Empowering Technopreneurial Leadership: Fostering Innovative Behavior among Islamic School Teachers

Ima Rahmawati[1], Hana Lestari[2], Zaimatus Sa'diyah[3]

[1]Islamic Educational Management Department, Institut Agama Islam Sahid, Bogor, West Java, Indonesia
[2]Pendidikan Guru Madrasah Ibtidaiyah Department, Institut Agama Islam Sahid, Bogor, West Java, Indonesia
[3]Empirical and Practical Religious Studies Department, Radboud University Nijmegen, Netherlands
Email: dafenta.ima13@gmail.com[1], hanalestari3011@gmail.com[2], zaimatus.sadiyah@ru.nl[3]

Abstract:

This research is motivated by the need for Islamic school's human resources who have strong character, have an entrepreneurial spirit, have high global insight competence, can think critically, creatively, communicatively, collaboratively, and innovatively, and have academic abilities that are in line with organizational needs in the era of digitalization. This means that madrasah teachers who have innovative work behavior are needed. To develop creative work behavior, a leader who can manage madrasa human resources must integrate entrepreneurial values with technology. The focus of the problem in this research is to develop a school principal's Technopreneurship leadership model to develop teachers' innovative work behavior influenced by self-efficacy, work environment, and teacher adaptability. The approach used in this research was a combination store using an explanatory method, and the research sample was 156 Bogor City Private MA teachers. Data was collected using questionnaires using a Likert scale, interviews, observation, documentation, and FGD. It was analyzed using the SmartPLS Ver 2.0 and Atlas TI evaluation models. The research results show that the technopreneur-ship leadership model can develop innovative work behavior in Islamic school teachers. So, suppose the school principal's Technopreneurship leadership model is implemented. In that case, it will impact increasing the innovative work behavior of Islamic school teachers, which will indirectly improve the quality of Islamic school education, marked by the formation of a professional Islamic school ecosystem.

Keywords: *Innovative Work Behavior, Technopreneurship Leadership, Islamic Schools*

Abstrak:

Penelitian ini dilatarbelakangi oleh kebutuhan akan sumber daya manusia pesantren yang memiliki karakter kuat, berjiwa wirausaha, memiliki kompetensi berwawasan global yang tinggi, dapat berpikir kritis, kreatif, komunikatif, kolaboratif, dan inovatif, serta memiliki kemampuan akademik yang sesuai dengan kebutuhan organisasi di era digitalisasi. Hal ini berarti dibutuhkan guru madrasah yang memiliki perilaku kerja inovatif. Untuk dapat mengembangkan perilaku kerja inovatif, tentu saja dibutuhkan sosok pemimpin yang dapat mengelola SDM madrasah agar mampu mengintegrasi nilai-nilai kewirausahaan dengan teknologi. Fokus masalah dalam penelitian ini adalah mengembangkan model kepemimpinan technopreneurship kepala sekolah dalam upaya pengembangan perilaku kerja inovatif guru yang dipengaruhi oleh efikasi diri, lingkungan kerja dan kemampuan adaptasi guru. Pendekatan yang digunakan dalam penelitian ini adalah sitorem kombinasi dengan menggunakan explanatory method, dan

sampel penelitian sebanyak 156 guru MA Swasta Kota Bogor. Penggumpulan data dilakukan dengan kuisioner dengan menggunakan skala likert, wawancara, observasi, dokumentasi dan FGD. Serta dianalisis dengan menggunakan model evaluasi SmartPLS Ver 2.0 dan Atlas TI. Hasil Penelitian menunjukkan model kepemimpinan technopreneurship dapat mengembangkan perilaku kerja inovatif guru madrasah. Sehingga apabila model kepemimpinan technopreneurship kepala sekolah ini diterapkan maka akan berdampak terhadap peningkatan perilaku kerja inovatif guru madrasah yang secara tidak langsung akan berakibat terhadap peningkatan mutu pendidikan madrasah yang ditandai dengan terbentuknya ekosistem madrasah yang professional.

Kata Kunci: *Perilaku Kerja Inovatif, Kepemimpinan Technopreneurship, Madrasah*

INTRODUCTION

Education plays a pivotal role in enhancing the quality of human resources (Aboramadan et al., 2020; Vrontis et al., 2022), and within this context, Private Senior High Islamic Schools in Indonesia, particularly in the city of Bogor, are the primary focus of this research. Challenges such as limited resources, a classical teaching approach, and a deficiency in educational qualifications (Ferri et al., 2020; Noor et al., 2020; Tomczyk & Walker, 2021), particularly among teaching staff mostly comprised of graduates from these schools, are observed (Bojović et al., 2020).

