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The Role of Social Support and Spiritual Well-Being in Predicting Internet Addiction Among Indonesian Seminarians

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Abstract
The Internet provides better access to knowledge, social interaction, and education for young adults, but excessive Internet use can lead to addiction. Catholic seminarians are another vulnerable group because they have daily and easy access to the Internet. This cross-sectional study aims to investigate the roles of social support and spiritual well-being in relation to Internet addiction among Indonesian seminarians. The study included 402 Indonesian seminarians enrolled in various Indonesian seminaries during the 2022–2023 academic year. Data collection was conducted through the Internet Addiction Test (IAT), the Multidimensional Scale of Perceived Social Support (MPSS), and the Spiritual Well-Being Scale (SWBS). The data were examined using descriptive statistics, the Pearson correlation coefficient, and stepwise regression analysis in SPSS version 23.0. The study found that seminarians had moderate levels of both spiritual well-being and perceived social support and that they had a mild level of Internet addiction. The Pearson correlation coefficient showed a significant negative correlation between perceived social support and Internet addiction (-0.217; $p < .01$). Similarly, spiritual well-being also revealed a negative correlation with Internet addiction (-0.341; $p < .01$). Stepwise multiple regression analysis revealed that existential well-being ($\beta = -0.344$; $p < .01$) and friend support ($\beta = -0.105$; $p < .01$) predict Internet addiction in Indonesian seminarians. These results suggest that encouraging seminarians to intensify their spiritual-based activities and seek support from friends in the seminary may help reduce their level of Internet addiction.

Keywords Friend support · Internet addiction · Seminarians · Social support · Spiritual well-being

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Introduction

The Internet is considered an essential component of daily routines, providing numerous benefits to humankind. It has offered better opportunities for communication, social interaction, information, and entertainment (Deursen & Dijk, 2009). The advantages of the Internet have become even more apparent during the COVID-19 pandemic as it has connected people and provided new, advanced tools for daily life, such as online work meetings, teaching, and gatherings (McKee & Stuckler, 2020). In recent years, the Internet has also provided significant educational benefits for Indonesian seminarians who are university students and candidates for the Catholic priesthood. The priestly formation process involves extensive development in the human, spiritual, intellectual, and pastoral areas, which typically takes at least nine years. In addition to studying philosophy and theology, seminarians also have regular and easy access to the Internet, just like other people.

According to the Association of Internet Service Providers in Indonesia (APJII, 2022), the number of Internet users in Indonesia reached 210.03 million in 2022, accounting for 77.02% of the country's total population. This figure increased from the previous year, when there were 196.7 million Internet users, or approximately 73.7% of the population. Internet usage is particularly high among those aged 13–18, with 99.16% using the Internet, and those aged 19–34, with 98.64% using it. The COVID-19 pandemic crisis in Indonesia has indirectly contributed to this increase as people were required to stay at home and thus relied on the Internet for information and entertainment (Pebrianto, 2020). Other studies have also demonstrated a significant surge in Internet usage during the lockdown period (King et al., 2020; Király et al., 2020; Masaeli & Farhadi, 2021). Additionally, research conducted in several European countries globally revealed a surge of approximately 50% in Internet addiction rates during the pandemic compared to pre-pandemic levels (Rolland et al., 2020). Similar patterns have also been observed in India, where excessive Internet usage has led to a rise in the number of people engaging in activities such as playing video games and binge-watching. Surveys conducted during the pandemic in India showed that the number of people playing video games on the WinZO games platform had increased threefold, while the number of players on Paytm First Games had risen by 200% (Amin et al., 2022).

The majority of Internet users are aged 16 to 24, which is a pivotal time of development. The recent increase in Internet usage has made it easier for individuals to become addicted to the Internet at a younger age, posing a significant risk factor for rapid addiction development (Traş & Gökçen, 2020). University students, who have more free time and uninterrupted access to the Internet through various wireless sources, are more likely to spend extended periods online, which increases their chance of becoming addicted to the Internet (Zhang et al., 2018). Due to their absence from home, inclination to form new relationships during their university years, and inadequate utilization of their free time, university students are at risk of developing Internet addiction (Konan et al., 2018). A study conducted by Marzilli et al. (2020) revealed that over 80% of 244 young adult college students showed indications of mild to moderate Internet addiction.

