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Proactive School Counseling for Students' Digital Citizenship: A Conceptual Review

Weno Dwi Restu, Eka Sakti Yudha, and Nandang Budiman
Department of Guidance and Counseling, Faculty of Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
*Correspondence: E-mail: wenodr04@upi.edu

ABSTRACT

Indonesian adolescents' use of digital media has outpaced schools' readiness to equip them with ethical online attitudes and behavior, while guidance and counseling services in many schools remain largely reactive. This review aims to synthesize the concept of digital citizenship and the evidence on school-based interventions into a conceptual model of proactive school counseling. Using a conceptual review with a theory-synthesis approach, 34 selected sources, prioritizing meta-analyses, systematic reviews, and experimental studies, were analyzed thematically. The synthesis yields three findings. First, digital citizenship is a multidimensional construct encompassing ethics, information literacy, safety, and participation, and it cannot be reduced to compliance with online etiquette. Second, school-based prevention programs are effective but with small effects, and programs that build social-emotional competence appear as promising as those that target cyberbullying specifically. Third, Indonesian discourse on digital citizenship remains centered on civic education, whereas relevant counseling studies are mostly small in scale and rarely measure behavioral change. The review proposes a Tiered Proactive Counseling Model for Digital Citizenship that integrates classroom guidance, group guidance delivered through structured group exercises, responsive services, and system support, with content contextualized in cultural and religious values. The model positions school counseling as a partner to civic education rather than a substitute for it, and it requires experimental testing in Indonesian secondary schools.
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1. INTRODUCTION

Indonesian adolescents are growing up in a media ecology that differs qualitatively from that of earlier generations. Online spaces have become places to learn, socialize, and build identity, and they are also places where young people harm themselves and others. A survey of 1,452 senior high school students in six Indonesian regions found a cyberbullying prevalence of 69.64%, which the authors classified as fairly high (Efianingrum et al., 2020). A study of students' digital ethics profiles in Surakarta likewise identified risky patterns of internet use (Sari et al., 2020). Findings such as these shift the educational problem from access to the quality of participation. The question is no longer whether students are connected, but how they act, evaluate information, and treat other people once they are connected.

The international literature has responded to this problem through the concept of digital citizenship. The concept has no single agreed definition. Mossberger et al. (2008) defined it as the ability to participate in society online, with consequences for economic opportunity and civic engagement. Ribble and Park (2019) emphasized norms of appropriate and responsible technology use. Choi (2016) mapped four categories: ethics, media and information literacy, participation, and critical resistance. Jones and Mitchell (2016), by contrast, narrowed the focus to online respect and online civic engagement. These differences are more than terminological, because a definition determines what is taught, what is measured, and what counts as success. A cross-disciplinary review by Chen et al. (2021) and a fifteen-year mapping of the field by Richardson et al. (2021) both indicate that conceptualizations of digital citizenship remain diverse and have yet to converge.

In the Indonesian context, a systematic review of 20 articles by Prasetiyo et al. (2021) found that discourse on digital citizenship revolves around three themes: digital readiness, digital citizenship competence, and educational policy. Ribble's nine-element framework was the most frequently used, and civic education was the curricular channel discussed most often. Isabella et al. (2024) identified barriers to national digital literacy policy, including unequal access, limited education and training, and weak coordination among stakeholders. Pawitan et al. (2023) developed a digital citizenship learning module for secondary school students and described it as the first effort of its kind in Indonesia. The common thread across these studies is a tendency to treat digital citizenship primarily as curriculum content, that is, as knowledge and skills to be taught, rather than as dispositions and behavioral habits to be cultivated.

Guidance and counseling, on the other hand, carries a developmental mandate that spans students' personal, social, academic, and career domains. The Indonesian operational guidelines for guidance and counseling (Panduan Operasional Penyelenggaraan Bimbingan dan Konseling, POP BK) define four service components: basic services, specialization and individual planning services, responsive services, and system support (Kementerian Pendidikan dan Kebudayaan, 2016). This structure is consistent with comprehensive school counseling and the ASCA National Model, which position the counselor as the designer of a program for all students rather than merely a handler of cases (American School Counselor Association, 2019). Normatively, then, the Indonesian service framework is already proactive. However, counseling studies that address digital behavior are still mostly small-scale curative interventions, such as counseling to reduce social media addiction (Fauzan et al., 2025). Evaluations of classroom guidance also tend to rely on participants' positive responses rather than on measurable behavioral change (Saputra & Zuriah, 2023). Anggraeni (2017) called for

school counselors to help students become digital citizens, but that call has not yet been followed by a service model that can be operationalized and tested.