The significance of innovative education is highlighted globally, particularly in the era of the Fourth Industrial Revolution (Oke & Fernandes, 2020; Spöttl & Windelband, 2021; González-Pérez et al., 2022). Global data indicates a low level of innovative behavior among teachers in Indonesia (Kistyanto et al., 2022; Zaini et al., 2022), with many entering the profession due to a lack of alternative job opportunities (Akkermans et al., 2020; Labrague et al., 2021). At the local level, data from the Ministry of Religious Affairs in Bogor City reveals a significant imbalance in the academic qualifications of teachers in Private Senior High Islamic Schools (Shaturaev, 2021; Tambrin et al., 2021; Zubaida, 2022).

Education is a fundamental thing that can improve the quality of human resources (Baharin et al., 2020; Akdere & Egan, 2020; Mulang, 2021). Education is also a process of human and personality development (Diana & Zaini, 2023), which is carried out consciously and responsibly to improve knowledge, skills, attitudes, and values to adapt to the environment (Astuti & Datrini, 2021). This indicates that education is closely related to learning carried out by educational institutions. Islamic schools are educational institutions growing and developing in Indonesian society (Ariza et al., 2021; Wijaya et al., 2022; Komariah & Nihayah, 2023).

Under the coordination of the Ministry of National Education (Zaid et al., 2022), Senior High Islamic Schools are divided into State Senior High Islamic Schools and Private Senior High Islamic Schools (Maulidah et al., 2023). Usually, state Senior High Islamic Schools have adequate facilities and qualified teaching staff. Meanwhile, private senior high Islamic schools are Islamic educational institutions run by organizations or individuals. Private Senior High Islamic Schools also have flexibility in admitting students. On average, the number of

teaching staff at Senior High Islamic Schools is still limited, the learning used is still classical, and most of the teaching staff are not linear with the subjects they teach in the sense that teaching is not by their competencies (Blackman, 2022; Halle Petiot et al., 2021). Apart from that, the educational qualifications of teachers in private Senior High Islamic Schools need to meet the requirements, such as only graduating from Senior High Islamic Schools. So, the delivery of learning is still limited by the knowledge they have. In this case, teachers have been unable to make classroom learning innovations. Therefore, madrasas are still considered second-class traditional educational institutions, only religious ones, and need to be more innovative and modern in their learning (Syarif, 2020). This is also reinforced by the significant public interest in public schools due to public assumptions regarding the low quality of teachers at Islamic schools Aliyah (Abrori & Hadi, 2020). To fulfill this, Islamic school managers must pay more attention to continually improving the professionalism and quality of Islamic schools as they face changes in the era of digitization.

Innovative teachers can provide new things or new experiences for students. These new experiences are not new things for the first time but can modify existing ones. Innovative teachers are needed when the progress of the Industrial Revolution 4.0 era requires teachers to be more innovative in terms of performance, teaching, learning methods used in class, and the media used.

Innovative behavior generated by teachers will be the key to success in achieving learning goals because teachers will play a role in helping to overcome the types of problems that arise. This shows that innovative teacher behavior is essential in facilitating and encouraging change to improve the quality of Islamic schools. The innovative behavior carried out by teachers is a form of effort to respond to changes in a rapidly changing society, trying to keep up with developments in new science and technology, which requires teacher members to integrate them into the learning methods the organization uses. The innovative behavior carried out by teachers is a form of effort to respond to changes in a rapidly changing society, trying to keep up with developments in new science and technology, which requires teacher members to integrate them into the learning methods the organization uses. However, on the one hand, teachers' work behavior that could be more innovative will undoubtedly be an obstacle to achieving learning goals in Islamic schools.

Some previous research results can be used as a reference for innovative work behavior, which examines transformational leadership and organizational culture in innovative work behavior examines innovative work behavior with transformational leadership (Knezović & Drkić, 2021). Transformational leadership effectively develops innovative work behavior in employees/teachers (Jan & Manzoor, 2021). However, further research needs to be carried out regarding other management models or styles that can better develop innovative employee behavior to the changes and needs of the times. Research on Innovative Work Behavior (IWB) shows that innovative work behavior is influenced by two main factors, namely individual factors and organizational factors. These studies show that innovative work behavior positively affects performance (Khan et al., 2020). Innovative work behavior has a significant influence on employee

performance. Therefore, every organization must create a situation where its members can innovate. In addition, the resulting innovation will achieve the effectiveness of the madrasa organization (Juniarni & Ali, 2022). Of course, this will be an advantage for madrasas to be able to compete, where teachers can transform their competencies professionally through innovations produced in the form of innovative learning models, productive ideas related to entrepreneurship, adopting innovative new ideas such as in learning practicums, and implementing production results through technology.

The novelty of this research is its focused investigation into the impact of Technopreneurship leadership on teachers' innovative behavior in Private Senior High Islamic Schools in Bogor, Indonesia. By narrowing the scope to this specific context, the study addresses a gap in the existing literature concerning Islamic schools' unique challenges.

