

Why SMEs Don't Use Academic Research: The Knowledge-to-Action Gap

Jaani Väisänen

LAB University of Applied Sciences, Lappeenranta, Finland

jaani.vaisanen@lab.fi

Abstract: Small and medium-sized enterprises (SMEs) often express baseline trust in academic research, yet report limited ability to translate research outputs into actionable decisions and routines. To address this phenomenon, this study examines a) the mechanisms that create a gap between trust in academic research and practical use, b) how SMEs move from accessing research to making sense of it and applying it in practice—and where this “research to action” process most commonly breaks down—and c) how differences in absorptive capacity and related routines explain variation in research utilization. Empirically, we draw on semi-structured interview data collected by the NOKKA project in southeastern Finland, comprising 23 SME representatives. The empirical analysis is grounded in three complementary perspectives. First, absorptive capacity explains firm-level differences in recognizing, assimilating, and exploiting external knowledge, offering a capability-based indicator of why some SMEs can convert research insights into practice more readily than others. Second, knowledge transfer stickiness provides a barrier-focused perspective on why knowledge—even when valued—tends to “stick” and fail to transfer into routines, highlighting frictions such as ambiguity and recipient-side constraints. Third, research utilization clarifies what “using research” can mean in practice (e.g., instrumental vs. conceptual use), while evidence-based management explains why and how research insights should be translated into actionable managerial practices to narrow the research–practice gap. Interview evidence indicates that SMEs typically rely on fast, familiar information channels, experience uncertainty and opportunity costs when assessing relevance and comprehensibility, and most frequently struggle at the point of converting insights into implementable actions. We further observe meaningful variation in “research literacy” and routines, suggesting different absorptive-capacity profiles across firms. This paper derives actionable guidance for designing low-barrier support that helps SMEs (i) find relevant research efficiently, (ii) reduce sensemaking costs, and (iii) operationalize evidence through case-based and action-oriented translation artefacts and facilitation.

Keywords: University-industry collaboration, Small and medium-sized enterprises, Research utilization

1. Introduction

University–industry collaboration (UIC) has become increasingly important as firms operate under persistent pressure to adapt and renew themselves. Small and medium-sized enterprises (SMEs) in particular face a demanding combination of rapid technological change alongside shifting market expectations, geopolitical uncertainty, and financial constraints. In such conditions, the ability to identify, absorb, and apply new information and practically usable knowledge becomes a central requirement for maintaining competitiveness. Universities represent a prominent and widely recognized source of such knowledge, offering research-based insights that can, in principle, support firms’ learning, decision-making, and renewal.

UIC has been examined from multiple perspectives, such as the Triple Helix (and subsequent) model (Etzkowitz and Leydesdorff 2000, Cai and Etzkowitz 2020, El-Ferik and Al-Naser 2021, Tereschenko et al. 2024), which highlights the structures and interplay among universities, industry, and government. Later on, the attention has shifted from structural framing to a more processual and capacity-based framing (Mura, Di Flauro, and Fratocchi 2025), highlighting the barriers for knowledge-to-action, such as knowledge ambiguity, low absorptive capacity, and institutional cognitive differences (de Wit-de Vries et al 2018).

The success of collaboration efforts often hinges on acquired trust (Darabi, Saunders, and Clark 2021), and while SMEs may express baseline trust in university-produced knowledge and often regard academic research as credible (Rantala et al 2025), this trust does not automatically translate into systematic use. Barends et al. (2017) suggest that although SME managers may report positive attitudes toward evidence-based practice, they also report major barriers, such as a lack of time and limited understanding of scientific research to its uptake and implementation, suggesting that favourable attitudes do not automatically translate into systematic use. Personal experience and established practices can also affect the uptake of research evidence, as Rousseau (2006) suggests. Additionally, de Wit-de Vries et al (2018) argue that fear of opportunistic behaviour may limit the collaboration even further. Thus, we can identify a noticeable knowledge-to-action gap: knowledge that is accessed and even valued may still fail to translate into concrete decisions, routines, or implementable practices.

