

GEN Z'S INFORMATION BEHAVIOR IN THE ERA OF AI: A STUDY APPLYING WILSON'S THEORY (CASE STUDY IN JAVA ISLAND)

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Receive : 09 Sept 2025
Accepted : 11 Nov 2025
Published: 12 Nov 2025
DOI : 10.30829/jipi.v10i2.25964

Abstract

Information behavior refers to all activities related to human interaction with information. Generation Z (Gen Z), the generation born in the technological era, is no stranger to the use of artificial intelligence (AI) in their daily lives. This study aims to analyze Gen Z's information behavior in this AI era from the perspective of Wilson's Information Behavior Theory (1996). The variables examined include passive attention, passive search, active search, and ongoing search information behaviors. Data analysis was conducted descriptively and inferentially using Moderated Regression Analysis (MRA) with the help of SPSS 26.0 software. The research instrument used an online questionnaire. The research respondents consisted of 260 Gen Zers spread across the island of Java. Respondents came from diverse demographic backgrounds, such as freelancers, students, and housewives. The results of the study show that demographic differences did not significantly affect AI usage patterns, as the majority of respondents (77.5%) chose AI personalization on social media as the most frequently used AI. Further findings show that the average values for information behavior are passive attention at 4.05, passive search at 3.91, active search at 4.04, and ongoing search at 3.97. This indicates that Gen Z in the AI era has a fairly balanced pattern of information behavior. They are not only passive in interacting with information that often comes by chance through social media algorithms, but also actively search for information when needed through search engines. Overall, this study shows that AI-based digital environment factors have a stronger influence than demographic factors in shaping Gen Z's information behavior. This also shows the relevance and expansion of the application of Wilson's Theory (1996) in the context of AI.

Keywords: Artificial intelligence, Gen Z, Information Behavior, Wilson's Theory (1996)

INTRODUCTION

Information behavior encompasses all human actions involving how individuals interact with information. (Case, 2007). These actions can take the form of purposeful information seeking to fulfill specific needs, as well as incidental information exposure, whereby information is obtained by chance or without any intention to seek it out. Beth added that information behavior also includes when someone avoids information or refuses to use it. Information

behavior is not limited to actions such as needing, trusting, seeking, organizing, managing, evaluating, sharing, and using information; it also includes non-actions, namely when someone is in a situation where they do not need information, does not seek it, and does not use the information they obtain (St. Jean et al., 2021).

Moreover, in this day and age, we are faced with a flood of personalized information, which has often become part of our daily lives without us realizing it. For example, AI algorithms are used in search engines, social media recommendation systems, and virtual assistants to personalize content. These algorithms, as the basic infrastructure in the digital information ecosystem, are capable of adapting in real time to deliver relevant content based on users' needs and preferences (Wang et al., 2026).

This directly affects what we see and access, changing previously known information behavior patterns. Behavior patterns that developed before the AI era tended to be more focused on formal and structured sources. Deliberate information searches often involved more structured and systematic methods such as browsing library catalogs, consulting experts, or reading physical documents. Unintentional information discovery occurred on a smaller scale and was less automated, for example through casual conversation or stumbling upon a book on a shelf.

The concept of information behavior itself has become an important focus in information science studies. Donald O. Case (2007) in his book *Looking for Information* explains that theories in this field continue to evolve alongside developments in the times and technology. In the early days of information behavior studies, researchers mostly used theories and frameworks from classical psychology and sociology. Their approach was based on the understanding that human behavior in seeking, using, and understanding information can be explained through concepts derived from the fields of psychology and sociology. For example, in psychology, theories about motivation, cognition, and decision-making processes are used to understand how individuals interact with information. Meanwhile, in sociology, theories about social structure, norms, and social dynamics help explain how social context influences information search and use behavior.

Professor Wilson, recognized as an indisputable contributor to information behavior research, has introduced highly influential models in this field (Maceviciute, 2025). One influential information behavior theory is Wilson's Information Behavior Theory (Widiyastuti, 2016). This theory was developed in the 1980s and is considered one of the main theoretical frameworks underlying the study of information behavior. (Al-Suqri & Al-Aufi, 2015).

Wilson Second Model (1996)

In the book *Looking for Information*, Donald O. Case provides an explanation of the evolution of T.D. Wilson's information search behavior model. Case specifically discusses Wilson's "second model" (often referred to as the 1996 Wilson model as an improvement on the previous version. This model is more complex and attempts to describe the information search process in a broader context, emphasizing the role of intervening variables that influence the information search process.

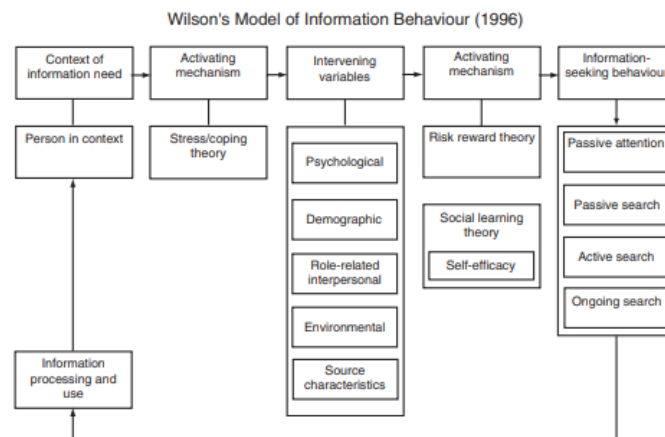


Figure 1. Wilson's information search behavior Second Model (1996)