Unlike previous research, this study explores the intricacies of technopreneurship leadership within Islamic education, offering insights into how it can enhance the quality of teaching in a religious educational setting. The research aims to provide valuable, context-specific findings to inform school administrators, policymakers, and educators about improving education in Private Senior High Islamic Schools.

RESEARCH METHODS

This research was conducted at a private Senior High Islamic School in Bogor City. The approach used in this research is a correlational approach using combined SITOREM analysis (Sayuti et al., 2021). So this approach is named the Combination Cytorem approach. Meanwhile, the strategy in this research uses a sequential explanatory mixed methods research design. The strategy in this combination method uses a combination of the two research methods, starting with quantitative methods and then applying qualitative methods (Clark et al., 2021).
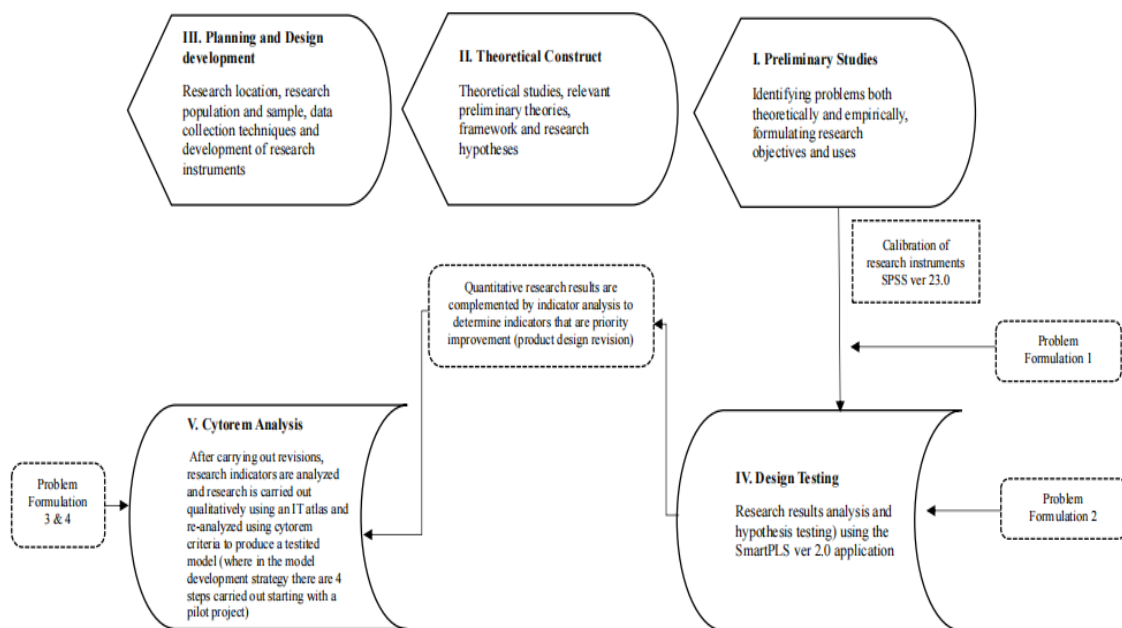

Figure 1. Flowchart of the Combination SITOREM Approach

The population in this study were heads of Islamic schools and private MA teachers in Bogor City. Based on BPS Bogor City 2023 data, 19 private IPs have been recorded. The sampling technique applied in this research is cluster random sampling. The sample size was determined using the Taro Yamane formula. So, 156 respondents were obtained as the research sample. Next, the quantitative data collection technique uses a closed questionnaire with a Likert scale as the measure (Aithal & Aithal, 2020). Meanwhile, qualitative data uses interview, observation, and documentation techniques.

Quantitative data from closed questionnaires underwent descriptive statistics, including mean and standard deviation, and inferential statistical techniques, specifically correlation analysis utilizing the SITOREM method (Rubiati et al., 2020). The integrated analysis followed the Combination Cytorem approach proposed. Qualitative data from interviews, observations, and documentation were subjected to thematic content analysis. The research design employed a sequential explanatory mixed methods strategy, where qualitative insights complemented and elucidated quantitative findings. This comprehensive approach aimed to explore the technopreneur-ship leadership model in private Senior High Islamic Schools in Bogor City.

