

A pilot study on leadership styles influencing innovative work behaviour among educators: The mediating role of digital competency

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ABSTRACT

This pilot study assessed the clarity, reliability, and appropriateness of a survey instrument designed to examine the influence of leadership styles specifically transformational, servant, and digital leadership on innovative work behaviour (IWB) among educators, with digital competency as a proposed mediator. A quantitative survey approach was employed, utilising a six-point Likert scale. Data were collected from a sample of 20 educators, comprising secondary school teachers and higher education lecturers in Malaysia, before the main empirical study. Reliability analysis was conducted using Cronbach's alpha to evaluate the internal consistency of the adapted constructs. The results demonstrated that all the constructs achieved good to excellent reliability, with their Cronbach's alpha values ranging from 0.818 to 0.969, well above the recommended threshold of 0.70. Furthermore, the analysis indicated high item comprehension and structural suitability among the respondents. These findings confirm that the adapted instrument is psychometrically sound and highly reliable for use in a full-scale empirical investigation. Conducting this pilot study strengthens the methodological rigour of the research and invites confidence in the subsequent step of large-scale data collection within the Malaysian educational context.

1. INTRODUCTION

The Fourth Industrial Revolution (IR 4.0), which is associated with rapid digital transformation, has significantly reformed educational practices and institutional prospects. Innovation has become crucial for sustaining teaching quality, institutional effectiveness, and learner engagement in increasingly complex

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educational environments. In Malaysia, national initiatives such as the National Science, Technology and Innovation Policy (NSTIP 2021–2030) highlight the importance of strengthening innovation and digital capability in education systems.

Educators, including secondary school teachers and higher education lecturers, are no longer expected to function solely as transmitters of knowledge. Instead, they are increasingly required to demonstrate innovative work behaviour (IWB), including the generation, promotion, and implementation of new ideas in teaching, curriculum design, and institutional practices. IWB among educators is key to reacting to technological advancements, diverse learner needs, and evolving educational demands.

Innovative work behaviour refers to the intentional creation, promotion, and realisation of new ideas within a work role or organisation (De Jong & Den Hartog, 2010). Messmann and Mulder (2014) found that such behaviour contributes to pedagogical improvement, curriculum innovation, and organisational adaptability in educational settings. Meanwhile, research indicates that leadership plays a central role in promoting innovative behaviour among employees, including educators.

Leadership styles such as transformational, servant, and digital leadership have been linked to positive work performance, with aspects such as creativity, motivation, and innovation involved in this. According to Bass and Riggio (2005), transformational leadership fosters innovation through vision articulation, intellectual stimulation, and individualised consideration. Similarly, servant leadership highlights ethical conduct, empowerment, and concern for followers' well-being, forming a supportive environment conducive to innovation (Eva et al., 2019). Meanwhile, digital leadership has emerged as a critical capability that facilitates digital transformation and innovative practices among educators, especially in technology-rich educational environments (Van Wart et al., 2019).

In addition to leadership, the digital competency of educators is increasingly acknowledged as an individual capability essential for effective teaching and innovation. Digital competency enables educators to use digital tools effectively, solve technology-related problems, and integrate digital resources into teaching and learning processes (Redecker, 2017; OECD, 2019). Empirical research focusing on educators in both secondary and higher education in Malaysia remains limited, despite the growing scholarly interest in leadership, digital competence, and innovative work behaviours in education. Therefore, before conducting a full-scale empirical investigation, a pilot study was deemed necessary to validate the research instruments.

2. PURPOSE OF THE PILOT STUDY

The main purpose of this pilot study was to measure the clarity, reliability, and suitability of the research instrument developed to investigate leadership styles, digital competency, and innovative work behaviour among educators. The specific aims of the pilot study were as follows:

- (i) Evaluate the clarity and comprehensibility of the questionnaire items among secondary school teachers and higher education lecturers.
- (ii) Determine potential issues related to wording, redundancy, or item sequencing.
- (iii) Explore the internal consistency reliability of each construct using Cronbach's alpha.
- (iv) Identify the suitability of the six-point Likert scale employed in the questionnaire.

