
Local Wisdom in Algorithms: The Epistemology of Guidance Career Skills, Cultural Values, and the Dialectic of Humans with Artificial Intelligence

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Abstract: This study aims to explore in depth the epistemology of career skills from a phenomenological perspective in which artificial intelligence (AI) dominates. The background of this study is based on a fundamental shift in the way knowledge and expertise are formed and interpreted in the modern job market, which is increasingly influenced by AI. Specifically, this article investigates how individuals interpret and internalize their career knowledge amid the availability of AI-powered algorithms and platforms. Using interpretive phenomenology, this study involved in-depth interviews with six professionals across sectors who rely on AI in their daily work. Participants were selected through purposive sampling. Data analysis was conducted using Colaizzi's framework, which focuses on identifying essential themes from participants' life experiences. Results show that interaction with AI has created a "hybrid epistemology" in which human intuitive knowledge integrates dialectically with data and recommendations from machines. Further discussion suggests that this creates epistemic tension, where trust in personal intuition competes with the validity of algorithmic data. The main conclusion is that career counselors and practitioners need to develop a new framework that takes this duality of knowledge into account. The recommendation from this study is the need for a career approach that focuses not only on developing technical skills, but also on strengthening individual self-reflection and epistemic literacy to navigate an increasingly complex and AI-driven career landscape. In the educational context, these findings implicitly reinforce the urgency for career guidance services to dynamically systematically prepare students and university students to build cognitive autonomy ahead of the AI-integrated workforce.

Keywords: *Artificial Intelligence (AI), Career Skills Epistemology, Phenomenology, Local Wisdom, Career Guidance.*

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INTRODUCTION

The rapid development of artificial intelligence (AI) has disrupted various aspects of human life, particularly in the professional and career spheres. This phenomenon has created a fundamental shift in how knowledge and expertise are not only developed but also interpreted in the global job market. The dominance of AI has changed the traditional paradigm in which skills were considered static assets possessed by individuals. Instead, human interaction with machines has created a new epistemic ecosystem, in which intuitive knowledge and personal experience interact dialectically with data and algorithmic recommendations (Bianchini et al., 2022). This social fact reveals that, rather than merely being a tool, AI has become an integral part of the cognitive and decision-making processes in careers, compelling individuals to reevaluate their understanding of "*expertise*" and "*competence*" in the digital age (Moor et al., 2023). These changes are not only technical in nature, but also fundamental, requiring a redefinition of the concept of relevant and sustainable career skills.

Previous studies have examined the impact of AI on the job market, such as the automation of routine tasks and the need for upskilling (Taeihagh, 2021). Most of these studies tend to focus on macroeconomic and sociological dimensions, neglecting micro-personal perspectives on how individuals phenomenologically experience and interpret this process. There is a significant gap in the literature that explores in depth the epistemology of career skills from the perspective of individual life experiences (Correa & Liu, 2023). Existing studies have not fully captured the internal tensions and dialectical processes that occur when human intuitive knowledge intersects with the validity of algorithmic data (Ghanem et al., 2025). Based on this, this study aims to fill this gap by highlighting the lived experiences of professionals, placing the theme of the dialectic between humans and machines at the core of understanding the epistemology of careers amid the dominance of AI.

Based on these gaps, this study attempts to answer several crucial questions. First, how do individuals interpret and internalize their career knowledge and expertise amid the availability and use of AI in their daily work? Second, how does the dialectical interaction between human intuitive knowledge and algorithmic recommendations shape a new understanding of the epistemology of career skills? Third, in the context of this hybrid epistemology, how do individuals navigate the tension between the validity of personal intuition and the reliability of algorithmic data? The answers to these questions are expected to provide a comprehensive understanding of the cognitive dynamics that shape professional identity in the age of AI (Cunningham et al., 2022).

