

# Individual Attitudes Toward E-Wallet Adaptation Behavior in Malaysia

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## Abstract

This study examines how users thought about and adapted to the e-wallet. We made conceptual research by adding an attitude to see how well it might predict how users would adjust to an e-wallet. Self-efficacy (independent construct), risk attitude (mediating construct), and adaptive behavior are all independent constructs (Dependent variable). This study intends to show that self-efficacy is an important factor in figuring out risk attitudes toward user adaptive behavior. There is a strong need for research on the attitudes that motivate users to start using e-wallets so that financial providers may improve their marketing and product offers and increase demand for their products.

**Keyword:** digital payment, e-wallet, attitude, adaptive behavior, cyber risk

## 1. Introduction

The development of internet banking and electronic wallets (e-wallet) has altered the current payment environment, which is dominated by cash transactions. Since their introduction, e-wallets have been a crucial payment method online. This implies that users must adjust to using it. With a high internet usage rate of more than 80% in Malaysia and a solid electronic commerce (e-commerce) market worth more than RM17.14 million, more Malaysians are likely to adopt online payment soon. There are both hazards as well as opportunities involved with online payment. The digital surveillance economy is a danger to individual, societal, and political objectives (Clarke, 2019).

Due to the shutdown of brick-and-mortar stores caused by the corona virus in early 2020, consumers turned to online shopping, which contributed to the growth of Malaysia's e-commerce business. Indirectly, the utilisation of any digital payment begins with the confidence that it is secure and user-friendly. Indeed, there may be drawbacks to using digital payments, such as a lack of understanding, confidence, or expertise, privacy and security issues, such as theft, technology, and service interruptions. In addition, technological advancement would be hindered if security were not well handled (Sahi et al., 2022). Users are more likely to deny internet banking transactions if they believe the system's security is severely bad (Olusolade Aribake Fadare & Aji, 2020). Ali (2017) claimed that security is important to the user's decision on digital payment. It is obvious that there is a gap in how users' adaptive behaviour skills toward digital payment uptake and countering cyber danger and risk.

Any technological component consist a risk (Jansen, 2018). About 49.8% of online users are feeling uncertain or insecure while using the internet (Malaysian Communications and Multimedia Commission, 2020) with most people are unaware of the digital risk and potentially are at risk whilst using it (Medeiros et al., 2020). Thus, it led to the increasing number of using digital payments resulted in fraud risk (Afridi et al., 2021). Despite the hazards or threats, the number of e-wallet users is encouraging and has garnered public attention, but still limited acceptance compared to other basic payments (BNM, 2022). This demonstrates that the user has an adaptive behaviour toward the e-wallet. As if they believe it is too hazardous, the behaviour reflected is not to use it, and they attempt to avoid it. According to Alsaad and Al-Okaily (2021) said that the human decision-making is influenced by the dangers and threats they are aware of. Even though, user aware with the knowledge of threat and risks, user still can be a cyber victim.

Individual attitudes and perceptions have a significant impact on future behavior. Despite their poor level of comprehension and pessimistic outlook on e-wallet usage, individuals have adopted some cautious practices. In addition, if a person is aware of actions that can be taken and believes that these actions may reduce his risk of disease or its severity, he is more likely to engage in them. To avoid the spread of the current epidemic and remain safe, greater levels of knowledge and good attitudes can result in adaptive behaviors relating to the digital payment. There is a strong need for research on the attitudes that motivate user adaptive behavior towards e-wallet adoption, so that financial service providers may enhance their

marketing and product offers and increase product demand. Utilizing the protection motive theory, this study examined the protective behavior of users.

## 2. Problem Statement

It cannot be denied that the technology is advanced and that present users can use an e-wallet. However, if the user displays careless behavior or attitude, it will be problematic. Even though the user's adaptive behavior towards e-wallets is based on their knowledge-related risk, the increasing number of cyber risk security issues is still cause for concern. In Europe, 27% of users choose not to utilize digital payments due to poorly regulated security concerns (Cisco, 2017). In addition, Gnaneswaran (2020) stressed in its report that cyber users also believe they will be cyber victims in the future. Besides, based on the figure above, about 13,000 cybercrime reports cost RM539 million in 2019. 17,000 in 2020. Over 20,000 cases cost RM560 million last year. Until February, RM114 million was lost in 3,273 incidents. It demonstrates that many of the threats that country faces now and in the future are based on new technologies, and that these threats are altering the national security landscape.

