E-Governance Projects in Public Organizations: The Role of Project Manager's Islamic Work Ethics in Accomplishing IT Project Performance

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Abstract The study explored the usefulness of Islamic work ethics within the context of public sector information technology projects. Using social learning theory and social exchange theory, we examined the trickle-down impact of leader's Islamic work ethics on project performance via teamwork quality. Data were collected from 188 project managers leading information technology teams. Discriminant validity of constructs was established using confirmatory factor analysis, while hypotheses were tested using SPSS process macro. Statistical analysis showed that Islamic work ethics positively and significantly impacted project performance. Teamwork quality partially mediates the relationship between Islamic work ethics and project performance. Public organizations should develop training programs to enlighten employees about the fundamentals of work practices from the Islamic perspective.

1 Introduction

Work ethics has always remained an essential discussion issue for organizational scholars (Wasieleski & Weber, 2019). The focus on ethics from an Islamic perspective has emerged over the past few years (Khan et al., 2015; Murtaza et al., 2016).

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The concept of Islamic work ethics has its roots in the teachings of the Quran and the Prophet Muhammed (SAW). Islamic work ethics characterize a collection of work-related moral principles and values that differentiate between right and wrong in Islam's context (Beekun, 1997). Previous literature has reported significant effects of Islamic work ethics on an individual's attitudinal and behavioral outcomes (e.g., de Clercq et al., 2019; Gheitani et al., 2019; Haroon et al., 2012). However, no considerable research has been conducted to examine the influence of a leader's Islamic work ethics on team-level outcomes within public-sector organizations.

The current study's objective is to analyze the direct and indirect effect of a leader's Islamic work ethics on the performance of public-sector information technology (IT) projects. In terms of direct effect, we explore the role of a leader's Islamic work ethics in fostering the performance of IT projects delivered by public-sector organizations. In terms of indirect effect, we introduce teamwork quality as a mediating team-level mechanism through which the leader's Islamic work ethics affects the IT team's project performance. Following Hoegl and Gemuenden (2001), we conceptualize teamwork quality as the quality of interactions between team members during the planning, execution, and completion of a project. Interaction refers to the connectedness or the "being in contact" of two or more people and the quality of collaborative work performed by team members (Campion et al., 1993).

In the current investigation, we contribute to Islamic business ethics literature related to public administration. First, we assess the critical premise of Islamic work ethics that strives to develop a positive and moral workplace environment and prioritize cooperating and collaborating with others (Ahmad, 2011; Aldulaimi, 2016; Ali, 1988). Within the public sector context, helpful task interaction between employees is a fundamental ingredient of creating successful community products and services. We understand that organizations' digital initiatives and e-governance mechanisms are increasingly common in developing and developed countries (Danish, 2006; Glyptis et al., 2020). Thus, in this regard, our study aims to contribute to the usefulness and effectiveness of the leader's Islamic work ethics on the quality of IT projects developed by the public sector. Second, we explore the top-down effect of the leader's Islamic work ethics via the mediating impact of Islamic work ethics on team-level performance. Examining the trickle-down effect of the leader's Islamic ethical principles as a social influence process to accomplish team success is one step toward validating the theory of Islamic work ethics. The following section reviews the literature on Islamic work ethics, followed by developing the study hypothesis.

2 Literature on Islamic Work Ethics

Islamic work ethics is defined as the extent to which employees embrace Islamic ethical values in their daily work activities (Ali, 1988; De Clercq et al., 2019). Muslims live their daily lives, including the decisions they make at work, such that actions in the workplace are judged through the lens of these religious values (Ali &

Al-Owaihan, 2008). Islamic work ethics emphasizes diligent effort, collaboration, and morally responsible conduct in performing job tasks (Ali & Al-Owaihan, 2008). The seminal work on Islamic work ethics comes from Ali and Al-Owaihan (2008), who integrated Islamic and organizational literature, suggested four pillars of Islamic work ethics: effort, competition, transparency, and morally responsible conduct. Empirical studies have shown significant main effects of IWE on an individual's attitudinal and behavioral outcomes. Within the Islamic banking sector, Hayati and Caniago (2012) found that individuals with a strong inclination and awareness about Islamic work ethics are delighted with their job and possess strong affective commitment toward their organization. Abu-Saad (2003) empirically studied Islamic work ethics among Arab educators in Israel and found that high Islamic work ethics predicts the importance of one's contribution to society. Conducting the study within Malaysian public sector organizations, Kumar and Rose (2012) examined the moderating effect of the Islamic work ethics on knowledge-sharing enablers and the innovation capability of employees in Malaysia. They found that the Islamic work ethics significantly moderated the relationship between knowledge-sharing capacity and innovation capability. In a recent study conducted within public sector educational institutions, Murtaza et al. (2016) demonstrated that Islamic work ethics significantly positively affected extra-role work behaviors, including organizational citizenship behavior and knowledge-sharing behavior.