These two bodies of literature rarely meet. Indonesian studies of digital citizenship seldom name guidance and counseling as a channel for implementation, while counseling studies seldom draw on digital citizenship frameworks or on meta-analytic evidence about cyberbullying prevention (Gaffney et al., 2019; Polanin et al., 2022) and social and emotional learning (Cipriano et al., 2023; Taylor et al., 2017). In addition, the assumption that proactive services are inherently more effective than reactive ones is rarely examined critically. This review starts from the position that the choice between reactive and proactive services is a false dichotomy. The more productive question is how both can be organized within an evidence-based tiered system of services. Accordingly, this review aims to (1) identify the core components of digital citizenship that are relevant to school counseling services, (2) assess the strengths and limitations of the evidence on school-based interventions, and (3) formulate a conceptual model of tiered proactive counseling services for digital citizenship. Its novelty lies in integrating digital citizenship frameworks, meta-analytic evidence, the POP BK service structure, and the logic of a *multi-tiered system of supports* into a single model that can be tested empirically.

2. METHODS

This study used a conceptual review design with a theory-synthesis approach. According to Jaakkola (2020), this approach integrates concepts and findings from several streams of literature to produce a new framework that explains a phenomenon more fully. The search logic followed the integrative review described by Snyder (2019), which allows empirical and conceptual sources from different traditions to be combined in building a framework. This review is not a systematic review and does not claim exhaustive coverage of the literature. This boundary is stated at the outset so that the conclusions do not exceed what the method can support.

Sources were searched through Google Scholar, Garuda, Crossref, publisher portals (ScienceDirect, Taylor & Francis, SAGE, SpringerLink, and Wiley), and the archive of KONSELI: Jurnal Bimbingan dan Konseling. English keywords included *digital citizenship*, *digital ethics*, *cyberbullying prevention*, *misinformation*, *social and emotional learning*, *school counseling*, and *multi-tiered system of supports*. Indonesian keywords included *kewargaan digital* (digital citizenship), *literasi digital* (digital literacy), *perundungan siber* (cyberbullying), *bimbingan klasikal* (classroom guidance), and *bimbingan kelompok* (group guidance). For empirical studies, the publication period was limited to 2016–2025. Foundational works and normative documents outside this period were retained when their concepts were referred to directly in the synthesis.

Sources were selected using three criteria. First, the source was a peer-reviewed journal article or an official framework or policy document. Second, the source addressed at least one of three domains: the conceptualization and measurement of digital citizenship, the effectiveness of school-based interventions for adolescents, or guidance and counseling services in Indonesia. Third, the bibliographic details of the source could be verified, including a DOI where available. Sources that were not peer reviewed, were unrelated to media behavior, or could not be verified were excluded. When selecting empirical sources, the review prioritized meta-analyses and systematic reviews, followed by experimental and quasi-experimental studies, and then survey and qualitative studies. This process yielded 34 substantive sources, plus two methodological references. The distribution of sources is presented in Table 1.

Table 1. Distribution of synthesized sources by category.

Source category	n	Sources	Role in the synthesis
Meta-analyses and systematic reviews	8	Chen et al. (2021); Cipriano et al. (2023); Gaffney et al. (2019); Muttaqin & Sofiandari (2024); Polanin et al. (2022); Prasetiyo et al. (2021); Richardson et al. (2021); Taylor et al. (2017)	Direction and magnitude of intervention effects; maps of conceptualization and discourse
Experimental and quasi-experimental studies	5	Fauzan et al. (2025); Gunawan et al. (2020); Roozenbeek & van der Linden (2019); Sutarto & Sari (2020); Wineburg et al. (2022)	Evidence on specific interventions and service techniques
Instrument and module development	3	Choi et al. (2017); Jones & Mitchell (2016); Pawitan et al. (2023)	Dimensions and measurement of the construct
Survey, descriptive, and qualitative studies	6	Anjasari & Raharjo (2023); Choi et al. (2018); Efianingrum et al. (2020); Hui & Campbell (2018); Saputra & Zuriah (2023); Sari et al. (2020)	Prevalence, behavioral profiles, and service practice
Conceptual and policy studies	7	Anggraeni (2017); Choi (2016); Emejulu & McGregor (2019); Isabella et al. (2024); Kirschner et al. (2006); Mossberger et al. (2008); Ziomek-Daigle et al. (2016)	Theoretical, pedagogical, and policy foundations
Frameworks and normative documents	5	American School Counselor Association (2019); Jacobs et al. (2016); Kementerian Pendidikan dan Kebudayaan (2016); Ribble & Park (2019); Vuorikari et al. (2022)	Service structure, group technique, and competence standards
Total	34		

The analysis proceeded in three steps. The first step was concept mapping, in which the dimensions of digital citizenship were extracted from each framework and instrument. The second step was evidence juxtaposition, in which convergent and divergent findings were separated while recording the design, sample size, and type of outcome measure of each study. Effect sizes were reported as stated in the sources, and the review did not use vote counting based on statistical significance, because that practice ignores the magnitude and precision of effects. The third step was model construction, in which these dimensions and evidence were mapped onto the POP BK service components and the tiers of a *multi-tiered system of supports*. The resulting propositions were stated explicitly so that they can be tested in future research.