Everything that is connected to the internet is vulnerable to cyber threats. The cybersecurity framework's effectiveness was questioned. The most prominent cyber hazard in Malaysia has been online fraud as an example of a cyber risk. Cybercrime reports collected by the Royal Malaysian Police in 2018 and 2019 indicate that telecommunication fraud, e-commerce, the 419 scam (also known as the Nigerian Scam), and e-financial fraud are among the most prevalent risks. An individual will confront security issues when adapting to digital money changes. Malaysia recently experienced one of the worst data breaches in history, with the data of 46,2 million mobile customers hacked and exposed online. If this situation persists in the future, it will impede sustainable economic growth and thwart Malaysia's ambition of being the digitalization hub of Asia by 2030. Interestingly, according to Afridi et al (2021), studies on the security of digital transactions are still uncommon, particularly during pandemic season.

Based on the issues above, the need to studies on the adaptive behavior toward the e-wallet. Most of the researchers study the adaptive behavior have always preferred on the health context, digital payment, flood, and climate change. Clearly, there is still too little research done on the e-wallet. The limited studies on the adaptive behavior in the context of youth attitude is found remain unclear and uncertain (Jassim Ahmad Al-Gasawneh, Ghada Al-Rawashdeh, Ali Zakariya Al-Quran, Ahmad Mtair Al Hawamleh, Nawras M. Nusairat, 2021). In addition, the risk attitude of the user also will be assessed by identify how the user state mind towards e-wallet's potential risk and threat exposure.

Generation Z has been declared as the e-wallet's most active user. Active users of digital payment include Generation Z, with ages ranging from 5 to 21, and Generation Y, with ages ranging from 22 to 38. This is since their attitude plays a crucial part in describing the adaptable behavior of digital payment adopters. An increasing amount of research acknowledges the significance of attitude in affecting the adaptive behavior of users. Fatokun et al. (2019) discovered that the younger generation lacks exposure and awareness of digital payments, making it possible for them to become victims of cybercrime. Compared to the

older generation, the younger generation is proficient with texting and social media, but they are more cautious regarding digital payment matters. This study has therefore focused on the younger generation's ability to make judgments and comprehend their adaptive behavior for e-wallets.

China's Gen Z youth are more susceptible to online fraud than their elders, even though China is the quickest nation to fully adopt digital (Chen, 2021). Lack of understanding and education can expose the cyber risk victim to danger. According to Fatokun et al. (2019), undergraduate students are less educated of and vulnerable to cyber risk than graduate students. The elderly is more cautious when using digital payment methods. What cyber-related issues should users be more aware of? The advancement of this research raises several concerns, such as what is the relationship between risk attitude and adaptive behaviour? Is the age of the user strongly correlated with their attitude? Therefore, for a digital culture to be effective, attitudes, values, and behaviours must adapt to the digital transformation agenda (Boey, 2020). The Malaysian Economic Blueprint also highlighted the ability of Generation Z to achieve these goals. Although, Generation Z is expected to become the largest group of people making e-payments soon, there is still a paucity of research in Kuala Lumpur about the use of electronic wallets for online shopping by this generation. Rural areas were found to have fewer users of electronic wallets at the time due to inadequate connectivity and understanding of e-wallets. This was shown to be the case. This investigation will fill the gap and expand understanding. This study should help marketers in Malaysia understand Generation Z e-wallet use. The research goal is to emphasize the role of user attitudes in e-wallet payment behavior. Thus, to assess adaptive behavior, e-wallet usage attitudes must be examined.

