

Expanding Qualitative Research Horizons: The Development and Application of Intuitive Field Research (IFRes)

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Abstract: This article is a study introducing a new qualitative research methodology - Intuitive field research or IFRes - involving words and the narrative and relying on the experience and intuition of the [experienced practitioner] researcher (Stein, 2019). Though similar, it is different to autoethnography as the latter's focus is seen to be on culture (ethnography) whilst IFRes may focus on any aspect – including, also, machine-type interactions. IFRes is a six-step process, described herein, which seeks to take advantage of considerable previous work experience, in the field, to answer a research question posed following a literature review. It is an iterative process which seeks to perfect the knowledge produced (Baldacchino, Ucbasaran & Cabantous, 2023). Intuitive Field Research (IFRes) emerges as a pioneering qualitative research methodology that capitalizes on the nuanced intuition and rich field experiences of researchers to uncover deep insights into complex phenomena (Stein, 2019). Distinct from autoethnography, IFRes introduces a structured six-step process designed to systematically harness and refine these insights for academic and practical application. Originating at the University of Aveiro, this method represents a significant departure from conventional research methodologies by valuing experiential knowledge and intuitive understanding as critical components of the research process. In the context of business and management, IFRes holds particular promise for addressing the intricate challenges of contemporary business environments. These environments demand an agile and nuanced understanding that transcends traditional quantitative analyses, making the case for methodologies that can capture the subtleties of consumer behavior, organizational culture, and innovation dynamics. By enabling researchers and practitioners to integrate their intuitive judgments with rigorous academic inquiry, IFRes offers a unique approach to exploring and solving pressing business and academic issues. This article delineates the foundation of IFRes, its methodological underpinnings, and its potential applications within business and management, illustrating how intuitive insights can drive innovation, strategic decision-making, and transformative organizational practices. Through this expanded lens, IFRes not only contributes to academic discourse but also provides practical frameworks for businesses seeking to navigate the complexities of modern markets and organizational challenges. A practical example of applying Intuitive Field Research (IFRes) in business and management could involve a multinational corporation seeking to enhance its customer experience across diverse markets. By employing IFRes, the corporation's research team could immerse themselves in different cultural contexts, using their intuition and experience to gather nuanced insights into consumer behavior and preferences (Gorry & Westbrook, 2013). This approach would allow them to identify subtle, culturally specific factors influencing customer satisfaction that traditional surveys or data analysis might miss. These insights could then inform tailored strategies for each market, leading to improved customer engagement and loyalty. This example illustrates how IFRes' emphasis on intuitive understanding, combined with rigorous analysis, can address complex challenges in global business environments, leading to innovative solutions and competitive advantages. This article on Intuitive Field Research (IFRes) significantly impacts research by offering a novel method that blends intuitive insights with rigorous academic inquiry. It addresses the need for methodologies that go beyond traditional quantitative analysis to capture the complexities of human behavior and organizational dynamics (Ganzarain, Ruiz & Igartua, 2019). By emphasizing experiential knowledge and intuitive judgment, IFRes empowers researchers and practitioners to uncover deeper understandings of complex issues. This approach fosters innovation, enhances strategic decision-making, and facilitates transformative practices in various fields, thereby enriching academic discourse and offering practical solutions for real-world challenges.

Key words: Intuition, Field research, Qualitative research, Experience

1. Introduction

“The Wonderful Wizard of Oz believes a heart, not a brain, makes one happy” (L. Frank Baum).

This article, which presents a new qualitative research methodology and approach, IFRes – Intuitive Field Research, starts with a look at the background of how IFRes arose and was developed. IFRes was created and developed at the University of Aveiro when an academic PhD supervisor (the first author of this article) saw in

his student (the second author of this article) the possibility of solid knowledge acquired over the years as an operative and manager - solid, objective, and scientific knowledge. This student was in stark contrast to other younger researchers in that a long and fruitful career were already in place – and the student very quickly caught on and showed interest in what his supervisor was saying, in methodological terms, and regarding the possibility of joining intuition and science together in a novel way, to fill a gap identified regarding qualitative research. Essentially, very experienced practitioners may have acquired certain truths and knowledge, accessible intuitively, which is correct and deems no further primary data collection to confirm it. The research methodology was subsequently tested with individuals also seeking to become researchers. We perceive, following our research, that intuition is a major topic of interest to many people and is still under-researched. Bringing one's intuition into the research domain brings with it new possibilities, especially for the experienced individual, as intuition is based on experience. Our research question is as follows: How can the experience and expertise of certain researchers who have had successful careers in business and management as practitioners over several decades be utilised? This is the central research question of this study to expand and improve future research. It is not a substitute for structured literature research, but rather, as Kahneman, Sibony and Sunstein (2021) aptly describe in their book *Noise* - what distorts our decisions and how we can improve them, the research results are characterised by the experience and wide range of experts involved (Barlev, Mermelstein & German, 2018). This question aims to explore the potential of utilising the in-depth knowledge and experience of experienced practitioners to enrich the field of research, particularly in the area of business and management. It encourages an exploration of the ways in which this experience can be systematically utilised to gain new insights and/or solve existing problems in the field.

The article continues with a section on the research basis followed by a section on the development of a hypothesis. We have sought to enrich the text with figures and diagrams to better illustrate the concepts and six-step process of IFRes. Finally, the article concludes on what we have done with our article and what we seek to achieve in the future.

2. Background and Discussion

We detected a gap in the literature regarding research by experienced practitioners. The research question that led to this study is hence: how may one capitalise on the experience and expertise of certain researchers who have developed successful careers over several decades in business and management, as practitioners? On the one hand, it is fairly obvious that this is a different case to that of a young researcher without work experience and who wishes to research businesses and their management processes. For example, when talking to an experienced executive (PhD student) on management and leadership he was quick to distinguish between the two - management does not involve people but rather only machines; when at least one human being is involved then we are in the presence of leadership. This seemed very true, in the age of technology. Teams may indeed be mixed - involving machines or artificial intelligence - as well as people. When dealing with such a team then you are leading - as the human component is present. Where did this knowledge and insight come from? It was automatic and the result of working in industry for decades, in this case in high tech firms linked to silicon chips. On several continents. The knowledge was thus the result of intuition and previous experience.

