic work ethic (IWE). Using the 5th and the 7th waves of World Values Survey (WVS) data, in total this study processes 2474 Indonesian Muslim respondents' data. Among the notable findings is that religiosity has a dynamic effect on IWE. Religiosity is found to positively and significantly influence IWE in the 5th wave (2006) but the significant influence is no longer found in the 7th wave (2018). The authors argue that globalization, secularism, and the new way Muslims learn their religion may be the source of these dynamics. While religiosity does not influence IWE in contemporary times, the authors propose national culture and macroeconomic factors as the prospective factors driving individuals' IWE. The present study is arguably among the first studies to comprehensively explore IWE as a multidimensional construct, involving both micro (individual-as being represented by religiosity) and macro (societal) perspectives to bring about IWE's discourses. Additionally, the time-series data this study employed also offer a rich discussion on how religiosity influences (or does not influence) individuals' IWE.

Subjects: Sociology of Religion; Human Resource Management; Islam - Religion

Keywords: Islamic work ethic; Work; Ethic; Muslim; Religiosity; Indonesia

1. Introduction

The changing economic conditions and social environment due to rapid globalization and increased competition have significantly influenced the nature and ethics of work (Homann & Koslowski, 2016). At the same time, there is growing concern about the role of religion in shaping individual ethics in the workplace (Benefiel et al., 2014; Uygur et al., 2017). As recorded in the literature, Weber (2005—first published in 1904) has been corroborated among the pioneers who established a link between religion and work ethics by introducing the concept of Protestant Work Ethics (PWE). This concept has been widely applied by work and business ethics studies, especially those conducted in Western countries where Christianity—particularly Protestantism—stands as a dominant religion (e.g., Furnham, 1991; Zulfikar, 2012). Studies also confirmed that PWE relates to various positive organizational outcomes, such as heightened motivation (Townsend & Thompson, 2014), higher work engagement, and organizational citizenship behavior (Zúñiga et al., 2022).

Then, around 80 years later, Ali (1988) proposed Islamic Work Ethics (IWE), following the trail of its Protestant counterpart. Both concepts share common views of work as a divine calling (Kalemcı & Tüzün, 2019) and advocate various positive attitudes and behaviors in the workplace, including

cooperation, devotion, honesty, and loyalty (Raja et al., 2020). Likewise, studies on IWE mainly occur in Muslim-majority countries and generate positive organizational outcomes. For example, IWE has been empirically tested to foster employees' job involvement and job satisfaction in Pakistan (Khan et al., 2015), organizational citizenship behavior in Jordan (Alhyasat, 2012), and organizational commitment in Malaysia (Mohamed et al., 2010).

In this study, the authors aim to advance the knowledge of IWE in another Muslim-majority country—Indonesia. Indonesia is an important country for studies about Muslims. As the largest Muslim country in the world, Indonesia is expected to lead the transformation of global Islamic communities (Wanandi, 2002). It is hence suitable to examine Muslim behavior in Indonesia. Particularly, the authors are interested in examining religion's dynamic effect on individuals' work ethics. That is whether religion (as further indicated as religiosity) consistently drives individuals' work ethics over time. Islam views work as an honorable act that gives meaning to a Muslim's life and therefore obligates the believers to work (Branine et al., 2010; Yousef, 2001). Accordingly, ethical stances driven by religion (particularly Islam) at work have become a prevailing theme in management discourse. There are at least two essential concepts concerning Islam and work as developed in management literature, with one of them being IWE (Linando, 2022a).

Despite the dynamic nature of religiosity (Pearce & Lundquist Denton, 2011), almost no studies examining IWE go beyond the cross-sectional approach (for a rare exception, see, Zaiton, 2017). While the present study does not adopt a longitudinal approach as frequently suggested by the IWE researchers (e.g., Khalid et al., 2018; Yousef, 2000), the present study used time-series data that provide multiple values to enhance the understanding of IWE. Through the time-series data, the present study might shed light on the dynamic of the relationship between IWE and religiosity and propose explanations for the investigated phenomenon.

In addition to the gap concerning time on the methodology part, to the best of the authors' knowledge, no studies have yet examined IWE using a multidimensional lens. This gap is understandable given the positivistic nature of most IWE studies' (e.g., Khan et al., 2015; Yousef, 2001), which limits the scope a study could reach (Sekaran & Bougie, 2016). The present study aims to fill this existing gap by examining time series data using an explorative approach. The explorative approach allows researchers to cover a broader issue and map the existing knowledge of the investigated phenomenon (Stebbins, 2001). Like typical explorative studies in the business and management field (e.g., Festing et al., 2013; Mogaji et al., 2016; Sala et al., 2016), this study does not provide any hypotheses and delivers more explanations on the discussion rather than the literature review section.

Through the explorative approach, the present study comprehensively discusses IWE from a multidimensional lens. Ali (2015) suggests that IWE concepts incorporate five dimensions, namely: spiritual, social, philosophical, psychological, and economic dimensions. Linando (2018) asserts that most IWE studies only focus on the psychological dimensions, creating a dearth of knowledge on four other dimensions. The authors touch on the base of IWE's spiritual dimension that deals with the work-faith relationship by showing the dynamic effect of religiosity on individuals' work ethics in the same country over time. Through the later postulate that secularism might explain the insignificant effect of religiosity on IWE, this study touches on IWE's social dimension. The authors also discuss the philosophical dimension of IWE on the explanations about God's importance and individual's work ethic in the discussion section. Lastly, the authors also present many economic arguments in explaining the pattern of focal variables' relationship over time.