3. RESULTS AND DISCUSSION

The synthesis produced three interrelated themes. The first concerns the multidimensional nature of digital citizenship. The second concerns the strengths and limitations of the evidence on school-based interventions. The third concerns the position of guidance and counseling in Indonesia within this landscape. These themes are then combined into the conceptual model described in Section 3.4. Section 3.5 specifies group exercises as the working mechanism of the group tier, Section 3.6 compares the position of this review with earlier reviews, and Sections 3.7 and 3.8 discuss implications and limitations.

3.1. Digital citizenship as a multidimensional construct: from compliance to participation

The literature reveals two traditions that pull the concept of digital citizenship in different directions. The normative-protective tradition views digital citizenship as a set

of norms for safe and appropriate behavior. Ribble and Park (2019) grouped nine elements into three domains: safe, savvy, and social. DigComp 2.2 places safety, personal data protection, well-being, and netiquette within citizens' digital competence (Vuorikari et al., 2022). The participatory-critical tradition views digital citizenship as the capacity to engage in economic and political life (Mossberger et al., 2008), including the ability to question the power structures behind technology (Choi, 2016). Emejulu and McGregor (2019) went further, criticizing digital citizenship education that overemphasizes individual responsibility, because such an approach risks ignoring inequality and the political dimension of technology.

The difference between these traditions is also visible in measurement instruments. The scale developed by Choi et al. (2017) includes factors of internet political activism, technical skills, local and global awareness, critical perspective, and networking agency, which places it closer to the participatory tradition. In contrast, Jones and Mitchell (2016) deliberately narrowed the construct to online respect and online civic engagement. They tested their scale with 979 youth aged 11–17 years. After controlling for other variables, both subscales were negatively associated with online harassment perpetration and positively associated with helpful bystander behavior. Online respect scores also declined with age. This last finding matters for school counseling because it shows that online respect does not grow on its own as adolescents mature, and it therefore needs to be fostered from early adolescence through a developmental counseling approach.

This review argues that choosing either tradition exclusively would disadvantage students. A purely protective approach treats students only as potential victims or perpetrators and overlooks their potential as contributing citizens. A purely participatory approach, conversely, overlooks adolescents' developmental vulnerability, as reflected in the high prevalence of cyberbullying (Efianingrum et al., 2020). For school counseling, the relevant core lies at the intersection of the two traditions. This review formulates that intersection as four dimensions: (1) online ethics and respect, (2) information literacy and critical reasoning, (3) digital safety, privacy, and well-being, and (4) responsible participation. These four dimensions form the core content of the model presented in Section 3.4.

There is a fundamental reason why these dimensions require the involvement of school counseling and cannot simply be taught as subject matter. Hui and Campbell (2018) reported a discrepancy between what students learn about digital citizenship and what they practice. The gap between knowing and doing is classic territory for school counseling, because behavioral change requires the internalization of values, emotional regulation, and consistent social support. Knowing that hoaxes are harmful does not automatically stop someone from forwarding a message that confirms their prejudices. Likewise, knowing the rules of online etiquette does not automatically prevent a hurtful comment written in anger. It is here that social-emotional competencies such as self-awareness, self-control, and empathy serve as a bridge between knowledge and behavior.

At the level of measurement, this conceptual diversity creates practical problems. Chen et al. (2021) showed that the conceptualization and measurement of digital citizenship vary widely across disciplines. Prasetiyo et al. (2021) specifically recommended developing instruments and structural models of digital citizenship suited to the Indonesian context. Without valid instruments for measuring attitudes and behavior, counseling services will continue to be evaluated on participant satisfaction, and claims about their effectiveness will remain difficult to substantiate.

3.2. Evidence on school-based interventions: consistent in direction, limited in magnitude

The strongest evidence on preventing harmful online behavior comes from meta-analyses of anti-cyberbullying programs. Gaffney et al. (2019) analyzed 24 program evaluations and found that school-based interventions reduced cyberbullying perpetration by approximately 10–15% and victimization by approximately 14%. Polanin et al. (2022) analyzed 50 studies comprising 320 effect sizes and 45,371 participants. They found significant but small effects: g = -0.18 for perpetration and g = -0.13 for victimization. The finding by Polanin et al. most relevant to school counseling is that general violence prevention programs appeared as likely to reduce cyberbullying as programs that targeted cyberbullying directly. The implication is that harmful online behavior is probably rooted in the same social-emotional competencies and relational climate as offline behavior, rather than in technical knowledge about media.

This interpretation is reinforced by meta-analyses of social and emotional learning (SEL). Taylor et al. (2017) synthesized 82 universal school-based interventions involving approximately 97,000 students. They found benefits for social-emotional skills, attitudes, and well-being indicators that persisted at follow-up periods ranging from 6 months to 18 years. Social-emotional skills developed immediately after the intervention were the strongest predictor of well-being at follow-up. Cipriano et al. (2023) updated this evidence with 424 studies from 53 countries covering 575,361 students. They found improvements in skills, attitudes, behaviors, school climate and safety, and peer relationships. However, Cipriano et al. also found substantial heterogeneity, moderated by program content, intervention features, context, and implementation quality. In other words, the SEL label does not guarantee results; design and quality of delivery determine the effects obtained.