The methodology and the promotion of a broader application of Intuitive Field Research (IFRes) by researchers in qualitative research, particularly in the fields of business and management, will be structured as follows: *Research Paradigm*: IFRes typically aligns with a constructivist research paradigm, emphasizing the subjective interpretation (interpretivism approach) (Elharidy, Nicholson & Scapens, 2008) of experiences to generate knowledge. This paradigm acknowledges the complexity of reality and supports the idea that understanding comes from engaging with the environment. In business and management, this approach can reveal nuanced insights into organizational culture, leadership dynamics, and consumer behavior, which are often overlooked by positivist paradigms relying strictly on quantifiable data (Hakak & Bioria, 2011).

Ethical Principles: Researchers adopting IFRes must adhere to ethical principles such as confidentiality, informed consent, and reflexivity. Given the method's reliance on personal experience and intuition, scholars must be vigilant against biases and ensure transparency about their perspectives and potential influence on findings. Ethical considerations also include the respectful representation of all participants and the mindful interpretation of experiences (Vossoughi et al., 2021).

Trustworthiness of Findings: To argue for the trustworthiness of IFRes findings, researchers should employ strategies like triangulation – using “multiple approaches or tools or data in order to obtain a greater understanding of the phenomenon being studied... a method of cross-checking the credibility or validity of what is being discovered” (Remenyi, 2017, p.228), member checking, thick description, and audit trails. These

strategies enhance the credibility, transferability, dependability, and confirmability of the research. In business and management, linking intuitive insights with existing theories and empirical data (both primary and secondary data) can further validate the findings (Liebowitz et al., 2019).

Suggestions for Data Analysis and Overcoming Bias: Data analysis in IFRes can incorporate thematic analysis, narrative analysis, or grounded theory, depending on the research question and data nature. To overcome potential bias, researchers should engage in reflexivity, critically examining how their background, assumptions, and emotions influence the research process. Peer debriefing and maintaining an audit trail of analytical decisions can also help mitigate bias (Knight et al., 2018; Luo et al., 2018).

Complementing Existing Methodologies: IFRes can complement existing qualitative methodologies like autoethnography (table 1), ethnography, and phenomenology by adding depth to understanding phenomena through the lens of intuition and experience. IFRes may support case study research, for example (even in a multimethod approach). In business and management research, combining IFRes with the above can enrich the analyses of complex issues like organizational change, strategic decision-making, and consumer engagement.

Table 1: Key Differences Between IFRes and Autoethnography

Feature	Intuitive Field Research (IFRes)	Autoethnography
Focus	Broad, encompassing any aspect of human and machine interactions	Mainly on culture and the researcher's personal experience within it
Basis	Empirical research from field experience and intuition	Personal narrative to explore cultural, emotional, and social implications
Application	Any field, particularly useful in business and management	Cultural studies, anthropology, sociology
Process	Six-step process emphasizing iterative reflection and analysis	Focus on narrative exploration of the researcher's experiences
Objective	To leverage practitioner's expertise and intuition in generating insights	To understand and represent one's cultural experiences

A new avenue for qualitative research has been created and though similar to autoethnography (autobiography plus ethnography – please see Ellis, Adams & Bochner, 2011) (table 1) it is different in so far as it may be applied to any area (leadership, process management, ergonomics, etc.) hence moving beyond cultural analyses and appreciations (Gouzouasis & Ryu, 2015).

Relying on one's experience and expertise in a given area Intuitive Field Research - or IFRes, for short - is a six-step process. These steps are as follows (adapted from a previous publication of the authors - Au-Yong-Oliveira, Kuehnel and Andrade-Campos, 2023):

The six steps of IFRes (a qualitative research method that uses a researcher's personal experience in a field to construct an informed version of reality) are seen to be (please also refer to Au-Yong-Oliveira, Kuehnel and Andrade-Campos, 2023):

1. Acquire expertise in a subject matter (e.g., over ten, twenty, thirty or even forty years) – Note that, according to Gladwell (2008), ten years or 10,000 hours of practice are required to become an expert in a given area. Up and above the hours put in, the influence of family, culture and friendship (the supportive relationships) also have a big influence on creativity and results (see also Wong, 2015).
2. Find an unanswered research question (Remenyi, 2013, 2017), following a literature review.
3. Sit [alone] in a quiet room or atmosphere (e.g., office setting) where one may focus / concentrate on the topic – slow down (please see Kahneman (2012), for notions on thinking fast and slow – automatic versus more deliberate type thinking (or modes 1 and 2, as regards thinking processes)).
4. Summon thoughts and feelings cemented over the years about e.g., a production process environment, management or leadership – regarding the research question. Write them down. Note that the late renowned 20th century author George Orwell engaged in what we see as autoethnography in so far as, in Orwell (2021), for example, he engaged in telling a story about his own experiences (while fighting for the Republicans, in the Spanish Civil War) while sharing insights and observations about other cultures (principally about the Spanish, but not only about them). The difference between IFRes and autoethnography is that the former may be about almost any previous

- experience, including business and management, on which one may be considered to be an expert. Orwell had a “unique ability to capture in prose the mood of a country” (Orwell, 2021, p.8). Orwell also discussed intuition, which he described as “the mysterious art of knowing” (Orwell, 2021, p.80).
5. Compare to fact-based knowledge from a database (e.g., Web of Science, Scopus or Science Direct) to encourage the documentation process. “Glimpses” of the literature [review] should inspire the writing and documentation process.
 6. Let the feelings flow (note that ideally one will be in a state of “flow” - “A person is in a state of flow when they are totally immersed in a task. When a person is “in flow,” they may not notice time passing, think about why they are doing the task, or judge their efforts. Instead, they remain completely focused.” (Villines, 2022)) and continue to write them down in an iterative process. Challenge your intuitive conclusions several times before making them definitive (Kahneman, 2012) warns to be cautious about intuition and mode 1 thinking – fast thinking mode – which is how we think most of the time; a problem is that when we are intuitively right or wrong they both feel the same; hence the need to “sleep on it” and slow down and be iterative (figure 1). Iterative means “doing something again and again, usually to improve it” (Cambridge Dictionary, 2023). You first develop, then go into the operations area, and find ways to improve (a standard software improvement process; in a loop or cycle).