Finally, this study aims to answer these overarching questions: 1) *does religiosity consistently affect Islamic work ethic over time?* 2) *if yes, what are the explanations for that consistency?* and 3) *If not, what other factors drive Islamic work ethic besides religiosity?*

2. Literature review: Islamic work ethics and Indonesian muslims

Islamic work ethics uses religion as the foundation for distinguishing right from wrong (Beekun, 1997). From the Islamic perspective, right and wrong are clearly advocated through the *Al-Quran* (Islamic holy book) and *As-Sunnah* (the traditions, practices, and sayings of Prophet Muhammad). Scholars (e.g., Ahmad et al., 2021; Chaudhary et al., 2021; Islam et al., 2020) assert that IWE, as driven by religious values, will either lead to positive job-related outcomes or mitigate negative workplace elements. That is because Muslims believe they will be held accountable in the hereafter for each of their actions. Therefore, ideally, Muslims would avoid unethical behaviors in all places at all times, including in the workplace. Accordingly, ethical work stands as a partial depiction of Muslims' *Taqwa* (piety—God consciousness; Maham et al., 2019).

Recently, scholars (e.g., Islam et al., 2022; Raja et al., 2020) have initiated the need to strengthen the contextualization of religious work ethics not only under religious affiliation but also to the societal characteristics (e.g., Islamic Work Ethic in Muslim-majority society, Protestant Work Ethic in Western society). This idea sounds relevant considering previous studies (e.g., Zulfikar, 2012) findings, implying that the exclusivity of religious work ethics for religious adherents is somewhat obscure without appropriate contextualization. Also strengthened by the recent findings (e.g., Linando, 2022b), different societal contexts bear different workplace issues and discourses. For those reasons, the present study contextualizes Islamic work ethic in Indonesia, a Muslim-majority country, to better portray IWE's concept in practice.

Currently, there are more Muslims in Indonesia than anywhere else in the world (Lipka, 2017). The latest national survey reveals that 86.93%, or around 238 million Indonesians are Muslims (Kusnandar, 2022). This number accounts for nearly 13% of the global Muslim population (World Population World Population Review, 2022), making Indonesia the most populous Muslim country in the world and Islam the biggest religion in Indonesia. Islam is an essential element of Indonesia as it has a long history in conjunction with Indonesia's journey as a country, including mobilizing resistance during the Indonesian independence war (Howell, 2005). Nevertheless, despite the high number of Muslims in Indonesia, Indonesia is considered a secular democratic rather than an Islamic country (for a detailed review on this matter, see, for example, Mujani & Liddle, 2009).

Concerning the relationship between Indonesia's economy and Islam as a religion, Rudnyckyj (2009) proposes a "market Islam" term, a concept representing the merge of Muslim religious practices and economic activities intended to break existing boundaries (e.g., between religion and work). This concept aligns with the idea that a Muslim should see work as an obligation and that work means fulfilling the duty as is regulated by Islam (Linando, 2022a). Further, "market Islam" articulates economics-related Islamic ethics, including the emphasis on hard work, responsibility, accountability, and competitiveness (Rudnyckyj, 2009). These values resemble Islamic work ethic values as proposed by Ali (1988). Islamic work ethic, as proposed by Ali, describes the set of ethical conduct a Muslim should have at work. The values include effort, competition, transparency, and responsible conduct in the workplace (Ali, 2015).

Examining IWE in a democratic Muslim-majority country like Indonesia might convey interesting insights. Without having an Islamic law to regulate work ethics rigidly, a survey by Pew Research Center in 2020 revealed that more than 95% of Indonesian respondents considered religion an important aspect of life (Tamir et al., 2020). This immense figure supposes that the life of Indonesian people, including their work ethics, might be profoundly inspired by religion. Simultaneously, other macro factors such as globalization (Imhanzenobe, 2021), macroeconomic conditions (Feess et al., 2014), and the changes in society's culture (Hofstede & Hofstede, 2004) might also affect individuals' work ethics. Those variables' interrelations alongside religion potentially enrich work ethics exploration as the central theme in the present study.

Alam and Talib (2016) find out that globalization significantly affects employees' IWE in several countries. Similarly, other scholars (e.g., Goulet, 2006; Holden, 1999) also tie the dynamic of work

ethics in general (not IWE in particular) to globalization. Further, there is also a growing argument that individual work ethics go hand in hand with macroeconomic conditions in a country. To name a few macroeconomic factors, studies have investigated the links between work ethics and unemployment numbers (Furnham, 1982), labor market conditions (Congleton, 1991), national industrial development (Kim & Park, 2003), GDP, and tax rate (Feess et al., 2014). Lastly, society could also play a significant role in shaping one's work ethic (Ralston et al., 2008). Studies have explored several cultural dimensions that are reckoned to affect individual work ethics. For instance, Laufer and Robertson (1997) focus on examining collectivism, femininity, and long-term orientation as a strong control mechanism through social sanction to inhibit individual unethical behaviors. Also, Davis et al. (2012) who focus on examining uncertainty avoidance as the factor affecting individual ethical conduct, including in the workplace.

