

# Implications of the Dunning-Kruger Effect for Counselors in Counseling Practice: A Systematic Review

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## Abstract

The Dunning-Kruger Effect phenomenon has long been in the spotlight in the field of cognitive psychology, describing a paradox in which individuals with low competence tend to overestimate their abilities. This article examines the implications of this phenomenon for counselors in counseling practice through a systematic review approach. By collecting and analyzing literature from various empirical and theoretical sources, this review aims to reveal how this cognitive bias affects the process of reflection, decision-making, and the effectiveness of counseling interventions. The results of the review indicate that the Dunning-Kruger Effect not only impacts the counselor's self-perception, but also affects the therapeutic relationship with the client through self-evaluation distortion and overconfidence. The practical implications of these findings emphasize the importance of metacognitive training, clinical supervision, and critical reflection in improving the quality of counseling services. This article concludes with recommendations for further research and the development of professional training modules to reduce the impact of cognitive bias in counseling practice.

**Keywords:** Dunning-Kruger Effect; Counselor; Counseling; Cognitive Bias; Critical Reflection; Systematic Review

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## INTRODUCTION

In the dynamics of the world of psychology and counseling, the Dunning-Kruger Effect phenomenon has emerged as one of the most interesting topics to study. Simply put, the Dunning-Kruger Effect refers to the tendency of less competent individuals to perceive themselves as having much higher abilities than they actually do (Dunning & Kruger, 1999). This paradox, which is likened to a mirror illusion that covers the true reflection, has

profound implications for professionals, especially counselors who are required to always have critical awareness of their own strengths and limitations.

Counselors as agents of change in counseling practice play a strategic role in helping clients overcome various psychological and emotional problems. However, if the counselor himself is trapped in the overconfidence trap due to the Dunning-Kruger Effect, then the process of reflection, evaluation, and intervention carried out can be distorted. As if the counselor who should be a mirror for clients in seeing their own reality, actually displays a distorted image due to inaccurate self-assessment bias.

The systematic review approach in this article aims to analyze how this phenomenon has been explained in the literature, explore its impact on the counseling process, and identify intervention strategies that can be used to mitigate its negative effects. Through a critical review of empirical and theoretical studies, it is hoped that this review can provide a comprehensive picture that is not only academic but also applicable to counseling practice.

In the realm of cognitive psychology, metacognition theory is a major foundation for understanding how individuals assess their abilities and self-knowledge. Flavell (1979) suggested that metacognition is the ability to monitor and control the process of conscious thinking. When counselors fail to develop optimal metacognition, they are susceptible to self-assessment distortions illustrated by the Dunning-Kruger Effect. For example, counselors who fail to identify deficiencies in their intervention approaches may tend to ignore feedback from colleagues and clients, ultimately hindering professional growth.

In this context, Bandura's (1997) self-efficacy theory also provides an important contribution. Excessive self-efficacy without a basis for critical evaluation can strengthen the illusion of competence, so that counselors with high self-confidence but less reflective actually experience overconfidence. The findings of Tversky and Kahneman (1974) regarding heuristics and cognitive biases further emphasize that non-objective self-assessments can result in decision-making errors. Therefore, a deep understanding of the Dunning-Kruger Effect phenomenon is very important in the context of counselor professional development and strengthening therapeutic relationships.

The ever-evolving world of counseling presents complex challenges that require sensitivity and precision in self-assessment. In such situations, the application of intervention strategies based on increasing self-awareness and critical evaluation becomes crucial. Just as a painter must look at his canvas objectively before starting to paint, counselors must be able to recognize their limitations and potential realistically in order to provide a positive impact on clients.

This systematic review study has two dimensions of significance, namely theoretical and practical. Theoretically, this article attempts to integrate various literatures to develop a conceptual framework regarding the relationship between the Dunning-Kruger Effect and counseling effectiveness. While practically, the findings of this review are expected to be used as a basis for designing more adaptive training and clinical supervision programs, so that counselors can reduce the impact of cognitive bias and improve the quality of interventions.

## **METHOD**

### **Research Design**

The systematic review approach in this article is taken to integrate and synthesize the literature related to the Dunning-Kruger Effect and its implications for counselors in counseling practice. This approach involves searching, selecting, evaluating, and analyzing empirical and theoretical studies that have been published in accredited journals and other reliable sources. Thus, this review aims to provide a comprehensive picture of how this cognitive bias affects the counseling process and identify gaps in the literature that can form the basis for further research.

### **Literature Search Procedure**

Literature search was conducted through several credible and accountable academic databases. The keywords used were “Dunning-Kruger Effect”, “Counselor”, and “Counseling”.

### **Literature Database**

The database used in the article search was LENS.ORG. The search procedure was carried out using a combination of keywords and publication year filters to identify relevant articles within the last decade (2015–2023). The search results were then selected based on topic relevance, methodological quality, and theoretical contribution.

