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AN ASSESSMENT OF CORRUPTION FACTORS AND IMPACT FROM THE PERSPECTIVE OF PROFESSIONAL BODIES IN THE BUILT ENVIRONMENT

Khairusy Syakirin Has-Yun Bin Hashim[1], Muhammad Faris Abdullah[2], Noor Suzilawati Rabe[3], Jasasikin Bin Ab. Sani[4], Abdul Razak Bin Sapian[5], Izihan Bin Ibrahim[6], Abazazilah Mohd Abbas[7]

[1,2,3,4,5]*Kulliyyah of Architecture and Environmental Design,*
[6]*Kulliyyah of Engineering,*
[7]*Office for Strategy and Institutional Change,*
UNIVERSITI ISLAM ANTARABANGSA MALAYSIA

Abstract

The built environment sector is highly vulnerable to corruption due to its complex processes, multiple stakeholders, and large financial flows. This study examines the factors and impacts of corruption from the perspective of registered members of professional bodies in the built environment sector in Malaysia. It adopts a quantitative approach where an online survey was distributed among members of the professional bodies, yielding 417 valid responses. Relative Importance Index analyses revealed that the main factors driving corruption are the need "To obtain approval quickly" and "Low ethics and integrity." Respondents also agreed that "Poor reputation of professional bodies/the sector" and "Non-compliance with standards" as the most significant impacts of corruption. The results also suggest that corruption is less about external pressures and more linked to systemic weaknesses and individual ethical failings. Hence, the study recommends the professional bodies to undertake rigorous awareness campaigns and continuous training for both new and long-serving members, and to adopt Organisation Anti-Corruption Plan as a platform to embed anti-corruption initiatives and integrity values in their organisational culture as well as among members. The study also suggests for a more streamlined and simplified project approval process to reduce corruption risks.

Keywords: corruption risks, built environment, corruption factors, corruption impacts.

[1] Corresponding author. Email: syakirin@iium.edu.my

INTRODUCTION

Corruption in the construction industry and broader built environment sector has been widely recognised as a pervasive global issue with severe economic and developmental consequences. Studies have consistently shown that corruption-related leakages, fraud, and kickbacks can significantly inflate project costs, with Okereke (2020) reporting increases of 10–30% of project value and the World Bank (2018) estimating that approximately 5% of infrastructure investment and maintenance expenditure is lost to corrupt practices. Beyond the direct financial losses, procurement studies have highlighted that red flags such as single bidding and limited competition are strongly correlated with corruption risks, particularly in high-value infrastructure sectors like transport and public works (Fazekas & Tóth, 2018). These practices undermine transparency and accountability in project delivery, diverting resources away from development goals and reducing value for money in public investment. The global nature of this challenge is further emphasised by Transparency International, which consistently identifies construction as one of the most bribery-prone sectors, underscoring its systemic vulnerability to corruption.

The persistence of corruption in this sector points to a deeper structural problem. The complexity of construction processes, the involvement of multiple stakeholders, and the scale of financial flows create environments where collusion, bribery, and state capture thrive, ultimately compromising project integrity and sustainability. Evidence from advanced economies, such as the Royal Institution of Chartered Surveyors (RICS, 2021) survey showing that 97% of UK construction companies felt exposed to bribery and money-laundering risks, illustrates that this is not only a developing country issue but a global concern. The consequences are profound: inflated costs, project delays, abandonment, substandard outputs, and even risks to public safety through compromised building quality. These recurring outcomes indicate a critical gap between governance frameworks and industry practices, raising the problem statement that despite existing regulations and professional codes of conduct, corruption continues to undermine efficiency, accountability, and trust in the built environment sector. Addressing these challenges requires a deeper understanding of the underlying drivers of corruption, their systemic impacts, and the urgent need for more effective anti-corruption strategies tailored to the sector's unique vulnerabilities.

This paper intends to achieve the following objectives, which are; i) to analyse the factors that leads to corruption to occur in the built environment sector, ii) to assess the impact of corruption to the built environment.

LITERATURE REVIEW

Professional Bodies in Built Environment

In Malaysia, practitioners in the built environment sector are required to register with their respective professional bodies as a regulatory condition for practice. This requirement is intended to ensure that professionals possess the necessary competence, credibility, and commitment to deliver their responsibilities effectively and ethically. Membership in a professional body reflects adherence to established standards of quality, integrity, and accountability, thereby reinforcing public confidence in the profession.