The following are the important parts of Wilson's Second Model according to (Case, 2007) based on the diagram in Figure 1:

(1) Context of Information Need: This context refers to the broader environment or situation in which there is a need for information. To meet their information needs, each individual will make efforts or search for information in various unique and diverse ways, or using the same methods. (Izzati, 2025). (2) Activating Mechanisms: these are essentially the driving factors that motivate a person to start searching for information. These mechanisms answer the question: What causes a person to feel the need to search for information? (3) Intervening Variables: These include: (a) psychological factors, (b) demographic factors such as age or education, (c) social roles, (d) environment (external conditions, such as resources and opportunities available to individuals), and (e) the nature of the information source (whether the information is easily accessible or not). (4) Information Seeking Behavior: This is an important element of Wilson's new model of information behavior, particularly the recognition of different types of search behavior and the role of information use in the feedback process. Wilson identifies four distinct types of search behavior that people engage in when faced with an information need:

- a) Passive Attention: This occurs when someone has no intention of seeking information or no need to seek information, but happens to be exposed to information that they do not need. For example, seeing advertisements when opening a feed on Instagram.
- b) Passive Search: More deliberate than Passive Attention, this involves someone who is not actively searching. There is a need for information, but it is not urgent. For example, finding information from recommendations based on search algorithms on Instagram.
- c) Active Search: Here, someone deliberately searches for specific information to meet predetermined needs. For example, using a search engine by typing in the required topic, using a library catalog, or asking an expert for help in finding specific information.
- d) On-Going Search: A continuous or repetitive search process due to complex or constantly evolving information needs. For example, a researcher who monitors developments in a field for months or years.

(5) Information Processing and Use: Wilson's model also emphasizes the importance of what happens after information is found. Once someone has obtained information, does it meet their initial needs? Is it useful or sufficient? If the information obtained is adequate to meet their

needs, the search process can end. If not, the person may start the search process again, this time based on what they have learned or a new understanding of their needs. Thus, this model understands information search as a dynamic and iterative process, rather than a one-time event. The feedback loop ensures that the search process is responsive to the effectiveness of the information obtained.

Although this model has been widely used to understand information search behavior, Wilson developed it in the pre-digital era, so the intervention variables he emphasized psychological, social, and demographic did not explicitly include the role of digital technology and artificial intelligence (AI) algorithms. Compared to Ellis's model, which focuses more on the stages of searching, or Kuhlthau's model, which emphasizes the affective aspects, Wilson's model is indeed more comprehensive but tends to be broad, requiring adaptation to suit the current digital context. (Widiyastuti, 2016).

The breadth of Wilson's framework is actually an advantage because the concept of intervening variables can be expanded to include technological factors as new elements that influence information behavior. Wilson's model itself distinguishes between information seeking behavior (focused on information discovery strategies) and information searching (focused on interaction with computer-based information systems) (Li et al., 2025). Thus, this model remains relevant for use, while also providing scope for further development in the digital age. This study uses Wilson's Theory (1996) as a basic framework for understanding the information behavior of Generation Z, while also testing the extent to which this classic model can be updated in the context of an AI-based information ecosystem.

Stuart Russell and Peter Norvig in *Artificial Intelligence: A Modern Approach* define AI functionally as the computational part of the ability to achieve goals in the world. (Russell & Norvig, 2022). This shows that AI has now become a component in systems that perform calculations to assist humans, and furthermore in terms of achievement and information. Spiegeleire (2017) states that AI is the ability of machines to perform cognitive tasks in an intelligent manner. This ability performs tasks that would normally require human intelligence to complete. (De Spiegeleire et al., 2017) AI has become the latest technological innovation that provides information and does everything humans want. AI has created a "rich ecology" between humans and electronic devices (Norman, 2013).

Although useful, this approach tends to be technological in nature and does not highlight the impact of AI on everyday information behavior. This study attempts to bridge this gap by positioning AI not merely as a tool, but as an information environment that shapes human interaction patterns with information, especially for Gen Z.

Gen Z grew up alongside the development of technology, especially the internet and social media (Sekar Arum et al., 2023). Everything Gen Z does is usually related to the digital world. (A'yun, 2025). This can indirectly influence their personalities and characteristics. One example is how they interact with information. The emergence of AI-generated content (AIGC), such as ChatGPT, has marked a new era of AI that is changing the overall information behavior of individuals (Ruan, 2025).

Studies on Gen Z's information behavior have also been conducted extensively. Some of them include "Perilaku Informasi Gen Z Melalui Akun Autbase Kuliner dalam Media Sosial X" by Elvin Edsa (Caesarani & Suharso, 2024) dan "Memahami Perilaku Informasi Gen-Z dan Strategi Melawan Disinformasi: Sebuah Tinjauan Literatur Penggunaan Media Sosial" by Diemas Arya Komara. (Komara & Widjaya, 2024). These studies have specifically discussed how Gen Z interacts with information. How they find, analyze, and use the information they obtain on

digital platforms. However, both studies focus only on active searching. In fact, information behavior also includes passive behavior. This line of thinking is in line with the need to clearly distinguish between active media consumption (involving deliberate cognitive engagement) and passive consumption (occurring automatically or habitually) (Hu & Ou, 2025).

Seeing this gap, researchers tried to understand information behavior from the perspective of Wilson's Theory, which categorizes information behavior not only as active behavior but also passive behavior, divided into four dimensions, namely passive attention, passive search, active search, and ongoing search. Given the dominance of AI technology in the daily lives of Gen Z, it is important to understand descriptively how they interact with information influenced by digital environments such as AI. Researchers also hope that the results of this study will not only contribute theoretically to expanding the application of Wilson's Theory in the context of the AI era, but also have significant practical implications for the design of information services.