The increasing prevalence of Internet addiction, which is also referred to as problematic Internet use or Internet dependence, is becoming a significant issue. Internet addiction is characterized by excessive and impulsive preoccupation with activities such as playing online games and using social media, resulting in significant impairment or distress (Weinstein & Lejoyeux, 2010; Young, 1999). The poor agreement on conceptualizing problematic

Internet addiction as a disorder has resulted in its exclusion from both the *International Classification of Diseases, Eleventh Revision* (ICD-11; World Health Organization, 2022) and the *Diagnostic and Statistical Manual, Fifth Revision* (DSM-5; American Psychiatric Association, 2013). According to the DSM-5, Internet addiction is currently placed under the category of Internet gaming disorder, listed in the third section as a condition that requires further research (Block, 2008).

Research has indicated that gender differences exist in Internet addiction. Specifically, men in Asia are more prone to developing generalized Internet addiction than women, while this gender difference is less pronounced in Europe, North America, and Africa (Baloğlu et al., 2020). Moreover, women tend to use the Internet more for social networking and online shopping, whereas men are more likely to engage in online gaming, gambling, and pornography (Vigna-Taglianti et al., 2017). While previous studies have suggested that men typically experience more severe Internet addiction symptoms (El Asam et al., 2019; Su et al., 2019), some studies do not find such gender differences or have found that women reported greater Internet addiction symptom severity (Laconi et al., 2018).

An individual with Internet addiction is characterized as someone who is unable to control their Internet use, causing negative impacts on their personal, professional, and other areas of life, despite attempts to avoid this behavior (Aslan & Yazıcı, 2016). According to Young (1998), individuals who are addicted to the Internet lack the ability to control their usage, view being offline as wasted time, become nervous and agitated when deprived of it, and let their excessive Internet use deteriorate their personal and professional relationships. Research studies have indicated that college and university students with Internet addiction are more prone to experiencing physical health issues (Inamori et al., 2017), poor academic performance (Kim et al., 2017), aggressive behavior (Staude-Müller, 2011), and difficulties in family and social relationships (Honnekeri et al., 2017; Longobardi et al., 2018). Excessive Internet usage also reduces time spent with friends and family, leading to increased loneliness and depression, ultimately decreasing psychological well-being (Kraut et al., 1998; Oktuğ, 2010). However, another study has reported a positive relationship between Internet usage and well-being, indicating that greater Internet usage can lead to improved communication and social involvement, resulting in an enhanced sense of well-being (Kraut et al., 2002).

Internet addiction is currently an emerging public health problem in Indonesia. According to a study conducted in 2020, 14.4% of Indonesian adults used the Internet excessively during the COVID-19 pandemic (Siste et al., 2020). Another study on young adults in Indonesia found that 0.45% of respondents had severe Internet addiction, 4.85% had moderate Internet addiction, and 20.18% had mild Internet addiction (Al Ghifari et al., 2021). However, the prevalence of Indonesian seminarians addicted to the Internet is not known. The literature has shown that some seminarians and Catholic priests have lost their efficiency in ministry because of excessive Internet use (D'Souza, 2017; McMahon, 2010). A study conducted in Kenya found that 34.1% of the participating seminarians had moderate Internet addiction, while 4.6% had severe addiction (Landry et al., 2019).

The COVID-19 pandemic has not only affected individuals' daily lives; it has also decreased social support. Social support is defined as "the knowledge that leads people to feel that they are valued and cared for, they are respected, and they are a part of a group of shared responsibilities" (Öztürk & Kundakçı, 2021). Individuals receive social support from people in their surrounding environment, such as family, friends, and significant others. Individuals may turn to the Internet to find dynamic social support groups when they lack adequate social support in real life (Esen, 2009; Zhang et al., 2021). Some studies have shown that individuals who receive inadequate social support from others choose

the Internet as a way to obtain social support, particularly when social relationships and communication with others need to be re-established due to environmental changes (Kayri et al., 2014; Yao & Zhong, 2014; Zhang et al., 2018). Researchers have observed that online gaming enables individuals to play various roles, providing teenagers with social support that may not be found in their physical lives and helping them meet various emotional needs (O'Connor et al., 2015; Trepte et al., 2012). However, relationships built in such networks are superficial, unreal, and sometimes risky (Fusco et al., 2015).