This paper addresses that gap by focusing on the research-to-action chain and by identifying where frictions most commonly emerge along the path from research access to practical application. Empirically, the study draws on thematic interview material collected from 23 SME representatives in southeastern Finland, providing a grounded basis for examining how research-based knowledge is encountered, interpreted, and (not) translated into action in organizational settings.

2. Theoretical Foundation and Research Questions

The knowledge-to-action process involves multiple steps for success. Therefore, the gap within it is unlikely to be explained solely by attitudes or processes. To address this gap, this study formulates three distinct research questions to clarify the drivers behind the observed disconnect between knowledge and action.

First, RQ1 focuses on explanation by asking which mechanisms and barriers create the disconnect between SMEs' baseline trust in academic research and their limited practical use of research outputs. The aim is to move beyond a generic "lack of use" claim and specify what prevents trusted knowledge from translating into implementable actions and organizational routines. Survey evidence suggests that SMEs may value research produced by academic institutions, indicating that university-produced research is often perceived as credible in principle (Rantala et al 2025). At the same time, research on SME–university collaboration shows that this trust is not unconditional: SMEs place importance on selecting academic partners they can access and understand, influencing how credible and useful the university partner is perceived to be in delivering the knowledge the firm seeks (Johnston 2022, Darabi, Saunders and Clark 2021). In addition, studies of SME–university collaborations emphasize that trust is initiated and developed through factors such as networking and referrals (Darubi, Saunders, and Clark 2021) and that, in a general setting, trust evolves as SMEs form judgments about their counterparts' competence and integrity (Schoorman, Mayer and Davis 2007). Taken together, these insights suggest that the relevant problem is not only whether SMEs trust academic knowledge as such, but also whether they trust that it can generate practical value under the constraints of everyday managerial work. Therefore, we formulate our first research question as

RQ1: What are the central mechanisms and barriers that weaken SMEs' trust in the practical usefulness of academic research, even when the research itself is considered credible?

Second, translating academic research into day-to-day managerial action is not a single decision but a process that unfolds through multiple steps. In SME settings, this translation problem is especially salient because firms may value university-produced research, yet still struggle to convert it into implementable practices. The core phenomenon addressed by RQ2 is therefore the "results-to-action" pathway: how research moves from being available to becoming actionable inside the firm.

The translation challenge is best examined by separating sensemaking from implementation. Sensemaking refers to how managers interpret research and connect it to their own context so that it becomes meaningful enough to guide action (Weick, Sutcliffe and Obstfeld 2005, Maitilis and Christianson 2014). This step is often difficult in university–industry settings because differences in goals and knowledge bases can create ambiguity and absorption problems (de Wit-de Vries et al., 2018), making it hard to interpret the findings in the firm's specific situation. However, even when SMEs succeed in making sense of the research, they may still fail to use it in practice. The knowledge transfer literature notes that partners often face difficulties with the application of knowledge, even when strong scientific evidence is provided (de Wit-de Vries et al 2019, Rynes, Giluk and Brown 2007, Lawler 2007), indicating that the bottleneck may occur after interpretation, when insights need to be converted into routines, decisions, or concrete interventions. This suggests that a limited understanding of the applicability process of scientific research is perceived as a major barrier to uptake and implementation, thereby preventing action even when the underlying message is understood. Therefore, we propose the following research question

RQ2: How do SMEs move beyond accessing academic research to making sense of it and applying it in practice, and where does this "results to action" process most commonly break down?

While RQ1 identifies the mechanisms that weaken SMEs' trust in the practical usefulness of academic research, and RQ2 examines where the research-to-action chain most commonly breaks down, they do not yet explain why some firms are more successful than others in exploiting research-based knowledge. To address this remaining gap, we turn to the concept of absorptive capacity, commonly understood as a firm's ability to recognize the value of external knowledge, assimilate it, and apply it to commercial ends (Cohen and Levinthal 1990).