### **3. Literature Review**

#### *3.1 Adaptive Behavior*

In recent years, there has been a growing trend towards adaptive behavior on digital payment. This is due in part to the increasing availability of digital payment options, as well as the growing awareness of the benefits of using digital payments. Adaptive behavior on digital payment refers to the willingness of individuals to adopt and use digital payment methods (Arora & Aggarwal, 2013). The investigation of the adaptive behavioural is important because if the outlined assumptions do not hold, there is a risk of creating and strengthening inequalities in digital payment service. According to Sahi et al. (2022) reported that the low of user digital payment is due to the risk such security. As understood that all the problems happened is cause by the human and need to be reserved by human behavior (Wang et al., 2019). Security is an essential component of any information or payment system. The alteration or any unintended change, unauthorized access to the information, and rapid accessibility to approved users' clients on demand are three crucial components of data security (Khan & Alshare, 2015).

Low perception and a lack of security, on the other hand, will lead to a lower level of trust in the adoption of systems and technologies (Chen, 2018). Any security compromise will undermine trust and adoption of the e-wallet system. The research also showed that

three-quarters (76%) of Malaysian consumers prioritize payment safety and fraud prevention.

As the trend towards adaptive behavior on digital payment continues, it is likely that we will see a decline in the use of cash and checks. This will affect companies and customers in several ways, such as Businesses will have to change how they handle funds to accept digital payments. People will have to learn how to use digital means of payment. To protect against fraud, there will need to be more security steps. In general, it's a good thing that digital payments are becoming more flexible. It could help make every day easier, safer, and more productive.

### *3.2 Self-Efficacy*

Self-efficacy in individual is developed through the belief that they possess. For the self-efficacy and risk attitude are two important concepts in psychology that have been studied extensively (Bandura, 2005). Self-efficacy is a person's belief in their ability to succeed at a task, while risk attitude is a person's willingness to take risks (Rohrmann, 2008). There is a positive relationship between self-efficacy and risk attitude. People who have high self-efficacy are more likely to take risks, while people who have low self-efficacy are more likely to avoid risks. This is because people with high self-efficacy believe that they can succeed, even if the task is difficult or risky.

Self-efficacy affects risk attitude for several reasons. Self-efficacy affects risk perception. High self-efficacy people see risks as challenges to overcome, while low self-efficacy people see them as threats to avoid. Second, self-efficacy impacts risk-taking. When facing danger, people with strong self-efficacy utilise positive coping mechanisms including problem-solving and planning. Low self-efficacy increases risk avoidance and denial. Third, self-efficacy affects risk-learning. Self-efficacy helps people learn from failures and take chances again. Low self-efficacy leads to giving up after mistakes and avoiding risks. Overall, the relationship between self-efficacy and risk attitude is a complex one that has been studied extensively by psychologists. Self-efficacy is a positive factor that can help people to take risks and to succeed.

### *3.3 Risk Attitude*

Risk Attitude is "an individual's positive or negative feelings (evaluative effect) about performing the target behaviour" in an uncertain scenario (Ajzen & Fishbein, 1972). It includes both risk takers and risk averse individuals. The risk attitude is a decided response to uncertainty that matters, influenced by perception. According to Africa et al. (2020), the relationship between attitude and purposeful behaviour has been extensively examined in the field of information systems research. In addition, the partnership must emphasise online payment. It is believed that a favourable attitude towards protective measures will have a favourable effect on the adoption of such measures. In general, for a transition to be successful, people must be willing to implement it (Mills & Zheng, 2019).

Risk attitudes were the most closely linked to adaptive behavior. The stronger the risk-taking mindset, the greater the likelihood of adaptation., given that a positive attitude towards a specific behavior is thought to positively affect that behavior (Ajzen & Fishbein, 1972).

### *3.4 E-Wallet*

The emergence of e-wallets in this country is extremely exciting. All parties, including the financial services sector and individuals, are attempting to offer and adapt to this shift. Aside from online banking, users are interested in and accept electronic wallets (e-wallets) such as Touch and Go, Grab Pay, and Shoppe Pay. The rise in demand for digital payments has resulted in greater acceptability among internet users. Furthermore, because the digital economy is currently expanding well, this will have an impact on Malaysia's long-term economic development. The COVID19 epidemic has had an impact on the economic digitalization transition. The advantages of this digital payment could save time and money, and they can also help to reduce the risk of fraud.