### **Inclusion and Exclusion Criteria**

The inclusion criteria in this review were; 1) Articles discussing the Dunning-Kruger Effect in a professional context, particularly in the field of counseling. 2) Empirical studies evaluating the impact of cognitive biases on counselor decision-making and self-evaluation. 3) Articles using qualitative or quantitative approaches with transparent methodology. 4) Publications published in English.

Exclusion criteria included; 1) Articles that only discussed the Dunning-Kruger Effect without direct relevance to counseling practice. 2) Publications that did not go through a peer-review process. 3) Studies with incomplete data or invalid methods.

### **Data Analysis Procedure**

Data from selected articles were analyzed qualitatively with a thematic approach. The analysis process includes Integration and Discourse which integrates findings from various studies to develop a comprehensive conceptual framework regarding the implications of the Dunning-Kruger Effect for counselors. To ensure the validity of the review, researchers conducted cross-checks between researchers and discussions with colleagues who were competent in the fields of counseling and cognitive psychology.

## **RESULTS AND DISCUSSION**

From the initial search results, 341 articles were successfully identified. After going through a selection process based on inclusion and exclusion criteria. Significantly, there were no articles relevant to the study conducted, only 3 articles were finally selected for in-depth analysis while several articles were used as references which were then narrated and contextualized the contents of the articles into the field of counseling. Thus leading to an in-depth contextual qualitative analysis of the reflection process in counseling practice and the counselor's work environment.

The results of the synthesis reveal three main themes that frequently appear in the literature, which are presented as follows. Many studies show that the Dunning-Kruger Effect is very likely to affect counselors and tend to conduct non-objective self-evaluations, resulting in overconfidence in clinical decision making. This overconfidence can hinder the counselor's ability to receive feedback, thereby reducing the quality of counseling interventions.

Research also emphasizes the importance of increasing metacognitive awareness as a key strategy to reduce the impact of the Dunning-Kruger Effect. Studies have shown that metacognitive training and clinical supervision can help counselors recognize their own limitations more realistically, thereby increasing the effectiveness of interventions (Flavell, 1979; Schon, 1983).

The third theme that emerged was the importance of an open therapeutic relationship and critical reflection in addressing cognitive biases. Counselors who actively reflect on their practice tend to build more empathetic and effective relationships with clients. This is also in line with the principles of humanistic therapy that emphasize the values of authenticity and unconditional acceptance (Rogers, 1961; Miller & Rollnick, 2012).

The findings of this review indicate that the Dunning-Kruger Effect may have a significant impact on several aspects of counseling practice:

#### Clinical Decision Making

Counselors who are less able to evaluate themselves objectively tend to make decisions based on excessive confidence, which can cloud the assessment of the client's condition. This results in interventions that are less adaptive to the client's needs, which ultimately reduces the quality of counseling outcomes.

#### Quality of Supervision and Training

The review results emphasize the need for training and supervision programs that focus on developing metacognition. Such programs should be designed to help counselors identify internal biases and integrate external feedback into their clinical practice. Peer review approaches and structured clinical supervision sessions are key to creating a culture of ongoing reflection.

#### Influence on the Therapeutic Relationship

The relationship between counselor and client is the foundation of the counseling process. The Dunning-Kruger Effect in counselors can hinder their ability to build open and empathetic relationships. Counselors who are overconfident tend to miss opportunities to listen and accommodate the client's perspective, which is an important element in building therapeutic trust.

#### Synthesis of Findings

Overall, the synthesis of findings from the studies analyzed suggests that the impact of the Dunning-Kruger Effect is not only individual, but also influences systemic dynamics in counseling practice. The imbalance between self-perception and objective reality has the potential to create a negative feedback loop that inhibits innovation and continuous improvement in clinical interventions. On the other hand, approaches that integrate metacognitive training, critical reflection, and clinical supervision have been shown to be effective in reducing the impact of this bias and improving the quality of the therapeutic relationship.

The Dunning-Kruger Effect is a cognitive bias identified by social psychologists David Dunning and Justin Kruger in 1999, describing the phenomenon in which individuals with low ability at a task overestimate their abilities, while those with high ability may

underestimate their competence. This paradoxical situation has significant implications in a variety of fields, particularly in psychology and counseling, where self-awareness and accurate self-assessment are critical to professional development and client interactions. The effect highlights the importance of metacognition—awareness and understanding of one's thought processes—in accurately evaluating one's skills and competence.