3. LITERATURE REVIEW

3.1 Innovative Work Behavior

Innovative work behaviour refers to the intentional generation, promotion, and realisation of new ideas within a work context for the benefit of the organisation (Janssen, 2000). IWB consists of a set of proactive behaviours such as identifying problems, seeking novel solutions, championing new ideas, and realising them (De Jong & Den Hartog, 2010). Betancur et al. (2022) stated that innovation is of the utmost importance to educational institutions. Hence, it is necessary to enhance the methods of delivering knowledge, the problem-solving capabilities of institutions, and the quality of their applied research. Barak et al. (2019) and Thurlings et al. (2015) argued that innovative behaviour is crucial in the education field, particularly for the advancement of educational professions and school organisations, as well as the development of knowledge-based societies. Equally, Namono et al. (2022) and Al-Husseini and Elbeltagi (2018) discovered that being innovative is a critical requirement for educational institutions if they are to thrive in demanding and ever-evolving environments, considering the rapidly shifting societal demands.

Additionally, research indicates that the IWB of educators has a solid influence on student progress (Johner & Zamor, 2022). Studies have shown that when teachers demonstrate innovative work behaviour, this boosts the school's effectiveness and produces beneficial learning outcomes for students (Ridwansyah et al., 2023).

3.2 Transformational Leadership

Transformational leadership is defined by its capability to inspire, intellectually stimulate, and assist individual needs (Bass & Riggio, 2006). This style of leadership has a strong correlation with increased IWB among followers (Mittal & Dhar, 2015). Teachers often feel more empowered and motivated to take the initiative regarding pedagogical innovation under transformational leaders.

Many studies have revealed positive relationships between transformational leadership and IWB, often mediated by various psychological and organisational factors. For example, both transformational leadership and work motivation significantly influenced IWB among employees in Taiwan (Chang et al., 2017). Similarly, Afsar et al. (2014) proved that transformational leadership has a direct positive effect on IWB, mainly through the mediating role of psychological empowerment. Expanding this idea, Jaiswal and Dhar (2015) showed that IWB would be enhanced by psychological empowerment, which mediates the relationship between transformational leadership and employee creativity.

In related studies, researchers such as Gumusluoglu and Ilsev (2009) discovered that transformational leadership promotes organisational innovation and IWB, with intrinsic motivation acting as a significant mediator. Meanwhile, the relationship between transformational leadership and IWB is moderated by creative self-efficacy and employee creativity, suggesting that individual capabilities amplify the impact of leadership on innovation (Pieterse et al., 2010). In the context of organisational change, Paulsen et al. (2009) showed that transformational leadership boosts IWB by enhancing the social identity of employees and their willingness for change.

3.3 Servant Leadership

Eva et al. (2019) explained that servant leadership is characterised by its focus on ethical behaviour, empathy, and serving others first. This form of leadership fosters psychological safety, which is conducive to innovation (Liden et al., 2014). In the education context, servant leaders encourage collaborative cultures that value teacher autonomy and creativity.

Servant leadership has been widely identified as a leadership style that significantly enhances IWB through its emphasis on empowerment, support, and ethical conduct. Van Dierendonck and Nuijten (2011) proved that enhanced employee creativity and psychological empowerment were both positively influenced by servant leadership. Similarly, Yoshida et al. (2014) showed that this form of leadership promotes team identification, subsequently producing greater innovation at both the individual and group levels. This team-oriented approach fosters collaboration, knowledge sharing, and mutual trust, which are key ingredients for innovation. In a longitudinal study, Liden et al. (2014) found that servant leaders significantly improve job performance and innovation by promoting in their subordinates a sense of autonomy and continuous support.

Further validating this relationship, Neubert et al. (2008) highlighted that servant leadership indirectly enhances organisational innovation by empowering employees within a supportive climate. Hunter et al. (2013) added that servant leadership cultivates an ethical organisational climate that motivates individuals to take the initiative, thereby reinforcing innovative behaviours. Based on a broader meta-analysis, Eva et al. (2019) concluded that servant leadership is strongly associated with increased creativity and innovation due to its core focus on developing individuals and enabling them to maximise their potential.

