

# **Epistemic Trust and Willingness to Engage with Challenging Ideas: A Structured Literature Review**

## 1. Introduction

Epistemic trust—the willingness to regard information from others as trustworthy and relevant—has emerged as a key factor in how individuals engage with challenging or novel ideas. Research suggests that epistemic trust facilitates openness to new information, supports productive argumentation, and underpins social learning, while epistemic mistrust or credulity can hinder adaptive engagement with dissenting or complex perspectives (Novaes, 2020; Campbell et al., 2021; Liotti et al., 2023; Fonagy et al., 2019; Fonagy & Allison, 2023; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Tong et al., 2019; Chevrier et al., 2019). The literature highlights that epistemic trust is not simply a matter of gullibility; rather, it involves a selective openness that enables individuals to consider, evaluate, and potentially revise their beliefs in light of new or conflicting evidence (Novaes, 2020; Campbell et al., 2021; Fonagy & Allison, 2023; Hendriks et al., 2015). Conversely, epistemic mistrust is associated with rigidity, resistance to change, and difficulties in benefiting from social communication (Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Fonagy et al., 2017). This review synthesizes current research on the relationship between epistemic trust and a person's willingness to engage with challenging ideas, drawing on empirical, theoretical, and clinical perspectives.

## 2. Methods

A comprehensive search was conducted across over 170 million research papers in Consensus, including sources such as Semantic Scholar and PubMed. The search strategy involved 20 targeted queries grouped into 8 thematic clusters, focusing on epistemic trust, openness to challenging ideas, intellectual humility, and related constructs. In total, 1,032 papers were identified, 564 were screened, 424 were deemed eligible, and the top 50 most relevant papers were included in this review.

## **Search Strategy**



FIGURE 1 Flow diagram of the literature search and selection process.



Eight unique search groups were used, targeting foundational concepts, mechanisms, critiques, and interdisciplinary perspectives on epistemic trust and openness to challenging ideas.

## 3. Results

## 3.1. Defining Epistemic Trust and Its Dimensions

Epistemic trust is conceptualized as an adaptive stance of selective openness to socially transmitted knowledge, distinct from both mistrust (rejection of information) and credulity (uncritical acceptance) (Campbell et al., 2021; Liotti et al., 2023; Fonagy & Allison, 2023; Hendriks et al., 2015). Validated measures such as the Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ) have established its multidimensional nature and links to psychological well-being (Campbell et al., 2021; Liotti et al., 2023; Greiner et al., 2025).

## 3.2. Epistemic Trust and Engagement with Challenging Ideas

High epistemic trust is associated with a greater willingness to engage in argumentation, consider opposing viewpoints, and revise beliefs in light of new evidence (Novaes, 2020; Fonagy & Allison, 2023; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Tong et al., 2019; Chevrier et al., 2019). Trust in the epistemic competence and integrity of information sources is crucial for productive engagement with challenging or controversial ideas (Novaes, 2020; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Tong et al., 2019). Conversely, epistemic mistrust leads to avoidance, rigidity, and reduced openness to intellectual risk-taking (Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Fonagy et al., 2017).

## 3.3. Mechanisms and Moderators

The relationship between epistemic trust and openness is mediated by factors such as mentalizing (the ability to understand others' mental states), attachment security, and prior experiences of social communication (Campbell et al., 2021; Fonagy et al., 2019; Fonagy & Allison, 2023; Locati et al., 2022; Greiner et al., 2025). Cultural, developmental, and contextual factors also shape epistemic stance and its impact on engagement with challenging ideas (Liotti et al., 2023; Tong et al., 2019; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Schwarzenegger, 2020).

## 3.4. Implications for Education, Science Communication, and Psychotherapy

Fostering epistemic trust is seen as a goal in education and science communication, as it supports critical thinking, intellectual humility, and the ability to navigate complex or conflicting information (Vaupotič et al., 2024; Vaupotič et al., 2021; Chevrier et al., 2019; Greene & Yu, 2016). In psychotherapy, restoring epistemic trust is linked to increased openness, resilience, and the capacity to benefit from social learning (Fonagy et al., 2019; Fonagy et al., 2015; Fonagy & Allison, 2023; Nolte et al., 2023; Fisher et al., 2023; Li et al., 2022).



