Through the Reflective Eye of a Pragmatist: Authenticity in Workshops for Co-Constructivism

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Abstract

Background

The scholarship of teaching and learning illustrates the dynamic interplay between teaching and research, emphasising the creation, dissemination, and application of knowledge to enhance learning. Within this framework, this methodology-focused **practice-based paper** examines the conceptualisation of an interactive workshop as both a research methodology and a tool for data

generation. Grounded in the pragmatic paradigm, the approach prioritises authenticity, offering a means to navigate the ethical complexities that arise in researcher-participant collaboration.

Objectives
This theoretical **practice-based reflective methodological paper** focuses on the workshop as a collaborative platform for generating actionable knowledge, considering both its usability and authenticity. By deconstructing the workshop as a research methodology, the discussion explores its potential to yield rich qualitative insights and data while maintaining authenticity. In doing so, we reflect on how workshops can navigate the delicate balance between ethical responsibilities and data integrity within researcher-participant collaboration.

Methods
Adopting a pragmatic perspective, the authors facilitated a three-step, semi-structured, interactive workshop with 19 purposefully selected subject matter experts (critical care nursing specialists) in South Africa. The workshop was designed to foster collaboration, co-creation, and dialogic consensus-building in response to a practical challenge – optimising the use of airway pressure release ventilation for mechanically ventilating adult patients with acute respiratory distress syndrome. To support meaningful engagement, strategies such as silent ideation and argumentative dialectics were incorporated, enabling participants to collectively generate insights and refine their understanding.

Reflections on Outcomes
The workshops illustrated the value of collaborative engagement in producing actionable solutions while maintaining a strong emphasis on authenticity to navigate ethical tensions. A draft clinical pathway emerged from this process, exemplifying the workshop's potential as a structured platform for co-creation and qualitative inquiry.

Conclusion
Integrating pragmatic assumptions with a commitment to authenticity helped to mediate ethical complexities and uphold the integrity of the reflective inquiry. Positioned as a dynamic and participatory methodology, workshops provide an avenue for addressing complex, practice-based challenges while fostering collaboration and the development of meaningful, actionable outcomes.

The workshop, which involved 19 experienced critical care nurses, resulted in the co-construction of a clinical pathway for airway pressure release

ventilation therapy. This outcome not only addressed a local clinical challenge but also validated the workshop's effectiveness in generating structured, practice-ready solutions through authentic, collaborative engagement.

Keywords
Authenticity, clinical pathway, pragmatic assumptions, practice-based reflective methodology, qualitative inquiry, workshop methodology

## 1.	Background/Introduction

The scholarship of teaching and learning (SoTL) emphasises the value of research that bridges disciplinary boundaries, engages diverse stakeholders, and disseminates knowledge across inclusive platforms (Gansemer-Topf, McCloud and Braxton, 2024; Godbold, Matthews and Gannaway, 2024; Schrum and Mårtensson, 2023). For many researchers the data collection phase of the research represents the most engaging aspect, as it marks the tangible manifestation of the research taking shape. Within the pragmatic research paradigm, a diverse array of data collection methods exists, with several innovative approaches emerging in recent years (Allemang, Sitter and Dimitropoulos, 2022; Kelly and Cordeiro, 2020; Kaushik and Walsh, 2019). One such method involves gathering data during interactive workshops, where participants actively engage with the topic and content under investigation. This approach aligns with the SoTL philosophy by fostering collaboration and co-creation while collecting qualitative data. Interactive workshops promote participant engagement, dialectical processes, and reflection, potentiating a more nuanced and authentic understanding of the participants' interpretations of reality and knowledge constructions (Boersema, Van Rensburg and Botha, 2024; Hu, 2024; Ødengaard, Oen and Birkeland, 2023; Ahmed and Asraf, 2018; Peck and Mummery, 2022; Storvang, Mortensen and Clark, 2018).