Professional bodies, which are statutory organisations established under specific legislative acts, carry wide-ranging responsibilities, including maintaining registers of members, assessing membership applications, accrediting academic programmes at higher education institutions, conducting professional examinations and training to uphold competency, and formulating codes of conduct to guide ethical practice. Within this framework, professional bodies and their members play a central role in combating corruption in the built environment sector by promoting transparency, safeguarding accountability, and upholding public interest in project delivery. This underscores the importance of registered professionals not only in maintaining technical and professional standards, but also in understanding corruption and its associated offences as outlined in Malaysian Anti-Corruption Commission Act 2009 [Act 694], thereby strengthening integrity across the sector.

Factors Contributing to Corruption in the Built Environment

Generally, the built environment sector is highly competitive as it involves numerous stakeholders striving to secure project contracts and tenders. The limited availability of projects, shaped by development needs and market demand, further intensifies this competition. In such circumstances, some parties may resort to unethical practices, including corruption, to gain advantage and secure project opportunities (Nordin et al., 2012; Sohail & Cavill, 2006).

Lee (2019) provides a detailed examination of the factors contributing to corruption in the built environment sector. He argues that the inherent characteristics of the sector itself are the primary drivers behind its high susceptibility to corrupt practices. The complexity of construction projects, which often involve multiple stakeholders, substantial financial investments, intense competition, and close relational networks, creates numerous opportunities for corrupt activities to emerge. This perspective is well supported in the literature, where scholars have consistently highlighted the structural and relational features of the built environment sector as critical enablers of corruption (Gunduz & Önder, 2013; Bowen et al., 2012; Kenny, 2009; De Jong et al., 2009; Sohail & Cavill, 2006; Zou, 2006).

The built environment sector is often characterised by lengthy and complex processes, which make project coordination and monitoring particularly challenging. According to Nordin et al. (2012), the multiple phases of construction, coupled with the diverse interactions and psychological behaviours of practitioners, frequently result in inconsistent standards and information flows. Such circumstances create opportunities for corruption and fraudulent practices to take place (Tabish & Jha, 2011).

Another major contributing factor is the pursuit of financial gain. The large sums of money typically involved in construction projects render the sector especially vulnerable to corrupt practices. As noted by Zou (2006), Sohail and Cavill (2008), and Zhang et al. (2017), the temptation of financial rewards can lead individuals to exploit the system for personal enrichment. Given that capital is essential to advance any project, and that construction projects generally involve significant financial allocations, corruption becomes an attractive avenue for unscrupulous actors seeking illicit income within a short period of time (Olusegun et al., 2011; Sohail & Cavill, 2006; Nordin et al., 2011).

The payment system itself has also been identified as a factor contributing to corruption. Lee (2019) argues that because payment distribution is tied to project milestones, and varies depending on the actors involved, the system often lacks clarity and transparency. Contractors' claims typically pass through multiple parties, which blurs lines of accountability and opens opportunities for unethical actors to exploit the process by betraying professional trust and engaging in corrupt practices.

While fragmented processes can create gaps in communication among project participants, this does not imply that relationships within the industry are weak. On the contrary, Lee (2019) highlights that overly close personal ties between clients, consultants, and contractors, beyond the bounds of professional interactions, can foster nepotism and collusion, particularly in matters relating to contracts and tenders (Le et al., 2014; Sohail & Cavill, 2006).

Moreover, Sohail and Cavill (2006) contend that the absence of a strong professional culture further exacerbates the problem. Although professional bodies establish codes of conduct and ethical standards, many practitioners in the built environment sector tend to disregard these principles, prioritising profit maximisation over integrity. As Bowen et al. (2012) emphasise, this tendency weakens the role of ethical norms in guiding practice, thereby enabling corruption to persist.