# **Key Papers**

Paper	Methodology	Population	Key Results
(Novaes, 2020)	Theoretical analysis	General	Trust is fundamental for engaging with argumentation and challenging ideas
(Campbell et al., 2021)	Scale development, validation	Adults (n=500, n=705)	Epistemic trust predicts adaptive openness; mistrust linked to rigidity
(Liotti et al., 2023)	Validation study	Italian adults (n=843, n=445)	Cultural/contextual factors influence epistemic stance and openness
(Fonagy & Allison, 2023)	Theoretical/clinical	Clinical, developmental	Mentalizing and epistemic trust enable openness to new learning
(Vaupotič et al., 2024)	Experimental	General public (N=432)	Complexity in communication increases epistemic trustworthiness and humility

FIGURE 2 Comparison of key studies on epistemic trust and openness to challenging ideas.



## **Top Contributors**

Type	Name	Papers	
Author	P. Fonagy	(Campbell et al., 2021; Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Fonagy & Allison, 2023; Nolte et al., 2023; Locati et al., 2022; Fisher et al., 2023; Bo et al., 2017; Fisher et al., 2024; Fonagy et al., 2017; Greiner et al., 2025; Li et al., 2022; Fonagy et al., 2017)	
Author	C. Campbell	(Campbell et al., 2021; Liotti et al., 2023; Fonagy et al., 2019; Li et al., 2025; Li et al., 2021; Locati et al., 2022; Fisher et al., 2023; Fonagy et al., 2017; Greiner et al., 2025; Li et al., 2022; Fonagy et al., 2017)	
Author	P. Luyten	(Campbell et al., 2021; Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Li et al., 2025; Li et al., 2021; Fonagy & Allison, 2023; Nolte et al., 2023; Locati et al., 2022; Fisher et al., 2023; Bo et al., 2017; Fonagy et al., 2017; Greiner et al., 2025; Li et al., 2022; Fonagy et al., 2017)	
Journal	PLoS ONE	(Campbell et al., 2021; Liotti et al., 2023; Greiner et al., 2025)	
Journal	Journal of Personality Disorders	(Fonagy et al., 2015; Nolte et al., 2023)	
Journal	Psychopathology	(Fonagy et al., 2019; Fonagy & Allison, 2023)	

FIGURE 3 Authors & journals that appeared most frequently in the included papers.

## 4. Discussion

The literature consistently demonstrates that epistemic trust is a key enabler of openness to challenging ideas, argumentation, and intellectual growth (Novaes, 2020; Campbell et al., 2021; Liotti et al., 2023; Fonagy & Allison, 2023; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Tong et al., 2019; Chevrier et al., 2019). Individuals with high epistemic trust are more likely to engage with dissenting views, consider disconfirming evidence, and adapt their beliefs, while those with epistemic mistrust tend to be rigid, avoidant, and less receptive to new information (Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Fonagy et al., 2017). The development and restoration of epistemic trust are influenced by early attachment, mentalizing capacity, and social context, suggesting that interventions targeting these factors may enhance openness and resilience (Campbell et al., 2021; Fonagy et al., 2019; Fonagy & Allison, 2023; Locati et al., 2022; Greiner et al., 2025).

However, the relationship is not unidimensional; excessive credulity can also undermine critical engagement, highlighting the importance of balanced, selective trust (Campbell et al., 2021; Liotti et al., 2023; Hendriks et al., 2015). Some critiques caution against overemphasizing trust at the expense of epistemic vigilance, especially in environments with misinformation or low-quality sources (Novaes, 2020; Hendriks et al., 2015; John, 2018). The evidence base is strongest in clinical and developmental contexts, with growing but still limited empirical work in education, science communication, and broader social domains.