3.4 Digital Leadership

Digital leaders play a critical role in supporting teachers attempting to experiment with technology in instructional design (Cortellazzo et al., 2019). Digital leadership has emerged as a crucial factor in fostering IWB across various professional domains, including education. A growing body of empirical evidence supports the significant role played by digital leadership in enabling innovation through multiple mechanisms. For instance, García-Sánchez et al. (2020) found that digital leadership significantly promotes IWB by advancing digital transformation and strengthening organisational learning in Spanish institutions. Similarly, El Sawy and Loh (2021) reported that this type of leadership facilitates digital innovation by enhancing information technology capabilities and fostering a culture of continuous improvement. In a Chinese context, Gong et al. (2019) emphasised that digital leadership influences IWB through knowledge sharing and the use of digital communication tools. Supporting this, Schiuma and Lerro (2021) observed that organisational agility and a strong digital culture act as key mediators in the relationship between digital leadership and innovative behaviour.

Furthermore, Nwankpa and Datta (2017) emphasised that a clear digital strategy and change management practices are essential for digital leadership to translate into innovative outcomes. Likewise, Kane et al. (2015) noted that digital maturity and a supportive organisational culture significantly enhance the impact of digital leadership on innovation. In a virtual environment, Li and Herd (2017) found that e-leadership is an extension of digital leadership, enhancing IWB by fostering collaboration and maximising the use of digital tools.

3.5 Digital Competencies

Footnotes Digital competency refers to more than merely the technical ability to operate devices. It incorporates competences in information literacy, content creation, communication, collaboration, digital safety, and problem solving (Janssen et al., 2013). In education environments specifically, the high levels of digital competency exhibited by teachers has been associated with a corresponding increase in the innovativeness displayed during lesson delivery and assessment (Van Laar et al., 2019).

IWB is increasingly regarded as a vital facilitator of digital literacy in both organisational and educational contexts. Evidence from the literature suggests that individual employees possessing high digital competency are more likely to perform activities related to innovation. For example, Ghislieri et al. (2018) discovered that digital competency improved IWB through job performance and the effective use of digital tools. Similarly, Parzefall et al. (2020) showed that digital competency fosters innovation through knowledge sharing and organisational support mechanisms. Van Laar et al. (2019) highlighted that creativity and problem-solving abilities mediate the relationship between digital competency and IWB, indicating the cognitive processes that underpin innovative behaviour. Meanwhile, in the educational context, Park and Park (2021) emphasised the mediating role of e-learning engagement and job satisfaction in linking digital skills to innovation. Qualitative insights from Pettersson (2018) further support this by underscoring the importance of both digital literacy and organisational learning in enhancing innovation outcomes.

4. METHODOLOGY

4.1 Research Design

A quantitative survey design was employed in this pilot study. It emphasised instrument validation rather than hypothesis testing or statistical generalisation, in line with the purpose of a pilot study.

4.2 Participants

The pilot study involved 20 educators, consisting of secondary school teachers and higher education lecturers in Malaysia. Convenience sampling was used in participant selection, as this approach is appropriate for pilot studies focused on testing instrument reliability and clarity (Johanson & Brooks, 2010).

4.3 Research Instruments

The questionnaire consisted of two main sections. Section A collected demographic information, while Section B measured five constructs: innovative work behaviour, transformational leadership, servant leadership, digital leadership, and digital competencies. All the items were measured using a six-point Likert scale ranging from 1 (Never) to 6 (Always). The innovative work behaviour instrument was adapted from the studies by Janssen (2000) and De Jong and Den Hartog (2010). The transformational leadership items were based on the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (2004). Meanwhile, the servant leadership items were adapted from the work by Liden et al. (2008); the digital leadership items were based on those proposed by Larjovuori et al. (2018) and Cortellazzo et al. (2019); and the digital competency items were adapted from the studies by Janssen et al. (2013) and Van Laar et al. (2019).

4.4 Pilot Study Procedure

The questionnaire was administered online using Google Forms. Respondents were given approximately 15 to 30 minutes to complete the survey. Feedback regarding item clarity and questionnaire design was obtained at the end of the survey.

4.5 Data Analysis

Data were analysed using the Statistical Package for the Social Sciences (SPSS). Internal consistency reliability was assessed using Cronbach's alpha, for which values of 0.70 and above are considered acceptable for pilot studies (Hair et al., 2019).