The concept of workshops has evolved significantly from its industrial origins, where it referred to a place for manufacturing or repairing commodities (Hu, 2024; Ørngreen and Levinson, 2017). In contemporary academic contexts, workshops have been redefined as creative group problem-solving approaches with specific outcomes and

categorised by Storvang *et al*. (2018, p. 156) as addressing the 'what is' and the 'what might be' scenarios. Shamsuddin, Sheikh and Keers (2021) delineate three broad applications of workshops: Goal-oriented, practice-based, and as a research methodology. The latter – workshops as a research methodology – is specifically designed to co-create valid and reliable data pertinent to the research problem within its contextual framework, while fostering an environment conducive to learning and innovative problem-solving (Boersema *et al*., 2024; Hu, 2024; Albertse, 2023).

Workshops are increasingly recognised as an effective qualitative data collection method, offering cost and time efficiency, structured flexibility within a creative environment (Boersema *et al*., 2024; Hu, 2024; Albertse, 2023; Ørngreen and Levinson, 2017). However, Shamsuddin *et al*. (2021) note that the workshop as a research methodology is still an emerging concept from an academic perspective while Hu (2024) acknowledges that the workshop as research methodology faces several ethical issues. This practice-based paper elucidates the conceptualisation of a workshop conducted as the second phase (developmental phase) of a three-phase qualitative exploratory-descriptive study. The overall goal of the workshop was to co-construct a clinical pathway (CP) for using airway pressure release ventilation (APRV) for mechanically ventilating (adult) patients with adult respiratory distress syndrome (ARDS).

Definitions of CPs accentuate that they are multidisciplinary, structured, and detailed steps of care, catering for a specific patient population and clinical problems and channelling guidelines into the local context and structures (Aspland, Gartner and Harper, 2021; Trimarchi *et al*., 2021; Seckler *et al*., 2020). The workshop adopted the ontological, epistemological, and methodological assumptions of the pragmatic action-oriented framework, aligning these with authenticity criteria to address ethical issues, the location of power during data collection, and the authenticity of the data generated from the workshop. Figure 1 provides a visual representation of the relation between the assumptions of the pragmatic worldview and the elements of authenticity discussed in this paper.

Figure 1
The pragmatic worldview: Assumptions and elements of authenticity
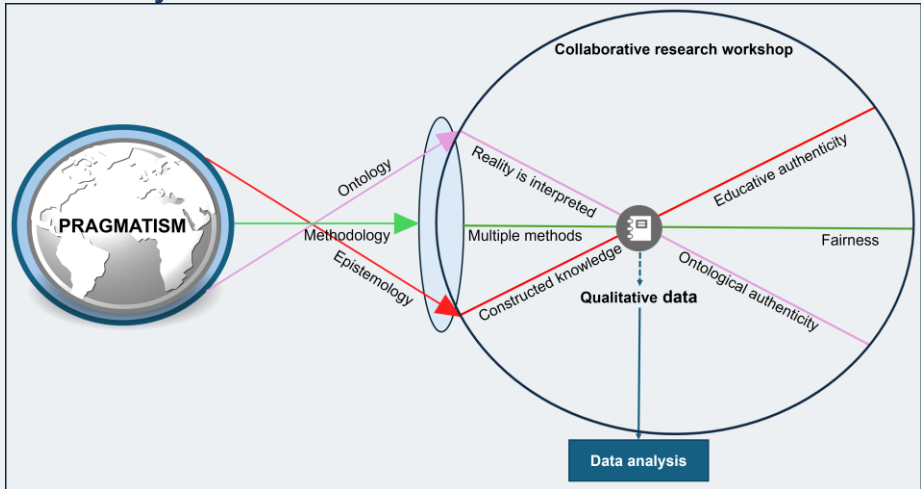
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Despite their potential, workshops as research methodologies face challenges, including ethical tensions in researcher-participant dynamics and the need for rigour in co-created outputs. This paper focuses on these challenges, exploring the alignment of pragmatic assumptions with authenticity criteria to ensure ethical and effective knowledge generation. Additionally, we discuss how these methodologies can be effectively adapted for diverse practical contexts.