Similarly, De Clercq et al. (2019) collected data from multiple industries (e.g., construction, finance, and education). They showed that Islamic ethical values buffer the negative relationship between high family-to-work conflict and helping behavior. The negative relationship becomes weaker in the presence of high Islamic work ethics. A sample of Royal Malaysian Air Force, Husin and Kernain (2019), showed the influence of individual behavior and organizational commitment toward enhancing Islamic work ethics. Thus, it appears that there is a recent surge in the studies of Islamic work ethics, which have primarily focused on its relationship at the individual (within-person) level, highlighting the need to examine associations between Islamic work ethics and team-level outcomes. While there has been some evidence on Islamic work ethics' utility within public sector firms, its effectiveness within team-based public IT organizations remains unexplored.

The ethical work practices within public-sector organizations may be more critical than private-sector organizations. Public organizations serve the masses and work for community welfare through the public's monetary and administrative resources (Goh & Arenas, 2020). Notably, any democratic government's success in accomplishing welfare and development goals largely relies on public servants' attitudes and behaviors (Anderson & Henriksen, 2005; Twizeyimana & Andersson, 2019). Governments worldwide strive to focus on e-governance and digitalization of their products and services (Ajmal et al., 2010; Heeks, 2003b). Public sector reforms in various countries have pressurized public organizations to be more transparent, ethical, practical, and market-oriented—in sum, to be more business-like (Glyptis et al., 2020). The existing literature on Islamic work ethics captures its value within organizations. However, this research has not adequately explored *why* and *how*

Islamic-oriented work practices play a role in efficient government products and services.

3   Hypothesis

3.1   *Islamic Work Ethics and Team Performance: A Social Influence Process*

We rely on social learning theory (Bandura, 1977) and social exchange theory (Blau, 1986) to explain *why* and *how* a leader's Islamic work ethics facilitates IT project team performance via teamwork quality and meaning in life. According to social learning theory, individuals learn by modeling the attitudes, values, and behaviors of role models in their environment (Bandura, 1977; Brown & Treviño, 2014). Team members often desire to mimic their team leader's morals and behavior (Brown & Treviño, 2014; Sendjaya et al., 2019), which is more likely if leaders are viewed as ethical role models. Team leaders possessing Islamic moral values are likely to be reliable role models because of their morally and professionally responsible conduct in performing workplace obligations (Aldulaimi, 2016; Ling et al., 2016). Consequently, a leader's ethical work practices may be acquired by team members (Brown & Treviño, 2014) and reciprocated through the process of social exchange in which team members display productive interaction and cooperative behavior toward each other in accomplishing project goals (Blau, 1986; Sendjaya et al., 2019).

   We expect a direct connection between leader Islamic work ethics and IT project team performance. Within team settings, the leader's role is to create an environment that facilitates collective team effort and improves team functionality toward achieving objectives (Chen et al., 2015). If a leader practices Islamic work ethics, then there is a likelihood that team members will show cooperation and consultation at work and strictly forbid anyone from engaging in harmful and offensive behavior (Yousef, 2001). A leader's Islamic work ethics will discourage team members from dishonesty and laziness in performing job tasks and encourage volunteerism and helping behavior (Khan et al., 2015; Yousef, 2000). This is consistent with the Quran teachings, which promote responsible, productive, and creative behavior in the marketplace (2: 275; 25: 67; respectively): "Those who, when spending, are not extravagant and not niggardly, but hold a just (balance) between those (extremes)," and "Those who hoard gold and silver and spend not in the way of God: announce unto them a most grievous chastisement." Thus, we propose the following hypothesis:

Hypothesis 1: Leader's Islamic work ethics has a positive and direct relationship with team task performance.