Regarding IWE in Indonesia, the extant management studies recorded several empirical depictions of Indonesians' IWE. Studies found significant positive relationships between IWE and positive outcomes such as intrinsic motivation (Sulastris, 2019), employee performance (Hamzah et al., 2021), job involvement, and organizational commitment (Haerudin & Santoso, 2016). Collectively, positive organizational outcomes will improve organizational effectiveness (Manzoor, 2012) and, consequently, its financial performance (Schneider et al., 2003). Further, IWE not only bring impacts on individual and organizational levels but also the country level. Raies (2021) argues that IWE is among the key drivers of economic growth (especially in Muslim countries) as it increases labor productivity and accumulates ethical capital in the long run. All in all, a linkage between IWE and economic development can arguably be established.

The study of work ethics is increasingly important in the current Indonesian context as the country is experiencing the demographic bonus and preparing for its peak in 2030 when the productive population (15–64 years old) greatly outnumbers the youth (0–15 years old) and elderly (over 64 years old) population (Afandi, 2017). Further explained in Afandi's presentation, the productive population in Indonesia is forecasted to be 64% of the total country's population in 2030. This condition will be an excellent opportunity for Indonesia to boost its economy and increase its national prosperity (Warsito, 2019), given that the human capital is ready to transform a competitive and good quality of work (Adriani & Yustini, 2021). Henceforth, discourses on the factors transforming the desired work environment, including work ethics in general, and IWE in particular, are gaining momentum.

Due to the explorative nature of the present study, this literature review section will only convey an overview of Muslims, work ethics, and IWE in Indonesia. The authors will present more thorough expositions in the discussion section instead.

3. Method

3.1. Participants and procedure

This study used World Values Survey (WVS)'s data to explore the dynamic effects of Islamic religiosity on Indonesian Muslims' work ethic. The WVS was designed to involve a representative sample from the Indonesian adult population aged 18 years and above. Other scholars have used World Value Survey (e.g., Halpern, 2001; Knack & Keefer, 1997) to investigate various societal issues, as it has been considered to adopt best practices for survey design and administration (Knechel & Mintchik, 2022). The respondents were assured confidentiality before responding to the survey (Halpern, 2001; Knechel & Mintchik, 2022). Furthermore, Torgler (2016) suggested that general-purpose surveys like WVS might reduce a social desirability bias where respondents tend to provide an answer prescribed by social norms. In addition, the authors also perceived WVS data to be suitable for this study as it extensively covers individual work ethic items over time.

There are three waves involving Indonesia on the WVS database: waves 4, 5, and 7. WVS Wave 4 (Inglehart et al., 2014b) spanning 1999–2004 with Indonesian data taken in 2001. On the Fifth

Wave (Inglehart et al., 2014a), which covers 2005–2009, Indonesian data were taken in 2006. Lastly, in WVS' newest Seventh Wave data (Haerpfer et al., 2022), Indonesian data were completed in 2018. Nevertheless, the Fourth Wave data did not comprise focal variables as determined by this study (i.e., whether the respondents think that work is a duty toward society, whether competition is good or harmful). For that reason, the authors decided to exclude the Fourth Wave data and only used the Fifth and the Seventh data. These two data sources contain 4518 Muslim respondents (only including those who choose option 5 “Muslim”, on V185 and Q289 questions about religious denomination in the 5th and the 7th Waves, respectively). After the removal of incomplete data and those respondents currently not in paid employment (e.g., retired, housewife not otherwise employed, student, unemployed, and others) as those data are not relevant with this study focus on work ethic, 2474 respondents' data were finally ready to be processed.

The authors made several adjustments to the data as there is a difference in the answer options for the same questions of the two data waves (i.e., V242 in the 5th wave and Q283 in the 7th wave). In addition, the authors also adjusted some variables with multiple response options into dummy variables to ease the data testing process. All control variables except for age and income were transformed into dummy variables: 1) sex (0 = male, and 1 = female); 2) marital status (0 = married, and 1 = others); 3) educational level (0 = university's degree, and 1 = others); 4) occupation groups (0 = professional workers, and 1 = others); 5) employment status (0 = self-employed, and 1 = others); 6) employment sector (0 = private, and 1 = others); and 7) social class (0 = lower middle class, and 1 = others); and 5). For the respondents' age, the authors only categorized them into particular groups (e.g., those in the early career stage: up to 25 years old). Table 1 summarizes the respondents' demographical background.

3.2. Variables

Religiosity—The present study employs four items to measure respondents' religiosity degree. The items are: 1) God's importance for the respondent (REL1); 2) the intensity of attending religious services (REL2); and 3) religious organization membership (REL3). Religious organization membership answer options range from “don't belong” (the smallest, 0) to “active member” (the largest, 2). The intensity of attending religious services ranges from “never” (the smallest, 0) to “more than once a week” (the largest, 7). Lastly, God's importance answer options are between “not important at all (the smallest, 1) to ‘very important’ (the largest, 10). Meanwhile, the fourth item regarding subjective religiosity perception (REL4) was originally categorical data. This categorical data was changed into ordinal data by reversing the possible answers' order so that the largest number represents high religiosity: religious (3); not religious (2); and atheist (1).

Islamic Work ethic—Seven items were employed to measure Islamic work ethic. The term “Islamic work ethic (IWE)” being used in this study refers to the IWE construct coined by Ali (1988). On IWE's development, Ali (2015) summarizes four pillars of IWE: effort; competition; transparency; and responsible conduct. The seven items employed in the present study cover all four pillars of IWE. The importance of work in the respondent's life (IWE1), hard work brings success (IWE2), and the statement that not working makes people lazy (IWE3) depict IWE's effort pillar. The statement that accepting a bribe while doing duties is not justifiable (IWE4) represents IWE's transparency pillar.