This paper presents a reflective, theoretical examination of workshops as a research methodology within a pragmatic paradigm, with specific attention to how authenticity can be operationalised during collaborative, content-generating processes. While the workshop was part of a broader study that included a rapid systematic review (RSR), this paper intentionally focuses on the methodological design and ethical considerations underpinning the workshop phase.

2.   Brief Overview of the Rapid Systematic Review

To inform the design and content scope of the workshop, a rapid systematic review (RSR) was conducted as Phase 1 of the broader study. The aim of the RSR was to identify current evidence and best practices related to the use of APRV in adult patients with ARDS. A streamlined search strategy focused on recent peer-reviewed literature. The results of the RSR were synthesised into preparatory materials and resource lists shared with workshop participants to support evidence-informed dialogue during the workshop sessions. A detailed report of the RSR and its methodology is available in Albertse (2023).

## 3.   Pragmatism as an Authentic (Research) Practice Paradigm

A research paradigm provides a theoretical and philosophical framework that guides researchers in addressing the complexities of their research problems. Each paradigm offers distinct perspectives, often referred to as assumptions, on how reality is perceived, knowledge is acquired, and evidence is obtained to answer research questions (Albertse, 2023; Allemang *et al*., 2022; Kaushik and Walsh, 2019). For the purposes of the workshop, we adopted a pragmatic stance, motivated by our commitment to prioritise co-construction, integrate end-users' perspectives, and ultimately inform practice in the participants' experiential world (Boersema *et al*., 2024; Kelly and Cordeiro, 2020). Across paradigms, it is essential for researchers and workshop facilitators to operate within their foundational assumptions and elucidate how scientific rigour, validity, and ethical issues are addressed throughout the process (Creswell and Creswell, 2023).

4.   Rigour and Qualitative Validity

Scientific rigour in research encompasses the thoroughness, accuracy, and precision of both the research process and its findings. Researchers frequently employ the framework of Lincoln and Guba to discuss standards for measuring and evaluating the reliability and validity of qualitative studies. The initial framework proposed by Lincoln and Guba includes four criteria to address trustworthiness: Credibility, dependability, confirmability, and transferability. However, these criteria

do not fully capture the naturalistic aspects, characteristics, and unique context of participants' worlds. In response to this limitation, Lincoln and Guba (cited in Polit and Beck, 2021) have introduced a new perspective for qualitative rigour: Authenticity. This concept addresses the context, realities, representation, and power structures of participants' lives and how these elements are considered during an intervention or study (Peck and Mummery, 2022; Polit and Beck, 2021; Amin *et al*., 2020). Lincoln and Guba delineate five authentic sub-criteria or dimensions: Fairness, ontological, educative, catalytic, and tactical authenticity (Figure 2).

Figure 2
The five authentic sub-criteria of Lincoln and Guba

Fairness 01
Ontological authenticity 02
Educative authenticity 03
Catalytic authenticity 04
Tactical authenticity 05
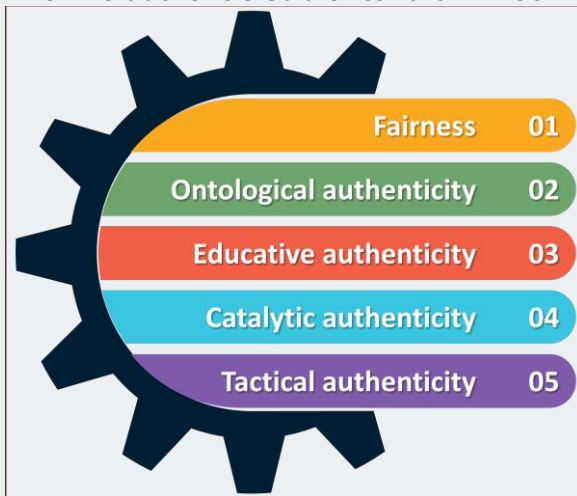
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In the planning and facilitation of our workshop we aligned the ontological, epistemological, and methodological assumptions of the pragmatic stance with elements of authenticity. We believe that this alignment provided a sound approach to address and reach authenticity when co-creating, collecting, and analysing qualitative data (Albertse, 2023; Peck and Mummery, 2022; Amin *et al*., 2020; Storvang *et al*., 2018).