In addition to describing the patterns of information behavior, this study also aims to analyze the factors that influence Gen Z's information behavior, particularly the extent to which experience in utilizing AI and demographic factors such as age, occupation, and education play a role in shaping their information behavior. This approach is expected to not only expand the application of Wilson's Theory in the context of the AI era, but also provide empirical understanding of the dynamics of the information behavior of the digital generation.

Understanding Gen Z's passive and active behavior patterns provides us with clues that can serve as the basis for designing information systems that are now more personalized, relevant, and automated (Hirvonen et al., 2024). Libraries, for example, understanding Gen Z's information behavior is important for developing more adaptive AI-based retrieval and recommendation systems. For example, online catalogs can utilize machine learning algorithms to display collections relevant to users' search history, similar to how social media presents personalized content. Similarly, the public sector needs to consider the role of algorithms in disseminating information in order to reach the younger generation more effectively. This research is relevant not only for the academic realm, but also for the design of AI-based information services that are more responsive to the characteristics of the digital generation.

RESEARCH METHOD

This study uses descriptive quantitative methods with inferential analysis. Descriptive quantitative methods are systematic studies that use numerical data and statistical techniques to describe the characteristics of a population or phenomenon, relying on valid and reliable variable measurements and measurement levels to summarize and interpret data without focusing primarily on causal explanations (Babbie, 2021). Inferential analysis was used to identify the influence of Gen Z's experience in using AI technology on their information behavior in four main dimensions developed from Wilson's information behavior theory (1996).

The population in this study is Gen Z. According to data from the Badan Pusat Statistik (BPS) in 2020, to date, the Gen Z population in Indonesia has reached more than 74 million people, with an estimated 35 million Gen Zers living on the Island of Java alone. (Badan Pusat Statistik, 2020).

The research sample consisted of 260 respondents, determined using the Slovin formula with a margin of error of $\pm 6.1\%$ and a confidence level of 95%. The sampling method used was non-probability sampling using purposive sampling. This method was chosen based on

considerations of time and budget efficiency, as well as the need to obtain respondents with specific characteristics relevant to the research objectives. The criteria specified for respondents were as follows: 1. Residing on the island of Java. 2. Aged 18 to 27 years. 3. Active users of AI technology.

With this sample size, the study does not intend to make statistical generalizations about the entire Gen Z population in Indonesia. The generalizations made are analytical in nature, namely to strengthen the understanding and application of Wilson's Theory in the context of Gen Z's information behavior. This research instrument used an online questionnaire distributed to respondents via the PopSurvey by Populix website between November 19 and November 28, 2024.

The questionnaire uses a 1–5 Likert scale, ranging from Strongly Disagree to Strongly Agree. The variables studied are user experience in AI utilization (X) and information behavior variables (Y): Passive Attention (Y1), Passive Search (Y2), Active Search (Y3), and Ongoing Search (Y4). The moderating variables are demographic factors, including age, education, and occupation. The questionnaire consists of a total of 23 questions. Then, the validity and reliability of the questionnaire were tested. The validity test results using SPSS 26.0 show that for all five variables, the calculated r value is greater than the table r value of 0.3. Thus, all five variables, consisting of a total of 23 question indicators, are declared valid.

Next, reliability testing was conducted in relation to the consistency and predictability of a measuring instrument. The test was carried out by comparing Cronbach's Alpha scores, where the minimum Cronbach's Alpha value was 0.6 or ≥ 0.6 . If the value produced from the SPSS calculation was greater than 0.6, the questionnaire was considered reliable, whereas if it was less than 0.6, it was considered unreliable. The reliability test results show that for the variables Passive Attention, Passive Search, Active Search, Ongoing Search, Gen Z Experience with AI Use (X), the Cronbach's Alpha values are 0.831, 0.900, 0.904, 0.861, and 0.877, all of which are above 0.6. Thus, the variables Passive Attention, Passive Search, Active Search, Ongoing Search, Gen Z Experience with AI Use (X) are declared reliable.

Next is the data normality test. The results of the second Kolmogorov-Smirnov Monte Carlo normality test show that the Sig. values of the regression model above are 0.153, 0.194, 0.151, and 0.136, which are greater than the α value of 0.05. Thus, the Kolmogorov-Smirnov test results from the regression model above have met the normality requirements with a Sig. value $> \alpha = 0.05$. This means that the tested data has a normal distribution. Furthermore, the multicollinearity assumption test is used to measure the level of association, closeness of relationship, or linear relationship between independent variables.

One of the commonly used multicollinearity tests is the Variance Inflation Factor (VIF) test. If the VIF value for variable X is < 10 , then there is no multicollinearity. The VIF values for each variable are less than 10. This means that the data tested does not exhibit multicollinearity. The multiple regression equation also needs to be tested to see whether the variance of the residuals from one observation is the same as that from another observation. If the residuals have the same variance, this is called homoscedasticity, whereas if the variance is not the same, this is called heteroscedasticity. A good regression equation is one in which there is no heteroscedasticity. Heteroscedasticity is tested using the Glejser test to determine whether there is a difference in the variance of the residuals from one observation to another in a regression model. If the variance of the residuals from one observation to another remains constant, it is called homoscedasticity. Based on the results of heteroscedasticity testing using

the Glesjer test, the sig. values of the seven variables above from the four regression models were all greater than 0.05, indicating that there was no heteroscedasticity in the model.