In the SME context, absorptive capacity is especially consequential because firms typically operate under significant resource constraints. Limited time, scarce specialized personnel, and restricted internal R&D capacity or knowledge management processes reduce the ability to systematically search for, interpret, and utilize external knowledge (Johnston 2020, Warren 2025). At the same time, absorptive capacity is not solely an internal attribute. Prior research on university–industry knowledge transfer shows that communication, experience, and the use of intermediaries can facilitate knowledge absorption and application (de Wit-de Vries 2019), allowing SMEs to access complementary and diverse expertise that would otherwise remain beyond their reach (Benhayoun-Sadafiyine et al 2020). Finally, absorptive capacity is shaped by organizational conditions inside the firm. Research on organizational antecedents shows that coordination mechanisms, participation in decision-making, and socialization capabilities influence firms’ ability to create value from external knowledge (Jansen, van den Bosch and Volberda 2005), while weak knowledge-oriented leadership and underdeveloped organizational capabilities can suppress firms’ innovativeness by limiting their ability to assess and use external knowledge effectively (Ćirović et al 2026). These insights suggest that differences in the utilization of academic research are also reflected by the variation in SMEs’ absorptive capacity and the routines through which it is enacted. We therefore propose the following third research question:

RQ3: How do SMEs’ absorptive capacity and related routines explain differences in the utilization of academic research?

3. Empirical Part

The empirical material for this study was collected as part of the NOKKA research project during the winter of 2025–2026, with a focus on understanding how SMEs utilize academic research in their operations. The interview material consists of 23 interviews with SME founders or CEOs in southeastern Finland and was collected using a semi-structured interview template covering themes such as knowledge acquisition practices, attitudes towards academic research, competencies in translating academic output, and possible intermediaries in the process. During the interviews, the interviewer could expand on a theme and ask follow-up questions when needed. All interviews were conducted via Microsoft Teams with transcription enabled. In addition, the interviewers had the option to make their own notes, which were added to the individual transcripts.

The interview material was analysed using a theoretically informed thematic analysis (Brown and Clarke 2006). The transcripts were first read repeatedly to become familiar with the material, after which segments semantically related to the research questions were coded. Because the analysis was guided by the three research questions and their underlying concepts, the coding was not fully inductive but rather directed, with prior literature and the research questions providing the starting point to the categories, as Hsieh and Shannon (2005) suggest. The resulting codes were then compared across interviews and grouped into higher-order themes that captured recurrent mechanisms, process breakdowns, and capability differences. The quotations reported in the empirical section were selected as illustrative evidence of these broader themes, not as standalone anecdotes, so that individual excerpts are interpreted in relation to the full dataset and the cross-case analytical patterns identified during coding

3.1 Research Question 1

Regarding RQ1, the interviews suggest that SMEs differentiate between trust in the credibility of academic research and confidence in its practical usefulness. The main barriers do not concern whether research is “true,” but whether it can be converted into context-relevant action with acceptable effort.

First, the most prominent trust barrier is a translation gap between research and applicability. SMEs commonly accept academic work as credible, yet struggle to see a clear pathway from results to concrete next steps. This is captured in interview wording such as: “Nice, but how does this help us?” and the recurring demand for a bridge between research and action: “How do we turn this into action?” Presenting explicit use cases is seen as one tool for closing this gap: “The biggest obstacle is putting it into practice... it would help if there was already a case or example of what this means in practice and how to apply it.”

Second, time pressure amplifies “relevance risk” and reduces perceived usefulness. SMEs describe limited time as the binding constraint, which makes engagement with research a calculated risk. One respondent frames the barrier as “purely about time use”, and another specifies the downside of low relevance as “wasted time... away from other work, meaning lost money.” Similar accounts in the interview summaries describe day-to-day work as leaving little room for deeper engagement with research.

Third, academic jargon and formatting can obscure applicability and increase interpretation costs. Several interviews note that academic terminology requires extra concentration because it is unfamiliar, even when the underlying topic is relevant. Translation tools can reduce language friction, but do not remove the need to “decode” academic structure into practical implications. Having said that, the data does show some variation: some respondents report that jargon is “not usually a problem,” especially when they already rely on translation tools and have more established routines for engaging research.