RESULTS AND DISCUSSIONS

Based on data analysis using combined cytorem, the model visualization can be described as follows:
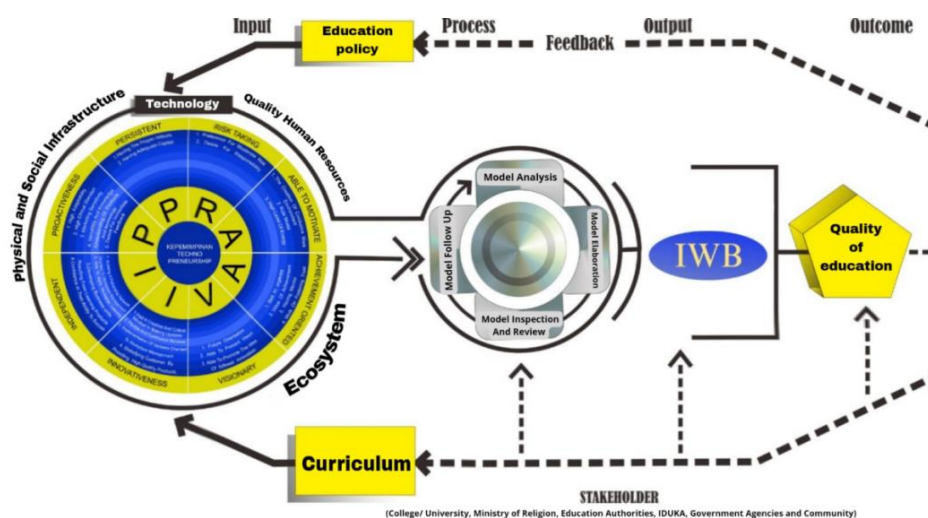

Figure 2. Visualization of the Technopreneurship Leadership Model in Developing Teacher Innovative Work Behavior

Based on the research results, it was found that the percentage of respondents who identified leadership in MA included having high adaptability, the ability to motivate and create an innovative environment, being future-oriented, being able to build a comprehensive and effective partnership network, having high resistance to stress, having an understanding of technology, having the courage to develop work programs that are work-based management oriented, able to delegate tasks while supervising the learning process and providing guidance that is oriented towards the development of innovative resources.

The descriptive analysis results show that the innovative work behavior variable has a theoretical range of 59 and 95, with an average value of 79.77 and a standard deviation of 6.75. Meanwhile, the average score for the innovative work behavior variable was $79.77 \leq$ median value of 80.00. It can be said that teachers in Bogor City Private MAs generally have pretty high levels of innovative work behavior or are considered to have a normal distribution. The standard deviation is 6.75 from the average value of respondents' answers to statements about innovative work behavior, which is 79.77.

The Madrasah Principal's technopreneurship leadership variable has a theoretical range of 84 to 135, with an average of 114.18 and a standard deviation of 9.58. Meanwhile, the average score obtained was $114.18 \leq$ median value of 116.00, so it can be said that principals in Bogor City Private MAs generally have pretty high technopreneurship leadership criteria or are considered to have a normal distribution. The standard deviation value shows a deviation of 9.58 from the average value of respondents' answers to statements about the technopreneurship leadership of Madrasah Heads, which is 114.18.

Table 1. Descriptive Statistics

Variable	N	Min	Max	Sum	Mean	Median	Std. Deviation
Innovative Work Behavior (Y)	267	59	95	21299	79.77	80.00	6.75
Technopreneur Leadership (X)	267	84	135	30485	114.18	116.00	9.58

Source: Primary Data Technopreneur Leadership Model Research using the SmartPLS Ver 2.0 Application
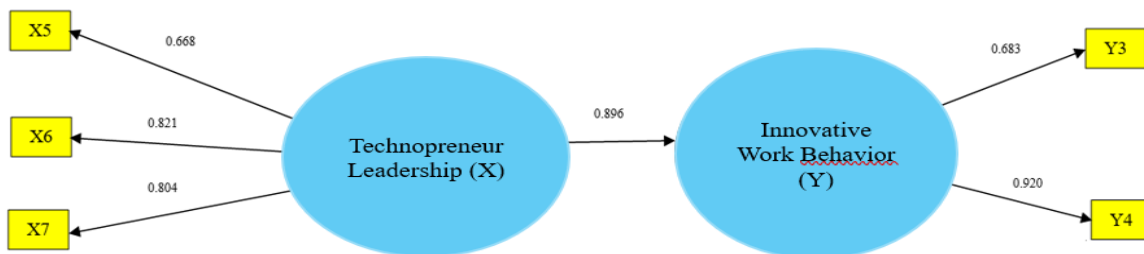

Figure 3. Loading Factor Sub Structure

Furthermore, based on hypothesis testing, it was found that technopreneurship leadership had a significant effect on innovative work behavior with a t-statistic value (6.640) > t-table (1.96) at a significance level of 5%. Technopreneurship leadership affects Innovative Work Behavior by 0.896, meaning that the better the technopreneurship leadership reflected by X.5, X.6, and X.7, the more innovative Work Behavior reflected by Y.3 and Y.4 will increase.

