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THE IMPLEMENTATION OF DIGITAL LITERACY IN EFL LEARNING: AN ANALYSIS BASED ON THE THEORY OF PLANNED BEHAVIOR

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Abstrak - Penelitian ini bertujuan untuk menganalisis tingkat keyakinan siswa dalam mengintegrasikan literasi digital dalam pembelajaran Bahasa Inggris (EFL) berdasarkan Theory of Planned Behavior (TPB). Penelitian menggunakan pendekatan kuantitatif deskriptif dengan desain survei. Sampel penelitian terdiri atas 70 siswa kelas X dan XI di SMAN 3 Banyuasin. Data dikumpulkan melalui kuesioner skala Likert yang mencakup tiga aspek keyakinan, yaitu behavioral belief, normative belief, dan control belief. Analisis data menggunakan SPSS 25 dengan uji deskriptif dan uji-t satu sampel. Hasil penelitian menunjukkan bahwa tingkat keyakinan siswa terhadap integrasi literasi digital berada pada kategori tinggi (M = 4,18). Uji-t menghasilkan t-hitung (20.762) > t-tabel (1.994) dengan p < 0.05, yang berarti terdapat perbedaan signifikan antara nilai keyakinan siswa dan nilai netral. Secara rinci, behavioral belief memperoleh nilai rata-rata tertinggi (M = 4,32), diikuti normative belief (M = 4,15), dan control belief (M = 4,07). Hasil ini mengindikasikan bahwa siswa memiliki persepsi positif, dukungan sosial, serta kendali diri yang baik dalam mengintegrasikan literasi digital di kelas EFL.

Kata kunci: Literasi Digital, Keyakinan Siswa, Theory of Planned Behavior, EFL

Abstract - *This study aims to analyze students' beliefs in integrating digital literacy into English as a Foreign Language (EFL) learning based on the Theory of Planned Behavior (TPB). The research employed a descriptive quantitative approach with a survey design. The sample consisted of 70 students from grades X and XI at SMAN 3 Banyuasin. Data were collected using a Likert-scale questionnaire covering three belief components: behavioral belief, normative belief, and control belief. Data analysis was conducted using SPSS 25 with descriptive statistics and a one-sample t-test. The results showed that students' belief levels toward the integration of digital literacy were in the high category (M = 4.18). The t-test revealed that t-value (20.762) > t-table (1.994) with p < 0.05, indicating a significant difference between students' belief scores and the neutral value. Specifically, behavioral belief had the highest mean (M = 4.32), followed by normative belief (M = 4.15) and control belief (M = 4.07). These findings indicate that students possess positive perceptions, strong social support, and good self-efficacy in integrating digital literacy into EFL classrooms.*

Keywords: *Digital Literacy, Students' Beliefs, Theory of Planned Behavior, EFL*

1. INTRODUCTION

According to Darma Wisada et al. (2019) and Luckin & Holmes (2016), the rapid development of digital technology, coupled with widespread internet access, enables anyone to access and produce information quickly and without limits. However, not all information available online is reliable, which requires users—particularly adolescents at the secondary school level—to possess adequate digital literacy skills. Digital literacy encompasses the ability to locate, understand, evaluate, use, communicate, and create information through various digital sources, while also involving social and emotional competencies (Citra Kurniawan, 2021; Gogahu & Prasetyo, 2020).

In the educational context, digital literacy is regarded as a set of skills that can enhance students' higher-order thinking abilities, including analysis, collaboration, and creativity, as well as enable them to access accurate and credible information quickly

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(Susanto et al., 2020). With digital literacy, students are not only able to operate digital devices or browse the internet but also acquire the knowledge, competencies, and attitudes necessary to function effectively in the digital era (Suryana et al., 2020; Puspita & Andriani, 2021). In other words, digital literacy acts as both a guide and a filter for students in utilizing digital technology (Keeley et al., 2019;Tanjung, 2020).

Recognizing the importance of digital literacy, teachers at SMAN 3 Banyuasin have begun integrating digital technology into classroom learning to encourage students to develop their digital literacy skills. Previous studies have shown that integrating digital literacy into language learning enhances students' thinking skills and promotes active engagement in the learning process (Bell, 2019;Ng, 2021;Elezi, 2021). The success of learning is influenced by both teachers' and students' beliefs and attitudes toward language learning and digital literacy (Hurley, 2012). Students' beliefs relate to their assumptions and perceptions regarding the learning process, including views on the meaning of learning, expectations of the material being taught, and the roles of teachers and students in education (Suryana et al., 2020). Affective and emotional aspects of these beliefs influence students' approaches to learning as well as the outcomes they achieve (Altun & Ahmad, 2021;Nghi et al., 2019).