5. Ontological Assumptions and Ontological Authenticity

Ontology, the study of being or reality, is conceptualised differently within the pragmatic paradigm. In this context, reality is constructed and intrinsically linked to the existing problem and participants' experiences, encompassing not only formal learning but also habits, traditions, and beliefs. Pragmatism posits that reality is what effectively addresses the problem at hand, allowing for the use of multiple or mixed methods to understand reality and generate knowledge to improve situations (Kaushik and Walsh, 2019; Creswell and Creswell, 2023). Ontological authenticity, on the other hand, refers to the development, improvement, and expansion of ideas, leading to the construction of a different reality (Peck and Mummery, 2022; Amin *et al*., 2020). During the workshop, participants' perspectives on manipulating ventilator settings based on various clinical scenarios changed and expanded. To illustrate: The role of sedation when using APRV therapy was also reflected on and debated extensively. Although not originally included, but as a result of the workshop discussions, consensus was reached to include aspects of international sedations protocols in the CP.

Following a rapid systematic review (cf. Albertse, 2023), a collaborative and consensus-based workshop was conducted with 19 experienced, critical care trained, professional registered nurses. Various strategies including brainstorming, discussion, debate, and consensus-building were employed to encourage participation and collaboration between the researchers and the participants. These dialectical processes expanded and improved the participants' understanding and ideation, resulting in the development of a new, evidence-based approach (the CP) to solving a critical care unit problem (Peck and Mummery, 2022; Amin *et al*., 2020).

6. Epistemological Assumptions and Educational Authenticity

Epistemology concerns the nature of knowledge and its acquisition, creation, development, and communication. Pragmatists posit that knowledge is constructed through inquiry, inseparable from experiences, and intrinsically linked to practical application.

Consequently, pragmatic studies focus on action learning and actionable knowledge (Albertse, 2023; Creswell and Creswell, 2023; Kelly and Cordeiro, 2020; Kaushik and Walsh, 2019). Educational authenticity refers to the learning processes, the extent of learning, and how through participation in the research process the construction of the individual's knowledge is changed (Peck and Mummery, 2022; Amin *et al*., 2020). Figure 3 illustrates how educational authenticity was addressed during workshop preparation and facilitation.

Figure 3
Processes to address educational authenticity during preparation for and facilitating the workshop
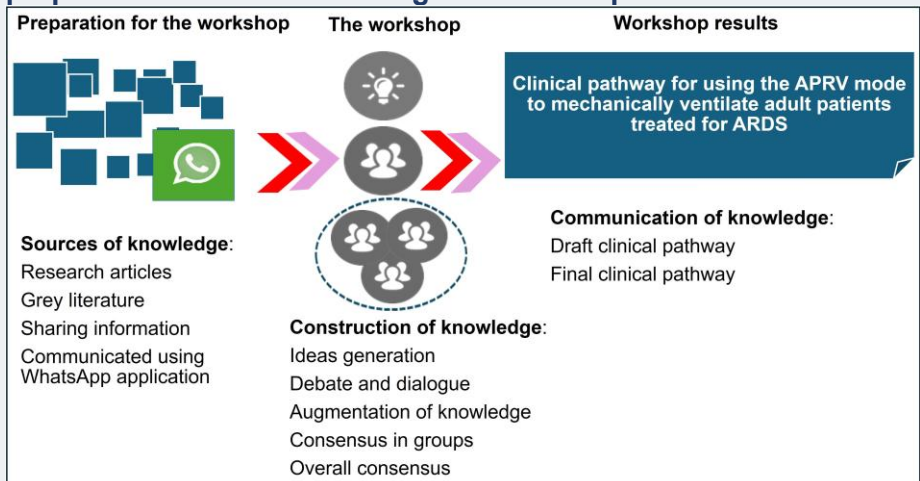
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6.1   Sources of Knowledge