Whether the respondents think that competition is good (IWE5) and that there should be greater incentives for individual effort (IWE6)¹ portrays IWE's competition pillar. Lastly, the statement that work is a duty towards society (IWE7) is the representation of IWE's responsible conduct pillar. These seven items are ordinal. All, but the question of incentives for individual effort (IWE6), were reversed. So that the greater response favors the Islamic work ethic more and vice versa.

Control variables—the authors controlled for respondents' sex (V235 and Q260 in the 5th and the 7th wave, respectively), age (V237 and Q262 in the 5th and the 7th wave, respectively), marital status (V55 and Q273 in the 5th and the 7th wave, respectively), education (V238 and Q275 in the

Table 1. Respondents' demographic data

Demographic information	Classifications	Wave	
		5 th	7 th
Sex	Male	406	1031
	Female	185	852
Age	<25	119	241
	26–41	249	800
	42–57	205	626
	>57	18	216
Marital	Married	419	1473
	Others	172	410
Highest Education	University's degree	204	342
	Others	387	1541
Occupational Group	Professional Workers	153	123
	Others	438	1760
Employment Status	Self-employed	106	814
	Others	485	1069
Employment Sector	Private	402	1708
	Others	189	175
Social Class	Lower middle class	333	671
	Others	258	1212
Income	1 (lowest group)	31	348
	2	19	155
	3	43	208
	4	63	199
	5	146	430
	6	107	199
	7	104	186
	8	60	83
	9	8	28
	10 (highest group)	10	47

Dummy variable notes of “others”: *Marital status* = living together as married; divorced; separated; widowed; single. *Highest education* = early childhood education/no education; primary education; lower secondary education; upper secondary education; post-secondary non-tertiary education; short-cycle tertiary education. *Occupational group* = higher administrative; clerical; sales; service; skilled worker; semi-skilled worker; unskilled worker; farm worker; manager; supervisory worker; non-manual office worker; member of armed/security forces. *Employment status* = full-time; part-time. *Employment sector* = government or public institution; non-profit organization. *Social class* = upper; upper middle; working; lower.

5th and the 7th wave, respectively), employment status (V241 and Q279 in the 5th and the 7th wave, respectively), occupational groups (V242 and Q283 in the 5th and the 7th wave, respectively), employment sector (V243 and Q284 in the 5th and the 7th wave, respectively), social class (V252 and Q287 in the 5th and the 7th wave, respectively) and scale of income (V253 and Q288 in the 5th and the 7th wave, respectively).

4. Data testing

Generally, the authors do not need to conduct complex testing mechanisms in exploratory studies (Madsen et al., 2017; Nargundkar, 2003). Accordingly, before the focal variables' examination, the authors only ran a standard test to depict each variable's mean, standard deviation, and inter-correlations as summarized in Table 2. To explore the relationship between religiosity and IWE over

time, the authors ran two separate regressions, where the first regression was done on the 5th wave data followed by the 7th wave data. The authors conducted hierarchical regression to test these two focal variables' relationships. Hierarchical regression was deemed an appropriate approach for such a study considering the data consist of a set of variables being controlled for (Lewis, 2007) and that the predicting variables of work ethic are most likely correlated one to another (Pedhazur, 1997).

The test results reveal that in 2006 religiosity significantly influence Indonesian Muslims' IWE (β : 0.23, significant at 1% level), meanwhile different pattern was observed in 2018's data where religiosity did not significantly influence IWE. The results also show that more personal and demographical factors significantly influence IWE in 2018 compared to 2006. The next section will discuss the noteworthy issues from the test results, such as: the different patterns that emerged in the relationship between religiosity and IWE across the years; the other factors besides religion that influence Muslims' IWE; the rationale for decoding work ethics from religiosity; and interesting findings in both 2006 and 2018 data. Table 3 summarizes the comparative overview of focal variables' regression results between 2006 and 2018. Tables 4 and 5 depict the detailed regression results of 2006 and 2018 data respectively.

5. Discussion

5.1. Indonesian Muslims' Religiosity and IWE: 2006 to 2018

The result shows that there is a different pattern of religiosity effect on IWE in the 5th wave (2006) and the 7th wave (2018). While religiosity had a significant influence on IWE in 2006, it was not significantly connected to IWE in 2018. The 2006's result is consistent with both empirical (e.g., Feess et al., 2014a; Lowery & Beadles, 2009) and conceptual (e.g., Ali & Al-Owaihian, 2008; Furnham, 1984) previous studies remark, that religiosity is an essential factor determining individuals' work ethics. The internalization of religious values will drive the way individuals behave, and consequently will affect their work-related decisions in general (Vasconcelos, 2009) and ethical behaviors in particular (Weaver & Agle, 2002). Parboteeah et al. (2009) also specify that work value guidance is provided on religious teachings and transcripts, stressing the interconnection between religiosity and work-related ethics.

Even though the 7th wave finding was not aligned with the 5th wave's, the result shows a positive trend in the cumulative religiosity score and a negative trend in the cumulative IWE scores. These observations are intriguing as they suggest that individuals were becoming more religious while simultaneously also becoming less adhering to IWE. One could easily observe the "more religious" phenomena in Indonesian Muslims as indicated by the rising of many public Islamic events (Hasan, 2019; Qomaruzzaman & Busro, 2021). The phenomenon is also economically ostensible as shown by the data of the Global Islamic Economy Report (DinarStandard, 2019), in which around the year when the 7th wave was conducted, Indonesia saw many robust initiatives to boost the economic growth in the Islamic-related sectors.