3.2   Islamic Work Ethics, Teamwork Quality, and Team Performance

In the present study, we follow the conceptualization of teamwork quality extended by Hoegl and Gemuenden (2001), later followed by Hoegl (2005) and Lindsjørn et al. (2016). They presented a comprehensive teamwork quality construct as a composite measure of six underlying facets: communication, coordination, balance of team member's contribution, mutual support, effort, and cohesion. *Communication* is the exchange of information among team members (Pinto & Pinto, 1990). *Coordination* is the degree of shared understanding regarding task interdependence and the extent of individual contributions toward collective tasks (Butchibabu et al., 2016). The *balance of member contributions* is the fair and consistent contribution of each member toward accomplishing team objectives (Liao, 2017). *Mutual support* is the intensive collaboration of individuals that depends upon a cooperative rather than a competitive frame of mind (Becker et al., 2018). The *effort* is the norm of sharing workloads and prioritization of team's goal over non-goal-related activities (Campion et al., 1993; Pinto & Pinto, 1990). *Cohesion* is the level of desire through which the team members want to remain a part of the team (Pescosolido & Saavedra, 2012).

Social learning theory argues that people can learn simply by observing and replicating others' behavior, especially their role models. Team leaders are a significant source of role modeling due to their status and ability to utilize managerial rewards. Leaders can often establish what values and behaviors are expected in team functionality (Brown & Treviño, 2014; Sims & Brinkmann, 2002). Sitting at the top of the hierarchy, team leaders set the tone for the behaviors and work-related norms expected of team members (Chen et al., 2015). Recent research has shown that leader's ethical and social service values often have a trickle-down effect on followers (Cheng et al., 2019; Peng & Wei, 2018; Sendjaya et al., 2019), which subsequently influences team functionality (Chiu & Chiang, 2019). Consistent evidence of top-down effects of leadership through follower modeling of leader behavior, as outlined in social learning theory, has been found in laboratory experiments (Sy et al., 2005) as well as field examinations (Mayer et al., 2009).

Team members emulate leaders' moral values and behaviors because leaders often serve as mentors to their followers (Liden et al., 2014). Protégés often learn by imitating the work practices of their mentors (Lankau & Scandura, 2002). Team members are especially inclined to model leader behaviors when they perceive the leader as possessing desirable qualities (Peng & Wei, 2018). Leaders high in Islamic work ethics have many attractive characteristics for team members. The qualities such as commitment to job responsibilities, cooperation with colleagues, fair competition, and hard work embodied with Islamic work ethics will be desirable for teams (Ali & Al-Owaihan, 2008). In social exchange, such qualities inspire team members to display high teamwork quality useful for team performance (Hoegl & Gemuenden, 2001). Because of the team leader's high moral and social values, each team member will begin to understand the importance of communication,

coordination, and mutual support in successfully performing tasks. When a team is led by an individual inclined toward hard work and effort and building a community environment at the workplace, it encourages the entire team to improve their teamwork quality. A leader's Islamic work ethics will enhance mutual collaboration and support rather than competition within groups (Khan et al., 2015), allowing the entire unit to work through different phases of team life effectively. Thus, we expect that:

Hypothesis 2: Leader's Islamic work ethics has a positive and direct relationship with teamwork quality.

The teamwork quality construct provides a comprehensive measure of the collaborative team-task process focusing on the quality of interactions rather than on teams (Hoegl, 2005; Hoegl & Gemuenden, 2001). Each team member must maintain coordination and communication within the team environment and provide a helping hand to other team members when performing collective tasks (Maynard et al., 2018). Because team tasks are often interdependent, each team member must work on their job and help other team members complete their subtasks (Pescosolido & Saavedra, 2012). Further, the interdependence of tasks requires that each team member understand each subtask's timelines and priorities. Such understanding will only develop when team members plan, communicate, and synchronize their actions (Lindsjørn et al., 2018). Previous research has shown that teamwork quality is a determinant of team performance (Dayan & Di Benedetto, 2009; Lindsjørn et al., 2018). Thus, we propose that:

Hypothesis 3: Teamwork quality has a positive and direct relationship with team performance.
Hypothesis 4: Teamwork quality mediates the relationship between Islamic work ethics and team performance.

4   Method

We approached the state government-operated information technology board in the largest province (by population) of Pakistan. This public sector body works through project teams who plan, develop, and deliver various applications, software, and websites as part of the government's e-governance and digitalization initiatives. We employed a multi-wave survey design to collect data from project managers. At Time 1, project managers were asked to rate their Islamic work ethics and teamwork quality in the ongoing project. Project managers also provided their necessary demographic information, including education, experience, and gender. At Time 2, team leaders rated the performance of their ongoing project. Because the research was aimed at Islamic work ethics, we ensured that all the participants are Muslims. Participation was voluntary, and complete anonymity was guaranteed for all participants.