Evidence on the information literacy dimension shows a similar pattern. Wineburg et al. (2022) conducted a field study in six high schools within one district involving approximately 500 students. Students who received six 50-minute lessons on civic online reasoning, including the technique of lateral reading, showed improvement in evaluating the credibility of sources, although their final scores remained well below the maximum. Roozenbeek and van der Linden (2019) reported that an inoculation-based game improved players' ability to recognize disinformation tactics. However, the pre-post design without a control group, applied to a self-selected online sample, limits the strength of that study's conclusions. Together, these two studies show that information evaluation skills can be taught in a relatively short time, but they do not show that such skills immediately become habits in everyday life.

Evidence from Indonesia, particularly from guidance and counseling, is positive in direction but weak in design. Fauzan et al. (2025) compared behavior contract and self-management techniques for reducing social media addiction with seven students in each group. Gunawan et al. (2020) tested group counseling with values clarification to increase respect among ten vocational high school students. Sutarto and Sari (2020) tested group guidance for building religious character with 30 students in a control-group design. All three studies reported positive results. However, all three used small samples from a single school, relied on self-report instruments, and conducted no long-term follow-up. The module by Pawitan et al. (2023) was evaluated through expert appraisal and a user survey without a comparison group. The correlational study by Anjasari and Raharjo (2023) offers a more sobering picture. Guidance and counseling services explained only 5.1% of the variance in bullying behavior, while counseling services and democratic parenting together explained 7.9%. These figures are a reminder that counseling services

operating in isolation have limited power to change behavior without the support of the surrounding system.

Read together, this evidence reveals three patterns. The convergent pattern is that school-based interventions consistently move outcomes in the expected direction, whether for cyberbullying, social-emotional competence, or information reasoning. The divergent pattern concerns the magnitude and durability of effects, which are small and highly dependent on implementation quality. Recurring methodological limitations include the dominance of self-report measures that are vulnerable to social desirability bias, short intervention durations, scarce follow-up, and analyses that rarely account for the clustering of students within classes or schools. The transferability of meta-analytic findings to Indonesian school settings also remains untested, because the Indonesian counseling studies reviewed here were small in scale and did not report comparable effect sizes.

These patterns call for a correction to an assumption that is often taken for granted, namely that the proactive approach has been proven to be the most effective method. The available evidence does not yet support so strong a claim. Nevertheless, small effects are not meaningless. Universal interventions reach all students, so a small reduction at the individual level can produce a large reduction in cases at the level of the school population. The case for proactive counseling is therefore better built on the logic of population-level prevention than on promises of dramatic effects. This logic also confirms that responsive services remain necessary for students whom universal prevention does not reach.

3.3. The position of school counseling in Indonesia: beyond the reactive-proactive dichotomy

Normatively, Indonesian school counseling does not lack a proactive framework. POP BK positions basic services as assistance for all students through structured experiences delivered in classroom or group settings, and it states that classroom guidance serves developmental, preventive, and maintenance functions (Kementerian Pendidikan dan Kebudayaan, 2016). Responsive services are intended not only for students who need immediate help but also as prevention for students who are on the verge of making unwise choices (Kementerian Pendidikan dan Kebudayaan, 2016). This latter provision matters because it gives a normative basis for targeted services for at-risk groups, which the present model places in Tier 2. The ASCA National Model organizes programs into a cycle of defining, managing, delivering, and assessing, and it distinguishes between direct and indirect student services (American School Counselor Association, 2019). The problem lies in implementation and accountability rather than in the absence of a concept. Judging the success of classroom guidance by the positive reactions of the school community (Saputra & Zuriah, 2023) reflects a gap between a comprehensive program framework that requires data-based evaluation and a practice that still relies on impressions.

The logic of a *multi-tiered system of supports* (MTSS) offers a way to bridge this gap. Ziomek-Daigle et al. (2016) showed that MTSS can be integrated with comprehensive school counseling programs through three tiers of service. Tier 1 consists of universal services for all students. Tier 2 consists of targeted services for groups showing risk. Tier 3 consists of intensive services for individuals, with decisions about movement between tiers based on data. The mapping onto the POP BK structure is fairly direct. Basic services correspond to Tier 1, targeted group guidance to Tier 2, and responsive services to Tier 3, while system support underpins all three. Within this framework, the opposition

between reactive and proactive services loses its relevance. Both belong to one system, and what distinguishes them is only the intensity and target of the service.