Madrasah Heads actively fosters innovation among teachers by providing support through initiatives such as installing wifi, encouraging participation in training, and facilitating events for introducing student learning products. Despite their studies' predominant focus on educational management, findings reveal that Madrasah Heads, including those pursuing doctoral and master's degrees,

emphasize the importance of practical experience gained through managing Aliyah Madrasahs. The majority hold Madrasah Head certificates, indicating their commitment to professional development. However, varying levels of IT competence among Madrasah Heads suggest a need for further improvement. While challenges persist in applying IT to madrasah management, some heads have demonstrated innovative thinking by initiating programs like eco-bricks and market days. This highlights the dynamic interplay between educational leadership, organizational experience, and technological adaptation within Islamic school management.

Based on the research results with teacher respondents, it was found that most madrasah heads have other types of businesses apart from managing madrasas. Of course, the majority of Madrasah Heads have built good partnership relationships. However, a small number of Madrasah Heads were still found to need to be more able to make maneuvers in their activities. This means that some Madrasah Heads still do not dare to take risks by calculating management policies. Apart from that, the teachers also think that the Head of the Madrasah needs to fully pay more attention to the achievements of the organization's members. It is proven that teachers feel less motivated to behave innovatively in madrasas because they think that the professional allowances provided by the government, basic wages, health insurance, and intensive attendance provided by madrasas are deemed not to meet the level of teacher welfare based on the standards they determine.

So, based on the findings in the dimensions of innovative thinking and business thinking, problems related to findings in the field can be analyzed, namely the need for an appropriate leadership model in managing Madrasah Aliyah, which in this case is related to the development of teachers' innovative work behavior. Based on the percentage results from interviews, 93% of respondents agreed with implementing the Madrasah Principal's technopreneurship leadership model in developing innovative teacher behavior at Madrasah Aliyah.

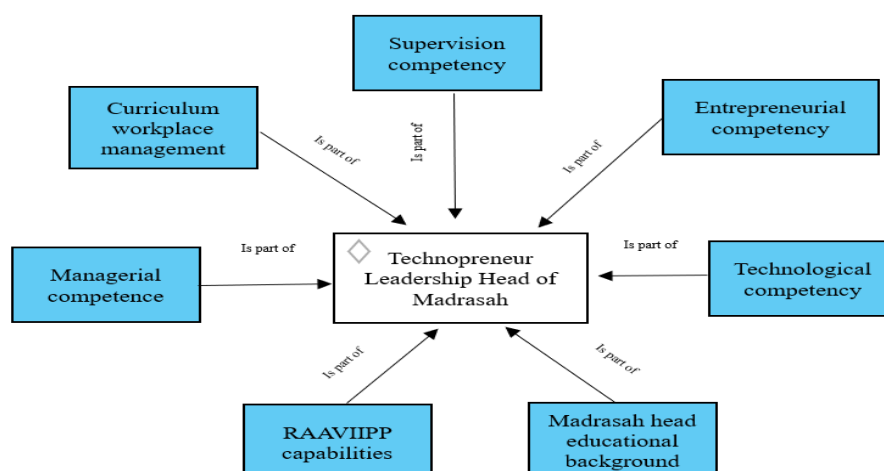Of course, this is supported by the results of analysis using the Atlas TI application, namely:

Figure 4. Results of technopreneurship leadership data analysis of Madrasah Heads using the Atlas TI application

Thus, the technopreneur-ship leadership model is considered capable of being applied in Madrasah Aliyah because to manage madrasas of the leadership of the Madrasah is someone who can manage human resources and data sources in the Madrasah through innovative thinking regarding change and development of innovative human resources and has the skills to create work programs which are oriented towards the quality and satisfaction of educational consumers. Apart from that, this technopreneurship leadership supports government policy regarding a Madrasah Head's competencies.

The technopreneur's leadership model in developing innovative teacher work behavior implies presenting President Joko Widodo's five directions for creating superior human resources and, of course, the goals of Indonesian national education. The technopreneurship leadership model of the Head of Islamic schools will be implemented with the support of the Ministry of Education and Culture policy no. 6 of 2018 concerning the competencies principals/Islamic schools must have, namely managerial, entrepreneurial, and supervisory competencies. The Head of Islamic schools must have managerial, entrepreneurial, and supervisory competencies. With technopreneurship leadership capabilities, namely RAAVIIP (Risk Taking, Able to Motivate, Achievement Oriented, Visionary, Innovativeness, Independent, Proactiveness, and Persistent), this technopreneurship leadership model indirectly offers and invites educational leaders to achieve various competencies needed in educational leadership in the era of digitalization and can create graduates of Senior High Islamic Schools who are productive, innovative, competitive and have character. This is because the head of an Islamic school with technopreneurship abilities will equip students with competencies, attitudes, life skills, and ways of thinking and acting to anticipate and respond to ever-changing situations (Kudus et al., 2022).