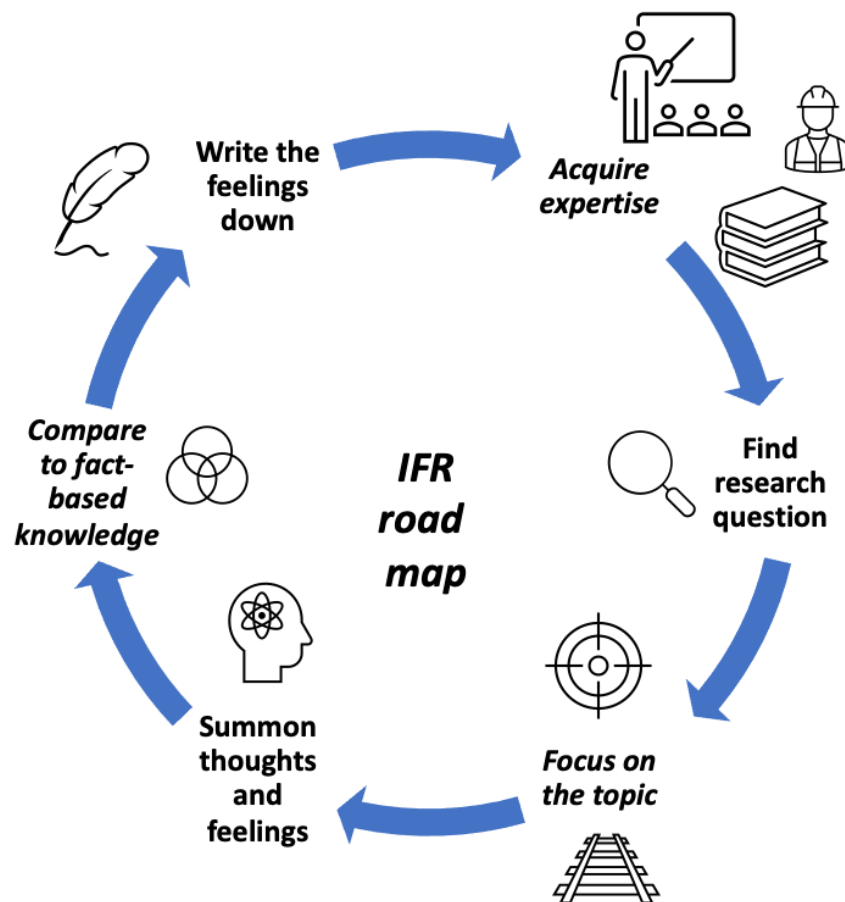


Figure 1: The IFRes road map – the methodology is an iterative cycle and process

Intuition and feelings are closely related concepts. Initially, the methodology was called Intuitive Feeling Research and indeed with this denomination the authors won an award in a business research methodology competition (The Innovation in Teaching of Research Methodology Excellence Awards), in September 2023, hosted at ECRM 2023, in Lisbon, and organised by ACI (Academic Conferences International, based in Reading, in the UK). So as to not repeat concepts in the title the authors changed the name of the methodology to Intuitive Field Research to also place an emphasis on what is involved - namely empirical research, resulting from field experience, and intuition. We also consulted with several experts on methodology who advised us to make this change to the name of the methodology.

In the age of Artificial Intelligence, or AI, human beings have an edge over AI as we have feelings and intuition which exist due to previous experience. Such feelings and intuition are unique to each individual and each individual may be an expert in any given activity.

This research method was born, and later tested for its acceptance, at the University of Aveiro, after analysis and approval by a senior researcher (the third author of the article). The idea is to have three immersive doctoral weeks for students per year (e.g., in November, March and June, three separate moments of the academic year, from the beginning to the end) in the DBI (Doctorate in Business Innovation) program. Why immersive weeks? Because the students of this program are to develop practical research projects closely linked to their companies (where they work) and previous experience and with direct application in industry. Due to work time constraints DBI students are urged to find time to write and research in particular during these three immersive weeks, when, ideally, they will also meet with their academic supervisors, on site, at the University of Aveiro.

It was during one of these immersive research weeks that IFRes was communicated and tested and feedback received from a workshop with around ninety participants - all PhD candidates doing various different PhD programs (the immersive week was opened up to all PhD degrees at the University of Aveiro) – channelled to the workshop by the third author of the article, a firm supporter of the methodology. The feedback was really encouraging. Ranging from “I was going to give up and drop out of my PhD because I felt I was not moving forward with my research. It all seemed so complicated. I did not realise that I could write about my previous experience (which is substantial) and hence I feel so much better and more positive about my future in research now.” (Informant 1). Another student stated: “I have actually written in the manner described here, at the workshop, about my previous experiences, I still have that [unpublished material] and now realise that that is a form of research and is publishable. I am so excited.” The research training session went so well and was so encouraging that another workshop, this time 3-4 hours long, instead of 1.5 hours long, was arranged for. So as to be able to go more in-depth and to give exercises to students to do - related to their own research studies and projects and interests. The authors are firm believers in doing rich, interesting, relevant research - relevant to the social world in which we live in (Mason, 2002). Such IFRes research is to be based on words but not excluding the possibility of statistics – though the statistics are not the central issue (Mason, 2002).

Upon further, deeper discussion with the workshop participants – after the training session / workshop – the conclusion was reached, just as had been suspected, that this research methodology could be applied to the social sciences in general and to tourism, for example, in particular. Another participant said: “We all have two sides to our brain – the creative or more intuitive side, as well as the more analytical side. When our brain functions, we use both sides of our brain. Some people do not realise that we cannot be purely analytical or purely creative – we will always have a mix of both in our thought processes.” This was actually as an answer to some scepticism voiced by some workshop participants as to the acceptance of IFRes. Their concerns were that certain firms do not regard or accept certain individuals’ experience as being definitive and still require standard research to be done in order to reach a conclusion. While this is the case, certainly, for most firms, some do practice what the late Steve Jobs defended – namely, that customer research is useless and not worthwhile because customers do not know what they want until Apple shows them (Isaacson, 2011). Hence, certain primary data collection may not be worthwhile in view of existing expertise in the research team. Another reservation was linked to the acceptance of IFRes by the academic community. “Your methodology will not be accepted by your peers in academia as being proper research.” they stated. The answer to this was that autoethnography studies are now widespread on Scopus. IFRes is similar but also different. It is a simple process whereby intuition backed by experience and a thorough literature review (e.g., reading, a lot of reading) can lead to novel knowledge being created and transferred and to research questions being answered.