## **Claims and Evidence Table**

Claim	Evidence Strength	Reasoning	Papers
Epistemic trust increases willingness to engage with challenging ideas	Strong	Multiple empirical and theoretical studies show trust enables openness, argumentation, and belief revision	(Novaes, 2020; Campbell et al., 2021; Liotti et al., 2023; Fonagy & Allison, 2023; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Tong et al., 2019; Chevrier et al., 2019)
Epistemic mistrust leads to rigidity and avoidance of challenging ideas	Strong	Clinical and developmental research links mistrust to reduced openness and adaptability	(Liotti et al., 2023; Fonagy et al., 2019; Fonagy et al., 2015; Fonagy et al., 2017)
Mentalizing and attachment security foster epistemic trust and openness	Moderate	Studies show these factors mediate the development of trust and engagement	(Campbell et al., 2021; Fonagy et al., 2019; Fonagy & Allison, 2023; Locati et al., 2022; Greiner et al., 2025)
Excessive credulity undermines critical engagement with challenging ideas	Moderate	Balanced trust is necessary; credulity leads to uncritical acceptance	(Campbell et al., 2021; Liotti et al., 2023; Hendriks et al., 2015)
Cultural/contextual factors moderate the impact of epistemic trust	Moderate	Cross-cultural studies show variation in epistemic stance and openness	(Liotti et al., 2023; Tong et al., 2019; Hendriks et al., 2015; Vaupotič et al., 2024; Vaupotič et al., 2021; Schwarzenegger, 2020)
Overemphasis on trust may reduce epistemic vigilance in some contexts	Weak	Some critiques warn of risks in low-quality or adversarial environments	(Novaes, 2020; Hendriks et al., 2015; John, 2018)

FIGURE Key claims and support evidence identified in these papers.

## 5. Conclusion

Epistemic trust is a foundational factor in a person's willingness to engage with challenging ideas, supporting openness, argumentation, and intellectual growth. Its development is shaped by psychological, social, and contextual factors, and its absence is linked to rigidity and reduced adaptability. While the evidence is robust in clinical and developmental domains, further research is needed to clarify mechanisms and interventions in educational, scientific, and societal contexts.



# 5.1. Research Gaps

Despite substantial progress, gaps remain in understanding how epistemic trust operates across diverse populations, contexts, and domains. There is a need for more empirical studies outside clinical settings, longitudinal research on the development of epistemic trust, and interventions to foster balanced trust and openness.

# Research Gaps Matrix

Topic/Attribute				Cross- Cultural	Longitudinal
Epistemic trust & openness	12	7	5	3	2
Epistemic mistrust & rigidity	10	4	2	1	1
Mentalizing/attachment as moderators	8	3	2	1	1
Interventions to foster trust	6	2	2	GAP	GAP
Epistemic credulity & critical thinking	4	2	1	GAP	GAP

FIGURE Matrix of research topics and study attributes, highlighting areas with limited research coverage.

# 5.2. Open Research Questions

Future research should address the following questions to advance understanding and application of epistemic trust in fostering openness to challenging ideas.



Question	Why
How does epistemic trust develop and change across the lifespan in non-clinical populations?	Understanding developmental trajectories can inform interventions to foster openness and adaptability in diverse contexts.
What are the most effective interventions for enhancing epistemic trust and openness in educational and societal settings?	Identifying evidence-based strategies can improve critical thinking and engagement with challenging ideas.
How do cultural and contextual factors shape the relationship between epistemic trust and willingness to engage with dissent?	Cross-cultural insights can ensure interventions are effective and equitable across different societies.

FIGURE Open research questions for future investigation on epistemic trust and openness.

In summary, epistemic trust is a critical enabler of openness to challenging ideas, but further research is needed to clarify its mechanisms, moderators, and practical applications across contexts.