Previous studies have reported that Internet addiction and perceived social support are negatively correlated (Çevik & Yıldız, 2017; Cui & Chi, 2021; Jia et al., 2022; Lu et al., 2023). A cross-cultural investigation involving African and South Asian Chinese international students revealed that perceived social support is a predictor of Internet addiction among these students. Moreover, students from both cultures tend to use the Internet excessively as a means of compensating for inadequate social support (Chaudhary, 2020). These studies have shown that the less social support individuals receive, the more they are addicted to the Internet. Other studies have revealed that young people with less social support lack effective coping mechanisms and are more vulnerable to Internet addiction (Guo et al., 2021; Mo et al., 2018). In contrast, individuals with high perceived social support have a low risk of Internet addiction (Taş, 2019; Wang & Zhang, 2020).

It has been found that Internet addiction also has a negative correlation with spiritual well-being. This indicates that overuse of the Internet can have an impact on spiritual well-being (Ahmadi et al., 2018; Bhayana & Ahuja, 2018; Taş, 2022). Spiritual well-being is characterized by "a sense of transcendence beyond one's circumstances, and other dimensions such as the purpose of life, reliance on inner resources, and a sense of within-person integration or connectedness" (Moberg, 2002). Spiritual well-being makes people feel inner peace, hope, meaning, a sense of security, life satisfaction, and self-confidence (Rovers & Kocum, 2010). Moreover, spiritual well-being has two dimensions: existential well-being and religious well-being. Existential well-being is the sense of having a purpose in life, peace, and contentment, or life satisfaction, while religious well-being refers to the sense of well-being in relation to God or a higher power (Moberg, 2002; Omar & Mutaz, 2017). Several studies have examined spiritual well-being among university students, and the findings suggest that spiritual well-being is linked to better college adjustment (Kneipp et al., 2009), greater involvement in health-promoting behaviors (Hsiao et al., 2010), and higher levels of social support (Taliaferro et al., 2009). Additional research has revealed that enhancing spiritual well-being can lessen the direct impact of Internet addiction, which is considered a mental health issue (Ahmadi et al., 2018; Taş, 2022).

It has been observed that the spiritual life of some seminarians is negatively affected by the overuse of the Internet (Landry et al., 2019). Spending several hours a day social networking, watching movies, and playing video games can affect their prayer life and rhythm of life. Since seminarians spend more time online, they are more likely to neglect their spiritual activities and not have enough time for Bible-reading, meditation, and reflection. They may get distracted during prayer because they are obsessed with their online activities. Spiritual practices can become routine activities lacking soul due to the overuse of the Internet. Previous studies have shown that spirituality improves both physical and mental health as well as subjective well-being, quality of life, coping mechanisms, and recovery from psychological disorders and reduces addiction (Bożek et al., 2020; Unterrainer et al., 2014).

The rapid increase in Internet technology necessitates a study on the positive and negative effects that the Internet has on youths, especially on seminarians. Currently, there are few, if any, studies on the effects of social support and spiritual well-being on Internet

addiction. Therefore, the aim of this study is to examine the roles of social support and spiritual well-being in predicting Internet addiction among Catholic Indonesian seminarians. The following are the specific research questions for this study:

1. What are the levels of Internet addiction, social support, and spiritual well-being among Indonesian seminarians?
2. What are the correlations between social support and Internet addiction and spiritual well-being and Internet addiction among Indonesian seminarians?
3. Do social support and spiritual well-being predict Internet addiction?

Methods

Participants

A cross-sectional design was employed using a quantitative approach and a self-administered questionnaire. The questionnaires were translated into Indonesian. For this study, 402 Indonesian Catholic seminarians were selected through homogeneous convenience sampling from five different seminaries located in Malang, Surabaya, Jogjakarta, Bandung, and Maumere. Traditional convenience sampling methods are known to be less generalizable and accurate, which can result in estimation bias. To avoid this, we used a homogeneous sampling strategy in this study (Jager et al., 2017). The homogeneous convenience sampling method ensured that the participants were Catholic seminarians aged 18–40, capable of comprehending the questionnaire, and undergoing priesthood formation at the seminary during the investigation.