Multiple interviews indicate that SMEs rely on fast, familiar channels (newsletters, blogs, and networks) for actionable knowledge, while academic databases are rarely part of day-to-day problem solving. In the transcribed discussion, one respondent describes staying current as a personal responsibility through “following industry people, news, and mailing lists”, and notes using “YouTube bloggers who go through headlines and results”. The same respondent also frames operational problem-solving as happening elsewhere: “practical problems are usually solved via Google”. Consistently, the interview summaries describe Google and organizational websites as natural starting points, implying that scholarly repositories are perceived as a poor fit for “in-the-flow” work.

At the same time, practical trust increases when research arrives already curated and formatted for use. One respondent explicitly reports that useful research information is “already filtered and written in plain language” through professional associations and regular communications, reducing the effort required to extract actionable implications. This suggests that intermediaries and ecosystem actors can strengthen trust in usefulness by embedding research in SMEs’ practical context and presenting it in an action-oriented form. RQ1 results can be generalized as follows:

- SMEs generally trust the credibility of academic research, but not automatically its practical usefulness
- The main barriers are a translation gap from research to practice, time pressure, relevance risk, and the extra effort caused by academic jargon and formatting.
- In practice, SMEs rely on fast, familiar, and curated channels rather than academic databases

3.2 Research Question 2

RQ2 examines how SMEs move from merely encountering research to (a) making sense of it in their own organizational context and (b) converting that understanding into implementable actions, routines, or decisions. Across the interview material, this progression is best described as a two-step translation process with substantial variation in individual and firm-level sensemaking capacity, followed by a recurring bottleneck at the point of operationalization.

For the most part, the respondents describe academic texts as requiring additional effort due to unfamiliar terminology and structure. For example, one interviewee notes that engaging academic reports “requires concentration” because terminology is often unfamiliar, while language can add friction even though translation tools help. This variability matters because SMEs frame engagement as a cost–benefit decision: when firms have internal competence, use translation tools, or rely on already-processed inputs, the perceived sensemaking cost decreases.

However, even when meaning is understood, application commonly fails because the “how-to” layer is missing. “The biggest obstacle is putting it into practice,” and that it would help to have “a case or example of what this means in practice and how to apply it.” This emphasis aligns with accounts in which research is seen as interesting but not sufficiently anchored in operational terms (e.g., outcomes tied to sales or revenue) to justify the implementation effort.

Finally, interviews highlight a second, reinforcing barrier: implementation requires time and routine change under resource scarcity, which creates uncertainty about whether the insight will “pay off” in the firm’s context. This is expressed as opportunity cost—for instance, one respondent frames non-relevance as “wasted time... away from other work, meaning lost money”. Taken together, RQ2 results indicate that breakdowns happen between understanding and doing, unless research is accompanied by concrete translation artefacts (cases, examples, or stepwise guidance) that reduce perceived implementation risk. RQ2 findings can best be summarized as follows:

- The research-to-action process is best understood as a two-step translation process: first, SMEs must make sense of research, and second, they must convert that understanding into action.

- The dominant bottleneck lies after sensemaking: research may be understood, but the application fails because the practical “how-to” layer is missing.
- Implementation is further constrained by resource scarcity, routine change, and uncertainty about payoff, which can also weaken future willingness to engage with research.

3.3 Research Question 3

Regarding RQ3, the interviews suggest that differences in SMEs’ use of academic research can be explained by variation in absorptive-capacity profiles and related routines, rather than by simple differences in attitudes toward science. The material points to three recurring profiles. High-AC SMEs engage with research relatively actively and systematically. In these firms, research use appears to be part of continuous development, as illustrated by cases where firms “read research weekly” across domains such as IT, economics, industry, AI, and management.

Medium-AC SMEs, by contrast, engage research more indirectly and reactively: knowledge use is typically triggered by newsletters, media, networks, or other intermediaries rather than by direct use of academic channels. They follow news “from own informal network, with which I stay in regular contact, receiving information on practices across different fields—offering collective support and perspectives on challenges and successes.” This suggests both that this profile outsources the research sensemaking to other parties, but that there is also a collective component on display, where practical value for the research is created together with industry peers.