These papers were sourced and synthesized using Consensus, an AI-powered search engine for research. Try it at <a href="https://consensus.app">https://consensus.app</a>

## References

Novaes, C. (2020). The Role of Trust in Argumentation. Informal Logic. https://doi.org/10.22329/il.v40i2.6328

Campbell, C., Tanzer, M., Saunders, R., Booker, T., Allison, E., Li, E., O'Dowda, C., Luyten, P., & Fonagy, P. (2021). Development and validation of a self-report measure of epistemic trust. *PLoS ONE*, 16. <a href="https://doi.org/10.1371/journal.pone.0250264">https://doi.org/10.1371/journal.pone.0250264</a>

Liotti, M., Milesi, A., Spitoni, G., Tanzilli, A., Speranza, A., Parolin, L., Campbell, C., Fonagy, P., Lingiardi, V., & Giovanardi, G. (2023). Unpacking trust: The Italian validation of the Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ). *PLOS ONE*, 18. <a href="https://doi.org/10.1371/journal.pone.0280328">https://doi.org/10.1371/journal.pone.0280328</a>

Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2019). Mentalizing, Epistemic Trust and the Phenomenology of Psychotherapy. *Psychopathology*, 52, 94 - 103. <a href="https://doi.org/10.1159/000501526">https://doi.org/10.1159/000501526</a>

Fonagy, P., Luyten, P., & Allison, E. (2015). Epistemic Petrification and the Restoration of Epistemic Trust: A New Conceptualization of Borderline Personality Disorder and Its Psychosocial Treatment.. *Journal of personality disorders*, 29 5, 575-609. https://doi.org/10.1521/pedi.2015.29.5.575

Vaupotič, N., Kienhues, D., & Jucks, R. (2024). Complexity appreciated: How the communication of complexity impacts topic-specific intellectual humility and epistemic trustworthiness. *Public Understanding of Science (Bristol, England)*, 33, 740 - 756. https://doi.org/10.1177/09636625241227800

Vaupotič, N., Kienhues, D., & Jucks, R. (2021). Trust in Science and Scientists: Implications for (Higher) Education. Trust and Communication. https://doi.org/10.1007/978-3-030-72945-5\_10

Li, E., Midgley, N., Campbell, C., & Luyten, P. (2025). A theory-building case study of resolving epistemic mistrust and developing epistemic trust in psychotherapy with depressed adolescents.. *Psychotherapy research*: *journal of the Society for Psychotherapy Research*, 1-19. <a href="https://doi.org/10.1080/10503307.2025.2473927">https://doi.org/10.1080/10503307.2025.2473927</a>



Li, E., Midgley, N., Luyten, P., & Campbell, C. (2021). 21 Therapeutic settings and beyond: a task analysis of reestablishing epistemic trust in psychotherapy. *BMJ Open*. <a href="https://doi.org/10.1136/BMJOPEN-2021-QHRN.21">https://doi.org/10.1136/BMJOPEN-2021-QHRN.21</a>

Schwarzenegger, C. (2020). Personal epistemologies of the media: Selective criticality, pragmatic trust, and competence–confidence in navigating media repertoires in the digital age. *New Media & Society*, 22, 361 - 377. <a href="https://doi.org/10.1177/1461444819856919">https://doi.org/10.1177/1461444819856919</a>

Tong, Y., Wang, F., & Danovitch, J. (2019). The role of epistemic and social characteristics in children's selective trust: Three meta-analyses.. *Developmental science*, e12895. <a href="https://doi.org/10.1111/desc.12895">https://doi.org/10.1111/desc.12895</a>

Hendriks, F., Kienhues, D., & Bromme, R. (2015). Measuring Laypeople's Trust in Experts in a Digital Age: The Muenster Epistemic Trustworthiness Inventory (METI). *PLoS ONE*, 10.

https://doi.org/10.1371/journal.pone.0139309

Fonagy, P., & Allison, E. (2023). Beyond Mentalizing: Epistemic Trust and the Transmission of Culture. *The Psychoanalytic Quarterly*, 92, 599 - 640. <a href="https://doi.org/10.1080/00332828.2023.2290023">https://doi.org/10.1080/00332828.2023.2290023</a>