Impacts of Corruption to the Built Environment

Corruption in the built environment sector poses significant threats to the overall success of project delivery, particularly with respect to cost, time, quality, and safety. One of the most direct and visible consequences is the escalation of project costs, where funds are diverted to cover bribes, kickbacks, and other irregularities rather than being allocated to project improvements (Le et al., 2014; Nordin et al., 2011; Sohail & Cavill, 2006; Kenny, 2009). Such diversions undermine financial integrity and result in outputs that are often incomplete, substandard, or even unsafe for end users (Nordin et al., 2011; Kenny, 2009; Sohail & Cavill, 2006). Corruption also disrupts planned processes, leading to frequent delays and project abandonment. Projects that are completed may be uninhabitable or structurally defective, with issues such as cracks and collapses linked to the use of poor materials and non-compliance with standards (Lee, 2019). Consequently, corruption has been widely associated with the rising number of abandoned projects and wasted investments, leaving communities and governments to bear the long-term consequences of such failures (Doraisamy et al., 2014; Olusegun et al., 2011).

Beyond financial losses and project failures, corruption significantly reduces productivity and efficiency in built environment sector. As Le et al. (2014) observe, poor contractor performance is often linked to corrupt practices, where contractors tender for multiple projects without adequate resources, relying on bribery to secure contracts. This behaviour contributes to inefficiency, reduced output, and diminished work quality. Nepotism and collusion in project allocation further weaken competition, allowing underqualified or resource-limited firms to win projects, which exacerbates inefficiencies across the sector. The cumulative effect of these practices is an industry environment where personal gain overrides professional integrity, leading to systemic inefficiencies, poor-quality infrastructure, and reduced trust in the industry.

According to the World Bank (2018), corruption in the built environment sector generates significant downstream impacts, most notably in the form of poor infrastructure quality, frequent delays, inadequate maintenance, and heightened risks to public safety, including cases of substandard construction, premature deterioration, and even structural collapse. Beyond these immediate effects, corruption also produces broader economic and social consequences by reducing the efficiency of public investment, lowering infrastructure returns, and distorting project selection processes. Furthermore, the diversion of resources away from essential maintenance exacerbates long-term vulnerabilities, leading to declining service delivery and undermining overall development outcomes.

RESEARCH METHODOLOGY

This study adopts a mixed-method research design, combining both qualitative and quantitative approaches to comprehensively address the research objectives (Johnson & Schoonenboom, 2017). The qualitative component involved an extensive review of literature, including journal articles, published and unpublished reports, government statistics, relevant legislation, and professional guidelines. This review served to strengthen the study's theoretical framework, guide the research design, and establish a broad understanding of the topic. Insights obtained from the literature review informed the development of the survey instrument, with key aspects incorporated into the questionnaire for subsequent quantitative testing to achieve the study objectives. A semi-structured questionnaire was therefore designed to collect responses from targeted participants, specifically registered members of selected professional bodies within the built environment sector.

For the quantitative phase, respondents were sampled from the registered professional members of major built environment professional bodies in Malaysia, as detailed in Table 1. Stratified random sampling was employed to ensure adequate representation from each professional body. Using the formulae proposed by Yamane (1967) and Cochran (1977), it was determined that for a population size of 1,000 or more, a sample of 385 is sufficient to achieve a 95% confidence level with a 5% margin of error. Considering the total population of registered professionals across the targeted professional bodies and the acceptable tolerance level for error, this study established a minimum sample size of 390 respondents. Table 1 presents the distribution of the target sample for each professional body.

Table 1. Sampling target based on professional bodies

Professional bodies	Target sample	
	No	**%**
i.Board of Architects Malaysia	65	16.7
ii.Board of Quantity Surveyors Malaysia	65	16.7
iii.Land Surveyors Board	65	16.7
iv.Board of Engineers Malaysia	65	16.7
v.Board of Town Planners Malaysia	65	16.7
vi.Institute of Landscape Architects Malaysia	65	16.7
Total	**390**	**100**

Data collection was administered through the Google Forms platform, which served as the primary tool for distributing and gathering responses from the targeted sample of professional body members. As noted by Creswell (2014), the use of online survey instruments has become increasingly prevalent due to their efficiency, accessibility, and ability to streamline the data collection process. The final survey was conducted between 5 July 2024 and 30 September 2024, during which the questionnaire link was disseminated through the secretariats of the selected professional bodies. These secretariats were requested to circulate the survey link among their registered members and to re-share it periodically to encourage higher participation. Ultimately, a total of 417 valid responses were collected, exceeding the minimum target sample size, thereby ensuring a robust dataset for analysis.