A more delicate issue is cultural and religious contextualization. Muttaqin and Sofiandari (2024) found that counseling practice in Indonesia is closely tied to cultural and religious values and can be delivered by peers, senior students, parents, or teachers. Sutarto and Sari (2020) showed that group guidance can be used to build religious character, and Gunawan et al. (2020) used values clarification to increase respect. Contextualization offers legitimacy and acceptance, because values such as honesty, *tabayyun* (verifying information before acting on it), and guarding one's speech have direct counterparts in online ethics. However, contextualization also carries a risk. If values are delivered as prohibitions to be obeyed with no room for reasoning, counseling services may produce fragile compliance that collapses in the absence of supervision, even though online spaces are precisely where supervision is weakest. The critique by Emejulu and McGregor (2019) of approaches that neglect the critical dimension is relevant here. This review therefore proposes that cultural and religious values be presented through clarification and dilemma discussion rather than normative lecturing, so that students understand the reasons behind norms and not merely the norms themselves.

This contextualization also has pedagogical implications. Kirschner et al. (2006) showed that minimally guided instruction is less effective for novices than instruction with explicit guidance. For school counseling, this principle means that classroom guidance should not begin with open discussion of issues that students do not yet understand. The counselor should first model the process explicitly, for example by demonstrating the steps for verifying a viral post through lateral reading, as taught in the study by Wineburg et al. (2022). Once students have a basic schema, group guidance becomes the appropriate space for case analysis and dilemma discussion. In that space, peer interaction allows students to test arguments, take the victim's perspective, and negotiate group norms. This sequence, moving from explicit modeling to collaborative discussion, avoids two equally common errors: lecturing without engagement and discussion without foundation.

System support is the component most often neglected, even though the evidence points to its importance. Choi et al. (2018) found that teachers' levels of digital citizenship were influenced by their individual backgrounds, internet use, and psychological characteristics. This means that teachers cannot be assumed to be ready to model digital citizenship without capacity building. The findings of Anjasari and Raharjo (2023) on the contribution of parenting, and those of Isabella et al. (2024) on weak coordination among stakeholders, point to the same conclusion. Counselors need to act as coordinators of an ecosystem that includes subject teachers, homeroom teachers, parents, and school policy, rather than only as presenters of classroom material.

3.4. The Tiered Proactive Counseling Model for Digital Citizenship

Building on the three themes above, this review proposes the Tiered Proactive Counseling Model for Digital Citizenship (Figure 1). The model consists of five elements. The first element is the core content, namely the four dimensions of digital citizenship formulated in Section 3.1. The second element is the three tiers of service mapped from POP BK and MTSS. The third element is a process of change that moves from understanding to internalization to habituation, reflecting a shift from the cognitive to the affective and behavioral domains. The fourth element is system support involving teachers, homeroom teachers, parents, and school policy. The fifth element is a data-

based evaluation cycle that determines students' movement between tiers and guides program improvement. All elements operate within the context of cultural and religious values and the developmental stage of adolescence.

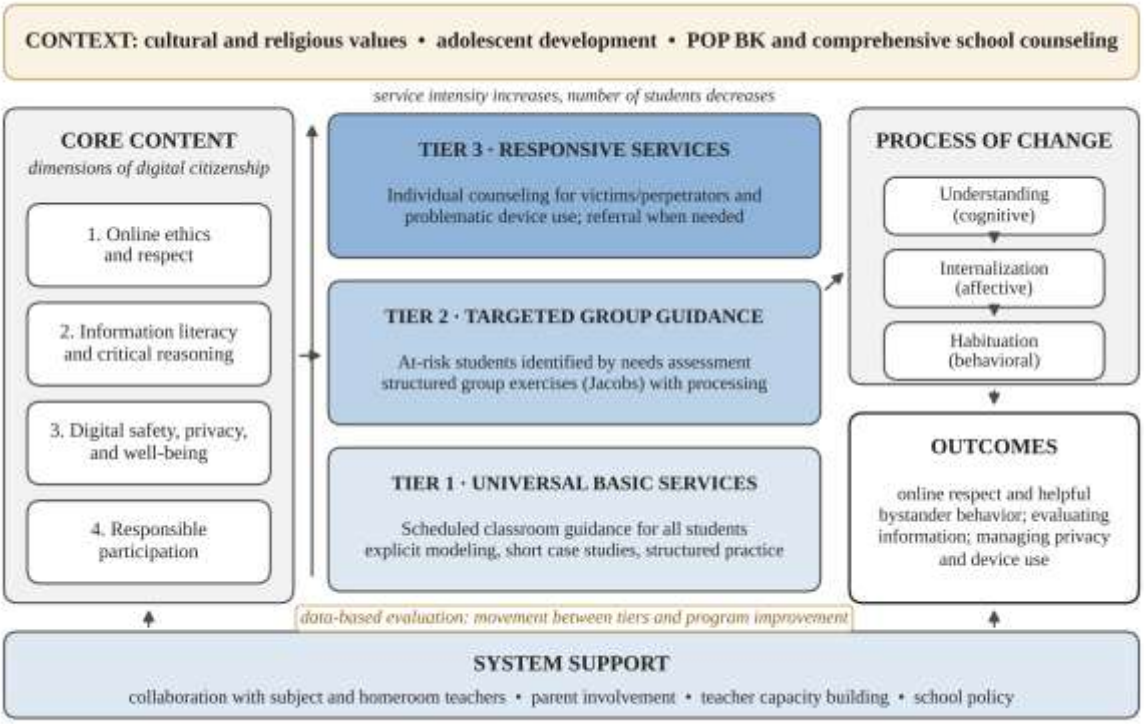


Figure 1. The Tiered Proactive Counseling Model for Digital Citizenship.