Ethical procedure

In order to conduct the research, approval was obtained from the Center for Research and Community Service of STFT Widya Sasana in Malang to ensure ethical compliance. The study respected ethical research principles and human rights, and the process involved explaining the research objectives to the directors of five different seminaries in Indonesia. Once the directors approved, the seminarians were notified and were given written instructions regarding the research procedures and confidentiality. Online consent forms were provided for the seminarians to sign. Data were collected using a Google Forms survey, distributed through email and WhatsApp, and each participant completed three questionnaires independently. The data collection period spanned three months, from July to September 2022.

Measurement instruments

Internet addiction test (IAT) The IAT, developed by Young (1996), is a reliable and valid measure of addictive Internet use. The IAT has been translated into the Indonesian language and consists of 20 self-reported items using a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*always*). It assesses the degree to which Internet consumption affects individuals' everyday activities, social life, productivity, sleep patterns, and emotions. The IAT has a total score range of 20 to 100, with higher scores indicating a greater degree

of Internet compulsivity and addiction. Respondents who score between 80 and 100 are considered "Internet-addicted," those who score between 50 and 79 are described as having "a moderate level of Internet addiction," those who score between 31 and 49 are viewed as having "a mild level of Internet addiction," and those who score below 30 are regarded as having "a normal level of Internet usage." The internal consistency of the scales ranges between 0.54 and 0.82, with good moderate internal consistency.

Multidimensional scale of perceived social support (MSPSS) The 12-item multidimensional instrument developed by Zimet et al. (1990) is used to determine perceived social support from three significant domains: family, friends, and significant others. Respondents rate all items on a 7-point Likert-type scale, ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). The MSPSS total score ranges from 12 to 84, with scores of 12–48 indicating low perceived social support, 49–68 indicating moderate perceived social support, and 69–84 indicating high perceived social support. The Cronbach's alpha coefficient for social support subscales is 0.89, indicating high internal consistency (Eker et al., 2001).

Spiritual well-being scale (SWBS) The SWBS, developed by Paloutzian and Ellison (1982), consists of 20 items that assess the overall score of spiritual well-being as well as the two subscales of religious well-being and existential well-being. Spiritual well-being measures overall religious and existential well-being. The religious well-being subscale assesses the respondent's relationship with God and their level of satisfaction in relation to God, whereas the existential well-being subscale measures satisfaction with life and life's purpose. The scales are based on a 6-point Likert scale, ranging from *strongly agree* (1) to *strongly disagree* (6). The religious well-being and existential well-being subscale scores range from 0 to 60. Finally, the score for the individual's spiritual well-being is divided into three categories: low (20–40), moderate (41–99), and high (100–120). Higher scores indicate a greater degree of spiritual well-being. The Cronbach's alpha for the scales is between 0.78 and 0.94, indicating high internal consistency (Ellison & Smith, 1991).

Data analysis

In this study, the data collected from participants were analyzed using SPSS Version 23, which is commonly used for statistical analysis in social sciences. Descriptive statistics, such as mean and standard deviation, were used to describe the demographic data and variable distributions. The Pearson's correlation was then used to measure the strength of the relationships between social support, spiritual well-being, and Internet addiction.

To determine the impact of social support and spiritual well-being on Internet addiction, stepwise regression analysis was conducted. Stepwise regression is a statistical method that helps identify the most significant predictors of a dependent variable by selecting variables one at a time based on their statistical significance by comparing *p*-values and significance level. Using this method, researchers were able to predict the impact of social support and spiritual well-being on Internet addiction among seminarians.

Results

Characteristics of the participants

The descriptive statistics show that 402 Indonesian seminarians, ranging in age from 18 to 40 and enrolled in several seminaries, participated in this study. Table 1 displays that 100% ($n=402$) of the seminarians were male, with 22.4% ($n=90$) in the first year, 20.9% ($n=84$) in the second year, 20.9% ($n=84$) in the third year, 13.9% ($n=56$) in the fourth year, 7.5% ($n=30$) in the fifth year, 6.9% ($n=28$) in the sixth year, and 7.5% ($n=30$) in the seventh year. Among the seminarians, 45 (11.2%) used the Internet for less than 4 h every day, 66 (16.4%) used the Internet for 3–4 h a day, 151 (37.6%) used the Internet for 4–5 h per day, 98 (24.4%) used the Internet for 5–6 h every day, and 42 (10.4%) used the Internet for 6 h or longer every day. In addition, 54.2% ($n=218$) of the seminarians owned a personal laptop, and 64.2% ($n=258$) owned a personal smartphone.