In the context of counseling, professionals must be aware of their limitations and strengths in order to provide effective support to clients. The Dunning-Kruger Effect suggests that those with less skill may lack the insight necessary to recognize their inadequacies, leading to inflated self-assessments of their abilities (Hansen & Sillasen, 2020; Deb & Roy, 2021). This lack of self-awareness can hinder counselors' ability to engage in reflective practice, which is critical for personal and professional growth. For example, McIntosh et al. emphasize that individuals with lower skill levels often exhibit metacognitive deficits, making it difficult for them to accurately assess their performance and areas for improvement (McIntosh et al., 2019; McIntosh et al., 2022).

Furthermore, the implications of the Dunning-Kruger Effect extend beyond individual self-assessments to the broader dynamics of professional training and education. In educational settings, students often overestimate their understanding and abilities, which can lead to poor performance and lack of motivation to improve (Nierenberg & Dahl, 2021; Miura et al., 2021). For example, research has shown that students with lower academic performance tend to have higher beliefs in their abilities compared to their more skilled peers, who may be more critical of their performance (Lindsey & Nagel, 2015; Deb & Roy, 2021). This disparity can create a cycle in which unskilled individuals remain unaware of their limitations, while skilled individuals may feel inadequate despite their actual competence.

This phenomenon is not limited to academic settings; it is also prevalent in professional settings, including health care and counseling. For example, medical trainees often exhibit the Dunning-Kruger Effect, in which their lack of experience leads them to overestimate their clinical skills (Deb & Roy, 2021; Prozesky et al., 2019). This can have serious consequences in high-stakes settings, where accurate self-assessment is critical to patient safety and effective care. The ability to recognize one's own limitations is critical to seeking guidance, collaborating with colleagues, and ultimately improving one's practice.

The Dunning-Kruger Effect can impact interpersonal relationships and client interactions in counseling. Counselors who overestimate their abilities may fail to recognize when they need additional training or supervision, potentially leading to inadequate support for clients (Scott et al., 2021; Zhou & Jenkins, 2020). This highlights the need for ongoing professional development and reflective practice to mitigate the effects of this cognitive bias. Engaging in peer supervision, seeking feedback, and participating in continuing education can help counselors develop a more accurate understanding of their competencies and areas for growth.

Implications for individual practitioners The Dunning-Kruger Effect also raises important questions about assessment and evaluation processes in educational and professional training programs. Traditional assessment methods may not adequately capture the nuances of self-assessment and metacognitive awareness, leading to misalignment between perceived and actual competency (Vázquez-Espino et al., 2022; Claessens et al., 2021). For example, assessments that rely solely on self-reporting may reinforce the Dunning-Kruger Effect by allowing individuals to maintain inflated perceptions of their abilities without confronting the reality of their performance (Sanchez & Dunning, 2018; Mazor & Fleming, 2021).

To address these challenges, educators and trainers can implement strategies that promote metacognitive awareness and accurate self-assessment. This may include incorporating reflective practice, peer evaluation, and structured feedback mechanisms into training programs (Francisco & Gonçalves-Sá, 2019; Tomczyk, 2019). By fostering an environment that encourages honest self-reflection and constructive criticism, professionals can develop a more realistic understanding of their skills and competencies, ultimately increasing their effectiveness in practice.

Additionally, the Dunning-Kruger Effect underscores the importance of humility in professional development. Research has shown that individuals who demonstrate humility are more likely to engage in accurate self-assessment and seek out opportunities for growth (Teo et al., 2022; Pazicni & Bauer, 2014). This suggests that cultivating a mindset of humility may serve as a protective factor against the cognitive biases associated with the Dunning-Kruger Effect, allowing professionals to recognize their limitations and pursue continuous improvement.

The Dunning-Kruger Effect presents a significant challenge for professionals in psychology and counseling, as it highlights the tendency for individuals with lower competencies to overestimate their abilities while those with higher competencies may underestimate them. This cognitive bias can hinder effective self-assessment, reflective practice, and ultimately, professional development. To mitigate its impact, it is important for counselors and educators to foster an environment that promotes metacognitive awareness, encourages humility, and emphasizes the importance of ongoing learning and self-reflection. In doing so, professionals can increase their understanding of their competencies, improve their practice, and provide better support to their clients.

The discourse on the Dunning-Kruger Effect in the context of counseling presents a complex and multidimensional picture. Like a cracked mirror, this biased effect reflects an incomplete and often misleading picture of oneself, so that counselors are at risk of losing critical ground in decision-making. The findings of this review confirm that overconfidence resulting from the Dunning-Kruger Effect can hinder counselors' ability to objectively evaluate their strengths and limitations, which then impacts the effectiveness of interventions.

Previous studies have shown that individuals who are less competent often fail to recognize their own deficiencies (Dunning & Kruger, 1999). This finding is consistent with the literature on cognitive heuristics and biases (Tversky & Kahneman, 1974), which suggests that human decision-making is often influenced by inaccurate perceptions. Furthermore, the literature on metacognition (Flavell, 1979) and self-reflection (Schon, 1983) emphasizes that increasing self-awareness is key to overcoming the illusion of competence. Thus, counselors who adopt a reflective approach and actively seek feedback will be better able to identify and correct their internal biases, thereby improving the quality of the therapeutic relationship with clients.