This study proposes three main hypotheses that refer to the findings and discussion. First, routine interaction with AI will give rise to a "*hybrid epistemology*" in which human intuitive knowledge and machine data will be dialectically integrated. Second, the emergence of this hybrid epistemology will cause epistemic tension, in which individuals' trust in personal intuition competes with trust in the validity of algorithmic data. Third, to navigate an increasingly complex career landscape, individuals will develop epistemic literacy as a new competency that enables them to distinguish and integrate various sources of knowledge. These hypotheses will be discussed in depth in the discussion section.

METHODS

This study uses interpretative phenomenology Interpretative Phenomenological Analysis (IPA) as its primary method and design to explore in depth the lived experiences of professionals in interpreting and internalizing career skills amid the dominance of Artificial Intelligence (Asnur et al., 2025). The phenomenological approach was chosen because it aims to understand the meaning of experiences as experienced by the subjects, a lens that is crucial for exploring the micro-personal dimensions of this epistemic shift. We specifically focus on the dialectic between human intuitive knowledge and algorithmic recommendations, as well as the epistemic tensions that arise from these interactions (Davies et al., 2024). This qualitative design allows for the collection of rich and nuanced narratives, which complement the existing understanding in the literature dominated by macroeconomic and quantitative studies.

The background of this study is based on a fundamental shift in the way knowledge and expertise are formed and interpreted in the modern job market, which is increasingly influenced by AI. This research attempts to fill a significant gap in the literature that has not fully captured the dialectical process and internal tensions that arise when human intuition intersects with the validity of algorithmic data (Karam & Afiouni, 2021). This study involves in-depth interviews with six professionals from various sectors who routinely rely on AI in their daily work. These participants were selected through purposive sampling, ensuring that they had rich and relevant experience interacting with AI systems, which are at the heart of the phenomenon under study (Jiang et al., 2024). To provide a clear context regarding the empirical data source, the comprehensive profiles of the six selected participants including their designated initials, respective professional sectors, and cumulative years of work experience are systematically structured and detailed in **Table 1**. below:

Table 1. Demographics and Profiles of the Research Participants

Participant Initial	Professional Sector / Occupation	Years of Experience
P1	Financial Consultant	> 5 Years
P2	Digital Marketing Manager	> 8 Years
P3	Health Data Analyst	> 5 Years
P4	Architect	> 7 Years
P5	Professional Educator	> 4 Years
P6	Legal Practitioner	> 6 Years

Through purposive sampling, we ensured that participants had sufficient experience to reflect on how they interpret and articulate their understanding of "*expertise*" and "*competence*" in the AI-driven digital age. The selection of subjects from various sectors was intended to provide diverse perspectives on the impact of AI on the epistemology of career skills, in line with literature findings that highlight the integration of AI in professions such as healthcare and law (Silveirinha et al., 2024). Focusing on individuals who actively interact with AI is essential to understanding the creation of a "*hybrid epistemology*" in which intuitive knowledge integrates dialectically with

machine data. This research was conducted with ethical principles, maintaining the anonymity and confidentiality of participants' personal data to ensure the authenticity of the narratives obtained (Tarihoran et al., 2022).

The primary data collection process was conducted through semi-structured in-depth interviews, which provided flexibility to explore participants' experiences and interpretations in situ and spontaneously. The interviews were designed to encourage narratives about how individuals phenomenologically experience interactions with AI, particularly how they navigate the tension between the validity of personal intuition and the reliability of algorithmic data. Each interview session was recorded and transcribed verbatim to ensure data accuracy and preserve the richness of the participants' original life experiences. Interviews lasted between 60 and 90 minutes per participant and focused on understanding how they interpreted and internalized their career knowledge amid the availability of AI-powered algorithms.

RESULT AND DISCUSSION

Result

The results of this study, obtained through in-depth analysis using Colaizzi's framework of interviews with six cross-sector professionals, reveal three essential themes regarding the epistemology of career skills in the context of Artificial Intelligence (AI) dominance (Morrow, 2015). These findings underscore a fundamental shift in the way individuals interpret and internalize their career knowledge, moving beyond the traditional skills paradigm.