In total, 238 project managers were invited to respond to the current research study. We received responses from 197 project managers. However, we retained only those project managers who responded at both Time 1 and Time 2. The final sample comprised 188 project managers. The response rate was approximately 78%. About 40% of respondents had master's degrees, 45% had a bachelor's degree, and 15% had other technical certifications.

Seventy-nine percent of respondents were male, and 21% were female.

4.1 Measures

Islamic work ethics. Consistent with previous research (Khan et al., 2015; Murtaza et al., 2016), we used a 17-item Islamic work ethics scale developed by Ali (1988). Each item was anchored on 5 points ranging from 1 (strongly disagree) to 5 (strongly agree). The scale demonstrated adequate reliability ($\alpha = 0.86$). A sample item measuring Islamic work ethics includes "Human relations in organizations should be emphasized and encouraged."

Teamwork Quality We adopted a standard instrument measuring six dimensions of teamwork quality developed by Hoegl and Gemuenden (2001). This scale had 37 items reflecting six aspects of teamwork quality: communication, coordination, the balance of member contributions, mutual support, effort, and cohesion. The team leader rated each team as a unit on all six dimensions. All items were anchored on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The composite 37-item scale showed adequate reliability ($\alpha = 0.92$). Six particular sample items representing each dimension includes "*There was frequent communication within the team* (communication), *The work done on subtasks within the project was closely harmonized* (coordination), *The team members were contributing to the achievement of the team's goals in accordance with their specific potential* (balance of member contributions), *The team members helped and supported each other as best they could* (mutual support), *Our team put much effort into the project effort* (effort), and *The team members were strongly attached to this project* (cohesion)."

Team Performance Team performance was measured using a 9-item scale developed by Ralf Müller (2008). This scale was previously used in several studies (e.g., Aga et al., 2016) and displayed satisfactory reliability ($\alpha = 0.90$). Each item was ranked on five anchors ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item includes "We were able to manage and satisfy all project stakeholders with the project deliverables/outcome."

Control variables We included leader gender and education as control variables. Previous research has demonstrated the correlations between personal and demographic factors and individual ethical and moral values (Peterson et al., 2001).

4.2 Analyses

To test the direct and indirect effect hypothesis, we performed a mediation analysis (model 4, as described in the SPSS process macro) with bootstrap methods (Hayes, 2013). Preacher and Hayes developed an SPSS macro that facilitates estimation of the indirect effect ab, both with a standard theory approach (i.e., the Sobel test) and with a bootstrap approach to obtain confidence intervals (CIs). It also incorporates the stepwise procedure described by Baron and Kenny. Through the application of bootstrapped CIs, it is possible to avoid power problems introduced by asymmetric and other non-normal sampling distributions of an indirect effect (Edwards & Lambert, 2007; Mackinnon et al., 2004)

5   Results

The means, standard deviations, reliability coefficients, and intercorrelations among all the variables under study are shown in Table 1. As shown in the diagonal, all variables demonstrated acceptable relatabilities with alpha values above 0.70 (Nunnally, 1970).

5.1 Discriminant Validity of Constructs

We established the discriminant validity of constructs using the rigorous nested model method by Bagozzi and Phillips (1991). The results revealed that the unconstrained model had a χ^2 of 3178.19 with 1378 degrees of freedom. In contrast, in which the correlation was constrained to 1, the constrained model had a χ^2 of 3401.67 with 1379 degrees of freedom. The difference gives a χ^2 of 223.48 with 1 degree of freedom and a p-value of <0.01. In conclusion, the $\chi2$ test's difference

Table 1 Means, standard deviation (SD), correlations, and reliabilities

	Mean	S.D.	1	2	3	4	5
1. Leader gender[a]	1.20	0.40	–				
2. Leader education[b]	3.39	0.77	−0.09	–			
3. Islamic work ethics	3.86	0.53	−0.04	0.04	**0.86**		
4. Teamwork quality	3.69	0.50	0.05	−0.04	0.63[**]	**0.92**	
5. Team performance	4.04	0.64	0.09	−0.04	0.39[**]	0.43[**]	**0.90**

Note:
$N = 188$ project managers
[**]$p < 0.01$
[a]1 = Male, 2 = Female
[b]1 = Matriculation, 2 = Intermediate, 3 = Bachelors, 4 = Masters

showed that constraining the correlation between the constructs to 1 did not improve model fit, supporting the conclusion that Islamic work ethics and teamwork quality represent two distinct constructs.