However, the fastest developing of digital economy along with the advantages, there are so many threats or risk that impacted the user over the significant opportunities. The threat such cyber-attacks involving the data privacy and missing, online fraud and scam (Sathiyamurthy, 2019). According to SAC Fazlisyam Abdull Majid from PDRM's commercial crime department, between Jan and Sept 2020, had been reported that 4,764 Macau scam cases involving losses of over RM232 million, and 2,433 arrests. Its worrying trend and he believes that internet created opportunities for scammers, and everyone has potential victims of scams. Such scam online face mask, immunisation, fake government aid text and etc.

Although in the report issued by Khazanah stated the level of risk involving digital is very minimal but if taken lightly will cause digitization to lose focus or security will be questioned. Kuhlicke et al. (2020) stated that the significant challenges relates to digital payment is to insuring that user are aware of cybersecurity risks and can respond to those risks in a meaningful way. Simple policy campaigns or warning messages, intended to increase their awareness of the risks involved are not always. This is relying on users making very informed or rational decisions (Acquisti, Alessandro, & Laura Brandimarte, 2015). Also, users find it relatively easy to dismiss the threat as irrelevant or unlikely, or they fail to act, simply because they have neither the time nor the skills to respond (Bulgurcu, Cavusoglu, & Benbasat, 2010).

### *3.5 Generation Z*

The generation Z acceptance towards digital payment especially e-wallet among the Malaysian is increasing (Gomes, 2022). Generation Z are known as potential adopters of digital which they are more on technology savvy and easy with different types of payment method (Wei et al., 2021). The government has identified the young generation to be the dominant vehicle to move the Malaysian digital economy. The power of knowledge of them is expected to be pumped into this digitalization and this will have a good return for the country. Young generations are afforded opportunities for self-development is either in venture into business or do a transaction. Despite all the advantages, there are an issue that could give an impact to the young generation behavior.

The issues that relating to the behaviour among the young generation will always be an important agenda. Hence, all the various risks and opportunities of digital money are not



manifest and are not the same for all the group of individuals. Indeed, they do not benefit equally from the digital money and in general, this generation who are vulnerable offline tend to be more vulnerable in online spaces as well. Additionally, stressed that youth generation easy to become a victim compare to millennials because they had little experience and knowledge towards the technology (Fatokun et al., 2019). Are the Generation Z really know and aware in handling the digital risk or just follow the trend in proceed with the e-wallet application?

The behavioral intention and promotional activities are the drivers of the young generation's actual usage of mobile payment. The perceived risk is found to employ a negative impact and reflecting the risk-averse preferences of the young generation. The findings in this research have important implications for the development of promotion programs motivating the young generation's adoption of mobile payment (Wei et al., 2021). This can be as a benchmark for the future potential Malaysia digital economy to embark more effective as well as gain more profit to the country.

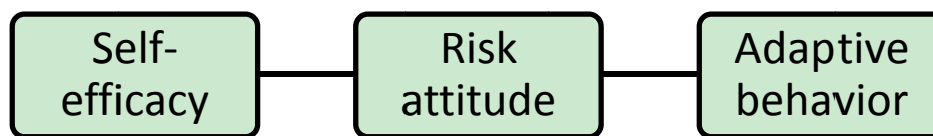


Figure 1. The research framework

#### 4. Conclusion

As for the conclusion, the study towards self-efficacy and e-wallet risk as basis underlying theory had been accelerated ever since the covid implication since early 2020. However, the issues of security on e-wallet remains the strongest draw-back and it could contribute to the declining number of users if this issue is not been addressed effectively in the future (Sahi et al., 2022). Therefore, by reviewing the pattern of studies on the behavior adaptation with related issues will help in understanding the individual perception and belief toward the usage of digital payment. For future research, researcher could review from different angle of digital payment such as the usage of debit or credit card or online banking. Most of the paper researched focused on the quantitative research, thus its suggested to have qualitative research on PMT and e-wallet study. Other than that, the unit analysis could be change to the old folks since they is actually possess a money to spend rather than young gen. In addition, the adoption on other theoretical basis shall also encouraged to have better findings.

#### Conflicts of Interest Statement

All authors declare that there are no conflicts of interest to disclose.