Tier 1, universal basic services, is delivered to all students through scheduled classroom guidance. Its aim is to build a shared understanding of the four dimensions through explicit modeling, short case studies, and structured practice. Tier 2, targeted group guidance, is intended for students whose needs assessment indicates risk or particular needs. Examples include students with low online respect scores, students who have been involved in online conflict, or students who show problematic device use. At this tier, structured group exercises in the sense of Jacobs et al. (2016), particularly moral dilemma, experiential, and group decision exercises, serve as the main technique, supported by case analysis and values clarification, because these activities target internalization rather than knowledge alone (see Section 3.5). Tier 3, responsive services, includes individual counseling for victims and perpetrators of cyberbullying, support for addiction or anxiety related to social media, and referral to professionals where needed. Table 2 details the targets, strategies, content, and outcome indicators of each tier.

Table 2. Components of the Tiered Proactive Counseling Model for Digital Citizenship.

Service tier	Target	Strategies and techniques	Content emphasis	Outcome indicators
Tier 1: Universal basic services	All students, by class	Scheduled classroom guidance; explicit modeling (e.g., verifying a viral post); short case studies; structured practice; information media	All four dimensions, with emphasis on information literacy, safety, and privacy	Knowledge; ability to evaluate the credibility of information; attitudes toward online norms
Tier 2: Targeted group guidance	Students with needs or risk identified by assessment (e.g., low online respect or prior involvement in online conflict)	Structured group exercises (Jacobs et al., 2016): moral dilemma, experiential, feedback, and group decision exercises, processed through rounds, dyads, and whole-group discussion; case analysis; values clarification	Online ethics and respect; self-control; responsible participation	Online respect; helpful bystander intentions and behavior; reduced online aggression
Tier 3: Responsive services	Victims and perpetrators of cyberbullying; students with problematic device use	Individual and group counseling; case conferences; referral to professionals	Recovery, responsibility, and self-control	Fewer incidents and complaints; restored relationships
System support	Subject teachers, homeroom teachers, parents, and school leaders	Consultation; cross-subject collaboration; parent meetings; teacher capacity building; school policy	Consistency of norms at home and at school	Program fidelity; school climate; parent involvement

As an illustration, one service cycle for the information literacy dimension might proceed as follows. In Tier 1, the counselor opens a classroom guidance session by displaying a viral post containing a misleading claim and then demonstrates, step by step, how to check the source, look for corroborating reports, and assess the motives of whoever is spreading it. Students then practice checking two other posts in pairs, and the session closes with a brief reflection on the urge to forward information immediately. Assessment data, such as an online respect scale and homeroom teachers' notes, are used to identify students who need Tier 2. In Tier 2, a small group works through a moral dilemma exercise based on a case in which a hoax spread by one student harmed a classmate. Members first state their position in a round, then compare reasons in dyads, and finally discuss the dilemma between group loyalty and honesty as a whole group, with the value of *tabayyun* introduced as material for clarification rather than as a predetermined answer. In Tier 3, students who were victims or spreaders receive individual counseling focused on recovery and responsibility. Meanwhile, homeroom teachers and parents receive a summary of the same norms so that messages at home and at school do not contradict each other. This illustration shows that the three tiers do not operate separately; they complement one another within a single program design.

The model carries several propositions that can be tested in future research. The first proposition states that basic services with explicit modeling will improve knowledge and the ability to evaluate information, but that their effect on ethical online behavior will be limited without Tier 2. The second proposition states that group guidance based on case

analysis and values clarification will produce larger gains in online respect and in the tendency to act as a helpful bystander than services that are merely informational. The third proposition states that service effects will be larger and more durable when system support, particularly the involvement of parents and teachers, is implemented in a planned way. The fourth proposition states that contextualization in cultural and religious values will increase students' acceptance of services but will improve behavior only when combined with critical reasoning, which also prevents digital citizenship from being reduced to normative compliance. These four propositions are the authors' interpretation of the synthesized evidence rather than empirical findings, and they need to be tested through quasi-experimental or cluster-randomized designs using validated measures of attitudes and behavior.

3.5. Group exercises as the working mechanism of Tier 2

A tiered model specifies who receives which service, but it does not yet explain how change occurs inside a group session. To address this, the review draws on the group exercise technique described by Jacobs et al. (2016) in their widely used text on group counseling. Jacobs et al. treat exercises as structured activities that the leader introduces for a deliberate purpose. They identify seven purposes: increasing members' comfort, giving the leader useful information, generating discussion and focusing the group, shifting the focus, deepening the focus, providing experiential learning, and providing fun and relaxation. They also describe fourteen types of exercises: written, movement, dyads and triads, rounds, creative props, arts and crafts, fantasy, common reading, feedback, trust, experiential, moral dilemma, group decision, and touching exercises.