5.2 Model Testing

Table 2 presents the detailed results of the direct and mediation hypothesis. Supporting Hypothesis 1, we found a positive and significant unstandardized regression coefficient regarding the direct association between Islamic work ethics and team performance ($B = 0.49$, $t = 6.05$, $p < 0.01$). The bootstrapped direct effect further revealed that this relationship was positive and significant, with a 95% CI between 0.33 and 0.66. Thus, Hypothesis 1 was accepted. In support of Hypothesis 2, Islamic work ethics was positively associated with teamwork quality, as indicated by a positive and significant unstandardized regression coefficient ($B = 0.60$, $t = 11.20$, $p < 0.01$). Also, accepting Hypothesis 3, we found the positive and significant relationship between teamwork quality and team performance, controlling for Islamic work ethics ($B = 0.36$, $t = 3.36$, $p < 0.01$). Finally, a leader's Islamic work ethics indirectly affected team performance via teamwork quality; this indirect effect was positive (0.22) with a 95% CI between 0.04 and 0.39, supporting Hypothesis 4. The formal two-tailed significance test (assuming a normal distribution) demonstrated that the indirect effect was significant (Sobel $z = 3.15$, S. E. $= 0.06$, $p < 0.01$).

6 Discussion

The study contributes to business ethics literature within the public sector domain by examining the trickle-down effect of the leader's Islamic work ethics on team performance via teamwork quality. The limited research on leaders' Islamic ethical values within the public sector and team context are somewhat surprising when project-based IT initiatives are increasingly common. Drawing from social learning theory (Bandura, 1977) and social exchange theory (Blau, 1986), we showed that a project manager's Islamic work ethic is instrumental in aiding project performance and facilitating teamwork quality. Among pioneering studies, Yousef (2001), Beekun (1997), and Ali (1988) discussed this construct more systematically by linking ethical work values with employees or organizational outcomes. We established the utility of Islamic work ethics for collective functionality and performance within government organizations.

In the e-government context, it has been observed that almost 15% of the e-initiatives are successful. However, 50% and the rest of 35% can be labeled as partial and complete failures, respectively (Heeks, 2008). Moreover, while underlining the critical success factors for any information and communication

Table 2 Results of mediation analyses (PROCESS, Hayes, 2013)

Model: 4 Dependent variable: Team performance Independent variable: Islamic work ethics Mediator: Teamwork quality Covariates: Gender and education Sample size: 188 project managers							
Outcome variable	Teamwork quality						
Model summary	R	R^2	F	df1	df2		p
	0.64	0.41	42.34	3.00	184.00		0.00
	Coefficient		SE.	t		p	
Constant	1.40		0.26	5.35		0.00	
Islamic work ethics	0.60		0.05	11.20		0.00	
Gender	0.10		0.07	1.36		0.18	
Education	−0.05		0.04	−1.25		0.21	
Outcome variable	Team performance						
Model summary	R	R^2	F	df1	df2		p
	0.47	0.22	13.15	4.00	183.00		0.00
	Coefficient		SE.	t		p	
Constant	1.57		0.41	3.78		0.01	
Islamic work ethics	0.27		0.10	2.65		0.01	
Teamwork quality	0.36		0.11	3.36		0.00	
Gender	0.14		0.11	1.36		0.18	
Education	−0.03		0.05	−0.55		0.58	
Outcome variable	Team performance						
Model summary	R	R^2	F	df1	df2		p
	0.42	0.18	13.04	3.00	184.00		0.00
	Coefficient		SE.	t		p	
Constant	2.08		0.40	5.25		0.00	
Islamic work ethics	0.49		0.08	6.05		0.00	
Gender	0.18		0.11	1.66		0.10	
Education	−0.05		0.06	−0.84		0.40	
Total effect, direct effect, and indirect effect of Islamic work ethics on team performance							
		Effect	SE.	t	p	95% CI	
Total effect of Islamic work ethics on team performance		0.49	0.08	6.05	0.00	0.33–0.66	
Direct effect of Islamic work ethics on team performance		0.27	0.10	2.65	0.01	0.07–0.48	
Indirect effect of Islamic work ethics on team performance							
Effect boot S.E. 95% CI Total indirect effect			Effect	Boot S.E.		95% CI	
Islamic work ethics →teamwork quality → team performance			0.22	0.09		0.04–0.39	