Note that when one speaks of an expert that expert may exist amongst other experts and does not have to be the sole owner of the “truth”. More voices may exist on a theme. This realisation was met with general acceptance but also with excitement. There were many years of accumulated experience in the workshop training room, at the University of Aveiro. Could they really consider themselves to be experts – even in the absence of a PhD? Would that expertise be useful to them in publishing and in the ultimate attainment of their doctoral degree? Our answer was yes. An unequivocal yes. And we could see in the room how refreshing and motivating that idea was. IFRes was born earlier that year and a vision for it was developed further that day – the 8th of November 2023. A memorable day, despite the wind and the rain in Aveiro, central Portugal. How had this birth and development occurred? Through working in teams. And in realising one’s differences and challenges and what one “brings to the table” in a unique way. And by recognising that in diversity one may see change and creativity. IFRes was essentially developed (the eureka moment) by a seasoned management researcher and lecturer (and previous practitioner – the first author of this article), who had a passion for and

was very knowledgeable about qualitative research methodologies, and who was aware of what already existed (and of qualitative methodological gaps to be filled). In essence, the first author of this article recognised in his PhD student (the second author of this article - with decades of experience in industry) certain deep knowledge, accessed intuitively, and without excessive thought – which could be deemed scientific, as a part of a broader process described herein. An exciting “debrief” of the student followed. The realisation was that knowledge, all sorts of knowledge, is valuable – and that the path to that knowledge may be different in each case. As long as the path to knowledge is systematic and repeatable, we all may benefit as a community. Which will make us stronger. As advocates for reaching the “truth”.

To elaborate on the importance of Intuitive Field Research (IFRes) in the context of AI, emphasizing human intuition and experience:

Even in what is now becoming known as the age of Artificial Intelligence (AI), a consequence of the advent of the Internet age, we are confirming that the distinct and unique human capabilities such as intuition and emotional intelligence offer a competitive edge that AI cannot replicate in its current or perhaps even future and more advanced state (Miyazaki et al., 2023). Unlike AI, humans possess the ability to draw on feelings, intuitions, and experiences that are deeply personal and contextually rich, providing insights into complex social and organizational phenomena that are often nuanced and multifaceted. This unique human aspect is critical in fields such as business and management, where understanding human behavior, cultural nuances, and ethical considerations play a pivotal role in decision-making and strategy formulation (Gross & Lorenz, 1990).

Recent literature supports the argument that while AI can process and analyze data at unprecedented speeds, it lacks the capacity for empathy, moral reasoning, and the intuitive leaps that come from lived experience (Polanyi, 1966; Dreyfus, 1972; Nonaka & Takeuchi, 1995). Polanyi's concept of 'tacit knowledge' emphasizes knowledge that is personal, context-specific, and often unarticulable, underscoring the limitations of AI in capturing the depth of human understanding. Dreyfus critiques the over-reliance on formal logic and algorithms in AI, arguing for the irreplaceable value of intuition and expertise that develops through experience. Nonaka and Takeuchi's theory of knowledge creation further highlights the role of tacit knowledge in innovation, suggesting that human intuition is essential for creating new knowledge and understanding complex situations.

Given these perspectives, IFRes' emphasis on leveraging the intuition and experience of researchers is particularly relevant (Díaz-Chang & Arredondo, 2022). It offers a methodology that not only complements AI's analytical capabilities but also enriches research outcomes with the depth and breadth of human understanding. In business and management scholarship, where the interpretation of social interactions and organizational cultures is crucial, IFRes provides a framework for integrating intuitive insights with empirical research, thus ensuring that the richness of human experience informs and guides the research process.

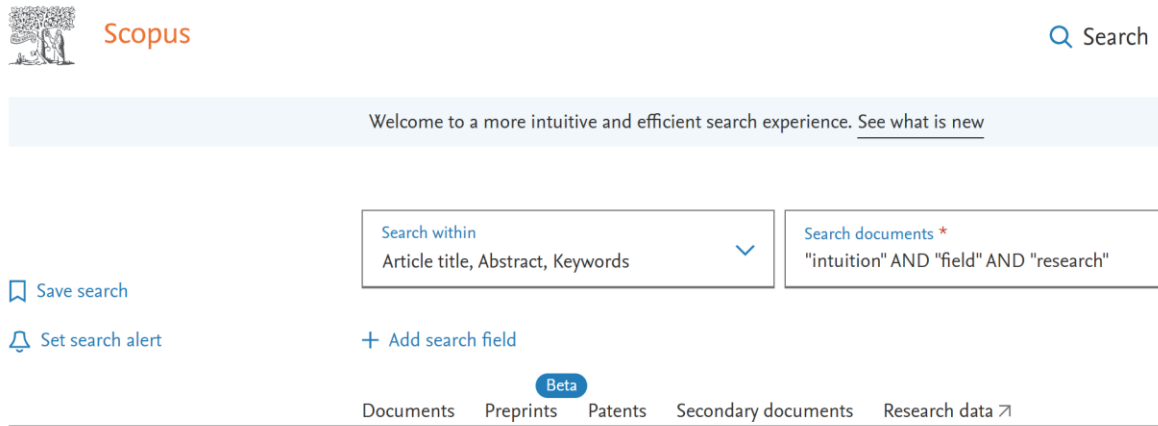
Furthermore, as AI continues to evolve, there is a growing need for research methodologies that can bridge the gap between quantitative data analysis and qualitative, intuitive understanding. IFRes positions itself as a critical tool in this regard, enabling researchers to navigate the complexities of modern organizational environments with a balanced approach that values both data-driven insights and the irreplaceable nuances of human intuition (Pope, Penney & Smith, 2018).

This expanded narrative situates IFRes as a valuable methodology in the era of AI, supported by literature that underscores the irreplaceable role of human intuition and experience in understanding complex phenomena.

3. Research Basis

Even the first approach to researching SCOPUS, with 961 articles, shows that this topic has become very important worldwide in recent years (figure 2).

Above all, the wide range of applications across the breadth of the subject areas (figure 3) shows that a proprietary method is being developed here that significantly improves quality in addition to classic structured literature reviews - SLR. Intuition, i.e., relating experience to a broad knowledge base, accelerates the process and increases the quality of decisions.