5. FINDINGS

5.1 Study Demographic

Part A discussed the respondent demographics, which incorporated the 20 respondents participating in the pilot study. This provided preliminary demographic data to support the evaluation of the research instrument. In terms of gender, most of the respondents were female (90.5%, $n = 18$), while male respondents accounted for 9.5% ($n = 2$). This distribution reflects the composition of the pilot sample, and it was considered adequate for assessing the clarity and applicability of the measurement items. Regarding age, more than half of the respondents were within the 41–50 age group (52.4%, $n = 10$). Respondents aged 31–40 represented 19.0% ($n = 4$) of the sample. The 21–30 and 51–60 age categories each comprised 14.3% ($n = 3$) of the respondents. Overall, the age distribution indicated that most participants were at a mid-career stage, suggesting a level of professional maturity relevant to the constructs examined in the study. In terms of ethnicity, all the respondents were identified as Malay (100%, $n = 20$). Although the sample lacked ethnic diversity, this homogeneity was acceptable for a pilot study, given that the primary aim was to test the reliability and comprehensibility of the instrument rather than to draw population-level conclusions.

Analysis of length of service showed that a substantial proportion of the respondents had 11–20 years of work experience (61.9%, $n = 12$). This was followed by those with less than 10 years of service (19.0%, $n = 4$) and those who had served for 21–30 years (14.3%, $n = 3$). Only 4.8% ($n = 1$) reported having 31–40 years of service. These findings suggested that most respondents possessed considerable professional experience. With respect to educational level, most respondents held a Master's degree (52.4%, $n = 10$), with the next-largest group holding a Bachelor's degree (42.9%, $n = 9$). A small proportion held a PhD (4.8%, $n = 1$), and no respondents reported a diploma as their highest qualification. This indicated a highly educated pilot sample. Finally, the respondents were primarily based in Melaka (47.6%, $n = 9$), followed by Pahang (28.6%, $n = 6$), Selangor (14.3%, $n = 3$), and Pulau Pinang (9.5%, $n = 2$).

5.2 Reliability Analysis

This pilot study was conducted to assess the reliability and consistency of the study questionnaire using Cronbach's alpha index coefficient values and to determine whether this could be adopted in a real study. The use of Cronbach's alpha values to assess the acceptability of study instruments was guided by the work of Hair et al. (2019).

Table 1: Rule of Thumb of Cronbach's Alpha

Alpha Coefficient Range (α)	Strength of Association
0.9	Excellent
0.8 < 0.9	Very Good
0.7 < 0.8	Good
0.6 < 0.7	Moderate
< 0.6	Poor

Source: Hair et al. (2019)

The reliability analysis demonstrated satisfactory to excellent internal consistency for all the constructs. The Cronbach's alpha values obtained are presented in Table 2.

Table 2: Reliability Analysis of Study Constructs (Pilot Study)

Construct	Number of Items	Cronbach's Alpha
Innovative Work Behaviour	8	0.818
Transformational Leadership	13	0.969
Servant Leadership	8	0.938
Digital Leadership	6	0.899
Digital Competency	6	0.860

All the constructs exceeded the recommended reliability threshold of 0.70, indicating good to excellent internal consistency. These findings confirm that the measurement items would be reliable and suitable for use in the main study.

5.3 Innovative Work Behavior Analysis

Table 3: Innovative Work Behavior Analysis

	Mean	Std. Deviation	N
IWB 1	4.90	.852	20
IWB 2	4.30	.801	20
IWB 3	4.25	.910	20
IWB 4	4.60	.598	20
IWB 5	4.70	.923	20
IWB 6	4.35	.813	20
IWB 7	4.20	.894	20
IWB 8	4.10	.912	20

Variable 1, Innovative Work Behaviour, showed good internal consistency, with a Cronbach's alpha of 0.818 for eight items. This indicated its reliable measurement in the pilot study. The mean scores ranged from 4.10 to 4.90, suggesting generally positive and favourable perceptions of innovative work behaviour among the respondents. These high mean values indicate that the participants frequently engaged in innovative activities in their work. Furthermore, the standard deviation values were within an acceptable range, reflecting moderate variability in the responses and indicating that the items were effectively understood by the respondents. Overall, the findings demonstrate the reliability and appropriateness of the innovative work behaviour scale, supporting its use in the main study.