Data analysis was conducted in two stages: (1) descriptive analysis. This analysis was used to describe the characteristics of respondents as well as their level of AI usage experience and Gen Z information behavior. The results were presented in the form of bar charts and average scores for each indicator. (2) Inferential analysis (Moderated Regression Analysis/MRA). This analysis was used to test the effect of independent variables (experience in using AI) on dependent variables (information behavior) with moderating variables (age, education, and occupation). The F test was used to assess the validity of the model simultaneously, while the t test was used to assess the partial effect of each variable. In addition, the R² value (coefficient of determination) is used to see the contribution of independent and moderator variables in explaining Gen Z's information behavior. The analysis was conducted using SPSS version 26.0.

The analytical framework in this study is based on Wilson's Behavior Model (1996), which emphasizes that information behavior is influenced by contextual, psychological, and environmental factors. In the context of this study, AI technology is positioned as a new external factor that acts as an intervening variable, mediating the relationship between information needs and information search strategies. Thus, this study allows for empirical exploration of the extent to which AI usage experiences shape Gen Z's information behavior in an algorithm-personalized digital environment

RESULT AND DISCUSSION

This study involved 260 respondents, all of whom were from Generation Z, aged 18–27 years. The age distribution showed that the majority of respondents were in the 22–27 age group (65%), while the rest were aged 18–21 (35%). In terms of gender, the composition of respondents was relatively balanced between males (47%) and females (53%). In terms of education level, the majority of respondents had achieved a bachelor's degree (57%), followed by high school/equivalent graduates (40%), and a small number with a master's degree (3%).

In terms of job categories, respondents were predominantly employees/professionals (46.9%) and students (26.9%), followed by self-employed workers/creators (18.1%), and a small number of housewives (4.2%) and those who were not yet employed (3.8%). This distribution shows that Gen Z in this study are not only in the education stage, but have also entered the workforce and even created jobs through creative activities. This is important in relation to information behavior, because the information needs of Gen Z may differ between those who are still students and those who are already working or entrepreneurs, as described in Wilson's Model of Information Behavior, which links information needs to work context, social roles, and environment.

Thus, the demographic profile of the respondents is in line with the research objective, which is to understand the information behavior of Gen Z in the AI era. The Generation Z respondents are characterized as digital natives, relatively highly educated, and mostly active in the workforce. These conditions make them a relevant group to analyze using Wilson's Theory approach.

The Balance Between Passive and Active Behavior

The average scores for the four information behaviors based on Wilson's Theory (1996), consisting of passive attention (4.05), passive search (3.91), active search (4.04), and ongoing search (3.97), show that Gen Z's information behavior tends to have a fairly balanced pattern between passive and active behaviors. (See Figure 3)

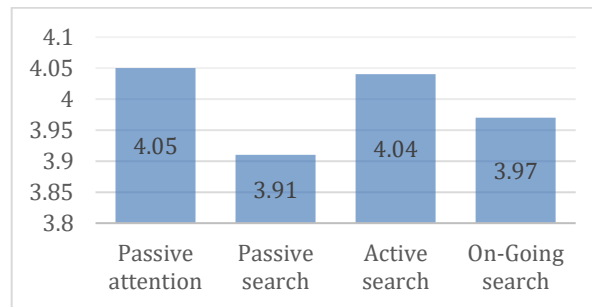


Figure 3. Average score for Gen Z's information behavior

From the image above, it can be seen that passive attention information behavior is the type of information behavior with the highest average value of 4.05. This shows that AI-based recommendation systems have a strong influence in shaping the flow of information to Gen Z, so that they receive more information indirectly or passively. Especially from social media algorithms. This cannot be separated from the fact that Indonesia is known as the country with the most social media users in the world. In 2025, the number of active social media users will reach 143 million. This is equivalent to 50.2% of Indonesia's population at the beginning of 2025. (Kemp, 2025). As active social media users, personal contexts such as entertainment and social media usage habits play a major role in shaping Gen Z's experience of interacting with information.

However, the average active search value is also a high type of information behavior with an average of 4.04. This indicates the complexity of Gen Z's information behavior in the AI era. In this era, the line between deliberately searching for information and accidentally being exposed to information has become blurred. Recommendation systems on social media present content that seems to be sought after, even though users are only opening the application. As a result, Gen Z feels that their information needs have been met without conducting a deliberate search (active search). Passive attention also "feels" like an active action because it is as efficient as active searching. AI meets information needs without much effort from users.

This phenomenon is interesting because conceptually the two are opposites: passive attention occurs without the intention to search, while active search is a deliberate search. This condition indicates the complexity of Gen Z's information behavior in the AI era, where the line between passive and active is blurred. Social media algorithms are capable of making passive exposure feel like the result of active searching, so that Gen Z simultaneously becomes passive consumers and active seekers of information. This expands Wilson's theory, because the technology variable plays a dual role: as a trigger for passive attention and a facilitator of active search.

On Going search is a type of behavior that often occurs after active search (average percentage of 3.59). This could be due to curiosity, leading to a deeper exploration of the information that has been obtained, or it could be due to the need to stay updated with the latest trends. The last type of information behavior is passive search (average of 3.91). This shows

that the process of unintentional searching while looking for other sources of information is not very significant. AI has been very efficient in presenting the information needed (personalization) so that passive search actions are less necessary and rarely interrupted by information outside the main purpose of their search.

The balance between active and passive information behavior among Gen Z in this AI era cannot be viewed as two contradictory elements. Rather, it is a dynamic phenomenon influenced by technological factors, motivation, and awareness of algorithmic systems. In Wilson's Theory, the process of passive information acquisition is an initial stage that can trigger more targeted information seeking when individuals realize the relevance of what they have received or when they feel that the information they have obtained accidentally is actually useful to them. (Wilson, 1996; (Case, 2007). Case also emphasizes that accidentally discovering information actually helps individuals broaden their horizons and form new understandings of a topic.