Table 1 Sociodemographics of Respondents

Demographics	*n*	%
Gender		
Female	0	
Male	402	100
Age		
Age 18–25 years	325	80.8
Age 26–30 years	65	16.2
Age 31–35 years	10	2.5
Age 36–40 years	2	0.5
Daily Internet use		
Less than 3 h	45	11.2
3 to 4 h	66	16.4
4 to 5 h	151	37.6
5 to 6 h	98	24.4
More than 6 h	42	10.4
Year in seminary		
First year	90	22.4
Second year	84	20.9
Third year	84	20.9
Fourth year	56	13.9
Fifth year	30	7.5
Sixth year	28	6.9
Seventh year	30	7.5
Ownership of personal laptop		
Yes	218	54.2
No	184	45.8
Ownership of personal smartphone		
Yes	258	64.2
No	144	35.8

Table 2 Prevalent Rates of Internet Addiction as Based on IAT Scores

Variables	*n*	%
Normal	1	0.24
Mild	274	68.16
Moderate	124	30.85
Severe	3	0.75
Total	402	100

Table 3 Correlation Between Social Support, Spiritual Well-Being, and Internet Addiction

	Mean	*SD*	*r*
Internet addiction	46.49	10.04	
Total score for social support	61.81	9.24	−0.217
Family support	20.64	3.16	−0.198
Friend support	18.53	3.71	−0.202
Significant others support	22.64	3.16	−0.198
Total score for spiritual well-being	86.63	9.89	−0.341
Religious well-being	43.20	5.37	−0.232
Existential well-being	43.43	5.71	−0.374

Correlation is significant at the 0.01 level (2-tailed)

The mean scale scores of the participants

A total of 0.24% of seminarians had normal, 68.16% mild, and 30.85% moderate Internet addiction, while 0.75% of seminarians were considered severely Internet addicted (Table 2). The mean score of Internet addiction score was 46.49. The mean values of religious well-being and existential well-being were 43.20 and 43.43, respectively. For social support, the mean scores of family support, friends support, and significant others support were 20.64, 18.53, and 22.64, respectively (Table 3).

Correlations between the participants' social support, spiritual well-being, and Internet addiction

The correlation analysis presented in Table 3 reveals that there is a negative correlation between Internet addiction and religious well-being (−0.232; $p < .01$) as well as existential well-being (−0.374; $p < .01$). This suggests that seminarians who have higher levels of religious and existential well-being tend to have lower levels of Internet addiction. Additionally, the negative correlation between total spiritual well-being and Internet addiction (−0.341; $p < .01$) indicates that seminarians with higher levels of spiritual well-being are less likely to develop Internet addiction. Furthermore, the findings suggest that Internet addiction is negatively associated with social support from family (−0.198; $p < .01$), friends (−0.202; $p < .01$), and significant others (−0.198; $p < .01$). This implies that seminarians who perceive higher levels of social support from the people around them are less likely to experience Internet addiction.

Social support and spiritual well-being as predictors of Internet addiction

The researchers used multiple regression with the stepwise method to examine how well religious well-being, existential well-being, and support from family, friends, and significant others predicted Internet addiction. The results showed that existential well-being ($\beta = -0.344$; $p < .01$) was a good predictor and contributed to 14% of the variance in Internet addiction. Additionally, support from family, friends, and significant others was negatively correlated with Internet addiction, but only support from friends ($\beta = -0.105$; $p < .01$) was a predictor of reduced Internet addiction among seminarians; it contributed 15% of the variance (as shown in Table 4).