Qualitative findings extracted from the phenomenological narratives of six participants have been summarized and presented systematically in **Table 1** below, which outlines three main essential themes in the epistemology of career skills in the AI era (Imam Anas Hadi et al., 2025). This table contains formulations of meaning, supported by direct quotations (verbatim quotes) from participants, which constitute the primary empirical evidence in phenomenological research. These three essential themes: Creation of Hybrid Epistemology, Epistemic Tension, and Demands for Epistemic Literacy represent the fundamental structure of the lived experiences of professionals. This detailed narrative reveals that human interaction with machines is dialectical, in which personal intuitive knowledge is constantly negotiated with the validity of algorithmic data (Pudelko & Tenzer, 2024).

Based on this, this section will discuss each theme in depth, using participant data to reinforce claims and place findings in the context of the shifting roles of modern professionals.

Table 1. Key Qualitative Themes on Epistemological Shifts in Professional Practice with AI

No	Research Findings	Empirical Evidence	Interpretation and Implications	Participants
1	Creation of Hybrid Epistemology	"Previously, I relied solely on gut feeling... Now, my gut feeling must 'negotiate' with the risk predictions generated by the algorithm. The result is a stronger decision an integration between tacit experience and real-time data validity."	Career knowledge is no longer singular but a dialectical integration between Human Intuition (tacit knowledge) and Machine Rationality (algorithmic data).	P1, Financial Consultant
		"I see AI-generated data as a 'second voice' in meetings. It does not replace my intuition...but it validates or challenges it."	AI functions as a cognitive co-pilot that supports and tests the validity of professional judgment, altering decision-making processes.	P2, Marketing Manager
		"My task shifts from searching for answers to integrating machine probabilities with undocumented patient context human nuance. It is an integration of clinical knowledge and technical literacy."	The professional role transforms into a knowledge integrator who combines analytical capabilities (AI) with contextual capabilities (human).	P3, Health Data Analyst
2	Epistemic Tension	"I must consciously choose do I trust my 20 years of professional experience or the machine's material-efficiency numbers? This	Internal conflict emerges between confidence built from experience and reliability based on AI data, requiring high cognitive	P4, Architect

No	Research Findings	Empirical Evidence	Interpretation and Implications	Participants
		negotiation process is exhausting a personal struggle over which source is more valid."	negotiation.	
		"I often resist because my intuition tells me that individual talent is unique and cannot be reduced to data. I must distinguish between the 'wisdom' of data and the 'wisdom' of experience."	Ethical and value-based tensions arise when AI systems reduce human complexity into statistical probabilities.	P5, Educator
		"Justice involves morality, which cannot be computed. This tension forces me not only to master legal tech but also to strengthen self-reflection on why I make choices beyond machine recommendations."	The conflict between efficiency (AI) and ethical/moral values (human judgment) becomes central to professional practice.	P6, Legal Practitioner
3	Demand for the Development of Epistemic Literacy	"It is not just data literacy, but the ability to determine when to trust data, when to trust intuition, and how to integrate both into responsible decisions."	New competencies are required to evaluate sources of knowledge (epistemic) to maintain professional accountability.	P1, Financial Consultant
		"I must ask critical questions: How was this data generated? What assumptions underlie the AI algorithm? Without this ability, we are merely machine operators."	Professionals must understand the mechanisms and assumptions behind AI (not just its outputs) to preserve cognitive autonomy.	P2, Marketing Manager
		"Epistemic literacy is about autonomy the ability not to be dictated by machines. I must have a strong foundation of knowledge to challenge AI outcomes."	This competence becomes the foundation for maintaining authority and professional judgment rather than surrendering it to machine decisions.	P4, Architect