The Islamic school curriculum plays a pivotal role in shaping students' character, instilling Pancasila values, promoting religious moderation, and fostering critical, creative, and innovative thinking through initiatives like the Project for Strengthening the Pancasila Student Profile and the Rahmatan Lil Alamin Student Profile (P5 PPRA). This approach emphasizes partnership, flexibility, relevance, and accreditation to provide MA graduates with successful careers and further education opportunities. Implementing the technopreneurship leadership model aligns with critical policies (PP Number 19 of 2005, Law Number 14 of 2005, and Decree of the Minister of Religion Number 347 of 2022), driving increased investment and innovation. With its RAAVIIPP capabilities, the model integrates entrepreneurial skills with technology, facilitating the development of innovative human resources among teachers and graduates. The resulting impact on the innovative work behavior of teachers, as evidenced by regression results, signifies the unintentional creation of a professional Islamic school ecosystem. This ecosystem fosters partnerships aligned with implementing an independent curriculum, further enhancing the quality of education.

This is in line with research by Rahmawati et al. (2022), which examines the emergence of innovative work behavior through technopreneurship leadership. In innovative work behavior, a leader who can adapt to the times and has talents and skills from different cultures and countries in managing technology is needed. In

another study, Rahmawati and Permana (2020) also stated that staff development programs are needed to develop teachers' innovative work behavior. The visionary and adaptive heads of Islamic schools currently transitioning can only implement this work program. In line with this research, Fahrurrobi et al. (2020) explained that the role of leaders is vital, and knowledge-sharing activities can only be created if the organization has good knowledge management. In this way, leaders who are innovative, able to motivate, and take risks can develop teachers' innovative work behavior, which will later have implications for improving the quality of learning (Li et al., 2020; Asima et al., 2021; Rahmawati et al., 2022; Lestari et al., 2023).

This research contributes significantly to understanding the impact of the Technopreneurship Leadership Model on the development of innovative work behavior among teachers in Private Islamic High Schools in Bogor City. Critical contributions from the study include: In this review, a thorough visualization of the influence of the Technopreneurship Leadership Model on teachers' innovative work behavior is presented, offering a clear framework for understanding the dynamics involved. The research identified specific leadership characteristics associated with Madrasah Heads, such as adaptability, motivation, and creating innovative environments, which contribute to advancing innovative work behaviors among teachers. Overall, the research provides valuable insights and practical implications for improving educational leadership, advancing innovation among teachers, and ultimately improving the quality of education in Private Islamic High Schools in Bogor City.

CONCLUSION

This technopreneurship leadership model can ideally be applied in Islamic schools if the prerequisites and model components are met. Like the ability of heads of Islamic schools who have RAAVIIPP (Risk Taking, Able to Motivate, Achievement Oriented, Visionary, Innovativeness, Independent, Proactiveness and Persistence) capabilities, qualified Islamic schools' human resources, one of the main requirements is that human resources are qualified and competent by established policies. In effect, physical infrastructure, especially the availability of energy sources and adequate information technology networks, and social infrastructure, such as the existence of quality assurance institutions, both internal and external, as well as the existence of an Islamic schools ecosystem that supports the implementation of the independent learning curriculum in Islamic schools. This technoperneurship leadership model in developing innovative work behavior will impact the creation of innovative schools/Islamic schools and improve the quality of education. This leadership model will unintentionally form a professional Islamic school ecosystem and can build good partnerships. Apart from that, the assumptions of this technopreneurship leadership model can only be applied to schools that have flexible SOPs related to organizational development, such as private schools/Islamic schools.

Recommendations for further research can center on an in-depth analysis of the prerequisites and critical components of the Technopreneurship Leadership Model to gain a deeper understanding of its successful implementation. A

longitudinal study could be undertaken to track the long-term impact of this model on teachers' innovative work behavior and the development of Islamic schools. It is crucial to explore the level of flexibility in the Standard Operating Procedures (SOPs) of private/Islamic schools and assess the need for technopreneurship-oriented school principal training. Involving a pilot project for educational leadership transformation that can serve as a model for similar schools could be beneficial. Further research on developing teacher innovation as a response to technopreneur-ship leadership can provide valuable insights. All these endeavors aim to enrich the understanding of implementing this leadership model and its impact on Islamic schools, ultimately aiming to enhance the quality of education.

ACKNOWLEDGEMENT

REFERENCES

Aboramadan, M., Albashiti, B., Alharazin, H., & Dahleez, K. A. (2020). Human Resources Management Practices and Organizational Commitment in Higher Education: The Mediating Role of Work Engagement. *International Journal of Educational Management*, *34*(1), 154-174. DOI: 10.1108/IJEM-10-2019-0435

Abrori, M. S., & Hadi, M. S. (2020). Integral Values in Madrasah: To Foster Community Trust in Education. *Istawa: Jurnal Pendidikan Islam*, *5*(2), 160-178. DOI: 10.24269/ijpi.v5i2.2202