Based on the Theory of Planned Behavior (TPB), students' beliefs can be categorized into three types: behavioral beliefs, normative beliefs, and control beliefs (Ummah, 2019). Behavioral beliefs refer to an individual's perception of the value of a behavior; the more positive the belief about a particular behavior, the more likely the individual is to perform it (Ajzen, 1991). For example, if students believe that integrating digital literacy can improve their learning outcomes, they are more likely to actively use technology in the classroom. Normative beliefs relate to social support from peers, groups, or others, influencing the perceived pressure to perform a behavior. Perceived behavioral control, or control beliefs, refers to an individual's perception of ease or difficulty in carrying out a behavior; the more confident students are in their abilities and access to resources, the greater the sense of control they experience (Conner, 2020). Several previous studies have examined teachers' beliefs and intentions regarding digital literacy integration, such as classroom practices (Luckin & Holmes, 2016). Parents' and teachers' intentions to use digital media for school-family communication Indahsari (2020), and students' intentions to participate in online or face-to-face foreign language classes (Sari, 2020). However, research on students' beliefs about integrating digital literacy in EFL classrooms using the TPB framework remains limited (Namaziandost & Nasri, 2019;Rao, 2019).

Given this gap, the present study was conducted at SMAN 3 Banyuasin to explore the beliefs of digital-native students regarding the integration of digital literacy in EFL classrooms, as well as the understanding of teachers, schools, and parents about the professional development needed to support students. The importance of digital literacy for adolescents is not only related to its influence on students' beliefs and actions but also because adolescents are the most vulnerable group to the negative impacts of digital media. Understanding students' beliefs provides crucial insights into their role in learning, including the effects on motivation, learning strategies, and learning outcomes (Susanto et al., 2020;Mckeachie & Svinicki, 2014;Eyring, 2001). In the context of language learning, students' beliefs also affect motivation, attitudes, achievement, anxiety, behavior, and learning strategies (Haug & Mork, 2021).

2. METHOD

2.1 Research Design

This study employed a quantitative descriptive approach using a survey design. This approach was chosen to obtain data regarding students' beliefs about integrating digital literacy in EFL classrooms, including the three components of the Theory of Planned Behavior (TPB): behavioral belief, normative belief, and control belief (Conner, 2020). The study is observational in nature, as the researcher observed and measured students' beliefs without manipulating any variables.

2.2 Population and Sample

1. **Population:** All 10th and 11th-grade students at SMAN 3 Banyuasin enrolled in English as a Foreign Language classes, totaling 250 students.
2. **Sample:** Selected using purposive sampling based on the following criteria:

    - Students who own personal digital devices or have regular access to computers/laptops.
    - Students who agreed to participate and completed the questionnaire.

From the population, 70 students were selected as the research sample, consisting of 35 students from Grade X and 35 from Grade XI.

2.3 Research Variables

This study focuses on one main variable: students' beliefs in integrating digital literacy, with three indicators based on TPB:

- **Behavioral Belief (BB):** Students' belief in the positive value of digital literacy integration in learning (e.g., improving learning outcomes).
- **Normative Belief (NB):** Students' belief in social support from teachers, parents, and peers in using digital literacy.
- **Control Belief (CB):** Students' belief regarding their own ability and resource availability to implement digital literacy.

2.4 Research Instrument

The instrument used was a closed-ended questionnaire based on a 5-point Likert scale, with the following range of responses:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

The questionnaire consisted of 25 items distributed across the three TPB dimensions:

Table 1. Student Belief Assessment Instrument

No	Aspect	Indicator	Number of Items
1	Behavioral Belief	Belief in the positive value of digital literacy in language learning	10
2	Normative Belief	Perception of teacher, peer, and parent support in digital literacy	8
3	Control Belief	Perception of self-ability and resource availability in implementing digital literacy	7

Validity and Reliability:

Validity was tested using Pearson Product-Moment Correlation in SPSS, and all items showed **r > 0.30**, indicating validity.
Reliability testing using Cronbach's Alpha produced **α = 0.87**, showing that the instrument is highly reliable.

2.5 Data Analysis Techniques

Quantitative data were analyzed using descriptive and inferential statistics:

- **Descriptive:** Calculation of mean, percentage, and score distribution for each TPB aspect (BB, NB, CB).
- **Inferential:** One-sample t-test was used to determine whether students' beliefs about digital literacy were significantly above the neutral value (3 on the Likert scale).