For the decline of IWE, particularly as influenced by religiosity, the authors argue that globalization and secularism might be the reason behind this phenomenon. Abu Bakar et al. (2018) argue that rapid globalization and increased global economic competition bring a dilemma to Muslim societies, between the need to adopt Western management and work practices on the one hand, and the aspiration to preserve religious identities on the other. Consequently, some Muslim societies may choose the secularism path to deal with such a dilemma to keep both religious values and the maintenance of global advancement in their hand. This is also the case in Indonesia with its somewhat unique secularism type. It is the type where sacred and secularism co-evolve, secularism influences the way society lives but it does not entirely displace religious influences from societal living (Menchik, 2014).

This rising secularism is closely attached to globalization. Globalization relaxes the boundaries of higher education and income level. As income increases, workers tend to look away from religious

Table 2. Mean, standard deviation and inter-variable correlations														
Notes	Variables	Mean	Std. Dev	1	2	3	4	5	6	7	8	9	10	11
				The 5 th wave, 2006										
Overall Construct	REL	3.92	0.52											
	IWE	6.23	0.81											
1	REL1	9.50	1.45	1										
2	REL2	2.55	1.66	-.17**	1									
3	REL3	1.07	0.84	0.04	-.25**	1								
4	REL4	2.85	0.35	.33**	-.31**	.15**	1							
5	IWE1	3.93	0.28	.15**	0.02	-0.01	0.06	1						
6	IWE2	7.64	2.56	.22**	0.02	0.07	.12**	.13**	1					
7	IWE3	4.07	0.93	0.03	-0.01	-0.07	.09*	.08*	0.06	1				
8	IWE4	9.64	1.27	.28**	-0.06	0.05	.16**	.14**	.21**	0.03	1			
9	IWE5	7.57	2.47	.25**	-.08*	.09*	.11**	-0.01	.31**	0.02	.10**	1		
10	IWE6	7.31	2.26	.12**	-.09*	0.07	.13**	0.04	.12**	-0.00	0.04	.23**	1	
11	IWE7	3.50	1.17	-.10*	-.12**	-0.00	-0.05	0.02	-.14**	0.03	-0.06	0.02	.09*	1
Overall Construct	REL	4.08	0.41											
	IWE	5.77	0.92											
The 7 th wave, 2018														
1	REL1	9.78	0.78	1										
2	REL2	2.51	1.37	-.059*	1									
3	REL3	1.13	0.87	-0.00	-.19**	1								
4	REL4	2.92	0.26	0.02	-.06**	.12**	1							
5	IWE1	3.93	0.29	.05*	0.00	-0.00	-0.00	1						
6	IWE2	6.98	2.99	0.02	-0.03	0.00	0.02	0.02	1					

(Continued)

Table 2. (Continued)

Notes	Variables	Mean	Std. Dev	1	2	3	4	5	6	7	8	9	10	11
7	IWE3	3.25	1.27	.09**	-.004	-.12**	-.09**	0.01	-.002	1				
8	IWE4	9.14	1.95	.16**	-.06**	-.003	-.000	-.001	.06**	.14**	1			
9	IWE5	6.63	3.05	0.01	-.002	0.02	-.000	-.000	.22**	.06**	0.01	1		
10	IWE6	6.91	2.92	.12**	-.004	-.003	-.04*	-.002	-.003	.16**	.06**	0.04	1	
11	IWE7	3.61	1.05	0.03	-.04*	-.001	-.002	0.00	-.003	0.00	0.01	0.01	.04*	1

Notes: * = Correlation is significant at the 0.05 level (2-tailed), ** = Correlation is significant at the 0.01 level (2-tailed); see appendix for more detailed information of the items.

Table 3. Comparative regression results

Model	Variables	5 th wave (2006)		7 th wave (2018)	
		β	Sig.	β	Sig.
1	Sex	0.02	0.61	−0.09	**
	Age	0.05	0.29	−0.07	*
	Marital	0.04	0.32	−0.01	0.44
	Education	−0.10	*	−0.02	0.28
	Employment	0.00	0.95	−0.06	*
	Occupation	−0.11	*	−0.05	*
	Sector	0.03	0.45	0.05	*
	Social class	−0.02	0.57	−0.07	*
	Income	0.15	**	0.09	**
2	Sex	0.00	0.90	−0.09	**
	Age	0.08	0.08	−0.07	*
	Marital	0.04	0.33	−0.01	0.43
	Education	−0.12	*	−0.02	0.27
	Employment	−0.00	0.98	−0.06	*
	Occupation	−0.12	*	−0.05	*
	Sector	0.02	0.54	0.05	*
	Social class	−0.01	0.67	−0.07	*
	Income	0.14	**	0.09	**
	Religiosity	0.23	**	−0.01	0.61

Notes: * = Correlation is significant at the 0.05 level (2-tailed); ** = Correlation is significant at the 0.01 level (2-tailed)

activities due to the opportunity cost of religion in exchange for economic activities (Lozano, 2017). Verweij et al. (1997) assert a similar thing, that generally modernization stands on the different end to religion. These notions create a seeming trade-off effect between religion and globalization, modernization, or other similar terms denoting this contemporary variable. Since the role of religion in society is declining at the moment, the authors argue that religiosity in the present time (particularly in the secular society) might have a stronger orientation on the vertical dimension (*hablumminallah*—relationship with Allah, the God) than on horizontal dimension (*hablumminannas*—relationship with humans).