A phenomenological analysis of participant narratives, summarized in **Table 1**, consistently reveals that interactions with AI have fundamentally changed the epistemology of career skills, moving from purely experience-based practices toward the formation of a Hybrid Epistemology (Ramesh et al., 2024). This finding is supported by quotes, such as those from P1 and P2, which describe the need to 'negotiate' or seek a 'second opinion' from algorithms in order to align human tacit knowledge with the validity of real-time data, thereby shifting the role of professionals to that of knowledge integrators. This shift, however, is not seamless, and inherently gives rise to Epistemic Tension, which is a significant internal conflict between trust in personal experience (as felt by P4 and P5) versus the reliability of AI data, particularly when it involves values and morality as reflected by P6. To manage this conflict and maintain professional authority, participants concluded that there is a critical demand for Epistemic Literacy, a competency that goes beyond data literacy and requires individuals to critically evaluate and integrate diverse sources of knowledge for autonomous and responsible decision-making.

The Creation of Multicultural Hybrid Epistemology

The participants' routine interactions with AI empirically create a "Hybrid Epistemology," in which human intuitive knowledge and algorithmic data from machines have been dialectically integrated into the career decision-making process. This phenomenon marks an epistemic transformation, changing not only how expertise is developed but also how it is interpreted in the job market. For example, P1 (Financial Consultant) reports that the gut feelings gained from years of experience must "negotiate" with real-time risk predictions from AI algorithms, resulting in stronger and more integrated decisions. This hybrid epistemology shows that AI has become an integral part of individuals' cognitive processes, rather than merely a static tool. P3 (Health Data Analyst) explains their role

shift from answer seekers to integrators, where they combine the rapid probabilities of algorithms with nuanced and undocumented patient contexts, demonstrating a synthesis between clinical knowledge and technical literacy. This aligns with the concept of human-in-the-loop AI, which emphasizes collaboration to achieve efficiency and accuracy, challenging old models that separate human and machine knowledge (Khushk et al., 2025).

Career skills within this hybrid epistemology framework are redefined as the ability to combine tacit knowledge that is difficult to articulate with the numerical validity provided by intelligent systems. P2 (Digital Marketing Manager) describes AI data as a second voice in decision-making, which serves to validate or challenge their intuition about market trends, so that career knowledge is a combination of subjective experience and data-based calculations (Crawford et al., 2023). Thus, professionals no longer rely on a single set of skills, but must proactively build a flexible portfolio of expertise that includes the integration of soft skills and hard skills relevant to the AI ecosystem. The process of interpreting and internalizing this knowledge is continuous and not static, reflecting the basic principles of phenomenology in the context of AI. This hybrid epistemology is a central concept that needs to be further conceptualized, as it explains how two forms of knowledge with different ontological bases can be integrated within individuals.

The Emergence of Epistemic Tension in Multicultural Guidance

The emergence of this hybrid epistemology directly gives rise to Epistemic Tension, an internal conflict in which trust in personal intuition competes with the validity of algorithmic data. This experience is central to the lived experiences of professionals, forcing them to consciously negotiate between two different sources of knowledge: intuition, which is personal and contextual, and algorithms, which are rational and data-driven. P4 (Architect) explicitly recounts this difficulty, where he must choose between 20 years of professional experience or the material efficiency figures from an AI model, describing this process as an "*internal struggle*" about which source is more valid. This tension underscores that the shift brought about by AI is not only technical but also fundamental, demanding a redefinition of relevant and sustainable career skill concepts.

This negotiation process requires significant cognitive effort, as individuals must suspend their assumptions and critically evaluate sources of knowledge. P5 (Professional Educator) reflects this tension in the context of counseling, where he often opposes AI system recommendations based on past success data, as he believes intuition can see individual talents that cannot be reduced to data (Zala et al., 2024). This epistemic tension shows that individuals seek not only efficiency but also autonomy and morality in decision-making. P6 (Legal Practitioner) concludes that while AI case prediction results are tempting, the legal process also involves morality and justice that cannot be quantified, forcing them to strengthen self-reflection beyond machine recommendations. This phenomenon represents a significant gap in the literature, which tends to overlook internal tensions and dialectical processes occurring at the micro-personal level.