The data obtained through the online survey were analysed using the Statistical Package for the Social Sciences (SPSS) software. The analyses encompassed both descriptive and inferential statistics. Descriptive analysis, presented in the form of tables, diagrams, and the Relative Importance Index (RII), was employed to summarize and rank respondents' perceptions across various aspects of the study. The RII was calculated using the formula $RII = \Sigma W / (A \times N)$, where ΣW represents the sum of weights assigned by respondents, A denotes the highest weight on the scale, and N is the total number of respondents. A higher RII value indicates greater relative importance attributed to the corresponding aspect. In addition, inferential statistical methods such as Spearman's rho correlation were applied. Spearman's rho was used to measure the strength and direction of associations between ranked variables, thereby enhancing the depth of the study's findings.

ANALYSIS AND DISCUSSION

Figure 1 below shows the membership of respondents to professional bodies. From the findings, 50.6% of respondents were registered members of the Board of Town Planners Malaysia, followed by 24.5% members of the Board of Quantity Surveyors of Malaysia, and 12.7% members of the Board of Architects of Malaysia. Respondents from the Board of Engineers Malaysia and the Land Surveyors Board were rather low despite several reminders by the secretariats for members to participate in the survey.

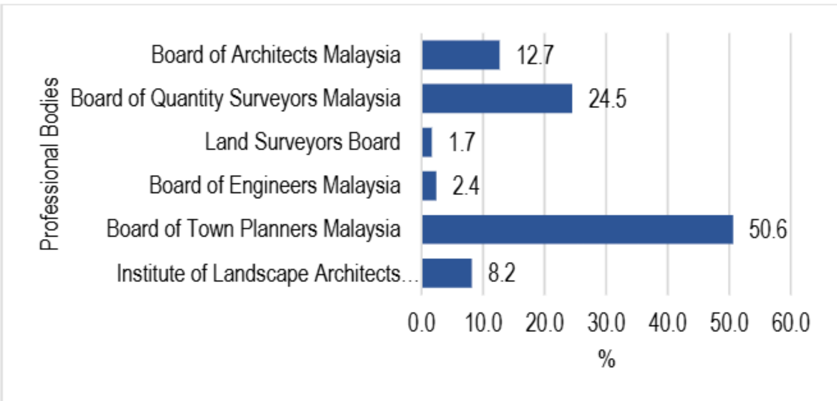

Figure 1: Distribution of respondents by professional bodies
Source: Online survey (2024)

In terms of working experience, Figure 2 shows that 51.8% of the respondents have working experience of between 6 years to 20 years, while 38.6% have working experience of more than 20 years in the built environment sector. Only 9.6% stated that they have worked in the sector for 5 years or less.

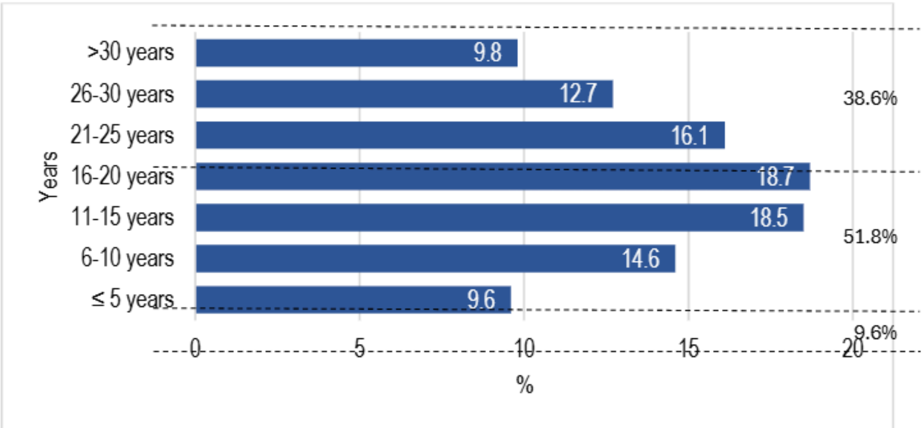

Figure 2: Years of working experience
Source: Online survey (2024)

Meanwhile, Figure 3 below shows that almost half of the respondents work in the private sector (48.7%), followed by 36.9% in the public sector and 11.3% who are self-employed. In addition, 2.2% are retirees, while 1% indicated that they were either not working or pursuing further studies.