Furthermore, (Hu & Ou, 2025) shows that awareness of algorithmic systems is a key factor mediating the transition from passive to active behavior on digital platforms, especially on social media. When users understand how algorithms regulate the flow of information, they tend to be more proactive in controlling the process of searching for and consuming news. In libraries, for example, passive users will simply enter keywords and accept the first results without questioning how the system selects information. In contrast, active users understand that search results are determined by algorithms, so they develop strategies such as changing keywords, utilizing metadata, or using subject headings to obtain more accurate results.

These findings are also highly relevant to Gen Z, who are more familiar with the digital environment and accustomed to interacting with AI-based systems that shape their information experience. Meanwhile, (Das & Mandal, 2021) has emphasized that information-seeking behavior is a dynamic action to fulfill academic, social, and personal needs, which shows motivation as the main driver of active behavior.

According to (Maceviciute, 2025), Wilson's thinking continues to place human factors at the center of understanding information behavior amid technological advances. Thus, even though the information environment is now dominated by AI and algorithms, it is individual decisions that determine whether to remain passive or become active, depending on the interaction between consciousness, experience, and information goals. These findings collectively indicate that the balance between passive and active behavior is determined not only by the availability of technology, but also by users' reflective abilities in navigating complex information spaces.

The phenomenon of balancing passive and active behavior is also evident in the context of digital libraries. For instance, users can passively discover e-books or scholarly articles through features like "suggested for you" or "related reading" generated by the catalog system's algorithms. At the same time, however, they actively search using specific keywords or browse subjects through subject headings. This indicates that libraries now function not only as information providers but also as recommendation ecosystems that combine both forms of information behavior simultaneously.

Patterns and Characteristics of AI Use by Gen Z

Descriptively, freelancers and creators are the groups with the highest daily AI usage (47%), followed by employees/professionals (44%), unemployed individuals (40%), and students (37%). Meanwhile, homemakers are the group with the lowest usage (18%). This

pattern shows that work context significantly influences the intensity of AI usage, particularly due to the high demands for productivity and creativity among freelancers and creators.

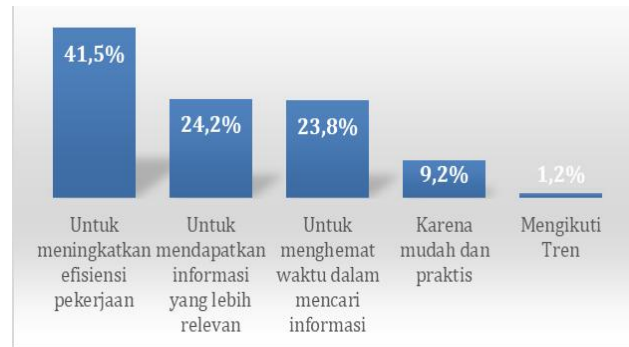


Figure 5. Reasons for Using AI

The daily use of AI and reasons for work efficiency (41.5%) are clear evidence of information-seeking behavior as a response to individual information needs influenced by context (role and environment). AI has become not only a source of information, but also an ‘assistant’ that helps them fulfill their social and professional roles. The second reason for using AI is to obtain more relevant information (24.2%), which is in line with AI’s ability to provide recommendations and personalize information. As shown in Figure 6, AI-powered algorithms on social media are the most frequently used category of AI by Gen Z respondents, at 76.5%. This is followed by AI search engines (65.8%) and product or movie recommendations on e-commerce platforms (65.4%). Next is the use of generative AI such as ChatGPT (55.5%), then chatbots (51.9%), and the lowest is virtual assistants like Siri (46.5%).

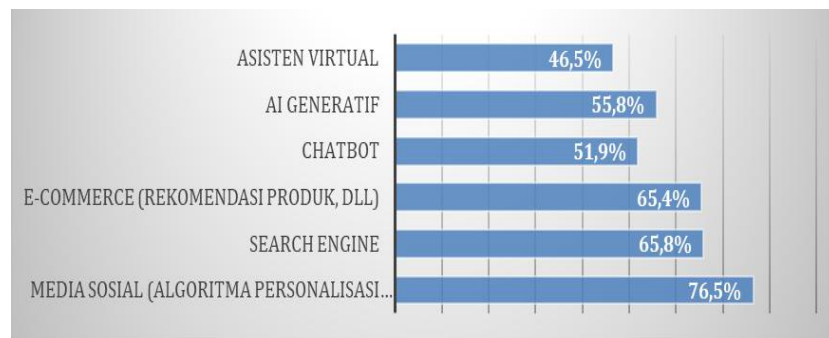


Figure 6. Most frequently used AI categories

Interestingly, even though daily AI users come from the “freelancers and creators” group, personalization on social media remains the most frequently used AI (see Figure 7). AI is widely used to generate personalized recommendations and tailor information for social media users. By analyzing user behavior, preferences, and interactions, AI systems can suggest content, friends, groups, or advertisements that match each user’s interests. This personalization enhances the user experience by making social media feeds more engaging and relevant to each user. AI enables social media platforms to better understand users and provide personalized, timely, and relevant information.