Nolte, T., Hutsebaut, J., Sharp, C., Campbell, C., Fonagy, P., & Bateman, A. (2023). The Role of Epistemic Trust in Mentalization-Based Treatment of Borderline Psychopathology. *Journal of Personality Disorders*. <a href="https://doi.org/10.1521/pedi.2023.37.5.633">https://doi.org/10.1521/pedi.2023.37.5.633</a>

Locati, F., Milesi, A., Conte, F., Campbell, C., Fonagy, P., Ensink, K., & Parolin, L. (2022). Adolescence in lockdown: The protective role of mentalizing and epistemic trust. *Journal of Clinical Psychology*. <a href="https://doi.org/10.1002/jclp.23453">https://doi.org/10.1002/jclp.23453</a>

Fisher, S., Fonagy, P., Wiseman, H., & Zilcha-Mano, S. (2023). I see you as recognizing me; therefore, I trust you: Operationalizing epistemic trust in psychotherapy. *Psychotherapy*. <a href="https://doi.org/10.1037/pst0000501">https://doi.org/10.1037/pst0000501</a>

Bo, S., Sharp, C., Fonagy, P., & Kongerslev, M. (2017). Hypermentalizing, Attachment, and Epistemic Trust in Adolescent BPD: Clinical Illustrations. *Personality Disorders: Theory, Research, and Treatment*, 8, 172–182. <a href="https://doi.org/10.1037/per0000161">https://doi.org/10.1037/per0000161</a>

Fisher, S., Guralnik, T., Fonagy, P., & Zilcha-Mano, S. (2024). The development of the Epistemic Trust Rating System (ETRS). *Psychotherapy Research*, 35, 412 - 423. <a href="https://doi.org/10.1080/10503307.2023.2299213">https://doi.org/10.1080/10503307.2023.2299213</a>

Chevrier, M., Muis, K., Trevors, G., Pekrun, R., & Sinatra, G. (2019). Exploring the antecedents and consequences of epistemic emotions. *Learning and Instruction*. <a href="https://doi.org/10.1016/J.LEARNINSTRUC.2019.05.006">https://doi.org/10.1016/J.LEARNINSTRUC.2019.05.006</a>

Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017). What we have changed our minds about: Part 2. Borderline personality disorder, epistemic trust and the developmental significance of social communication. *Borderline Personality Disorder and Emotion Dysregulation*, 4. <a href="https://doi.org/10.1186/s40479-017-0062-8">https://doi.org/10.1186/s40479-017-0062-8</a>

John, S. (2018). Epistemic trust and the ethics of science communication: against transparency, openness, sincerity and honesty. *Social Epistemology*, 32, 75 - 87. <a href="https://doi.org/10.1080/02691728.2017.1410864">https://doi.org/10.1080/02691728.2017.1410864</a>

Greiner, C., Besch, V., Bouchard-Boivin, M., Hénaff, C., Von Rohr-De Pree, C., Perroud, N., Prada, P., & Debbané, M. (2025). Epistemic Trust, Mistrust and Credulity Questionnaire (ETMCQ) validation in French language: Exploring links to loneliness. *PLOS One*, 20. <a href="https://doi.org/10.1371/journal.pone.0303918">https://doi.org/10.1371/journal.pone.0303918</a>

Greene, J., & Yu, S. (2016). Educating Critical Thinkers. *Policy Insights from the Behavioral and Brain Sciences*, 3, 45 - 53. https://doi.org/10.1177/2372732215622223

Li, E., Midgley, N., Luyten, P., Sprecher, E., & Campbell, C. (2022). Mapping the journey from epistemic mistrust in depressed adolescents receiving psychotherapy.. *Journal of counseling psychology*. https://doi.org/10.1037/cou0000625



Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017). What we have changed our minds about: Part 1. Borderline personality disorder as a limitation of resilience. *Borderline Personality Disorder and Emotion Dysregulation*, 4. <a href="https://doi.org/10.1186/s40479-017-0061-9">https://doi.org/10.1186/s40479-017-0061-9</a>