Finally, low-AC SMEs are characterized by weak routines for research acquisition and use, not because research is considered untrustworthy, but because it is perceived as insufficiently practical under everyday operating constraints. This is reflected in statements such as “time goes into keeping the projects running” and “time for searching and utilizing [research] is very limited.” Overall, the key variation in absorptive capacity seems to lie in routines: higher-AC firms possess either internal sensemaking capacity or access to capable intermediaries, whereas lower-AC firms remain dependent on practice-native information channels and struggle to connect research to action. A breakdown of RQ3 findings can be found below:

- Differences in research utilization are best explained by variation in absorptive-capacity routines, not by simple pro- or anti-research attitudes.
- High-AC SMEs use research actively and systematically, medium-AC SMEs rely on mediated and reactive access through networks and intermediaries, and low-AC SMEs have weak routines and see research as too impractical for everyday operations.
- Overall, the key variation lies in whether firms have the routines and capabilities needed to acquire, interpret, and exploit external knowledge directly or through capable intermediaries.

4. Conclusions and Recommendations

This study explains why SMEs may trust academic research in principle yet still fail to use it systematically in practice. The findings suggest that the core problem is not credibility, but the difficulty of translating research into context-relevant, low-effort action, consistent with prior work showing that firms may value research while still facing major barriers to implementation (Barends et al. 2017; de Wit-de Vries 2019).

The findings connect the three research questions into a single process explanation. RQ1 shows that practical trust weakens when research is perceived as costly to interpret and difficult to translate. RQ2 shows that the main breakdown occurs not primarily at access or interpretation, but after sensemaking. This aligns with prior knowledge transfer research showing that ambiguity, absorption problems, and difficulties in applying knowledge often prevent successful transfer even when valuable knowledge is available (de Wit-de Vries 2019).

These mechanisms also appear mutually reinforcing. Disappointment in sensemaking or implementation can feed back into future trust judgments, linking RQ2 back to RQ1. If an SME invests effort in interpreting academic output but fails to derive practical value, later encounters may be approached with lower expectations and greater scepticism. Low practical use can therefore become self-reinforcing: unsuccessful translation attempts reduce willingness to engage and inhibit the development of routines that would make later engagement easier. This interpretation is compatible with earlier work suggesting that trust in UIC settings is shaped not only by perceptions of competence and integrity, but also by prior interactions and reciprocal experiences that reinforce willingness to cooperate (Cohen and Levinthal 1990; Darabi, Saunders and Clark 2021).

RQ3 provides a firm-level explanation for why this process unfolds differently across SMEs, as variation in research utilization is best explained by differences in absorptive capacity routines. SMEs differ in their ability to acquire, assimilate, and exploit external knowledge, and these differences appear in recurring high-, medium-, and low-AC profiles. This is partly aligned with Benhayoun-Sadafiyne et al. (2020), who show that SMEs' absorptive-capacity practices vary in focus and intensity depending on context, and with work emphasizing that organizational antecedents of absorptive capacity—such as coordination mechanisms, socialization, and knowledge-oriented internal capabilities—shape whether firms can create value from external knowledge (Jansen, van den Bosch and Volberda 2005). Taken together, the findings suggest that the SME knowledge-to-action gap is a layered problem: firms must first assess whether research appears usable, then make sense of it in context, and finally convert interpreted insights into action. Whether they succeed depends heavily on absorptive-capacity routines and the availability of translation support.

4.1 Theoretical Contribution

Theoretically, the study contributes by integrating three perspectives that are often treated separately: practical trust in research, research-to-action translation, and absorptive capacity. Existing literature has identified these elements individually—trust as a relational condition of collaboration (Darabi, Saunders and Clark (2021), knowledge transfer barriers as sources of ambiguity and application failure (de Wit-de Wries et al 2019), and absorptive capacity as a firm-level capability for processing external knowledge (Zahra and George 2002). This study shows that, in the SME context, these should be understood as sequentially rather than as isolated themes. This integrated account extends the knowledge-to-action discussion beyond the generic claim that SMEs “do not use research” by specifying how credibility, sensemaking, and capability interact over time.