Discussion

The current study aimed to examine the roles of perceived social support and spiritual well-being in predicting Internet addiction among Indonesian seminarians. The results of this study indicate that among the Indonesian seminarians who participated, 0.75% had severe Internet addiction, 30.85% had moderate Internet addiction, and 68.16% had mild Internet addiction. Additionally, the study results indicate a significant negative correlation between Internet addiction and the perceived social support received by seminarians from family, friends, and significant others. Specifically, the results of this study indicate that less social support may increase the likelihood of Internet addiction and that those with less social support are more likely to develop Internet addiction (Jia et al., 2022; Lu et al., 2023; Mo et al., 2018; Öztürk & Kundakçı, 2021; Wu et al., 2016). This result is consistent with previous studies that have shown that people with Internet addiction are less likely to receive sufficient social support (Alheneidi & Smith, 2020; Cui & Chi, 2021; Gao et al., 2016; Guo et al., 2021; Mo et al., 2018). However, strong social support reduces excessive dependence on the Internet. Individuals who lack sufficient social support experience emotional rejection and consequently look for self-affirmation elsewhere, which might cause them to use the Internet excessively and develop an Internet addiction. In contrast to the current study, another study reported a positive correlation between perceived social support and Internet addiction (Shaw & Gant, 2002). According to this study, using the Internet significantly increased perceived social support. The findings of that study revealed that modern young people socialize with their peers more frequently on online platforms, which results in increased Internet usage. The deeper the Internet infiltrates people's daily

Table 4 Predictors of Internet Addiction

Model	Standardized Coefficient Beta	*t*	sig	R squared
Step 1				
Constant		21.005	0.000	
Existential well-being	−0.374	−8.053	0.000	0.140
Step 2				
Constant		20.471	0.000	
Existential well-being	−0.344	−7.144	0.000	0.150
Friend support	−0.105	−2.186	0.029	

lives, the more frequently they communicate online, which could lead to an increase in how supportive they consider their social networks to be. Other studies have also reported that some individuals choose the Internet as a tool to meet their needs and obtain social support when social resources are relatively insufficient, particularly when they need to re-establish social networks and communicate with others because of environmental changes (Kayri et al., 2014; Yao & Zhong, 2014; Zhang et al., 2018). However, the negative impact of the Internet on individuals should not be overlooked. Network-based communication is always a virtual form of interpersonal interaction but cannot substitute for genuine face-to-face communication (Ge & Wu, 2022). Additionally, Kraut et al. (1998) discovered that excessive Internet use can have negative consequences on personal relationships by reducing the amount of time spent with loved ones, leading to greater feelings of loneliness and depression.

The present study also found that spiritual well-being, religious well-being, and existential well-being were significantly negatively correlated with Internet addiction. The findings showed that higher religious well-being and existential well-being were correlated with less Internet addiction. The total score for spiritual well-being also showed a negative correlation with Internet addiction, illustrating that the higher the score on spiritual well-being, the lower the score on Internet addiction. These results are consistent with previous studies that showed a negative correlation between Internet addiction and spiritual well-being (Ahmadi et al., 2018; Bhayana & Ahuja, 2018; Taş, 2022). The results of the present study also revealed that the spiritual well-being of Indonesian seminarians ranged from moderate to high. According to Musa's (2015) study, a high level of spiritual well-being among university students was correlated with greater spiritual practices and beliefs. Additionally, all the seminarians who took part in this study were Indonesians, Catholics, and had the same priestly formation program, so their spiritual practices and beliefs reflect high levels of faith, peace, and a sense of purpose in life. Seminarians who are very religious are more optimistic and confident in their ability to overcome challenges, and, consequently, they are less prone to Internet addiction. These findings are in accordance with previous studies showing that students with high levels of meaning and purpose in their lives expressed high levels of contentment and had a more optimistic vision of the future (Sawatzky et al., 2009).

The stepwise multiple regression analysis revealed that social support provided by friends predicted Internet addiction in seminarians, while family support and support from significant others were not found to be predictors of Internet addiction. This result suggests that friend support could be a protective factor for Indonesian seminarians, particularly those who are addicted to the Internet. Furthermore, social support from friends is higher than that from family and significant others because in priesthood formation in Indonesia, seminarians must leave their families and live in the seminary for several years, where they live together and form a community. Seminarians who have supportive friends in the seminary feel loved and appreciated and know they can turn to their friends for support when they need it. This experience can trigger the feeling of being socially connected and supported, which reduces the risk of Internet addiction. However, less social support from friends can make them feel unappreciated and act as a distressing factor in their lives (Alsubaie et al., 2019). Therefore, seminarians who have less social support are more likely to develop Internet addiction. However, Çevik and Yıldız (2017) found that perceived social support from significant others significantly predicted Internet addiction. This may be due to working with different sample groups.