#### References

Acquisti, A., & Laura, B. G. L. (2015). Privacy and human behavior in the age of information. *New Electronics*, 40(16). <https://doi.org/10.1017/9781108943321>

Africa, S., Development, S. A., Acyl, F., Free, T., Area, T., Summit, T., ... Summary, E. (2020). 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析. *Human Relations*, 3(1), 1–8. Retrieved from [http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=bth&AN=92948285&site=eds-live&scope=site%0Ahttp://bimimpactassessment.net/sites/all/themes/bcorp\\_impact/pdfs/em\\_stakeholder\\_engagement.pdf%0Ahttps://www.glo-bus.com/help/helpFiles/CDJ-Pa](http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=bth&AN=92948285&site=eds-live&scope=site%0Ahttp://bimimpactassessment.net/sites/all/themes/bcorp_impact/pdfs/em_stakeholder_engagement.pdf%0Ahttps://www.glo-bus.com/help/helpFiles/CDJ-Pa)

Afridi, F. E. A., Ayaz, B., & Irfan, M. (2021). Adoption of online retail banking practices as a precautionary protective. *Int. J. Hum. Capital Urban Manage*, 6(August), 1–10. <https://doi.org/10.34069/AI/2021.41.05.17>

Ajzen, I., & Fishbein, M. (1972). Attitudes and normative beliefs as factors influencing behavioral intentions. *Journal of Personality and Social Psychology*, 21(1), 1–9. <https://doi.org/10.1037/h0031930>

Ali, M. (2017). Investigating Maturity of Mobile Commerce Adoption: A Qualitative Study. *Journal of Internet Banking and Commerce*, 22(3), 1–24. Retrieved from [https://search.proquest.com/docview/1992199025?accountid=14744%0Ahttps://cbua-us.primo.exlibrisgroup.com/discovery/openurl?institution=34CBUA\\_US&vid=34CBUA\\_US:VU1&lang=es?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ](https://search.proquest.com/docview/1992199025?accountid=14744%0Ahttps://cbua-us.primo.exlibrisgroup.com/discovery/openurl?institution=34CBUA_US&vid=34CBUA_US:VU1&lang=es?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ)

Alsaad, A., & Al-Okaily, M. (2021). Acceptance of protection technology in a time of fear: the case of Covid-19 exposure detection apps. *Information Technology & People*, ahead-of-print. <https://doi.org/10.1108/ITP-10-2020-0719>

Arora, N., & Aggarwal, A. (2018). The role of perceived benefits in formation of online shopping attitude among women shoppers in India. *South Asian Journal of Business Studies*, 7(1), 91–110. <https://doi.org/10.1108/SAJBS-04-2017-0048>

Bandura, A. (2005). The Evolution of Social Cognitive Theory. In *Great Minds in Management* (pp. 9–35).

BNM. (2022). *Basic Payments Indicator 2022* (Issue Cic).

Boey, E. (2020). *Finance-Digital payments give users more bang for their ringgit*. The Edge Market, Malaysian's Digital Transformation.

Bulgurcu, B., Cavusoglu, H., & Benbasat, I. (2010). Information security policy compliance: an empirical study of rationality-based beliefs and information security awareness. 34(3), 523–548. <https://doi.org/10.2307/25750690>

Chen, C. (2021). Why more of China's digital-savvy Gen Z youth are falling victim to online fraud than their elders. *The Star*, 2019–2021.

Chen, Y. (2018). Security risk tolerance in mobile payment: A trade-off framework [OLD DOMINION UNIVERSITY]. In *Information Technology & Decision Sciences*. <https://doi.org/10.25777/6ndk-eq41>