Pragmatists view practical or practice-based knowledge as the primary source, rather than considering knowledge as an absolute reality (Kaushik and Walsh, 2019). Allemang *et al*. (2022) argue that pragmatists should prioritise knowledge that contributes to problem-solving over the sources of knowledge. Recent learning theories within the pragmatic paradigm acknowledge and explain the role of theory in

understanding and constructing knowledge (Van Haastrecht *et al.*, 2023; Allemang *et al.*, 2022; Amin *et al.*, 2020).

To facilitate knowledge construction and sharing, participants were provided with access to resources during workshop preparation. A list of recent (less than five year old) scientific publications and links to grey literature addressing the topic under discussion (APRV mode for ventilating adult ARDS patients) was created. Participants joining the workshop's WhatsApp group gained access to these resources and could contribute to discussions and share experiences. The resources shared with the participants included:

- One article on the complexities and strategies to mechanically ventilate patients treated for ARDS.
- Four articles describing the manipulation of ventilator settings when using the APRV mode of ventilation.
- Electronic links to websites addressing APRV therapy.

6.2   Construction of Knowledge

The reconstructive, emergent nature of workshops was deemed the most appropriate method for constructing the CP and collecting qualitative data. Ørngreen and Levinson (2017) describe two participation modes for workshop facilitation as a research methodology – the collaborative participation mode was selected for this workshop. The workshop was conducted in a semi-structured manner with three steps, each with specific goals to generate and progressively expand ideas, debate options, and integrate knowledge with coherent action. The dialogical principle of argumentation was implemented to build consensus during steps 2 and 3 (Albertse, 2023; Van Eemeren and Van Haaften, 2023; Miyazaki, 2023).

Step 1: Individual Ideation

Participants worked individually, generating ideas based on their experiences drawing from their personal experiences with APRV therapy. Silent brainstorming ensured focus and originality. Visual prompts were provided to stimulate deeper reflection during this step (Albertse, 2023; Ritter and Mostert, 2018).

Step 2: Group Discussion and Consensus
Small groups used argumentative dialectical processes to debate, refine, and document their ideas. The facilitators prompted collaborative understanding and balanced participation to minimise dominance by certain individuals (Albertse, 2023).

**Step 3: Overall Consensus Building**
Group representatives presented their outputs, culminating in a consolidated draft solution (draft CP). Colourful pin boards were used to enhance the visualisation of group contributions (Albertse, 2023).

7. Methodological Assumptions and Fairness

Methodological assumptions concern the optimal methods for obtaining knowledge, evidence, and ultimately answering research questions (Polit and Beck, 2021). While pragmatism is often associated with mixed methods, it can support studies with diverse methodological combinations when these are best suited to address the topic under discussion and the subsequent research question (Kaushik and Walsh, 2019).

This project implemented multiple methods to develop the CP, starting with a RSR and the workshop (Phase 2) that forms the backdrop to this paper on authenticity. The criterion of fairness, as a component of authenticity, was addressed throughout the participant recruitment process, workshop preparation, facilitation, and follow-up (Figure 4).