5.4 Transformational Leadership Analysis

Table 4: Transformational Leadership Analysis

	Mean	Std. Deviation	N
TL1	4.70	.923	20
TL 2	4.85	.875	20
TL 3	4.80	.834	20
TL 4	4.85	.875	20
TL 5	4.75	.851	20
TL 6	4.60	.883	20
TL 7	4.75	.851	20
TL 8	4.80	.834	20
TL 9	4.65	.875	20
TL 10	4.65	.875	20
TL 11	4.65	.813	20
TL 12	4.85	.875	20
TL 13	4.90	.788	20

As variable 2, transformational leadership demonstrated excellent internal consistency, with Cronbach's alpha value of 0.969 across 13 items. This indicated that it was a highly reliable scale for the pilot study. The item mean scores ranged between 4.55 and 4.95, reflecting very favourable perceptions of transformational leadership among the respondents. These high mean values suggest that the participants consistently perceived that their leaders demonstrated transformational leadership behaviours. In addition, the standard deviation values were within an acceptable range, indicating moderate variability in the responses and suggesting that the items effectively captured individual differences. Overall, the findings confirm that the transformational leadership scale was highly reliable and would be suitable for use in the main study.

5.5 Servant Leadership Analysis

Table 5: Servant Leadership Analysis

	Mean	Std. Deviation	N
SL 1	4.75	.910	20
SL 2	4.95	.826	20
SL 3	4.80	.768	20
SL 4	4.65	.745	20
SL 5	4.70	.801	20
SL 6	4.55	.887	20
SL 7	4.70	.865	20
SL 8	4.80	.894	20

Variable 3, Servant Leadership, demonstrated excellent internal consistency, with Cronbach's Alpha value of 0.938 across eight items. This indicated that it was a highly reliable measurement scale for the pilot study. The mean scores ranged between 4.55 and 4.95, reflecting generally strong and favourable perceptions of servant leadership among the respondents. These high mean values suggest that the participants perceived their leaders as consistently displaying servant-oriented behaviours. Furthermore, the standard deviation values were within an acceptable range, indicating moderate variability in the

responses and showing that the items effectively captured individual differences. Overall, the results confirm that the servant leadership scale was reliable and would be appropriate for use in the main study.

5.6 Digital Leadership Analysis

Table 6: Digital Leadership Analysis

	Mean	Std. Deviation	N
DL 1	4.65	.933	20
DL 2	4.70	.865	20
DL 3	4.80	.834	20
DL 4	4.40	.681	20
DL 5	4.55	.759	20
DL 6	4.65	.745	20

The table above shows that variable 4, digital leadership, demonstrated good to excellent internal consistency, with a Cronbach's alpha value of 0.899 across six items. This indicated that it was a reliable scale for the pilot study. The mean scores ranged between 4.40 and 4.80, reflecting generally favourable perceptions of digital leadership practices among the respondents. These results suggest that the participants perceived their leaders as effectively demonstrating digital leadership behaviours. In addition, the standard deviation values were within an acceptable range, indicating moderate variability in the responses and confirming that the items adequately captured individual differences. Overall, the findings support the reliability and suitability of the digital leadership scale for the main study.

5.7 Digital Competency Analysis

Table 7: Digital Competency Analysis

	Mean	Std. Deviation	N
DC 1	4.50	.946	20
DC 2	4.75	.967	20
DC 3	4.70	.801	20
DC 4	4.30	.865	20
DC 5	4.60	.821	20
DC 6	5.10	.788	20

Variable 5, digital competency, demonstrated good to excellent internal consistency, with a Cronbach's alpha value of 0.860 across six items. This indicated that it was a reliable measurement scale for the pilot study. The mean scores ranged between 4.30 and 5.10, reflecting generally favourable and strong perceptions of digital competency among the respondents. These high mean values suggest that the participants perceived themselves as having adequate to high levels of digital skills. In addition, the standard deviation values were within an acceptable range, indicating moderate variability in the responses. Overall, the results support the reliability and suitability of the digital competency scale for use in the main study.

6. DISCUSSION

The primary objective of this pilot study was to assess the clarity, reliability, and suitability of a survey instrument designed to examine the relationships between leadership styles (transformational, servant, and digital), digital competency, and innovative work behaviour (IWB) among educators in Malaysia. In

contrast to full-scale empirical research, the focus here was not to test hypotheses or establish causal relationships but to validate the psychometric properties of the adapted measurement scales before more extensive data collection. Overall, the findings demonstrate strong empirical support for the robustness and cultural appropriateness of the instrument within the Malaysian educational context.