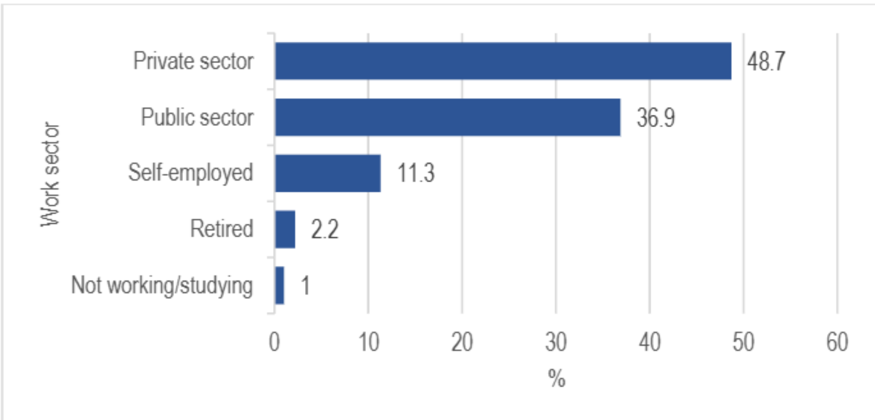

Figure 3: Working sectors
Source: Online survey (2024)

In terms of factors contributing to corruption risks in the built environment sector, respondents were asked to rate their agreement according to the scale of 1 to 4, where 1 denotes 'Very Disagree' while 4 represents 'Very Agree'. From the result, the Relative Importance Index (RII) was calculated based on the number of responses for each scale. Figure 4 below presents the result of the RII calculation, in which the higher the RII value indicates the higher the agreement of respondents on those factors.

As shown in Figure 4 below, 'To obtain approval quickly' and 'Low ethics and integrity' received high agreement as the most important factors causing corruption in the built environment sector (RII=0.87170). This was followed by 'Seeking personal gains' (RII=0.87110) in second place and 'Greed' (RII=0.86091) in third. On the other hand, 'Lifestyle beyond means' (RII= 0.73561) received the lowest agreement followed by 'Pressure from superiors/colleagues' with a RII of 0.75420.

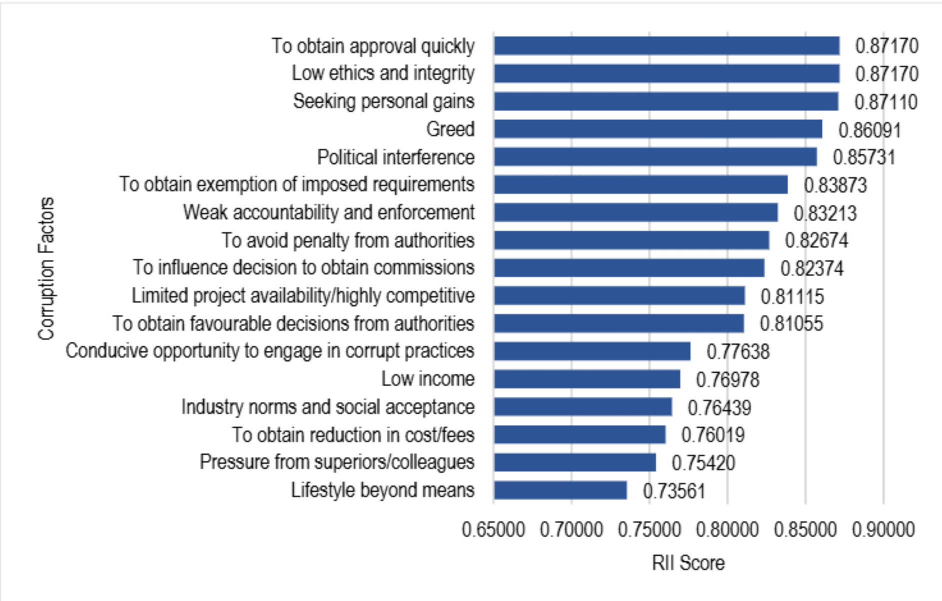

Figure 4: RII analysis of perceived corruption factors in the built environment sector
Source: Online survey & author's calculation (2024)

Next, the Spearman test was conducted to examine the relationship between respondents' backgrounds and their feedback. Through the Spearman test, the direction and value of the correlation between the variables tested can be identified, and thus providing insights into the factors influencing the feedback given by the respondents. The results of this Spearman test are as shown in Table 2.