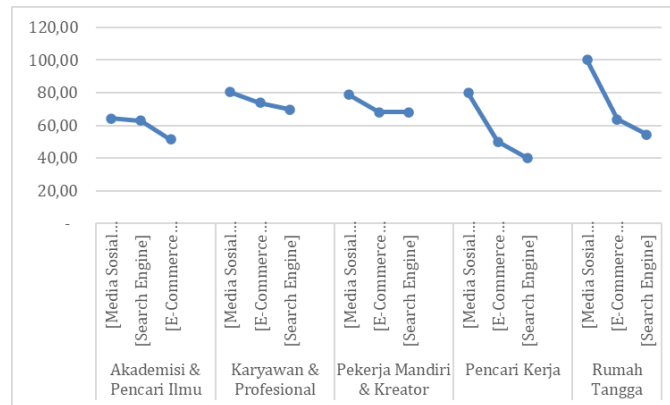


Figure 7. AI usage by job category

In this digital age, the line between personal and professional social media use has become very blurred. Many jobs, such as content creators, freelancers, and even private employees, rely heavily on social media for marketing, branding, networking, trend research, and communicating with customers/consumers. So, in this context, AI algorithms that personalize content on social media also indirectly help their work. The use of AI on social media that is 'frequent' or 'constant' may be an integral part of their work, even though they consciously view the primary reason for using AI as being for "work efficiency" in general.

When asked "Why use AI?", respondents are more likely to answer with conscious and structured motivations, such as "work efficiency" or "saving time". However, the use of AI on social media (such as recommendation algorithms) is often automatic and passive. Respondents may not consciously think they are using AI when opening Instagram or TikTok, even though AI algorithms are working hard to personalize their feeds. Due to its automatic nature, this use can be the most frequent, even surpassing the use of AI tools that they deliberately use for work, such as search engines and generative AI.

These findings support Wilson's theory that information-seeking behavior is often passive and automatic, especially in the context of AI use. The data not only shows that information-seeking behavior can be passive, but also that in the modern digital ecosystem, this passive behavior has become one of the most common and frequent forms of behavior.

After describing AI usage patterns based on job categories, it appears that AI has become an important part of Gen Z's daily activities, whether in academic, professional, or entertainment contexts. To understand the extent of this involvement, more specific measurements of Gen Z's level of experience in utilizing AI-based technology are needed. This experience encompasses not only how often they use AI, but also how AI plays a role in simplifying, accelerating, and improving the effectiveness of information searches. Therefore, the following section presents descriptive results of the variable Gen Z Experience with AI Use (variable X), which is measured through five main indicators.

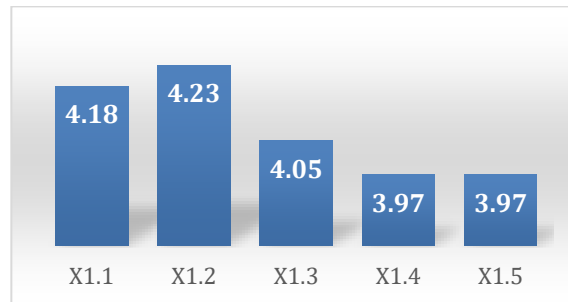


Figure 8. Gen's experience in using AI (Variable X)

The image above shows Gen Z's experience with AI usage (X), which consists of 5 indicators, including: AI helps find the needed information faster (X1.1), AI makes searching for information easier (X1.2), AI makes it easier to find the right information (X1.3), asking AI when experiencing problems and feeling stressed while searching for information (X1.4), The living and working environment requires respondents to use AI at every opportunity (X1.5).

The average score for this variable is 4.03. This indicates that Gen Z has a very positive experience with AI. The highest average score (4.23) shows that they feel AI greatly facilitates the process of searching for information. In addition, they also feel that AI makes searching for information faster and more accurate. This also indicates that for them, AI is not a foreign technology but has become part of the environment that shapes the way they interact with information. In fact, when stressed, an average of 3.97% of respondents seek solutions by asking AI. This shows that AI has gone beyond its function as a mere information search tool. AI is now something that can be considered helpful in overcoming psychological conditions such as stress or frustration, which are strong triggers in Wilson's information behavior model.

In addition, the perception that they must use AI because of their environment (3.73) is the lowest, indicating that even though AI is widely used for work (see the results in Figure 5), Gen Z seems to evaluate the use of AI based on personal reasons, such as wanting to be more efficient, save time, or understand material more quickly, rather than because of demands from their environment. Intrinsic motivation is more dominant than external factors. This is in line with the characteristics of Gen Z, who are more self-directed learners, including in their use of technology (Wardi et al., 2025). AI has also become part of the coping mechanism or strategy for dealing with problems digitally for Gen Z, reflecting a deeper and more complex relationship between humans and technology.

The Influence of Experience vs Demographics

Further analysis was conducted using Moderated Regression Analysis (MRA) to gain deeper insight into whether demographic factors (such as age, education, occupation) truly moderate the relationship between AI experience and information behavior. Data processing was carried out using SPSS (Statistical Package for the Social Sciences) 26.0. The coefficient of determination (R^2) test is conducted to measure how well the model can explain the variation of the dependent variable. The coefficient of determination value ranges between 0 and 1. A small R^2 value means that the ability of the independent variables to explain the variation in the dependent variable is very limited. A value close to 1 indicates that the independent variables provide almost all the information needed to predict the variation in the dependent variable.

Based on Table 4.11, it is known that the Adjusted R Square value of model equation 1 = 0.860. This indicates that 86.0% of Passive Attention is influenced by the variable of Gen Z's

Experience with AI Usage (X), as well as the moderating variables of age, education, and occupation, while the remaining (100% - 86.0%), i.e., 14.0% of Passive Attention, is influenced by other factors outside this study. The Adjusted R Square value of model equation 2 = 0.852. This indicates that 85.2% of Passive Search is influenced by the variable of Gen Z's Experience with AI Usage (X), as well as the moderating variables of age, education, and occupation, while the remaining (100% - 85.2%), i.e., 14.8% of Passive Search, is influenced by other factors outside this study. The Adjusted R Square value of model equation 3 = 0.832.