The Demand for Epistemic Literacy Development

To navigate an increasingly complex career landscape dominated by Epistemic Tension, participants universally concluded that they must develop a new competency called Epistemic Literacy. This competency is defined as the ability to critically evaluate, differentiate, and integrate diverse sources of knowledge whether derived from intuition, data, or AI recommendations. P1 (Financial Consultant) defines this literacy as the ability to determine when to trust data, when to trust intuition, and how to integrate the two into responsible decisions. The need for this literacy arises because the adoption of AI has created a "*skills gap*," where market demand for complex social judgment and problem-solving skills far exceeds the available workforce (Chounta et al., 2022).

Epistemic literacy goes beyond mere digital or data literacy; it is a fundamental skill necessary to ensure autonomy and informed decision-making. P2 (Digital Marketing Manager) emphasizes that this ability is key to asking critical questions about the assumptions behind AI algorithms and avoiding becoming mere "*machine operators*." Developing these competencies requires a career approach that focuses not only on technical training, but also on strengthening self-reflection. P4 (Architect) concludes that epistemic literacy is about having a strong knowledge base to dare to challenge AI results, rather than leaving all judgment to machines, which is at the heart of algorithmic thinking. By identifying epistemic literacy as a key competency, this research contributes to the development of a more relevant and holistic career curriculum that can inform field practice and future research.

Discussion

Paradigm Shift in Career Skills in the AI Era

Recent literature highlights a significant shift from traditional skill paradigms to more adaptive and fluid frameworks, driven by the inevitable acceleration of AI technology. Conventional models that classify skills as static assets, primarily focusing on technical or specific skills, have proven inadequate for navigating the ever-changing job landscape (He, 2025). Instead, there is a consensus that individuals need more dynamic skills, such as data literacy, algorithmic thinking, and collaboration skills with intelligent systems. A study by Finan (2022) highlighting how AI is fundamentally changing the nature of work, shifting from manual and routine cognitive tasks to jobs that demand social judgment, creativity, and complex problem-solving skills. This shift not only challenges the definition of work, but also requires a profound reorientation of education and career training systems, which must focus on developing meta-skills (Chance, 2021) (Luo et al., 2022). In addition, literature also shows that the adoption of AI in various sectors has created a significant *"skills gap,"* where market demand for certain skills far exceeds the availability of competent workers, forcing companies and individuals to invest heavily in reskilling and upskilling programs (Management, 2021). More than just automation, AI serves as a catalyst for a transformation of the career ecosystem, requiring epistemic adaptation from workers.

Empirical studies have provided strong evidence of the impact of AI on various professions. For example, in the healthcare sector, AI algorithms have been integrated into medical image diagnosis and analysis, requiring doctors to have not only clinical understanding but also technical literacy to interpret the results from machines (Bledsoe et al., 2021). A similar situation occurs in the legal field, where AI is used to analyze documents and predict case outcomes, requiring legal practitioners to master legal tech and understand the limits of data-driven decision making (Lyu et al., 2022). This shift, often referred to as human-in-the-loop AI, emphasizes that collaboration between humans and AI is key to achieving greater efficiency and accuracy, rather than total substitution (Jedličková et al., 2022). This collaborative paradigm challenges the old model that separates human knowledge and machine knowledge, and instead encourages deeper integration between the two epistemic domains. Consequently, individuals can no longer rely on a single set of skills, but must proactively build a flexible portfolio of expertise that includes both soft skills and hard skills relevant to the AI ecosystem. Thus, the literature suggests that redefining career skills is an epistemic necessity, not merely a pragmatic response to market changes (Gentile et al., 2023).