Table 2: Spearman Rho analysis of perceptions of corruption factors based on respondents' background

Factors	**Age**		**Years of working experience**		**Year first registered as member**	
	p-value	cc	p-value	cc	p-value	cc
1) To obtain approval quickly	**-0.206****	**0.000**	**-0.201****	**0.000**	0.059	0.231
2) To obtain reduction in cost/fees	**-0.107****	**0.030**	**-0.097***	**0.047**	0.027	0.588
3) To obtain exemption of imposed requirements	**-0.153****	**0.002**	**-0.156****	**0.001**	0.053	0.278
4) To obtain favourable decisions from authorities	**-0.190****	**0.000**	**-0.161****	**0.001**	**0.097***	**0.047**
5) To avoid penalty from authorities	**-0.184****	**0.000**	**-0.178****	**0.000**	0.023	0.636
6) To influence decision to obtain commissions from suppliers/ contractors/ designers	**-0.140****	**0.004**	**-0.132****	**0.007**	0.053	0.284
7) Political interference	-0.049	0.321	-0.060	0.221	0.033	0.507
8) Low income	**-0.160****	**0.001**	**-0.145****	**0.003**	**0.140****	**0.004**
9) Lifestyle beyond means	**-0.120***	**0.014**	**-0.130****	**0.008**	**0.136****	**0.005**
10) Greed	-0.072	0.143	-0.068	0.164	0.071	0.148
11) Seeking personal gains	**-0.109***	**0.026**	**-0.097***	**0.048**	0.053	0.279
12) Low ethics and integrity	-0.073	0.134	-0.069	0.161	0.041	0.409
13) Limited project availability/highly competitive	**-0.181****	**0.000**	**-0.177****	**0.000**	0.064	0.193
14) Weak accountability and enforcement	**-0.105***	**0.031**	**-0.104***	**0.035**	0.004	0.942
15) Pressure from superiors/colleagues	**-0.161****	**0.001**	**-0.157****	**0.001**	**0.098***	**0.046**
16) Industry norms and social acceptance	**-0.222****	**0.000**	**-0.212****	**0.000**	**0.121***	**0.014**
17) Conducive opportunities to engage in corrupt practices	**-0.147****	**0.003**	**-0.143****	**0.003**	0.069	0.161

Source: Author's calculation

Referring to Table 2, there is a p-value result tested less than 0.05 between the variables of age, years of working experience and year of first registration as a member in a professional body with their perception of corruption factors in the built environment sector. Therefore, the null hypothesis that states that there is no effect or relationship between the variables tested can be rejected.

The Spearman test also shows that there is a low and negative correlation between the age and years of working experience of the respondents with their responses to corruption factors in the built environment sector. This negative correlation relationship shows that younger respondents and those with less working experience were more likely to agree or strongly agree that of the corruption factors in the built environment sector. On the other hand, there is a low and positive correlation between the year first registered as a member in a professional body with the perception of corruption factors in the built environment sector. This positive correlation shows that respondents with longer professional body membership were more likely to agree that 'To obtain favourable decisions from authorities' (cc=0.097*), 'Low income' (cc=0.140**), 'Lifestyle beyond means' (cc=0.136**), 'Pressure from superiors/colleagues' (cc=0.098*) and 'Industry norms and social acceptance' (cc=0.121*) are corruption factors in the built environment sector.

Respondents were also asked regarding their level of agreement on impacts of corruption. A scale of 1 to 4, namely, 1 Strongly Disagree, and 4; Strongly Agree was used. Based on the responses given, the RII was calculated, and the results are as shown in Figure 5 below