This indicates that 83.2% of Active Search is influenced by the variable of Gen Z Experience with AI Usage (X), and the moderating variables of age, education, and occupation, while the remaining (100% - 83.2%), which is 16.8% of Active Search, is influenced by other factors outside this study. Meanwhile, the Adjusted R Square value of model equation 4 = 0.859. This indicates that 85.9% of Ongoing Search is influenced by the variable of Gen Z Experience with AI Usage (X), and the moderating variables of age, education, and occupation, while the remaining (100% - 85.9%), which is 14.1% of Ongoing Search, is influenced by other factors outside this study.

The F-test or joint regression coefficient test is used to determine whether the independent variables together have a significant effect on the dependent variable (Ghozali, 2016). Testing is conducted using a significance level of 0.05. The simultaneous regression test (F-test) can be formulated as follows: (1) If Sig. < 0.05, then H0 is rejected, and Ha is accepted (significant). (2) If Sig. > 0.05, then H0 is accepted, and Ha is rejected (not significant). The F values are 228.72, 213.46, 184.87, and 266.01, and the Sig. value is 0.000. Thus, the Sig. value = 0.000 < 0.05, so H0 is rejected, Ha is accepted, and this means that the variable of Gen Z's experience with AI use (X) and the moderating variables of age, occupation, and education together have a significant effect on Passive Attention (Y1), Passive Search (Y2), Active Search (Y3), and Ongoing Search (Y4).

These findings indicate that Gen Z's experience in interacting with AI technology plays a major role in shaping their information behavior, both passive and active. Demographic factors such as age, occupation, and education also contribute to strengthening or weakening this relationship. Thus, this research model has proven to be valid and can explain the relationship between variables empirically.

The t-test results show that the AI Experience variable (X) has a positive and significant effect on the four dimensions of information behavior (Y1–Y4). This indicates that the more Gen Z interacts with AI-based technology, the higher their involvement in various forms of information behavior, both passive (passive attention and passive search) and active (active search and ongoing search). A summary of the test results is presented in Table 8.

Table 8. Summary of t-Test Results

Information Behavior Dimension	Koefisien (B)	t-value	Sig.	Significant Moderation	Main Interpretation
Passive Attention (Y1)	0,627	12.266	0.000	None	AI experiences increase passive information exposure; users often receive information without conscious searching.
Passive Search (Y2)	1.095	10.198	0.000	Age (+), Education (-)	AI facilitates indirect searches; more mature users are more aware, highly educated users are more selective.

Information Behavior Dimension	Koefisien (B)	t-value	Sig.	Significant Moderation	Main Interpretation
Active Search (Y3)	1.005	9.055	0.000	None	AI strengthens active search across demographics; digital fluency is more important than age or occupation
Ongoing Search (Y4)	0,514	9.513	0.000	Age (+), Education (-)	AI encourages continuity of search; older users broaden their horizons, higher education tends to be critical.

The t-test results show that Gen Z's experience with AI use has a significant effect on passive attention ($t = 12.266$; $\text{Sig.} = 0.000$), with a positive coefficient of 0.627. This means that the more experience Gen Z has in using AI-based technology, the greater their tendency to passively accept information from algorithmic recommendation systems, without actively searching for it. These results indicate that Gen Z's experience with AI use has a significant effect on passive attention, meaning that the more experience they have with AI, the greater their tendency to passively receive information through algorithmic systems. These findings are in line with the concept of information encountering proposed by (Erdelez, 1995) which is the process of discovering information accidentally when individuals are not actively searching for it. A recent study by Sun and Adnan (Sun & Adnan, 2025) reinforcing this point by looking at the context of social media, users often find information because of algorithmic systems and certain emotional states, rather than because of explicit search intentions. Thus, passive attention among Gen Z can be understood as a contemporary form of information encountering mediated by artificial intelligence and the affective states of users.

The experience of using AI also has a significant effect on passive search ($t = 10.198$; $\text{Sig.} = 0.000$; $B = 1.095$). These results indicate that AI helps Gen Z find information indirectly when they are engaged in other activities, for example through auto-suggestions or personalized search results. This finding is in line with studies that say that AI familiarity is not only a moderating factor but also an important mediator in shaping technology-based behavior. The higher the level of AI familiarity, the more confident people tend to be in using technology systems. (Marjerison et al., 2025). In the context of passive information searching among Gen Z, it was found that this not only reflects the ease of technology, but also takes the form of social and cognitive adaptation to an information ecosystem that is increasingly driven by algorithms. Interestingly, the variables of age and education also play a significant moderating role, with different directions of influence. Age moderates positively ($t = 2.245$; $\text{Sig.} = 0.026$), indicating that more mature respondents tend to use AI more consciously in the passive search process. Conversely, education level moderates negatively ($t = -3.367$; $\text{Sig.} = 0.001$), meaning that the higher the respondents' education level, the less dependent they are on automatic recommendations. These results reveal an important dynamic: the more experienced and educated a person is, the more likely they are to evaluate the results presented by AI.