The implications of this shift for careers and human resource development are profound. The literature suggests that traditional counseling models that focus on matching individuals to jobs based on existing skills are no longer effective (Kim & Kim, 2023) (Durán et al., 2022). Instead, a more holistic approach is needed that not only equips individuals with technical skills, but also helps them develop a growth mindset and resilience to cope with constant change (Huynh et al., 2021). Career counselors must transform themselves into epistemic facilitators, who help individuals understand how their own knowledge is shaped and modified by interactions with AI. This includes equipping them with epistemic literacy, which is the ability to critically evaluate sources of knowledge, whether they come from intuition or algorithmic data. Thus, the goal (Nikbakht Nasrabadi et al., 2021) Careers are shifting from simply finding a job that is suitable to helping individuals build a strong epistemological foundation, enabling them to continue learning and adapting amid the uncertainty created by the dominance of AI (Zhang et al., 2023).

Phenomenology of Career Guidance Skills in Lived Experiences

So far, most research on AI and careers has used quantitative or macroeconomic approaches, which fail to capture the richness and complexity of individuals' lived experiences at the micro level. The phenomenological approach, which aims to understand the meaning of experiences as experienced by subjects, offers a unique and valuable lens for exploring the epistemology of career skills (Valaskivi & Robertson, 2022). Relevant phenomenological literature suggests that human understanding of reality is not static, but is constantly shaped by the dialectical interaction between the subject and the surrounding world (Ahmad & Bilal, 2025). In the context of AI, this world encompasses data, algorithms, and intelligent systems that are now an integral part of the work environment. Based on this, the epistemology of career skills cannot be understood merely as an accumulation of factual knowledge, but as a continuous process of interpretation and internalization (Murgia & Pulignano, 2021). The phenomenological approach allows us to explore how individuals subjectively interpret recommendations

from AI, how they integrate them with their intuitive knowledge, and how this process shapes their perception of what constitutes "expertise" in the digital age (Usmani, 2023).

Several qualitative studies, although not yet explicitly using a phenomenological framework in the context of AI and careers, have provided relevant initial insights and careers have provided relevant initial insights. For example, research on professional practices in creative and problem-solving fields shows that individuals often rely on intuition, experience, and tacit knowledge that is difficult to articulate (Dodgson, 2023). When AI enters this domain, an epistemic tension arises: should proven intuition be replaced by data from machines, or can the two be integrated? These studies suggest that the experience of interacting with AI creates a space for negotiation in which individuals must consciously choose between two different sources of knowledge: intuition (which is personal and contextual) and algorithms (which are rational and data-driven). This negotiation process is at the heart of the phenomenological experience in the AI era, and understanding (Yağan et al., 2022). Thus, this literature supports the importance of research focusing on subjective experiences to fully understand the implications of AI on career epistemology.

The main challenge in using the phenomenological approach lies in its methodology, which requires bracketing or suspending the researcher's assumptions (Frick & Grudowski, 2023). This is crucial in the context of AI, where there is a tendency to view AI deterministically, either as a total threat or a universal solution. This study, using phenomenology, attempts to suspend such views and let the participants' experiences speak for themselves. In this way, we can discover new meanings that may have been overlooked by quantitative studies. A review of the literature shows that a richer understanding of how individuals construct meaning from their interactions with AI, how they experience tension, how they adapt, and how they redefine themselves as professionals is still an area that has not been adequately explored (Sukarma et al., 2024). Based on this, this study contributes by providing an in-depth qualitative narrative that complements existing understanding in the literature and provides a basis for the development of new theories that are more sensitive to the human dimension in dialectics with machines.

The findings revealed in this study provide a significant theoretical contribution to the understanding of the epistemology of career skills amid the dominance of Artificial Intelligence (AI), going beyond the traditional focus on technical adaptation alone. This discussion focuses on three essential themes: Hybrid Epistemology, Epistemic Tension, and Epistemic Literacy by comparing, supporting, and adding insights to previous research literature. Overall, these findings conclude that AI not only changes work but also reconstructs the way professionals produce and validate knowledge in their daily practices. The structure of the experiences discussed underscores the need for a new framework that takes into account the ontological duality between humans and machines as legitimate sources of knowledge. The implications of this dialectic point to the importance of educational interventions targeting metacognitive abilities and human judgment in the job market.