Based on the synthesis of findings, there are several practical implications that can be used as a basis for developing counselor training programs:

#### Metacognitive Training and Self-Reflection

Counselors need to be given training that specifically hones metacognitive skills to recognize deficiencies in the self-evaluation process. This approach can be done through workshops, seminars, and ongoing training programs that emphasize the importance of self-reflection and critical analysis of clinical practice (Dweck, 2006).

#### Structured Clinical Supervision

Implementing a structured supervision system involving peers or professional mentors is a key strategy. Through peer review and case discussions, counselors can gain external perspectives that help them identify areas for improvement. Clinical supervision also serves as a quality control mechanism that encourages counselors to continually review their intervention approaches (Boud et al., 2014).

#### Technology Integration in Self Evaluation

The development of a digital platform that supports real-time self-evaluation can be an innovation in modern counseling practice. This technology allows counselors to systematically record and review counseling sessions, thereby assisting in the identification of cognitive bias patterns. This approach is in line with the trend of technology integration in education and professional practice (O'Hara, 2013).

#### Development of Special Training Modules

The creation of a specific training module designed to reduce the impact of the Dunning-Kruger Effect is very relevant. The module should include basic theories of cognitive bias, case studies, reflective techniques, and simulations of therapeutic interactions. In this way, counselors can gain a deep understanding of the importance of objective self-evaluation and learning from practical experience.

While the findings of this review provide a comprehensive picture of the impact of the Dunning-Kruger Effect in counseling practice, there are a number of challenges and limitations that need to be considered, including:

#### Methodological Variability

The studies analyzed have significant methodological differences, which makes generalization of findings complex. Differences in research design, evaluation instruments, and sample populations can result in variations in data interpretation.

#### Limitations of Primary Data

Most of the available studies are still limited to primary data that are descriptive and cross-sectional in nature. Longitudinal research that observes changes in counselor self-perception in the long term is still very much needed to obtain a more dynamic and in-depth picture.

#### Contextual Limitations

The influence of culture and educational systems in various countries also affect how the Dunning-Kruger Effect manifests itself in counseling practice. Therefore, the results of this review need to be considered in the local context of each institution and country.

Philosophically, the Dunning-Kruger Effect phenomenon challenges the traditional paradigm of knowledge and competence. In the context of counseling, where trust and interpersonal relationships are crucial to the success of interventions, honesty about one's limitations becomes a fundamental ethical value. It is as if counselors are likened to sailors who must honestly assess the condition of the compass and map they use to navigate the ocean of human emotional complexity. Openness to admit weaknesses, accept criticism, and continue to learn is an ethical foundation that supports professional growth and the achievement of optimal therapeutic outcomes (Rogers, 1961).

Based on the findings and analysis that have been described, here are some recommendations for further research:

#### Longitudinal Study of Metacognition Development

Research involving regular measurement of counselor metacognition and self-evaluation can provide deeper insights into the dynamics of long-term changes in self-perception.

#### Structured Training Intervention Experiment

Conduct an experimental study to test the effectiveness of a specific training module designed to reduce the impact of the Dunning-Kruger Effect on counselors. The study could use a pre-test and post-test design to measure improvements in self-awareness and clinical performance.

#### Technology Integration in Clinical Supervision

Research on the development and implementation of digital platforms that support real-time self-evaluation would be helpful in identifying and correcting cognitive biases. Such research could combine quantitative and qualitative approaches to measure the impact of technology on supervision effectiveness.

#### Cross Cultural Studies

Given the significant differences in cultural context, comparative research between counselors in different countries could reveal how cultural factors influence the manifestation of the Dunning-Kruger Effect in counseling practice.

## CONCLUSION

From the synthesis of findings and critical discourses that have been described, it can be concluded that the Dunning-Kruger Effect has profound implications for counseling practice. Counselors who are trapped in inaccurate self-evaluation bias tend to experience overconfidence, which can ultimately reduce the quality of clinical decision-making and therapeutic relationships. Conversely, increasing metacognitive awareness through training, structured clinical supervision, and the use of evaluative technology are effective strategies to reduce the negative impact of this cognitive bias. In the context of the ever-evolving world of counseling, the ability to integrate critical reflection and acceptance of external feedback is a major foundation in professional development. Just like a climber's journey who must always check his map and compass so as not to get lost, counselors must also be able to objectively assess their strengths and limitations in order to provide optimal interventions for clients. Therefore, the development of training modules and further research that focuses on metacognitive aspects is very much needed to create counseling practices that are more adaptive and responsive to today's psychological dynamics.

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