Table 2. Average Score Category of Students' Beliefs

Score Range	Category
1.0 – 1.9	Very Low
2.0 – 2.9	Low
3.0 – 3.9	Moderate
4.0 – 4.5	High
4.6 – 5.0	Very High

Normality Test: Conducted using Kolmogorov–Smirnov in SPSS.
Homogeneity Test: Conducted using Levene's Test to ensure equality of variances between groups when applicable.

2.6 Data Collection Techniques

Data collection followed these steps:

1. **Preliminary observation:** Assessing digital facilities and the integration of technology in EFL classes.
2. **Questionnaire distribution:** Administered directly to selected students.

3. **Filling instructions:** Students were asked to complete the questionnaire honestly based on their experiences using digital literacy in class.
4. **Supporting interviews:** Conducted with several teachers and students to obtain additional qualitative data regarding digital literacy practices.

3. RESULT AND DISCUSSION

3.1 Result

a. Descriptive Statistic

Table 5. presents the mean scores and standard deviations of each belief aspect:

Belief Aspect	N	Mean	Std. Deviation	Category
Behavioral Belief	70	4.32	0.51	High
Normative Belief	70	4.15	0.47	High
Control Belief	70	4.07	0.56	High
Overall Mean	**70**	**4.18**	**0.51**	**High**

Based on the table above, the overall mean score of 4.18 indicates that students' beliefs in integrating digital literacy are categorized as high. This suggests that students have a positive perception of the importance of digital literacy in learning English.

b. One-Sample t-Test Results

To determine whether students' beliefs differ significantly from the neutral value (3.0), a one-sample t-test was conducted with the following hypotheses:

- **H_0:** There is no significant difference between the mean belief score and the neutral value (3.0).
- **H_1:** There is a significant difference between the mean belief score and the neutral value (3.0).

Aspect	Mean	t-count	t-table (α=0.05)	Sig. (2-tailed)	Description
Behavioral Belief	4.32	18.456	1.994	0.000	Significant
Normative Belief	4.15	17.201	1.994	0.000	Significant
Control Belief	4.07	15.984	1.994	0.000	Significant
Overall	**4.18**	**20.762**	**1.994**	**0.000**	**Significant**

Since the calculated t-value (20.762) > t-table (1.994) and the significance value (0.000) < 0.05, H_0 is rejected. It can be concluded that students' belief levels are significantly higher than the neutral value, indicating strong confidence in integrating digital literacy into EFL learning.

3.2 Discussion

a. Behavioral Belief

The mean score of 4.32 indicates that students have a strong belief in the benefits of digital literacy. They believe that using digital media (such as learning videos, online platforms, or language-learning applications) helps them understand materials more quickly, improves communication skills, and enhances learning motivation.

These findings are consistent, who argue that digital literacy fosters students' analytical, creative, and collaborative abilities.

b. Normative Belief

The mean score of 4.15 shows that students feel supported by their social environment—teachers, peers, and parents—in integrating digital literacy. Teacher support plays a crucial role in motivating students to use digital media effectively.

This finding aligns, who emphasize that social pressure or environmental support significantly influences an individual's behavioral intention.

c. Control Belief

The mean score of 4.07 reveals that most students believe they possess sufficient ability and resources to use digital technology in learning. Although a small number of students still experience limited internet access at home, they actively seek alternatives through school facilities.

d. Implications of the Findings

These findings confirm that digital literacy has become an integral part of language learning at SMAN 3 Banyuasin. Teachers are encouraged to continue promoting students' digital literacy skills, which include evaluating information, practicing media ethics, and developing critical thinking toward digital content.

4. CONCLUSION

1. Based on the results and analysis, it can be concluded that students at SMAN 3 Banyuasin demonstrated a high level of belief in integrating digital literacy into EFL classrooms (M = 4.18).
2. The Behavioral Belief component (M = 4.32) indicates that students hold positive perceptions of the benefits of digital literacy in English language learning. The Normative Belief component (M = 4.15) highlights strong social support from teachers, peers, and parents in the use of digital media. Meanwhile, the Control Belief component (M = 4.07) reflects students' confidence and adequate access to resources for implementing digital literacy practices.
3. The one-sample t-test results ($t = 20.762 > t\text{-table} = 1.994$; $p = 0.000 < 0.05$) confirm a statistically significant difference between students' belief scores and the neutral value, indicating that students possess strong and positive beliefs regarding the integration of digital literacy into EFL learning.

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