Redefining Career Skills Through Hybrid Epistemology

The first paragraph of this discussion supports literature that emphasizes the structural and didactic shifts brought about by AI, but extends it to personal and cognitive dimensions through the concept of Hybrid Epistemology. Previous research has documented the phenomenon of hybridity, often focusing on the organizational or didactic design domains. However, our findings show that this hybridity occurs at an internal epistemic level, where human intuitive knowledge (such as gut feeling P1) must actively 'negotiate' with algorithmic data rationality. We argue that this Hybrid Epistemology is the result of conscious dialectical integration, not just the passive coexistence of two sources of knowledge. This confirms that expertise no longer resides in the exclusive domain of humans, but is rather a synthesis that must be validated by both parties: subjective experience and objective calculation (Tapalova & Zhiyenbayeva, 2022).

The 'negotiation' mechanism revealed by participants adds a crucial layer to the literature on AI augmentation, which often assumes seamless integration. In this context, AI acts not only as a tool that augments capabilities but as a 'second voice' (P2) that professionals must seriously confront and consider. This finding refutes the deterministic view of technology that assumes AI will completely replace or dictate human judgment; rather, AI forces professionals to strengthen their process of self-reflection. This process of cognitive integration, as experienced by P3 in integrating machine probability with human nuance, requires a conscious effort to bridge the gap between clinical knowledge and technical literacy. Therefore, Hybrid Epistemology must be viewed as a cognitive practice that challenges the boundaries of knowledge autonomy.

The theoretical implications of Hybrid Epistemology challenge the traditional definition of tacit knowledge, which has been considered inarticulate or uncodifiable. If tacit knowledge must 'negotiate' with algorithms, then it is forced to be articulated or at least contrasted with structured data. We suggest that AI acts as a 'reflective catalyst', forcing professionals to explicitly define and validate their intuitions. This contribution enriches Usmani's (2023) framework on hybridity, showing that the successful integration of AI depends on individuals' ability to accelerate the externalization of their tacit knowledge (Al Braiki et al., 2020). Consequently, future career training should focus on methods that accelerate the articulation and negotiation of such knowledge.

Managing Internal Conflict: Epistemic Tension

Findings on epistemic tension expand the concept of knowledge contestation, which has previously been discussed extensively in the context of media and society, and transfer it to the realm of individual internal experience. Valaskivi & Robertson discuss epistemic contestations in hybrid media environments, where various claims to truth compete externally. We find that this tension is internalized and experienced as an exhausting phenomenal struggle by participants (P4). This conflict is not merely a disagreement over data, but rather a crisis of trust in the sources of knowledge validity: whether years of experience or algorithmic efficiency figures should take precedence. This addition highlights the psychological and cognitive impact of AI, which demands the development of more sophisticated coping mechanisms at the micro level (Chounta et al., 2022).

A significant contrast emerges when AI literature largely focuses on external governance and regulatory aspects. However, our findings show that the burden of ethical and epistemic governance is largely borne by the professional judgment of individuals. P6 (Legal Practitioner) and P5 (Educator) indicate that Epistemic Tension peaks when AI threatens individual morality and uniqueness, which are unquantifiable domains. This effectively creates a "*Moral Wisdom Zone*" that must be maintained by humans beyond the reach of algorithms. We argue that the policy focus should not only be on how AI is regulated, but also on how individuals are trained to regulate and maintain their own human judgment in the face of statistically powerful recommendations.