961 documents found

Figure 2: SCOPUS search - "intuition AND field AND research"

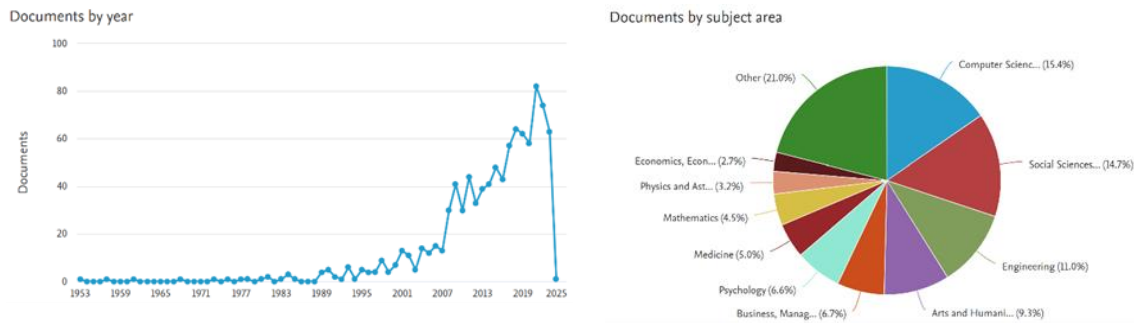


Figure 3: SCOPUS Analysis - Amount of documents and diversification of areas of application

The analysis of the central basic terms of this article via SCOPUS shows that the citations of the 961 articles on the term "Intuition" essentially form two focal points (Figure 4). Referring to the graphical representation, the reference to experience, judgement, rationality (Thaler, 2016), strategic decisions based on a good feeling is pronounced on the one hand, while the area of additional breadth, mindfulness and expertise leads to a very pronounced task performance.

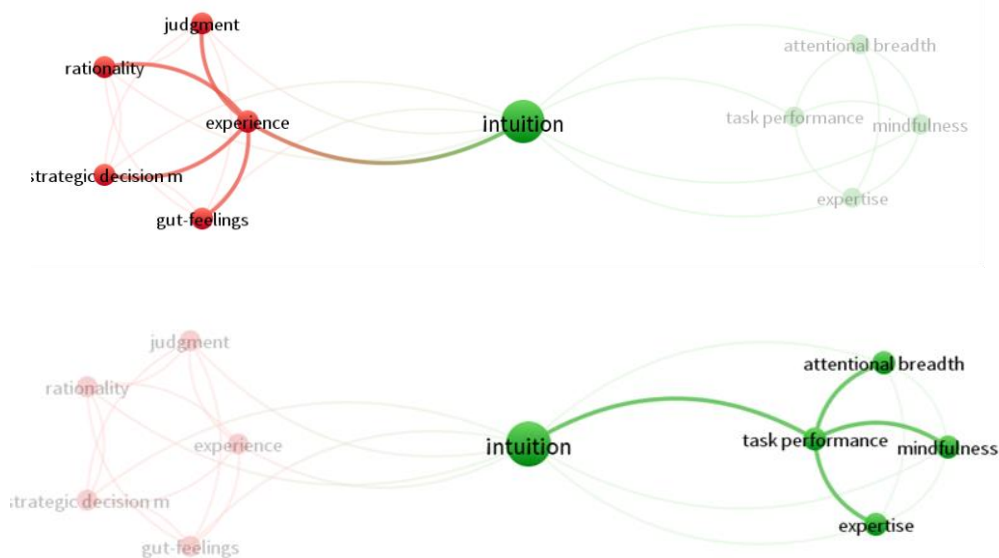


Figure 4: VOSviewer-outcome - First approach to interpreting the research data

4. Development of a Hypothesis

Based on many years of scientific work (including with complex systems in manufacturing companies through the systematic application of statistical analysis and synthesis methods), the idea of an innovative approach was born. Inspired also by Daniel Kahneman's book *NOISE* (Kahneman, Sibony & Sunstein, 2021), the decision was made to create a formal method that would make it possible to integrate the great potential of the experience of experts in an extended environment (figure 5).

In their book *NOISE*, Kahneman, Sibony & Sunstein (2021) describe very clearly the process that led to this complementary methodology based on the treatment of a cancer patient whose method was suggested by doctors. Using the traditional structured literature analysis SLR [green hits in figure 6], the doctors are very close to the best treatment, but the accuracy of the decision still has a large variance. In addition to this, the intuitive field approach from the daily working environment can complement the SLR with still great variance but on average this is closer to the best treatment (figure 6). Finally, the combination of SLR + IFRes [yellow hits in figure 6] significantly increased the precision by adding the experience of a large community of experts and thus found the maximum treatment quality currently available.

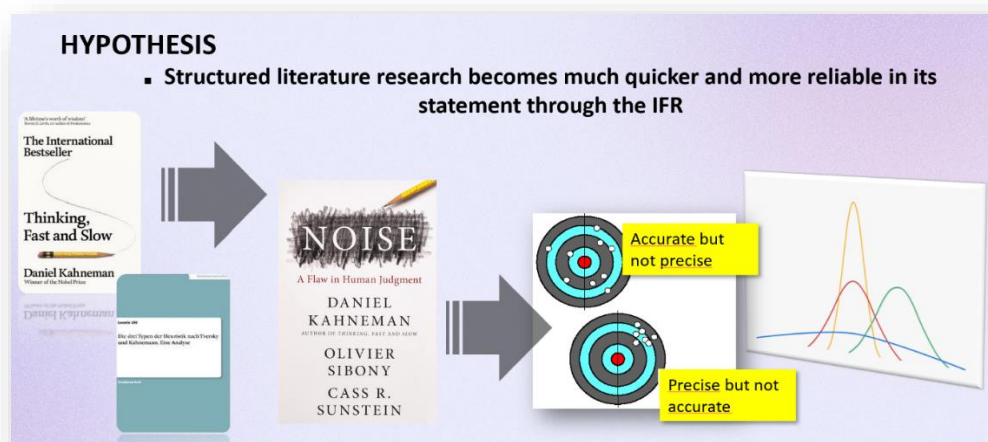


Figure 5: The concretisation of the IFRes idea through Daniel Kahneman's book *NOISE* (Kahneman, Sibony & Sunstein, 2021)