In addition to the more globalized era as the preposition of why religiosity no longer influences IWE, the altered way people learn religion might also be the reason explaining the finding. Align with technological advancement, Indonesian Muslims see the rise of social media assistance to learn and practice their religion (Ritchey & Muchtar, 2014; Zaid et al., 2022). The methods that people use in studying religions potentially have a significant impact on their attitudes and behaviors. As Slama (2017) asserts that religiosity in the digital era breeds a variety of Islamic practices and novel religious expressions, the authors posit that the present study's findings might also be rooted in these circumstances.

While learning Islam through an online platform brings many benefits, at the same time such a method also generates challenges. For example, the challenge to implement religious teaching in society, due to the absence of vivid role models in online platforms (Solahudin & Fakhruroji, 2020). The case is different from the previous time, where in ca. 2006 individuals need to present in person to obtain religious knowledge (Doorn-Harder & Doorn-Harder, 2006). Religious studies performed in a face-to-face setting will ease the knowledge transfer, as the teacher could directly demonstrate the way to practice Islam, including its ethical section. In the authors'

Table 4. The 5th wave's regression results (2006)

	Variables	IWE1		IWE2		IWE3		IWE4		IWE5		IWE6		IWE7	
		β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.
1	Sex	-0.05	0.27	0.06	0.15	-0.05	0.20	0.03	0.46	-0.03	0.52	0.03	0.48	-0.01	0.74
	Age	-0.02	0.76	0.06	0.21	0.04	0.46	0.09	0.08	0.01	0.77	-0.03	0.58	0.01	0.78
	Marital	0.00	0.99	0.06	0.21	-0.06	0.25	0.04	0.40	0.04	0.37	0.01	0.82	-0.02	0.69
	Education	0.03	0.47	-0.01	0.78	-0.04	0.41	-0.09	0.07	-0.11	*	-0.07	0.10	0.01	0.87
	Employment	0.12	*	0.02	0.63	0.01	0.78	0.06	0.18	-0.07	0.08	0.04	0.41	-0.05	0.28
	Occupation	0.02	0.75	-0.09	0.06	-0.09	0.07	-0.04	0.42	-0.07	0.12	-0.03	0.55	-0.04	0.40
	Sector	0.03	0.54	0.02	0.65	-0.11	*	-0.02	0.72	0.05	0.32	0.03	0.46	0.06	0.24
	Social class	0.01	0.87	-0.05	0.26	0.13	*	0.02	0.64	-0.05	0.23	-0.04	0.28	0.05	0.21
	Income	0.08	0.07	-0.01	0.88	0.04	0.33	-0.06	0.14	0.14	*	0.21	**	0.06	0.18
	Income	-0.05	0.21	0.05	0.22	-0.05	0.22	0.03	0.50	-0.03	0.44	0.03	0.47	0.00	0.95
2	Sex	0.01	0.91	0.09	0.08	0.05	0.37	0.10	*	0.03	0.56	-0.03	0.51	-0.01	0.84
	Age	0.01	0.92	0.06	0.18	-0.05	0.28	0.05	0.31	0.05	0.30	0.01	0.82	-0.02	0.71
	Marital	0.03	0.53	-0.02	0.68	-0.04	0.44	-0.08	0.09	-0.10	*	-0.07	0.14	0.02	0.67
	Education	0.11	*	0.01	0.87	0.01	0.90	0.03	0.44	-0.10	*	0.03	0.55	-0.04	0.31
	Employment	0.01	0.84	-0.09	*	-0.09	0.06	-0.03	0.55	-0.07	0.15	-0.02	0.71	-0.03	0.55
	Occupation	0.02	0.61	0.01	0.77	-0.11	*	-0.02	0.59	0.04	0.37	0.03	0.48	0.06	0.18
	Sector	0.01	0.78	-0.04	0.37	0.13	*	0.04	0.36	-0.04	0.37	-0.04	0.39	0.05	0.24
	Social class	0.07	0.08	-0.02	0.67	0.04	0.35	-0.09	*	0.12	*	0.20	**	0.06	0.17
	Income	0.14	*	0.22	**	0.01	0.86	0.27	**	0.25	**	0.07	0.09	-0.11	*
	REL1	0.07	0.11	0.12	*	0.04	0.43	0.04	0.42	0.02	0.64	-0.01	0.86	-0.16	*
	REL2	-0.01	0.89	0.07	0.10	-0.09	*	0.04	0.39	0.06	0.13	0.04	0.35	-0.04	0.37
	REL4	0.02	0.60	0.06	0.17	0.11	*	0.08	0.07	-0.01	0.82	0.06	0.17	-0.07	0.10

Notes: * = Correlation is significant at the 0.05 level (2-tailed), ** = Correlation is significant at the 0.01 level (2-tailed); see appendix for more detailed information of the items.

argumentations, these explications might explain the finding, that Indonesian Muslims are being more religious but their work ethics is no longer influenced by religion in recent years.