Additionally, this study sharpens the distinction between trust in research and trust in the usefulness of research. Much UIC literature emphasizes trust as a precondition for collaboration, yet the present findings suggest that, the more relevant problem is not distrust in science per se but distrust in the usefulness of science. This moves the discussion closer to the research utilization and evidence-based management literature, where the challenge is not simply awareness of evidence but its operational relevance and translatability. By linking this distinction to a feedback loop between failed sensemaking and future trust, the study also offers a more dynamic interpretation of how trust may erode through repeated, but disappointing, attempts to use academic knowledge.

Finally, the study contributes to absorptive capacity research by showing that, in the context of academic research use by SMEs, the decisive variation lies less in abstract openness to knowledge than in the presence or absence of routines that support repeated acquisition, interpretation, and application. This finding supports the view that absorptive capacity is enacted through concrete organizational mechanisms rather than existing as a static firm trait. In the SME setting, it also highlights the relevance of mediated and networked forms of absorptive capacity, where external actors and intermediaries partly substitute for missing in-house capabilities.

4.2 Practical Contribution for UIC

From a UIC perspective, the practical implication is clear: if universities want SMEs to use research more systematically, they should not assume that credibility is sufficient. The main challenge is to increase the usability of research outputs. This means presenting findings in a form that reduces interpretation costs and shortens the path from results to application. This implication is consistent with prior UIC and knowledge transfer literature, which emphasizes the importance of intermediaries, communication, and practical contextualization in overcoming ambiguity and application barriers.

A second implication is that UIC initiatives should be designed not only to transfer knowledge, but also to build absorptive-capacity routines inside SMEs. This means supporting firms in developing repeated practices for identifying relevant research, interpreting it in context, and linking it to decisions and routines. For high-AC firms, this may require direct access to advanced research outputs and dialogue with academic experts. For medium-AC firms, intermediated and peer-supported formats may be more effective, such as curated briefings, translated research summaries, and network-based discussion. For low-AC firms, the priority may be to lower entry barriers by embedding academic insights into very concrete, problem-centered formats that fit operational realities.

Third, the findings suggest that universities and intermediary actors should take the risk of negative cumulative experiences seriously. If SMEs repeatedly encounter research in forms that are difficult to interpret and impossible to operationalize, they may gradually disengage from academic knowledge channels altogether.

UIC practice should therefore aim not merely at contact creation, but at creating early experiences of practical success. In this sense, successful UIC may depend less on persuading SMEs that academic research is valuable, and more on demonstrating that it can be translated into workable action under the time and resource constraints of small firms.

Ethics Statement: Ethical clearance was not required in this research. All necessary permissions for research were obtained at the time of interviews, and the data used in the analysis was anonymized.

AI Declaration: Generative Artificial Intelligence tools were used in the generation of this paper in the following way: 1) Proofreading and grammatical errors (Grammarly), 2) Refining the overall tone of the text and checking for inconsistencies (Microsoft Copilot GPT-5.4, Gemini 2.5). All ideas and content originate from the author.