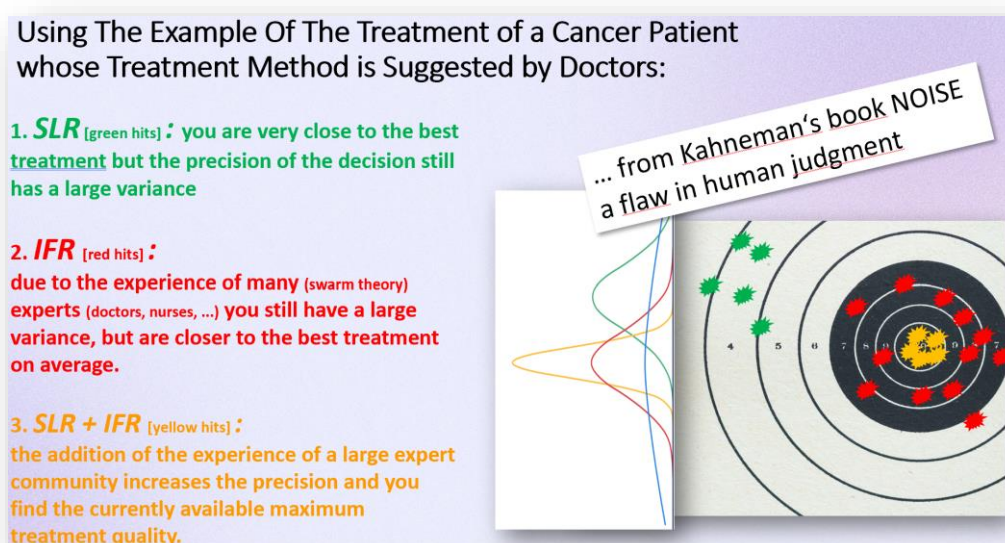


Figure 6: Development of the IFRes method from the process stabilisation toolbox

The potential limitations of the Intuitive Field Research (IFRes) method, while offering unique insights into qualitative research, may include:

- *Subjectivity and Bias*: The reliance on intuition and personal experience can introduce subjectivity, potentially leading to biased interpretations of the data. This is particularly challenging when the goal is to achieve objectivity and reproducibility in research findings (Silveira et al., 2003). However, as other lines of research have emphasized, human emotions are present everywhere, even in the workplace, so why not in research (Kahneman, Sibony & Sunstein, 2021)? Triangulation and other such techniques, as mentioned above, will help to minimize bias.
- *Difficulty in Verification*: Given its qualitative nature and the emphasis on intuition, verifying the findings through traditional quantitative measures or replication studies may be challenging, but it is possible. This may affect the perceived reliability and validity of the research outcomes, if overlooked as a research verification possibility (Silveira et al., 2003).
- *Training and Expertise Requirements*: Implementing IFRes effectively requires researchers to have a high level of expertise and experience in their field, as well as training in recognizing and interpreting their intuitive insights. This may limit the method's accessibility to early-career researchers or those in fields where such depth of experience is rare (Stengel et al., 2023).
- *Generalizability*: The insights gained through IFRes are deeply rooted in the individual experiences and contexts of the researchers, which may limit the generalizability of the findings to broader populations or different contexts (Schmidt & Stockly, 2023). Albeit certain truths are universal and may be generalized.
- *Ethical Considerations*: The deep immersion in the field and reliance on personal intuition may raise ethical considerations, especially concerning participant privacy, informed consent, and the interpretation of participants' experiences through the researcher's subjective lens (Vossoughi et al., 2021).
- *Time and Resource Intensity*: The process of IFRes, involving extensive fieldwork and the iterative analysis of intuitive insights, can be time-consuming and resource-intensive compared to other qualitative methods, which are already often seen to be cumbersome compared to the positivist paradigm (e.g., statistics based). This may impact its feasibility for certain projects with limited timelines or budgets (Ramalho et al., 2019). On the other hand, IFRes aims, through the application of intuition, to be a more natural way to access certain types of experience-based information and data and may even be quicker and less time consuming than other methods reliant on third parties (e.g., interviews, focus groups, surveys – qualitative and/or quantitative).
- *Integration with Existing Methodologies*: While IFRes can complement other qualitative methodologies, finding effective ways to integrate these insights into traditional research frameworks can be somewhat complex. Researchers must navigate combining intuitive knowledge with empirical data in a manner that maintains the integrity and coherence of the research design (Galman, 2019).

Addressing these limitations requires careful methodological planning, ethical considerations, and transparency in the research process. Researchers should be explicit about the limitations of their approach, the steps taken to mitigate bias, and the specific contexts in which their findings are applicable. Additionally, triangulation with other data sources and methods can enhance the credibility and depth of the insights generated through IFRes.

5. Conclusion and Future Steps

This article has presented, quite succinctly, the novel IFRes method. An aim for the future is to expand on the article and publish a book on IFRes. With examples and different contributions from various practitioners who are also researchers. The essential aspect is those who turn to academia after a full and rich career in industry. Those are the people who are best suited for IFRes. However, all individuals may be experts on something and at a young age – so we do not want to limit the possibilities of the application of IFRes. Our first 1.5-hour workshop on the topic was very gratifying in so far as the feedback was very positive. One participant was close to tears with the new possibilities which IFRes presented to them. A whole new future was envisioned – one which would seek to capitalize on previous experiences – worth sharing with the academic and practitioner communities.

The potential limitations of the Intuitive Field Research (IFRes) method – it is important to consider several aspects that could challenge its application and interpretation within business and management research:

- *Subjectivity and Bias:* A primary limitation of IFRes stems from its reliance on the intuition and personal experience of researchers, which can introduce subjectivity and bias into the research process. While these aspects are valuable for gaining deep insights, they may also skew the interpretation of data if not carefully managed (Silveira et al., 2003).
- *Replicability Issues:* Due to the personalized nature of intuitive insights and experiences, studies utilizing IFRes may face challenges in replicability. The unique contexts and perspectives that contribute to a researcher's intuition might not be easily duplicated, potentially limiting the generalizability of findings (Grof, 2003).
- *Methodological Rigor:* Critics may question the methodological rigor of IFRes, particularly in comparison to more traditional, quantitative research methods, even though a lack of time and availability may affect the results attained via surveys, among other data collection methods, hence skewing the results. Ensuring that IFRes maintains a systematic and transparent approach is crucial for its acceptance and credibility within the academic community (Aly et al., 2021).
- *Training and Expertise Requirements:* Effectively applying IFRes requires researchers to possess a deep level of expertise and experience in their field, as well as the ability to introspectively access and analyze their intuitive insights. This prerequisite may limit the method's applicability to seasoned researchers, potentially excluding those early in their careers (Massey, 2021).
- *Ethical Considerations:* IFRes' emphasis on leveraging personal experience and intuition necessitates a heightened awareness of ethical considerations, particularly concerning confidentiality and the potential for personal bias to affect interactions with research subjects or data interpretation (Gallagher, Little & Hooker, 2018).