5.2. The alternatives: other factors other than religion affecting Islamic work ethic

One of the main findings highlighted in Table 3 is a non-significant correlation between religiosity and work ethics. The authors propose national culture and economic condition as among the possible explanations for this remark. National culture is defined as the “values, beliefs, norms, and behavioral patterns of a national group” (Leung et al., 2005) and it represents a fundamental indicator behind the distinct value systems across entities (Rubino et al., 2020). As advocated by Vitolla et al. (2021) who conduct a study on 191 multinational companies across 29 countries, the quality of ethical codes at work is highly affected by cultural dimensions. Indonesia holds a culture of high power distance with 78 out of 100 scores (Hofstede Insights, 2022), reflecting a large gap between the power and non-power holders which leads to a control-oriented organizational culture. Regarding work ethics, the high gap of power tends to help reduce the opportunity to do unethical and opportunistic behaviors (Laufer & Robertson, 1997).

Another variable besides religion that might bring an effect on Indonesian Muslims’ work ethics is economic development. As elaborated by Feess et al. (2014), Muslims have a considerably higher work ethic in countries with the highest levels of GDP, emphasizing the positive role of the country’s economic development. It is also in line with Indonesia’s economy where there is a significant growth in GDP per capita from 1,589.8 in 2006 (the 5th wave) to 3,893.9 in 2018 (the 7th wave; World World Bank, 2022a). This positive development trend might trigger Indonesian Muslims to perform better work ethics, regardless of their religious degree. This delivers a sense that Muslims’ work ethics supposedly be seen as a business rather than a religious matter, in the contemporary realm.

Additionally, the authors also argue that the unemployment level might also offer some explanations for the findings. Scholars (e.g., Dunn, 2010; Shamir, 1986) remark on the close relationship between unemployment numbers in a country and its citizens’ work ethics. Heaven (1990) argues that work ethics stands as a potential solution to reducing unemployment. Indonesia hit the all-time highest unemployment number during the time the 5th WVS wave was conducted (7.9, 7.6, and 8.1 % of the total labor force in 2005, 2006, and 2007 respectively) and tend to be much more relaxed by the time the 7th wave was conducted (4.4% in 2018; World World Bank, 2022b). Furnham (1982) asserts that individuals with a strong work ethic will place the responsibility to deal with unemployment on themselves rather than on the system. This notion illustrates the findings that show a stronger score of IWE during a time of high unemployment, than during a more relaxed time. This argument also explains that, besides internal factors like religion, external factors such as unemployment number might also affect individuals’ work ethic.

5.3. Interesting remarks from the findings

As shown in Table 4, in 2006 the perceived importance of work is only affected by two indicators: the importance of God and employment status. People who acknowledge the importance of God will see the meaning in life by taking work seriously as a part of their obedience to God (Aldulaimi, 2016). Meanwhile, particularly in a religious country like Indonesia, employed individuals will certainly value their job more than the unemployed. It aligns with Van Hoorn and Maseland’s (2013) remark, that those religious communities place a stronger emphasis to stay employed rather than their non-religious counterparts.

The importance of God remains significant in 2018, however, the significant effect of employment status is taken over by the occupational group. First, it can be explained by the lower level of unemployment in Indonesia which substantially reduced from 7.6% in 2006 to 4.4% in 2018 (World World Bank, 2022b). Second, as more people are having jobs in 2018, what matters the most now is the type of their occupation. Professional workers value a job higher than other occupational types. As Udin et al. (2022) suggest, skilled and professional employees are expected to put in more significant effort and consequently gain more at their work, which enhances their belief that work is an important aspect of life.

Table 5. The 7th wave's regression results (2018)

	Variables	IWE1		IWE2		IWE3		IWE4		IWE5		IWE6		IWE7	
		β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.	β	Sig.
1	Sex	-0.01	0.62	-0.03	0.23	-0.04	0.08	0.00	0.90	-0.09	**	-0.04	0.12	-0.08	*
	Age	0.01	0.63	0.05	0.07	-0.21	**	-0.05	*	0.01	0.56	-0.09	**	-0.05	*
	Marital	-0.02	0.34	-0.03	0.28	0.02	0.43	-0.04	0.06	-0.01	0.69	0.00	0.97	0.06	*
	Education	-0.01	0.73	0.00	0.90	0.06	*	0.05	0.05	-0.05	0.07	-0.04	0.08	-0.05	*
	Employment	0.00	0.86	-0.02	0.46	-0.01	0.64	-0.06	*	-0.03	0.28	-0.03	0.17	-0.02	0.45
	Occupation	0.06	*	-0.03	0.24	-0.05	*	-0.02	0.43	0.00	0.86	-0.05	0.06	-0.03	0.31
	Sector	-0.03	0.23	0.03	0.23	0.06	*	0.05	0.10	0.02	0.51	0.03	0.28	-0.04	0.15
	Social class	0.00	0.84	0.00	0.88	-0.10	**	-0.06	*	-0.03	0.20	-0.06	*	0.01	0.59
	Income	0.00	0.98	-0.04	0.09	0.13	**	0.01	0.53	0.05	*	0.13	**	0.03	0.17
	Sex	-0.01	0.61	-0.03	0.24	-0.03	0.22	0.00	0.93	-0.09	**	-0.03	0.22	-0.07	*
2	Age	0.02	0.41	0.04	0.09	-0.19	**	-0.04	0.12	0.02	0.55	-0.07	*	-0.05	0.06
	Marital	-0.02	0.42	-0.02	0.35	0.02	0.37	-0.03	0.15	-0.01	0.71	0.00	0.84	0.06	*
	Education	-0.01	0.70	-0.01	0.83	0.05	*	0.04	0.10	-0.05	0.06	-0.05	*	-0.06	*
	Employment	0.01	0.82	-0.02	0.48	-0.01	0.54	-0.06	*	-0.02	0.32	-0.03	0.20	-0.02	0.49
	Occupation	0.06	*	-0.03	0.26	-0.05	0.07	-0.01	0.59	0.00	0.88	-0.05	0.08	-0.03	0.34
	Sector	-0.03	0.21	0.03	0.23	0.06	*	0.04	0.11	0.02	0.57	0.03	0.35	-0.04	0.14
	Social class	0.01	0.79	0.01	0.80	-0.09	**	-0.06	*	-0.03	0.20	-0.06	*	0.02	0.47
	Income	0.00	0.98	-0.04	0.07	0.13	**	0.01	0.74	0.05	*	0.13	**	0.03	0.20
	REL1	0.06	*	0.03	0.24	0.06	*	0.15	**	0.02	0.50	0.10	**	0.03	0.20
	REL2	0.01	0.58	-0.02	0.29	-0.06	*	-0.06	*	-0.01	0.77	-0.04	0.07	-0.05	*
	REL3	0.00	0.96	-0.01	0.67	-0.10	**	-0.04	0.06	0.02	0.37	-0.02	0.37	-0.01	0.61
	REL4	-0.01	0.71	0.02	0.47	-0.04	0.06	0.00	0.91	-0.01	0.64	-0.04	0.12	-0.01	0.56