Aithal, A., & Aithal, P. S. (2020). Development and Validation of Survey Questionnaire & Experimental Data–A Systematical Review-Based Statistical Approach. *International Journal of Management, Technology, and Social Sciences (IJMTS), 5*(2), 233-251. DOI: 10.35940/ijmts.b1390.1292Y520

Akdere, M., & Egan, T. (2020). Transformational Leadership and Human Resource Development: Linking Employee Learning, Job Satisfaction, and Organizational Performance. *Human Resource Development Quarterly*, *31*(4), 393-421. DOI: 10.1002/hrdq.21362

Akkermans, J., Richardson, J., & Kraimer, M. L. (2020). The Covid-19 Crisis as a Career Shock: Implications for Careers and Vocational Behavior. *Journal of Vocational Behavior, 119,* 103434. DOI: 10.1016/j.jvb.2020.103434

Ariza, M. R., Boeve-de Pauw, J., Olsson, D., Van Petegem, P., Parra, G., & Gericke, N. (2021). Promoting Environmental Citizenship in Education: The Potential of the Sustainability Consciousness Questionnaire to Measure Impact of Interventions. *Sustainability*, *13*(20), 11420. DOI: 10.3390/su132011420

Astuti, P., & Datrini, L. (2021). Green Competitive Advantage: Examining the Role of Environmental Consciousness and Green Intellectual Capital. *Management Science Letters, 11*(4), 1141-1152. DOI: 10.5267/j.msl.2021.1.002

Baharin, R., Syah Aji, R. H., Yussof, I., & Mohd Saukani, N. (2020). Impact of Human Resource Investment on Labor Productivity in Indonesia. *Iranian Journal of Management Studies, 13*(1), 139-164. DOI: 10.22034/IJMS.2020.02.02

Blackman, T. (2022). Raymond Williams and the New Industrial Trainers: A Critique and a Proposal. *Oxford Review of Education*, *48*(5), 555-569. DOI: 10.1080/03054985.2021.1902167

Bojović, Ž., Bojović, P. D., Vujošević, D., & Šuh, J. (2020). Education in Times of Crisis: Rapid Transition to Distance Learning. *Computer Applications in Engineering Education*, *28*(6), 1467-1489. DOI: 10.1002/cae.22353

Clark, T., Foster, L., Bryman, A., & Sloan, L. (2021). Bryman's Social Research Methods. Oxford University Press. DOI: 10.1093/oxfordhb/9780199689453.013.5

Diana, S., & Zaini, A. W. (2023). Nurturing Excellence: Leveraging Service Quality for Competitive Advantage in Islamic Boarding Schools. *Journal of Educational Management Research*, *2*(1), 13-28. DOI: 10.29240/jemr.v2i1.2419

Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations. *Societies*, *10*(4), 86. DOI: 10.3390/soc10040086

González-Pérez, L. I., & Ramírez-Montoya, M. S. (2022). Components of Education 4.0 in 21st Century Skills Frameworks: Systematic Review. *Sustainability*, *14*(3), 1493. DOI: 10.3390/su14031493

Halle Petiot, G., Aquino, R., Silva, D. C. D., Barreira, D. V., & Raab, M. (2021). Contrasting Learning Psychology Theories Applied to the Teaching-Learning-Training Process of Tactics in Soccer. *Frontiers in Psychology*, *12*, 637085. DOI: 10.3389/fpsyg.2021.637085

Jan, S., & Manzoor, K. (2021). Impact of Transformational Leadership Style of Headmasters on Job Satisfaction of Primary School Teachers in District Mohmand. *Management*, *4*(1), 65-81. DOI: 10.5296/mgmt.v4i1.18217

Juniarni, C., & Ali, N. (2022). Developing Innovation and Based on Smart Madrasah Model in Malang. *Idarah (Jurnal Pendidikan dan Kependidikan)*, *6*(1), 1-14. DOI: 10.18860/id.v6i1.9743

Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture, and Organizational Citizenship Behavior. *Sage Open*, *10*(1), 2158244019898264. DOI: 10.1177/2158244019898264

Kistyanto, A., Rahman, M. F. W., Adhar Wisandiko, F., & Setyawati, E. E. P. (2022). Cultural Intelligence Increase Student's Innovative Behavior in Higher Education: The Mediating Role of Interpersonal Trust. *International Journal of Educational Management*, *36*(4), 419-440. DOI: 10.1108/IJEM-10-2021-0685

Knezović, E., & Drkić, A. (2021). Innovative Work Behavior in SMEs: The Role of Transformational Leadership. Employee Relations: *The International Journal*, *43*(2), 398-415. DOI: 10.1108/ER-01-2019-0052

Komariah, N., & Nihayah, I. (2023). Improving The Personality Character of Students Through Learning Islamic Religious Education. *At-Tadzkir: Islamic Education Journal*, *2*(1), 65-77. DOI: 10.18860/at.v2i1.14062