In term of reliability and internal consistency, the reliability analysis yielded highly satisfactory results, with all five constructs achieving Cronbach's alpha values well above the recommended threshold of 0.70. In particular, the leadership scales were confirmed as having excellent internal consistency in this study, even though they were originally developed and have been heavily utilised in Western contexts. Examples of this are the Multifactor Leadership Questionnaire for Transformational Leadership and the Servant Leadership scale developed by Liden et al. (2008). Transformational leadership recorded the highest reliability ($\alpha = 0.969$), followed closely by servant leadership ($\alpha = 0.938$). This indicates that the translated and adapted items were clearly understood by the respondents; furthermore, they successfully captured the theoretical essence of these leadership styles without semantic ambiguity. Similarly, the digital leadership ($\alpha = 0.899$), digital competency ($\alpha = 0.860$), and innovative work behaviour ($\alpha = 0.818$) constructs were demonstrated to be highly reliable. This confirms that the combination of these diverse scales into a single, cohesive survey instrument is methodologically sound and suitable for large-scale deployment.

While, for item suitability and participant comprehension, an examination of the descriptive statistics further supports the suitability of the instrument. The mean scores across all the constructs generally ranged from 4.10 to 5.10 on the six-point Likert scale. These moderately high mean values, coupled with acceptable standard deviations, suggest that respondents had no issues with differentiating the scale points. Furthermore, no significant issues regarding redundant wording, poor item sequencing, or survey fatigue were identified during the 15 to 30 minutes required to complete the questionnaire online. The six-point Likert scale proved effective in forcing respondents to make a definitive choice, thereby avoiding the central tendency bias often associated with neutral midpoint scales.

This pilot study successfully validated the instrument; several limitations must be acknowledged and addressed in the subsequent main study. First, the sample size ($N = 20$) was strictly utilised for preliminary reliability testing and would be insufficient for inferential statistical modelling, such as testing the mediating role of digital competency. Second, the demographic profile of the pilot sample was highly homogeneous, consisting entirely of Malay respondents (100%) and being predominantly female (90.5%). Although this homogeneity is acceptable for assessing initial item clarity, it does not reflect the diverse demographic landscape of Malaysian educators.

Despite the strong statistical support for the model, practical implications must be interpreted cautiously due to the small pilot sample size ($N = 20$). Future research should involve larger samples and consider additional contextual factors such as school resources, organisational culture, and teacher motivation, which have also been shown to influence innovative work behaviour (Thurlings et al., 2015; OECD, 2021). Therefore, the upcoming full-scale empirical study must employ a larger and more geographically and ethnically diverse sample. To test the proposed conceptual framework specifically the direct influences of the three leadership styles on IWB and the mediating effect of digital competency, advanced analytical techniques such as structural equation modelling (PLS-SEM or CB-SEM) should be utilised.

7. CONCLUSION

This pilot study successfully validated a survey instrument designed to examine the leadership styles influencing innovative work behaviour among educators, with digital competency considered to have a mediating capability. The results confirm that the instrument is reliable, clear, and appropriate for use in large-scale empirical study. All the purposes of this pilot study were achieved. Conducting this pilot study strengthens the methodological foundation of the research and provides confidence for the subsequent data collection involving secondary school teachers and higher education lecturers.

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9. CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

10. AUTHORS' CONTRIBUTIONS

Siti Rohana Daud: Conceptualisation, methodology, formal analysis, investigation and writing-original draft; **Nur Qamarina Sharom:** Conceptualisation, methodology, and formal analysis, supervision; **Saida Farhanah Sarkam:** Formal analysis, supervision, writing- review and editing, and validation.

11. DECLARATION OF GENERATIVE AI IN THE WRITING PROCESS

During the preparation of this work, the authors used ChatGPT 5 to get an idea and visualization of conceptual framework and appropriate methodology suggestion. After using this tool/service, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

12. DATA AVAILABILITY/SUPPLEMENTARY MATERIALS

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

13. ETHICS STATEMENT

Ethical principles were strictly observed throughout the pilot study. Participation was voluntary, informed consent was obtained from all the respondents, and their anonymity and confidentiality were assured. All the data were collected and analysed solely for academic research purposes

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