Benefits for Future Research in Business and Management:

Adopting IFRes in future business and management research offers several benefits, including:

- *Deeper Insights into Complex Phenomena:* IFRes' focus on intuition and experience enables researchers to uncover deeper, more nuanced insights into complex business and organizational phenomena that might elude traditional methodologies (Pope, Penney & Smith, 2018).
- *Enhanced Innovation and Creativity:* By valuing intuitive knowledge, IFRes encourages innovative thinking and creative solutions to business challenges, fostering a culture of innovation within research and practical applications (Stein, 2019).
- *Flexible Methodological Approach:* IFRes' adaptability to various contexts and research questions makes it a versatile tool for exploring a wide range of issues in business and management, from consumer behavior to organizational culture (Cetina, 2007).
- *Bridging Theory and Practice:* IFRes offers a unique avenue for integrating theoretical knowledge with practical insights, thereby enriching both academic research and business practices.
- *Promoting Reflective Practice:* Encouraging researchers to engage with their intuitive insights fosters a reflective practice that can enhance personal growth, professional development, and the generation of impactful research findings (Pope, Penney & Smith, 2018).

In summary, while IFRes presents certain limitations, its potential to enrich business and management research by providing deep, nuanced insights and fostering innovative solutions to complex problems makes it a valuable addition to the researcher's methodological toolkit. Future research will benefit from its unique approach to integrating intuition with academic inquiry, offering new perspectives and contributing to the advancement of the field.

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References

- Au-Yong-Oliveira, M., Kuehnel, K., Andrade-Campos, A.G. (2023). The Creation of the Novel Intuitive Feeling Research (IFR) Method. In Remenyi, D. (Editor), *Innovation in the teaching of research methodology excellence awards – An anthology of case histories 2023*. ACI, Reading, UK, pp.15-26.
- Aly, S., Tyrychtr, J., Kvasnicka, R., & Vrana, I. (2021). Novel methodology for developing a safety standard based on clustering of experts' assessments of safety requirements [Article]. *Safety Science*, vol. 140, Article 105292. <https://doi.org/10.1016/j.ssci.2021.105292>

- Baldacchino, L., Ucbasaran, D., & Cabantous, L. (2023). Linking Experience to Intuition and Cognitive Versatility in New Venture Ideation: A Dual-Process Perspective [Article]. *Journal of Management Studies*, vol. 60, no.5, 1105-1146. <https://doi.org/10.1111/joms.12794>
- Barlev, M., Mermelstein, S., & German, T. C. (2018). Representational coexistence in the God concept: Core knowledge intuitions of God as a person are not revised by Christian theology despite lifelong experience [Article]. *Psychonomic Bulletin and Review*, vol. 25, no. 6, pp. 2330-2338. <https://doi.org/10.3758/s13423-017-1421-6>
- Cambridge Dictionary (2023). Iterative. Meaning. Available here: <https://dictionary.cambridge.org/dictionary/english/iterative>.
- Cetina, K. K. (2007). Microglobalization. In *Frontiers of Globalization Research: Theoretical and Methodological Approaches* (pp. 65-92). https://doi.org/10.1007/978-0-387-33596-4_2
- Díaz-Chang, T., & Arredondo, E. H. (2022). Conceptual Metaphors and Tacit Models in the Study of Mathematical Infinity [Article]. *International Journal of Emerging Technologies in Learning*, vol. 17, no. 15, pp. 16-27. <https://doi.org/10.3991/ijet.v17i15.33271>
- Elharidy, A.M., Nicholson, B., Scapens, R.W. (2008). Using grounded theory in interpretive management accounting research. *Qualitative Research in Accounting Management*, vol. 5, no. 2, pp. 139-155.
- Ellis, C., Adams, T.E., Bochner, A.P. (2011). Autoethnography: An overview. *Forum Qual. Soc. Res.*, vol. 12, pp. 273–290.
- Gallagher, S., Little, M., & Hooker, C. (2018). The values and ethical commitments of doctors engaging in macroallocation: A qualitative and evaluative analysis [Article]. *BMC Medical Ethics*, vol. 19, no. 1, Article 75. <https://doi.org/10.1186/s12910-018-0314-1>
- Galman, S. C. (2019). Flat claps and dengue fever: A story of ethnographies lost and found in India. In *Studies in Qualitative Methodology*, vol. 17, pp. 95-107. <https://doi.org/10.1108/S1042-319220190000017006>
- Ganzarain, J., Ruiz, M., & Igartua, J. I. (2019). Testing successful Business Model using System Dynamics [Article]. *International Journal of Production Management and Engineering*, vol. 7, pp. 91-100. <https://doi.org/10.4995/ijpme.2019.10807>
- Gladwell, M. (2008). *Outliers – The story of success*. Little, Brown and Company, San Francisco, CA.
- Gorry, G. A., & Westbrook, R. A. (2013). Customers, knowledge management, and intellectual capital [Article]. *Knowledge Management Research and Practice*, vol. 11, no. 1, pp. 92-97. <https://doi.org/10.1057/kmrp.2012.14>
- Gouzouasis, P., & Ryu, J. Y. (2015). A pedagogical tale from the piano studio: Autoethnography in early childhood music education research [Article]. *Music Education Research*, vol. 17, no. 4, pp. 397-420. <https://doi.org/10.1080/14613808.2014.972924>
- Grof, S. (2003). Implications of modern consciousness research for psychology: Holotropic experiences and their healing and heuristic potential [Article]. *Humanistic Psychologist*, vol. 31, no.2-3, pp. 50-85. <https://doi.org/10.1080/08873267.2003.9986926>
- Gross, R., & Lorenz, W. (1990). Intuition in surgery as a strategy of medical decision making: Its potency and limitations [Article]. *Theoretical Surgery*, vol. 5, no. 1-2, pp. 54-59. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-0025255346&partnerID=40&md5=8f7a4d0215dd38a587f182fd640f6bd0>
- Hakak, A. M., & Bioria, N. (2011). New perception of virtual environments, Enhancement of creativity Increasing dimension of design starting point. Proceedings of the International Conference on Education and Research in Computer Aided Architectural Design in Europe.
- Isaacson, W. (2011). *Steve Jobs*. Simon & Schuster.
- Kahneman, D. (2012). *Thinking, fast and slow*. Penguin Books.
- Kahneman, D., Sibony, O., Sunstein, C.R. (2021). *Noise – A flaw in human judgement*. William Collins.
- Knight, H. C., Smith, D. T., Knight, D. C., & Ellison, A. (2018). Light social drinkers are more distracted by irrelevant information from an induced attentional bias than heavy social drinkers [Article]. *Psychopharmacology*, vol. 235, no. 10, pp. 2967-2978. <https://doi.org/10.1007/s00213-018-4987-4>
- Liebowitz, J., Chan, Y., Jenkin, T., Spicker, D., Paliszkiwicz, J., & Babiloni, F. (2019). If numbers could “feel”: How well do executives trust their intuition? [Article]. *VINE Journal of Information and Knowledge Management Systems*, vol. 49, no.4, pp.531-545. <https://doi.org/10.1108/VJIKMS-12-2018-0129>
- Luo, J., Song, B., Blessing, L., & Wood, K. (2018). Design opportunity conception using the total technology space map [Article]. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM*, vol. 32, no.4, pp.449-461. <https://doi.org/10.1017/S0890060418000094>
- Mason, J. (2002). *Qualitative Researching*. 2nd ed. Sage, London, UK.
- Massey, G. (2021). Re-framing conceptual metaphor translation research in the age of neural machine translation: Investigating translators’ added value with products and processes [Article]. *Training, Language and Culture*, vol. 5, no. 1, pp. 37-56. <https://doi.org/10.22363/2521-442X-2021-5-1-37-56>
- Miyazaki, M., Ishikawa, K. I., Nakashima, K., Shimizu, H., Takahashi, T., & Takahashi, N. (2023). Application of the symbolic regression program AI-Feynman to psychology [Article]. *Frontiers in Artificial Intelligence*, vol. 6, Article 1039438. <https://doi.org/10.3389/frai.2023.1039438>
- Orwell, G. (2021). *Homage to Catalonia*. Arcturus, London, UK.
- Pope, C. C., Penney, D., & Smith, T. B. (2018). Overtraining and the complexities of coaches’ decision-making: managing elite athletes on the training cusp [Article]. *Reflective Practice*, vol. 19, no. 2, pp. 145-166. <https://doi.org/10.1080/14623943.2017.1361923>