Kudus, N., Sedek, M., Hassan, M. A., & Ab Rahman, Z. (2022). Learning Organization as Drivers of Human Resources 4.0 At the Technical University of Malaysia Melaka (UTEM). *Journal of Human Capital Development (JHCD), 15*(2). DOI: 10.1108/JHCD-06-2021-0180

Labrague, L. J., & de Los Santos, J. A. A. (2021). Fear of Covid-19, Psychological Distress, Work Satisfaction and Turnover Intention among Frontline Nurses. *Journal of Nursing Management*, *29*(3), 395-403. DOI: 10.1111/jonm.13283

Maulidah, H. F., Baharun, H., Hefniy, H., Tohet, M., & Zaini, A. W. (2023). Teacher Assistance in The Development of Merdeka Curriculum Learning Devices. *Communautaire: Journal of Community Service*, 2(2), 98-107. DOI: 10.17977/communautaire.v2i2.6944

Mulang, H. (2021). The Effect of Competences, Work Motivation, Learning Environment on Human Resource Performance. *Golden Ratio of Human Resource Management*, *1*(2), 84-93. DOI: 10.5281/zenodo.4628692

Noor, S., Isa, F. M., & Mazhar, F. F. (2020). Online Teaching Practices During the COVID-19 Pandemic. Educational Process: *International Journal*, *9*(3), 169-184. DOI: 10.15548/ep.9.3.169-184

Oke, A., & Fernandes, F. A. P. (2020). Innovations in Teaching and Learning: Exploring the Perceptions of the Education Sector on the 4th Industrial Revolution (4IR). *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(2), 31. DOI: 10.3390/joitmc6020031

Rubiati, K., Setyaningsih, S., & Suharyati, H. (2020). The Improvement of the Services Quality Through Development of Teachers Personality and Organizational Justice. *Journal of Education, Teaching and Learning*, *5*(2), 269-273. DOI: 10.17509/jetr.5.2.269-273

Sayuti, I., Tunas, B., & Retnowati, R. (2021). Teacher's Performance Improvement Through Strengthening Decision Making, Learning Organizations, and Self-efficacy. *Science and Education*, *2*(8), 431-456. DOI: 10.18782/sne.v2i8.824

Shaturaev, J. (2021). Financing and Management of Islamic (Madrasah) Education in Indonesia. *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie, (42)*, 57-65. DOI: 10.29119/1644-0649.2021.142.8.6

Spöttl, G., & Windelband, L. (2021). The 4th Industrial Revolution–Its Impact on Vocational Skills. *Journal of Education and Work*, *34*(1), 29-52. DOI: 10.1080/13639080.2021.1896250

Syarif, F. (2020). The History and Development of Madrasa in Indonesia. *Tsaqofah Dan Tarikh: Jurnal Kebudayaan dan Sejarah Islam*, *5*(1), 23-40. DOI: 10.18860/tsq.v5i1.9643

Tambrin, M., Wasliman, I., Hanafiah, H., & Mudrikah, A. (2021). Implementation and Evaluation of Teachers' Performance Supervision at Madrasah Aliyah (Islamic Senior High School). *Journal of Education Research and Evaluation*, *5*(4), 645-655. DOI: 10.30998/jere.v5i4.6455

Tomczyk, Ł., & Walker, C. (2021). The Emergency (Crisis) E-learning as a Challenge for Teachers in Poland. *Education and Information Technologies*, *26*(6), 6847-6877. DOI: 10.1007/s10639-021-10584-2

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial Intelligence, Robotics, Advanced Technologies and Human Resource Management: A Systematic Review. *The International Journal of Human Resource Management*, *33*(6), 1237-1266. DOI: 10.1080/09585192.2021.1898884

Wijaya, M. H., Khoir, A., & Zaini, A. W. (2022). Fostering Public Trust: The Transformative Leadership of School Principals. *Indonesian Journal of Education and Social Studies (IJESS)*, *1*(1), 51-62. DOI: 10.17509/ijess.v1i1.3585

Zaid, Z., Pettalongi, S. S., & Nurdin, N. (2022). Implementation of School-Based Management in Improving the Quality of State Islamic Junior High School. *International Journal of Social Science and Human Research*, *5*(8), 3448-3455. DOI: 10.31153/ijossr.v5i8.1150

Zaini, A. W., Rusdi, N., Suhermanto, S., & Ali, W. (2022). Internalisasi Nilai-Nilai Pendidikan Agama di Sekolah: Perspektif Manajemen Pendidikan Islam. *Journal of Educational Management Research*, *1*(2), 82-94. DOI: 10.35917/jemr.v1i2.82-94

Zubaida, S. (2022). Capacity Building Madrasah Growing from Creative Economy to Quality Management of MBS in Islamic Education. *Edukasi Islami: Jurnal Pendidikan Islam*, *11*(2), 355-376. DOI: 10.15408/ei.v11i2.30806