Gen Z's experience with AI also has a significant effect on active search ($t = 9.055$; $\text{Sig.} = 0.000$; $B = 1.005$). This means that AI not only facilitates passive acceptance, but also strengthens Gen Z's ability to actively search for information. This shows that high digital skills and technological experience enable them to use AI as an exploratory tool not just a consumptive one. However, the moderation results show that age, education, and occupation do not significantly affect this relationship ($\text{Sig.} > 0.05$). Thus, the ability to actively use AI appears to be cross-demographic, suggesting that digital fluency is determined more by practical

experience than by socio-demographic factors.. Theoretically, this expands Wilson's Model by showing that in the context of the digital generation, information-seeking behavior is not only driven by the need for information but also by familiarity with the technology tools themselves. In this context, AI acts as a cognitive extension (Clark, 2008), expanding human cognitive capacity in accessing and processing information.

The analysis results also show that the experience of using AI has a significant effect on ongoing search ($t = 9.513$; $\text{Sig.} = 0.000$; $B = 0.514$). This means that the more frequently Gen Z uses AI, the more consistently they update and expand their information search continuously. Age and education are proven to significantly moderate this relationship, but in opposite directions. Age has a positive effect ($t = 2.134$; $\text{Sig.} = 0.034$), indicating that as age increases, individuals are more likely to use AI to enrich their knowledge repeatedly. Conversely, education negatively moderates ($t = -2.472$; $\text{Sig.} = 0.014$), suggesting that individuals with higher education tend to be more selective and critical in updating information from AI.

These results indicate the existence of a digital paradox. On one hand, AI enhances the continuity of information searching; on the other hand, it has the potential to create a filter bubble (Pariser, 2011), which is a closed information space where users are only exposed to content that aligns with their preferences. This phenomenon shows that Gen Z's information behavior in the AI era is no longer entirely autonomous, but operates within an algorithm-mediated system.

Overall, the t-test results on the four dimensions of information behavior show that Gen Z's experience with AI usage has a significant and consistent influence on all forms of information behavior both passive and active. This indicates that AI acts as a new external factor in Wilson's Model, partially replacing the role of the social environment as an intervening variable. These findings enrich the literature on information behavior by showing that in the algorithmic era, technological experience factors not only mediate the information-seeking process but also shape patterns of information exposure and filtering. Practically, these results underscore the importance of digital literacy, which is key for Gen Z to not only be passive consumers of AI but also to be able to manage and evaluate the quality of the information they receive.

Practical Implications

From a practical perspective, the findings of this study have important implications for the development of artificial intelligence (AI)-based information service design. First, the predominance of passive behavior among Gen Z indicates the need for libraries and educational institutions not only to provide access to information but also to develop AI-based recommendation systems that are relevant, ethical, and transparent. In the context of digital libraries, recommendation systems can be utilized to display collections or reading materials that match users' search history and interests, while still offering manual exploration options so that users remain active and critical in seeking information.

Second, the low attention of Gen Z to the validation of information sources which is reflected in lower scores on indicators Y3.5 and Y3.6 indicates the importance of strengthening digital literacy, particularly in the ability to evaluate the credibility and accuracy of sources. Digital literacy programs in libraries and educational institutions can be designed to utilize AI to detect non-credible sources while guiding users through the evaluation process.

Third, at a broader level, the public sector needs to pay attention to algorithmic ethics to ensure that the use of AI does not reinforce filter bubbles or echo chambers that limit the

diversity of information access. Public policies on data management and algorithmic transparency become crucial to ensure that AI is used inclusively and responsibly.

CONCLUSION

Based on the research results discussed above, several conclusions can be drawn, including: (1) Digital environmental factors such as AI have a greater influence on information-seeking behavior than demographic factors such as occupation, gender, and age. This can be observed from how respondents from various demographic backgrounds choose social media as a source platform supported by AI by providing personalization and content recommendations through algorithmic systems. (2) Looking at the average values for the four information behaviors based on Wilson's Theory (1996), which include passive attention (4.05), passive search (3.91), active search (4.04), and ongoing search (3.97), it shows that Gen Z's information behavior tends to have a fairly balanced pattern between passive and active behavior. AI with its personalization capabilities (especially on social media) unconsciously leads Gen Z to exhibit passive behavior due to exposure to information they never intended to seek. However, on the other hand, they also remain active in seeking information because AI makes it easier for them to quickly obtain the information they want. In addition, the need to stay constantly updated leads Gen Z to have ongoing behavior in seeking information. (3) Wilson's (1996) theory is still relevant to illustrate how Gen Z tends to form patterns of information behavior in the era of AI. This can be seen from factors influencing why Gen Z interacts with information, to how they interact with information, both passively and actively, as well as continuously. (4) Practically, the results of this study have implications for designers of digital information services, including libraries, to integrate AI-based features that not only facilitate information retrieval but also help users increase awareness of the algorithmic processes that affect their exposure to information.

SUGGESTION

Based on the research findings and analysis presented, several suggestions can be made for future studies and the development of AI-based information practices. First, future research could expand its scope by involving other generations (such as Millennials and Generation Alpha) to compare cross-generational patterns of information behavior within the digital ecosystem. Second, educational institutions and libraries should design digital literacy programs that emphasize algorithmic awareness, enabling Gen Z not only to be passive consumers of AI-personalized information but also to actively control, select, and critically evaluate it. Third, governments and technology developers should prioritize algorithmic transparency and ethics to prevent the formation of filter bubbles that limit information diversity. Lastly, collaboration among academics, librarians, and AI developers should be strengthened to design recommendation systems that are not only efficient and relevant but also fair, inclusive, and supportive of reflective and responsible information behavior.

THANK YOU-NOTE

The author expresses gratitude to the Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM) of Universitas Terbuka for supporting this research.

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