There are three reasons why this framework fits the group tier of the proposed model. First, Jacobs et al. (2016) regard exercises as catalysts rather than ends in themselves, and they treat processing, that is, the discussion of the thoughts, feelings, and ideas that an exercise brings up, as its most important phase. This emphasis addresses the gap between knowing and doing identified by Hui and Campbell (2018) and is consistent with meta-analytic evidence that the development of social-emotional skills predicts later outcomes (Taylor et al., 2017). Second, a structured exercise gives students a concrete and guided experience before abstract discussion, in line with the argument of Kirschner et al. (2006) that novices learn better with explicit guidance than with minimal guidance. Third, the framework strengthens the procedure for group guidance in POP BK. The guidelines set out opening, core, and closing steps, and they mention group games mainly as interludes to keep members energetic and cohesive (Kementerian Pendidikan dan Kebudayaan, 2016). Jacobs et al. move the exercise from the margin to the center of the session and attach a deliberate processing phase to it.

Table 3 maps the exercise types onto the four dimensions of digital citizenship. Moral dilemma, feedback, and experiential exercises suit online ethics and respect, because they require members to take a position, hear the consequences of their choices from others, and rehearse alternative behavior such as acting as a helpful bystander. Common reading, dyads, and group decision exercises suit information literacy, because members can examine the same viral post, verify it in pairs, and agree on a verification rule for their class. Written exercises, rounds, and movement exercises suit digital safety, privacy, and well-being, for example through a short device-use log, a round on the urge to check notifications, or a line continuum on whether it is acceptable to share a classmate's photo without permission. Group decision and creative exercises suit responsible participation, for example by drafting a class digital charter or designing a positive content campaign.

Touching exercises are excluded from the model because they are rarely appropriate in Indonesian school settings and are not needed for the outcomes targeted.

Table 3. Mapping the group exercise types of Jacobs et al. (2016) onto the dimensions of digital citizenship.

Dimension	Exercise types	Example activity	Processing focus
Online ethics and respect	Moral dilemma; feedback; experiential	Deciding whether to forward a humiliating video of a classmate; role play as a helpful bystander	Consequences for others; empathy for the person targeted; alternative responses
Information literacy and critical reasoning	Common reading; dyads and triads; group decision	Reading the same viral post, verifying it in pairs, and agreeing on a class rule for verification	Reasons for wanting to share quickly; the value of *tabayyun*; when to stop and check
Digital safety, privacy, and well-being	Written; rounds; movement	A short device-use log; a round on the urge to check notifications; a line continuum on sharing a classmate's photo	Personal patterns of use; boundaries and consent; self-control strategies
Responsible participation	Group decision; creative props or arts and crafts	Drafting a class digital charter; designing a positive content campaign	Shared commitments; contribution to others; links to future careers

Jacobs et al. (2016) divide the use of an exercise into three phases, each of which needs adjusting to the digital context. When introducing an exercise, the leader explains its purpose, gives clear instructions, states how long it will take, and makes clear that members may decline to share. This right is especially important because digital experiences often involve shame or victimization, and using fictional characters in cases protects members' privacy. When conducting an exercise, the leader monitors members' reactions and responds to strong emotions, for example by giving brief attention to the member concerned or arranging individual follow-up. In the proposed model, such follow-up is the point at which a student moves from Tier 2 to Tier 3. When processing an exercise, the leader can begin with a round, continue in dyads or triads, and close with whole-group discussion, moving from what happened, to what members felt, to what they learned, and finally to how they will use it in their lives. This sequence of questions corresponds to the process of change in the model. The exercise and the first processing questions build understanding, questions about feelings and insights support internalization, and questions about application, together with group commitments, support habituation.

This framework also has limitations that should be stated plainly. Jacobs et al. (2016) offer a practitioner framework grounded in clinical and teaching experience rather than in experimental comparisons of exercise types, and this review found no study that tests whether particular exercise types change adolescents' digital behavior. The framework was also written mainly for small groups, whereas Indonesian group guidance is often delivered to a whole class. In that setting, a class needs to be divided into small groups with structured roles so that every member takes part in processing. Finally, an exercise without adequate processing risks becoming an activity for its own sake, and the heterogeneity of SEL effects by implementation quality (Cipriano et al., 2023) suggests that the leader's skill in processing will strongly influence outcomes. A fifth proposition therefore follows: the effect of Tier 2 on online respect and helpful bystander behavior will depend more on the quality and time allotted to processing than on the type of exercise used.

3.6. Positioning this review relative to earlier reviews

This review complements, and in some respects corrects, earlier reviews. Prasetiyo et al. (2021) mapped digital citizenship discourse in Indonesia and found civic education to be its main channel. This review accepts that finding but interprets it as a symptom of limitation rather than as an adequate division of roles. If digital citizenship is cultivated through only one school subject, the affective and behavioral dimensions highlighted by Hui and Campbell (2018) tend to be neglected. Richardson et al. (2021) and Chen et al. (2021) highlighted the diversity of conceptualizations of digital citizenship. This review responds by formulating the intersection of dimensions specifically relevant to counseling services, instead of adding yet another general definition.