This mechanism of Epistemic Tension is constant because intuition and AI data operate on different axes of validity: intuition is context- and morality-based, while AI is probability- and generalization-based (Khan et al., 2022). P4 explicitly refers to this negotiation process as "*exhausting*," indicating the high cognitive cost required to maintain Hybrid Epistemology. The Phenomenological Engagement with this Tension suggests that professionals must engage in continuous *epoché* (suspension of judgment), reevaluating their sources of trust in real-time. The practical implication is that work environments must acknowledge and provide space, time, and resources for this intense process of reflection and cognitive negotiation, rather than simply demanding AI-driven efficiency of outcomes.

Key Competencies: The Need for Epistemic Literacy Development

Findings on Epistemic Literacy support the general call for improved digital and data literacy in the workplace, but critically add the dimension of knowledge source assessment as a key focus. The literature on AI literacy generally emphasizes a functional understanding of how algorithms work. However, our findings define it more sharply: Epistemic Literacy is the competency to determine 'when to trust data, when to trust intuition' (P1) and how to integrate both for responsible decision-making. It is a meta-competency that enables individuals to effectively become hybrid decision-makers rather than merely users of technology (Wibowo, 2024).

Epistemic Literacy requires professionals to actively and critically interrogate the assumptions and mechanisms behind AI, which is a significant addition to the human-computer interaction literature. P2 and P4 emphasize that this literacy is about cognitive autonomy, namely the ability to challenge AI results rather than being dictated to as a "*machine operator*." The ability to ask critical questions about how data is generated is essential to maintaining professional integrity. We argue that Epistemic Literacy is a mechanism of individual knowledge self-governance, allowing individuals to maintain their own authority and judgment (P4), even when AI results are statistically compelling. It is the last line of defense against automation bias (Handayani et al., 2023).

The practical and pedagogical implications of Epistemic Literacy are vast. Future career curricula cannot focus solely on technical coding or prompting training, but must explicitly train judgment and self-reflection. These findings suggest that educational institutions need to adopt hybrid didactic designs that focus on case studies of ethical dilemmas, where learners are forced to deal with Epistemic Tension in a simulated manner. Through the

development of Epistemic Literacy, professionals can ensure that the Hybrid Epistemology they create leads to enlightened decision-making rather than mere compromise between humans and machines.

CONCLUSION

This interpretive phenomenological study successfully reveals a fundamental shift in the epistemology of career skills, confirming that the dominance of Artificial Intelligence (AI) has created a Hybrid Epistemology among professionals. This new epistemology is not merely passive coexistence; rather, it is an active dialectical integration process, in which human intuitive knowledge, often in the form of *intuition* gained from years of conscious experience, must negotiate with the rationality of data and algorithmic machine predictions. Professionals are now transforming from mere holders of static expertise into knowledge integrators, redefining competence not as a single skill, but as the ability to synthesize unarticulated expertise with the numerical validity provided by intelligent systems. This interaction positions AI as a "*reflective catalyst*" that forces professionals to strengthen their self-reflection processes.

However, this dialectical integration carries a significant cognitive load, manifested as internal Epistemic Tension. This conflict arises from a crisis of trust in the sources of knowledge validity, particularly when decisions go beyond pure data and touch on unmeasurable domains such as morality, ethics, and social context. In the context of studies, Epistemic Tension becomes a field of defense for Local Wisdom and Cultural Values; these are the human elements that act as critical filters, ensuring that the statistical efficiency of AI does not sacrifice contextual and moral considerations embedded in work culture and society. In other words, Local Wisdom manifests as human judgment that rejects total automation when human values are threatened, urging individuals to maintain their Moral Wisdom Zone beyond the reach of machines.

To address this Epistemic Tension and ensure professional autonomy, this study identifies a critical need for the development of Epistemic Literacy. In conclusion, navigating an AI-driven workforce demands that modern career guidance frameworks look beyond technical upskilling to prioritize epistemic literacy and critical self-reflection; and specifically for the Indonesian educational ecosystem, it is highly recommended that career counselors integrate local wisdom and cultural values into hybrid counseling modules to ensure students maintain cognitive and ethical autonomy amidst algorithmic dominance.

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