- Ramalho, F. D., Ekel, P. Y., Pedrycz, W., Pereira Júnior, J. G., & Soares, G. L. (2019). Multicriteria decision making under conditions of uncertainty in application to multiobjective allocation of resources [Article]. *Information Fusion*, vol. 49, pp. 249-261. <https://doi.org/10.1016/j.inffus.2018.12.010>
- Remenyi, D. (2013). *Field methods for academic research – Interviews, focus groups and questionnaires*. 3rd ed. ACPI, Reading, UK.
- Remenyi, D. (2017). *Dictionary of research concepts and issues*. 2nd ed. ACPI, Reading, UK.
- Richardson, J. N., Adriaenssens, S., Nordenson, G., Coelho, R. F., & Laberrenne, R. (2014). Design of a museum facade bracing system for changing performance requirements using multiobjective optimization. Structures Congress 2014 - Proceedings of the 2014 Structures Congress,
- Schmidt, B. E., & Stockly, K. (2023). The Fruits of Spiritual Experiences during the Pandemic: COVID-19 and the Effects of Non-Ordinary Experiences [Article]. *Interdisciplinary Journal for Religion and Transformation in Contemporary Society*, vol. 23, no. 8, pp. 1-29. <https://doi.org/10.30965/23642807-bja10079>
- Silveira, M. F. A., Gualda, D. M. R., Sobral, V., & Garcia, A. M. S. (2003). Workshops of sensitivity, expressiveness and creativity: A path to integrate subjectivity and reflection in qualitative research [Article]. *Forum Qualitative Sozialforschung*, vol. 4, no. 2. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-3342899220&partnerID=40&md5=19b293857097372d5d0ceb7f7f3ec98d>
- Stein, E. W. (2019). Studying intuition and creativity: Identifying intuition-rich contexts and candidates for research. In *Developing Informed Intuition for Decision-Making* (pp. 175-196). <https://doi.org/10.1201/9780429298097-11>
- Stengel, D., Wünscher, J., Dubs, L., Ekkernkamp, A., & Renkawitz, T. (2023). Evidence-based versus expertise-based medicine in orthopedic and trauma surgery: There is nothing more practical than a good theory [Review]. *Orthopadie*, vol. 52, no.6, pp. 435-446. <https://doi.org/10.1007/s00132-023-04382-6>
- Thaler, R.H. (2016). *Misbehaving - The making of behavioral economics*. Penguin Books, UK.
- Villines, Z. (2022). What a flow state is and how to achieve it. *Medical News Today*, April 19. Available here: <https://www.medicalnewstoday.com/articles/flow-state>.
- Vossoughi, S., Escudé, M., Kitundu, W., & Espinoza, M. L. (2021). Pedagogical “Hands and Eyes”: Embodied Learning and the Genesis of Ethical Perception. *Anthropology and Education Quarterly*, vol. 52, no.2, pp. 135-157.
- Wong, N.C. (2015). The 10 000-hour rule. *Canadian Urological Association Journal*, 9(9-10), 299. <http://dx.doi.org/10.5489/cuaj.3267>
- Yang, W., Shi, S., & Zhan, J. (2022). Advanced manufacturing technology and modeling optimization based on moldflow analysis —Take the design process of "Snowflake Bracket" as an example. *Journal of Physics: Conference Series*.