With respect to the counseling literature, this review departs from two dominant tendencies. The first is normative calls for a counselor role without an operational model, as seen in Anggraeni (2017). The second is small-scale tests of single interventions that are not connected to the school program as a whole, as seen in Fauzan et al. (2025) and Gunawan et al. (2020). This review places such interventions within particular tiers of a tiered system so that their results can be interpreted within a program framework. At the same time, it corrects the assumption that a proactive approach is inherently the most effective method. The meta-analytic evidence reviewed here supports prevention, but with modest effects that depend on implementation quality (Cipriano et al., 2023; Polanin et al., 2022).

The theoretical contribution of this review lies in shifting the unit of analysis from the intervention to the service system. Whether a given technique is effective remains an important question, but the more decisive question for practice is how techniques are arranged, for whom, at what intensity, and with what support. This shift is consistent with the logic of comprehensive school counseling programs (American School Counselor Association, 2019; Ziomek-Daigle et al., 2016), but it is applied to a domain that Indonesian counseling programs have rarely addressed, namely digital media behavior.

3.7. Implications for education, counseling practice, and policy

For education and pedagogy, this review underscores that digital citizenship cannot be left to a single school subject. Civic education and informatics can provide a foundation of knowledge and skills, but cultivating dispositions and habits requires reflective experience, peer interaction, and a consistent school environment. A learning sequence that begins with explicit modeling before open discussion (Kirschner et al., 2006) applies both in subject classrooms and in classroom guidance.

For counseling practice, the model calls for three shifts. The first is a shift from services built around incidental topics toward programs based on needs assessment and annual planning, in line with the ASCA comprehensive program cycle (American School Counselor Association, 2019). The second is a shift from satisfaction-based evaluation toward evaluation based on changes in attitudes and behavior, using instruments with evidence of validity and reliability. The third is a shift from the counselor as a presenter of material toward the counselor as a coordinator of the ecosystem. These shifts also require counselors to master the skills of introducing, conducting, and processing group exercises, which are rarely taught explicitly in counselor preparation. For vocational high school students, the dimension of responsible participation is also directly linked to career guidance. Digital footprints, online reputation, and the ability to collaborate online increasingly shape employment opportunities, consistent with the argument of Mossberger et al. (2008) that digital citizenship is tied to equality of economic

opportunity. Integrating digital citizenship content into career planning services can strengthen the relevance of counseling services for vocational students.

For policy, three recommendations follow. First, digital citizenship should be included explicitly in the guidelines for basic counseling services, together with example outcome indicators. Second, professional development for counselors through professional associations and school counselor forums should include skills in designing and evaluating tiered programs and in leading and processing group exercises, not merely awareness of digital issues. Third, the cross-stakeholder coordination that Isabella et al. (2024) identified as a major barrier should be realized at the school level through a team that includes counselors, teachers, homeroom teachers, and parent representatives.

3.8. Limitations

This review has several limitations. As a conceptual review, its source selection was purposive and therefore vulnerable to selection bias, and some relevant studies may not have been included. The group exercise component of the model rests on a practitioner framework that has not been tested experimentally in this domain. The review also did not appraise study quality with a standardized tool; the weight of evidence was determined by the hierarchy of designs rather than by quality scores for individual studies. In addition, most of the meta-analytic evidence comes from outside the Indonesian counseling context, while the Indonesian counseling studies reviewed were small in scale. As a result, the strength of the model lies in its theoretical coherence rather than in empirical confirmation. Future research should test the model through a systematic review with a registered protocol and through intervention studies in Indonesian secondary schools that use comparison groups, behavioral measures, analyses that account for clustering, and medium-term follow-up.

4. CONCLUSION

This review concludes that digital citizenship is a multidimensional construct that combines online ethics and respect, information literacy and critical reasoning, digital safety and well-being, and responsible participation. The available evidence shows that school-based interventions are effective with small but consistent effects, and social-emotional competencies appear to be an important mechanism linking knowledge to behavior. These findings place school counseling in a strategic position that has not yet been used in Indonesian discourse on digital citizenship. This position can be realized only if school counseling abandons the false choice between reactive and proactive services and organizes its services as a tiered system that is based on assessment, supported by collaboration with teachers and parents, and evaluated through behavioral change. The proposed Tiered Proactive Counseling Model for Digital Citizenship offers a framework for such organization, with structured group exercises and careful processing as the working mechanism of the group tier, with content rooted in cultural and religious values without sacrificing critical reasoning. The contribution of this review lies in providing a model and propositions that can be tested. Future research should develop validated instruments of ethical online attitudes and behavior for Indonesian adolescents and test the effectiveness of the service tiers, separately and in combination, through quasi-experimental or cluster-randomized designs in secondary schools, including vocational high schools.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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