The stepwise multiple regression analysis also revealed that existential well-being is a protective factor against Internet addiction. Specifically, the study indicated that Internet

addiction decreases as existential well-being increases. Existential well-being is positively associated with the willingness to seek meaning and purpose in life as well as with feelings of peace and contentment. Individuals who do not live a meaningful and purposeful life may be unable to control their Internet use and are therefore more vulnerable to Internet addiction (Çevik et al., 2020). In a life where existential well-being is lacking, individuals may not find their life to be meaningful or purposeful and may attempt to find new meaning in their lives through various methods, such as using the Internet. It has been observed that individuals with low levels of existential well-being use the Internet uncontrollably to make sense of their lives, to fill the voids in their lives, or for other reasons, which can result in Internet addiction.

The findings of this study provide insight into the importance of both existential well-being and friend support as protective factors in preventing Internet addiction. Therefore, it is essential to incorporate and emphasize the promotion of existential well-being and friend support in priestly formation programs to prevent Internet addiction. The integration of spiritual beliefs, religious activities, and supportive friendships that make seminarians feel valued and loved, help ease their burdens, and foster a sense of connection to God and loved ones is particularly important in working with seminarians who are at risk of Internet addiction. Additionally, seminaries can develop activities focused on community service, such as caring for the poor, tutoring children during or after school, organizing games and activities for underprivileged children, and so on. These activities can help seminarians enhance their sense of meaning and purpose in life. The ability to engage in meaningful activities aligned with the purpose of their lives can lead to feelings of happiness and peace (Demiroğlu & Taş, 2021).

In today's digital era, using the media responsibly requires proper formation of the "will" when using the Internet. This formation will enable seminarians to make well-informed decisions about Internet usage and to teach others to do the same. It is essential for them to acquire knowledge about when and where to use electronic devices. Therefore, formators and educators responsible for training future priests should teach cyber ethics to help seminarians exercise greater caution in their Internet use. They can also add modules to their psychoeducation programs that address the impact of Internet addiction on social support and spiritual well-being, thus reducing addiction while promoting social support and spiritual well-being (Ahmadi et al., 2018; Taş, 2022). Dari et al. (2019) recommend that small-group work can be an effective approach for fostering social well-being and social connectedness.

Research limitations and future research

This study has several limitations. Firstly, it was a cross-sectional survey that did not establish causal relationships between the study variables. Future longitudinal and qualitative studies are necessary to determine potential cause-and-effect correlations between the variables and to enhance our understanding of their relationships. Secondly, the sample size of all participants in the study was relatively small. To improve the reliability and validity of the findings, it is recommended that future studies replicate the research using a larger sample of Catholic seminarians, possibly focusing on specific age groups. This approach would allow for a more detailed examination of the relationships between Internet addiction, social support, and spiritual well-being during specific life stages. Thirdly, it is important to exercise caution when generalizing the results of this study to other cultural and

religious backgrounds as the sample mainly consisted of Indonesian Catholic seminarians. Different cultural and religious contexts have unique ideologies and social practices that could impact people's social and spiritual well-being differently. Therefore, the findings may not be applicable to young adults from different religious backgrounds or regions of the world. Other researchers can replicate this study among individuals from different religious groups or countries to validate the results.

Conclusion

This study found a negative correlation between social support from family, friends, and significant others and Internet addiction among Indonesian seminarians. It also found that spiritual well-being, including the subscales of religious and existential well-being, were negatively correlated with Internet addiction. The study identified existential well-being and support from friends as predictors of Internet addiction among seminarians. The findings suggest that it is important to incorporate the dimension of existential well-being into the lives of seminarians by designing priestly formation programs that foster meaning and purpose in life, inner peace, hope, and faith, which can result in higher levels of life satisfaction and happiness.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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