- Cisco, C. V. N. (2017). *Global mobile data traffic forecast update, 2016–2021*.
- Clarke, R. (2019). Risks inherent in the digital surveillance economy: A research agenda. *Journal of Information Technology*, 34(1), 59–80. <https://doi.org/10.1177/0268396218815559>
- Fatokun, F. B., Hamid, S., Norman, A., & Fatokun, J. O. (2019). The Impact of Age, Gender, and Educational level on the Cybersecurity Behaviors of Tertiary Institution Students: An Empirical investigation on Malaysian Universities. *Journal of Physics: Conference Series*, 1339(1). <https://doi.org/10.1088/1742-6596/1339/1/012098>
- Gnaneswaran, D. (2020). *Malaysia experienced general decline in cybercrime encounters; Cybercriminals shifting focus to COVID-19 themed attacks: Microsoft Security Endpoint Threat Report 2019*. Microsoft Malaysia News Center, December 2019. Retrieved from <https://news.microsoft.com/en-my/2020/07/20/malaysia-experienced-general-decline-in-cybercrime-encounters-cybercriminals-shifting-focus-to-covid-19-themed-attacks-microsoft-security-endpoint-threat-report-2019/>
- Gomes, V. (2022). *E-Wallet: Digital payments pivotal to Malaysia's financial services industry*. The Edge Markets. Retrieved from <https://www.theedgemarkets.com/article/ewallet-digital-payments-pivotal-malaysias-financial-services-industry>
- Jansen, J. (2018). *Do you bend or break? Preventing online banking fraud victimization through online resilience*. Retrieved from <http://www.evelienjagtman.com>
- Khan, H. U., & Alshare, K. (2015). *Factors influence consumers' adoption of mobile payment devices in Qatar* Factors influence consumers' adoption of mobile payment devices in Qatar Abeer Musa Habib Ullah Khan \* and Khaled A. AlShare. October. <https://doi.org/10.1504/IJMC.2015.072100>
- Kuhlicke, C., Seebauer, S., Hudson, P., Begg, C., Bubeck, P., Dittmer, C., ... Bamberg, S. (2020). The behavioral turn in flood risk management, its assumptions and potential implications. *WIREs Water*, 7(3), 1–22. <https://doi.org/10.1002/wat2.1418>
- Malaysian Communications and Multimedia Commission. (2020). *Internet Users Survey 2020*. In The Internet Users Survey.
- Medeiros, A. S., Martinez, L. F., & Martinez, L. M. (2020). Assessing the Determinants of Millennials' Online Protective Behavior: How Their Protection Motivation Translates into Actual Use Behavior. In *Advances in Digital Marketing and eCommerce* (Vol. 2020, Issue 2020, pp. 153–162). [https://doi.org/10.1007/978-3-030-47595-6\\_20](https://doi.org/10.1007/978-3-030-47595-6_20)
- Mills, A. M., & Zheng, Z. (2019). *The Future of Identity Management: Understanding Consumer Attitudes Towards Biometric Identification*. CONF-IRM 2019 Proceedings. Retrieved from <https://aisel.aisnet.org/confirm2019/14>
- Olusolade, A. F., & Aji, Z. M. (2020). The Mediating Role of Perceived Security on the Relationship between Internet Banking Users and their Determinants. *International Journal of Advanced Research in Engineering and Technology (IJARET)*, 11(2), 296–318. Retrieved

from

<http://www.iaeme.com/IJARET/issues.asp?JType=IJARET&VType=11&IType=2JournalImpactFactor%0Awww.jifactor.comElectroniccopyavailableat:https://ssrn.com/abstract=3553853>  
<http://www.iaeme.com/IJARET/index.asp297http://www.iaeme.com/IJARET/issues.asp?JType=IJARET>

Rohrmann, B. (2008). *Risk Perception, Risk Attitude, Risk Communication, Risk Management: A Conceptual Appraisal* Keywords. Abstract: February.

Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F. A., & Amosh, H. Al. (2022). The Research Trend of Security and Privacy in Digital Payment. *Informatics*, 9(2). <https://doi.org/10.3390/informatics9020032>

Sathiyamurthy, S. (2019). Bulletproof Risk Management to Thrive in the Digital Economy. 3, 1–8.

Wang, Y., Liang, J., Yang, J., Ma, X., Li, X., Wu, J., ... Feng, Y. (2019). Analysis of the environmental behavior of farmers for non-point source pollution control and management: An integration of the theory of planned behavior and the protection motivation theory. *Journal of Environmental Management*, 237(October 2018), 15–23. <https://doi.org/10.1016/j.jenvman.2019.02.070>

Wei, M. F., Luh, Y. H., Huang, Y. H., & Chang, Y. C. (2021). Young generation's mobile payment adoption behavior: Analysis based on an extended utaut model. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(4), 1–20. <https://doi.org/10.3390/jtaer16040037>

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