technology (ICT)-based initiative in the public sector, "management system and structure" holds significant value. In other words, the gap between the reality and idealized (designed) value of the management system, its practices, and hierarchy can help to define and predict ICT success in any public sector organization (Guha & Chakrabarti, 2014; Heeks, 2003a; Ranaweera, 2016). The literature argues that ICT in public sector institutions provides far-reaching benefits and value if implemented and adopted optimally (Glyptis et al., 2020). Apart from the technical aspects, managerial practices and behavior (Ajmal et al., 2010) and organizational structure (Anderson & Henriksen, 2005) take a strategic ICT implementation in public sector institutions. According to Twizeyimana and Andersson (2019), to drive public value and transform any public sector institute with support of ICT initiative requires administrative efficiency and ethical behavior and professionalism in the workforce. The ICT reform in public institutions eliminates most of the face-to-face interaction and reengineer decision-making chains. It still demands fairness, equality, and honesty in eliminating corruption, abuse of power, and maximizing institutional capabilities. In such a scenario, Islamic work ethics may play a significant role in accomplishing positive outcomes.

The role of leadership is highly significant in public organizations, especially those adopting team-based work designs. Team-based organizations mostly execute their primary work functions using teams (Burke & Morley, 2016). It is already well-documented that positive team leadership flows down the organizational and team hierarchy and creates positive work and team outcomes (Cheng et al., 2019; Peng & Wei, 2018; Sendjaya et al., 2019). Thus, we showed that a leader's Islamic work ethics would positively trickle-down positively affect project performance. Within the team and public sector context, the Islamic work ethics of a leader will signal team members to place considerable emphasis on cooperation, consultation, commitment, and hard work at the workplace, leading team members to improve their task performance through high teamwork quality (Lindsjørn et al., 2016).

6.1 Practical Implications

Islam is the second-largest religion in the world. The Muslim population is the fastest-growing population and constitutes around 24.1% of the world's population. A significant number of Muslims work in different public-sector industries across the globe. From developed to underdeveloped countries, we observe Muslim employees at various public organization levels (Mahadevan & Kilian-Yasin, 2017). The intense business competition requires a worldwide and diverse workforce to innovate new products and understand new markets. Multinational organizations encourage workplace diversity, offering employment to people from different demographics, national, and religious backgrounds (Howard et al., 2017). Therefore, public organizations should introduce training courses that enlighten individuals about Islamic work practices, especially within Muslim countries. Within a team environment, the project manager's behaviors and attitudes are considered a critical

success factor for teams. This research has provided evidence that Islamic work ethics builds a formidable social and task environment where individuals focus on accomplishing collective goals. Therefore, if managers want to improve teamwork quality and achieve performance goals, they should consider exercising ethical values and principles encapsulated in Islamic preaching.

6.2   Limitations and Future Research

Like any other social science research, there are few limitations of the study which should be addressed in future studies. In our time-lagged study, we managed to administer survey questionnaires from project managers at two different points during a project. However, getting responses from project managers only is a limitation of this study. There may be a difference in the perceived teamwork quality of team members and project managers. Thus, further studies may propose and test a multilevel model that collects team leaders and team members (Krull & MacKinnon, 2001). Second, both Islamic work ethics and teamwork quality were measured simultaneously at Time 1. Therefore, it is not easy to establish a causal relationship between Islamic work ethics and teamwork quality because of simultaneous measurement. Future research could focus on designing experimental studies within a team context to determine if Islamic work ethics causes teamwork quality and subsequent team performance.

Third, we did not account for the moderating factors or boundary conditions in our input-mediator-output framework. We know that moderating variables could magnify or minimize the strong relationship between the independent and dependent variables. Thus, future research could identify moderating variables that could influence the magnitude of associations between Islamic work ethics, teamwork quality, and team performance. For instance, it is possible that team members' religiosity moderates the relationship between Islamic work ethics and team performance. That relationship becomes more substantial when a team member is high in religiosity rather than low. Fourth, this study on the Pakistani public sector projects' data will be relevant to the team and cultural factors. Regarding the team factor, it would be interesting to explore the utility of Islamic work ethics within virtual teams (Hoch & Dulebohn, 2017). In long-distance or virtual teams, there is no direct and physical contact between leaders and team members. Therefore, team members may not see the leader and hence mimic their behavior and moral values. Regarding cultural factors, Pakistan is a collectivistic country with a strong emphasis on group harmony and success (Hofstede, 2001). Thus, future research could examine the relative importance of the project manager's Islamic work ethics for team performance within western and eastern countries.

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