References

- Barends E, Villanueva J, Rousseau DM, Briner RB, Jepsen DM, Houghton E. and ten Have, S. (2017) "Managerial attitudes and perceived barriers regarding evidence-based practice: An international survey", *PLoS ONE*, Vol.12(10).
- Benhayoun-Sadafiyine, L., Le Dain, M.-A., Dominguez-Péry, C. and Lyons, A. C. (2020) "SMEs embedded in collaborative innovation networks: how to measure their absorptive capacity?", *Technological Forecasting and Social Change*, Vol. 159, 120196.
- Braun, V., & Clarke, V. (2006) "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol. 3(2), pp. 77–101.
- Cai, Y. and Etzkowitz, H. (2020) "Theorizing the Triple Helix Model: Past, Present, and Future", *Triple Helix*, Vol. 7, pp. 189–226.
- Ćirović, D., Dabić, M., Melović, B. and Backović, T. (2026) "Unleashing SME innovation in small open economies: the strategic role of market dynamism, R&D, and organizational capabilities", *Review of Managerial Science*, Vol. 20, pp. 737–773.
- Cohen, W. M., and Levinthal, D. A. (1990) "Absorptive Capacity: A New Perspective on Learning and Innovation", *Administrative Science Quarterly*, Vol. 35(1), pp. 128–152.
- Darabi, F., Saunders, M. N. K. and Clark, M. (2021) "Trust initiation and development in SME–university collaborations: implications for enabling engaged scholarship", *European Journal of Training and Development*, Vol. 45(4/5), pp. 320–345.
- de Wit-de Vries, E., Dolfsma, W.A., van der Windt, H.J. and Gerkema, M.P. (2019) "Knowledge transfer in university–industry research partnerships: a review", *Journal of Technology Transfer*, Vol. 44, pp. 1236–1255.
- El-Ferik, S. and Al-Naser, M. (2021) "University Industry Collaboration: A Promising Trilateral Co-Innovation Approach", *IEEE access*, Vol 9, pp. 9112761–112769.
- Etzkowitz, H. and Leydesdorff, L. (2000) "The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university–industry–government relations", *Research policy*, Vol. 29 (2), pp. 109–123.
- Hsieh, H.-F. and Shannon, S. E. (2005) "Three approaches to qualitative content analysis", *Qualitative Health Research*, Vol. 15(9), pp. 1277–1288.
- Jansen, J. J. P., van den Bosch, F. A. J. and Volberda, H. W. (2005) "Managing Potential and Realized Absorptive Capacity: How Do Organizational Antecedents Matter?", *Academy of Management Journal*, Vol. 48(6), pp. 999–1015.
- Johnston, A. (2020) "Collaboration and Knowledge Transfer between SMEs and Universities ", *SOTA Review*, Vol. 42. pp. 1–6.
- Johnston, A. (2022) "Open innovation in science: assessing the formation and function of SME-university collaborations through the proximity matrix", *Industry and innovation*, Vol. 29 (2), pp. 310–332.
- Lawler, E. (2007), "Why HR Practices are not Evidence-based", *Academy of Management Journal*, 50(5), pp. 1033–1036.
- Maitlis, S. and Christianson, M. (2014) "Sensemaking in Organizations: Taking Stock and Moving Forward", *The Academy of Management Annals*, Vol. 8(1), pp. 57–125.
- Mura, R., Di Flauto, S. and Fratocchi, L. (2025) "Collaboration between universities and micro, small and medium firms: A structured literature review", *Industry and higher education*, Vol 0(0), pp. 1–32.
- Rantala, T., Saunila, M., Ukko, J. and Rinkinen, S. (2025). "SMEs as cutting-edge research utilizers: the strategies, motivations, and barriers of forerunners", *The Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-025-10239-1>
- Rousseau, D.M. (2006) "Is there Such a thing as "Evidence-Based Management"?", *Academy of Management Review*, Vol. 31(2), pp. 256–269.
- Rynes, S., Giluk, T. and Brown, K. (2007) "The very separate worlds of academic and practitioner periodicals in human resource management: implications for evidence-based management", *Academy of Management Journal*, Vol. 50(5), pp. 987–1008.
- Schoorman, F.D., Mayer, R.C., & Davis, J.H. (2007). An Integrative Model of Organizational Trust: Past, Present, and Future. *Academy of Management Review*, 32, 344–354.

- Tereschenko, E., Salmela, E., Melkko, E., Phang, S. and Happonen, A. (2024) "Emerging best strategies and capabilities for University-Industry cooperation: opportunities for MSMSEs and Universities to improve collaboration. A literature review 2000-2023", *Journal of Innovation and Entrepreneurship*, Vol. 13(28).
- Warren, K. (2025) "Absorptive Capacity as a Catalyst for Resilience in SMEs: A Literature Analysis", *Journal of Research Innovation and Implications in Education*, Vol. 9(1), pp. 511-522.
- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2005) "Organizing and the Process of Sensemaking", *Organization Science*, Vol. 16(4), pp. 409–421.
- Zahra, S. A. and George, G. (2002) "Absorptive Capacity: A Review, Reconceptualization, and Extension", *Academy of Management Review*, Vol. 27(2), pp. 185–203.