Notes: * = Correlation is significant at the 0.05 level (2-tailed), ** = Correlation is significant at the 0.01 level (2-tailed); see appendix for more detailed information of the items

In 2018, there is no significant variable found to be affecting the perceived belief that hard work brings success, suggesting that there are other variables outside the model that should be taken into account by future researchers focusing on IWE. Nevertheless, this remark still can be explained by the ever-growing “smart work” and “work-life balance” paradigms adapted by contemporary workers (Greenhaus & Powell, 2016). Contemporary workers value more freedom at work and hence tend to dismiss the notion of “hard work brings successes”. It is no longer relevant as the current workforce might prefer a more flexible and dynamic work style and avoid the exhausting, repetitive hard work pattern (Allan & Liu, 2020).

6. Conclusion and Suggestion

The present study shows that individuals’ IWE is dynamic and may change over time, and religiosity does not always act as its driving factor. The authors argue that globalization, secularism, and the novel ways of learning Islam are among the explanations for the insignificant relationship between religiosity and IWE. Additionally, the authors also propose several variables outside the model that potentially influence IWE, which are national culture and macroeconomic elements, among others. In addition, the authors also suggest future studies to explore the nexus of secularism, globalization, the Islamic learning method, and IWE.

Based on the current data’s findings, one might forecast that if both secularism and the trend to learn religion freely (without teacher presence) are going upward, in the future religiosity might not be the driver of IWE any longer. It does not necessarily mean that Muslims will no longer embrace IWE, instead their IWE will be driven by other factors besides their religion. The authors also encourage scholars to include more IWE dimensions in future studies. As though the present study had discussed all IWE dimensions as proposed by Ali (2015), the discussions are still very much limited and more enlightenment is needed.

7. Limitations

The present study’s arguments should be taken by considering several limitations this study bears. First, the present study heavily holds on to the statistical significance value in making its cases. Many studies (e.g., Dahiru, 2008; Thompson, 2006) criticize the sole use of significance value in making statistical conclusions due to its limited efficacy, random sampling errors, variability effects, and so on. Future studies might want to consider a more robust methodological approach to be able to draw more convincing conclusions. Second, despite the authors already delivering the rationale, the construct categorization still might be subject to criticism. One might argue that each item being categorized on religiosity and IWE constructs might not suitably represent the constructs. That criticism will be taken as a limitation for such studies using secondary sources whose data were not deliberately designed to represent particular constructs. Lastly, as scholars (e.g., Hilmy, 2013; Linando, 2021) believe that social norms within Muslim societies might differ per each Islamic group affiliation, the authors admit that the present study simplified the characteristic of “Muslims”. The authors suggest future studies design more detailed survey items, including to which denomination or group the respondents are affiliated.

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Notes

1. Note: Question regarding income equality (V116 in the 5th wave and Q106 in the 7th wave) might convey different impression toward respondents' mind. In the 5th wave, the Likert scale ends were: "incomes should be made more equal" (1/left side) and "**we need larger income differences as incentives for individual effort**" (10/right side). Meanwhile, in the 7th wave, the statements were "incomes should be made more equal" (1/left side) and "**there should be greater incentives for individual effort**" (10/right side).

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Appendix

Code	Items	5 th Wave (2006)	7 th Wave (2018)
Religiosity			
REL1	God importance	V192	Q164
REL2	The intensity of attending religious services	V186	Q171
REL3	Religious organization membership	V24	Q94
REL4	Subjective religiosity perception	V187	Q173
Islamic Work Ethic			
IWE1	Importance of work	V8	Q5
IWE2	Hard work brings success	V120	Q110
IWE3	People who don't work turn lazy	V52	Q39
IWE4	Accepting bribes while doing duties is not justifiable	V201	Q181
IWE5	Competition is good	V119	Q109
IWE6	Greater incentives for individual effort	V116	Q106
IWE7	Work is a duty towards society	V53	Q40



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