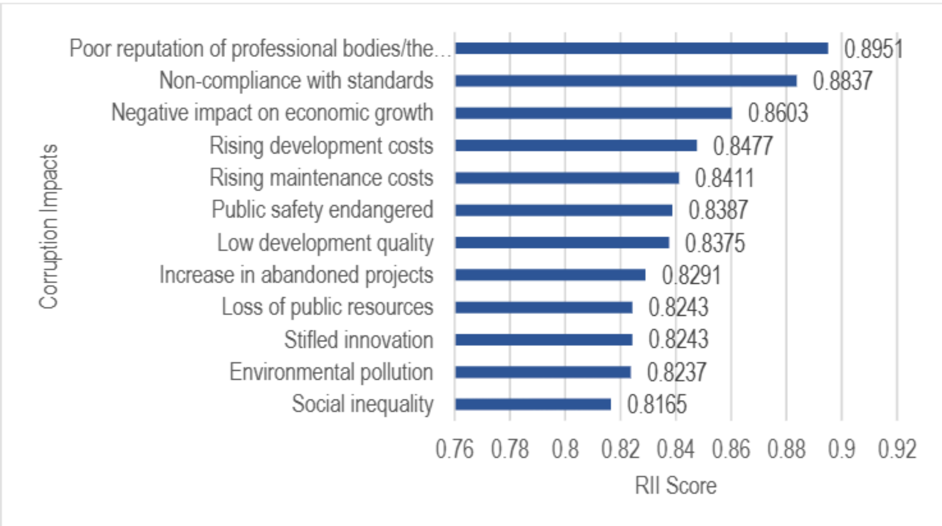

Figure 5: RII analysis of perceived impact of corruption on the built environment sector
Source: Online survey & author's calculation (2024)

Referring to Figure 4 above, the most agreed upon effect of corruption by respondents with the highest RII score is ‘Poor reputation of professional bodies/the built environment sector’ (RII=0.8951), followed by ‘Non-compliance with standards’ (RII=0.8837) and ‘Negative impact on economic growth’ (RII=0.8603). On the other hand, the least agreed-upon impact of corruption is ‘Social inequality’ (RII=0.8165), followed by ‘Environmental pollution’ (RII=0.8165) and ‘Stifled innovation’ (RII=0.8243).

CONCLUSION

The findings of this study reaffirm that corruption in the built environment sector is primarily driven by systemic weaknesses and individual ethical failings. The high RII score for factors such as “To obtain approval quickly” and “Low ethics and integrity” suggest that both institutional loopholes and personal misconduct create fertile ground for corrupt practices. This is further reinforced by the prominence of “Seeking personal gains” and “Greed” as underlying motivations. Interestingly, lifestyle pressures and external influences, such as “Lifestyle beyond means” and “Pressure from superiors/colleagues,” received comparatively lower levels of agreement or RII scores, indicating that corruption is less about external compulsion and more about deliberate opportunism. The Spearman correlation analysis deepens this insight, showing that younger professionals and those with less work experience tend to perceive corruption factors more strongly, possibly reflecting greater awareness or sensitivity to integrity issues among newer entrants to the profession. Conversely, long-serving members of professional bodies exhibit a stronger tendency to associate corruption with structural and cultural factors, such as income levels, authority pressures, and industry norms. These patterns highlight that perceptions of corruption are not homogeneous but shaped by demographic and professional experience, offering an important dimension for targeted anti-corruption strategies.

Given that the most significant perceived consequence of corruption is the “Poor reputation of professional bodies/the built environment sector”, followed closely by “Non-compliance with standards” and “Negative impact on economic growth,” it is evident that corruption not only undermines project quality but also erodes institutional credibility and national progress. In light of these findings, several recommendations can be proposed. First, professional bodies should strengthen ethical training and integrity-focused continuous professional development (CPD), particularly for younger and newly registered members, to nurture a culture of accountability from the outset of professional practice. Continuous training must also be enhanced to those long-serving members to refresh their awareness, understanding and values in relation to corruption. Second, Regulatory frameworks governing project approvals should be streamlined to enhance transparency and incorporate digital monitoring systems, thereby minimising opportunities for rent-seeking and reducing corruption risks. Simplifying overly complex procedures would also accelerate the approval process and further mitigate corruption vulnerabilities. Finally, professional bodies should develop and implement an Organisation Anti-Corruption Plan (OACP) to institutionalise anti-corruption initiatives and embed integrity within their organisational culture and among their members. The formulation and adoption of an OACP would also strengthen the public perception of professional bodies as institutions committed to transparency, integrity, and ethical governance. These proposed measures would not only mitigate corruption but also strengthen public confidence in the integrity and professionalism of the built environment sector.

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