Figure 4
Fairness as a methodological assumption
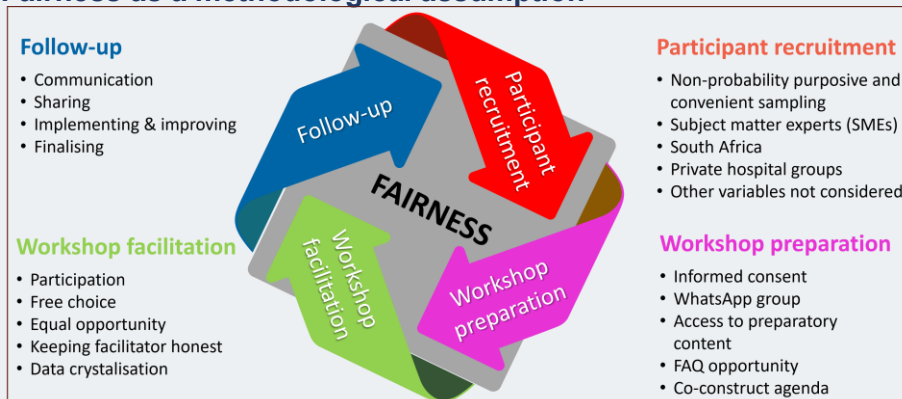
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7.1 Fairness in Participant Recruitment and Workshop Preparation

The target population comprised of critical care qualified and experienced nursing practitioners from five selected private hospitals in Pretoria, South Africa. Non-probability purposive and convenience sampling techniques were used to recruit 19 subject matter experts (SMEs) in critical care nursing and mechanical ventilation. Strict inclusion criteria were applied: A formal post-basic qualification in critical care nursing and at least 5 years' experience in nursing critically ill patients – more information on the complete project can be found in Albertse (2023).

Although fairness includes representative inclusion, for this project, variables, such as ethnicity, race, gender, and background were of less importance than the level of experience, training, and qualifications of the participants (SMEs). This minimum variation sampling strategy contributed to focused knowledge and experience sharing during the workshop, aligning with the assumptions of pragmatism (Kelly and Cordeiro, 2020; Polit and Beck, 2021; Ørngreen and Levinsen, 2017).

Prospective participants were approached with an informative letter explaining the workshop goals and their role in the project/

research study. Those expressing interest were added to a WhatsApp group, the WhatsApp group facilitated pre-workshop engagement, fairness of access to preparatory materials, and post-workshop feedback. The preparation phase also included virtual question and answer sessions to clarify workshop objectives and processes and an opportunity to co-set the agenda for the workshop.

7.2 Fairness During the Workshop

To ensure fairness during the workshop, the following measures applied:

1. *Participation*: Collaborative agenda setting. To mitigate the location of power, the participants contributed to the workshop agenda.
2. *Free choice*: Informed and voluntary participation. Participant information and consent forms were e-mailed to all participants prior to the workshop to assist in their own decision-making, allowing participants adequate time to decide without any peer-pressure.
3. *Power dynamics*: Group construction. To limit hierarchical power influence, groups were carefully constructed by the workshop facilitators, mixing unit managers (senior authoritative power) and bedside nurses from different hospitals per group.
4. *Equal opportunity*: Each group was allocated the same amount of time (15 minutes) to present their feedback.
5. *Keeping facilitator honest/in check*: A co-facilitator assisted with data collection to prevent the overemphasis of the researcher's agenda and to address power location.
6. *Data crystallisation*: Comprehensive data collection. Multiple data collection methods (observations, audio recordings, and written documents) were used to obtain thick descriptions and assist with triangulation (Amin *et al*., 2020; Storvang *et al*., 2018).

## 7.3 Fairness after The Workshop

To remain respectful of the participants' time and input, member checking was employed to confirm the accuracy of findings and establish authenticity of data interpretation (Creswell and Creswell,

2023; Amin *et al.*, 2020; Polit and Beck, 2021; Busetto, Wick and Gumbinger, 2020). The process involved the following:

- *Communication*: Sharing the second draft of the document (CP) with all workshop participants.
- *Improving*: Adapting the CP by implementing changes as recommended by participants.
- *Confirming*: Conducting a final member checking activity with the third draft.
- *Finalising*: Making design adaptations before publishing the final document (CP).

Figure 5 below illustrates the alignment of ontological, epistemological, and methodological assumptions with the criterion of authenticity within the workshop context.

Figure 5
Alignment of the pragmatic stance assumtions with the elements of autenticity
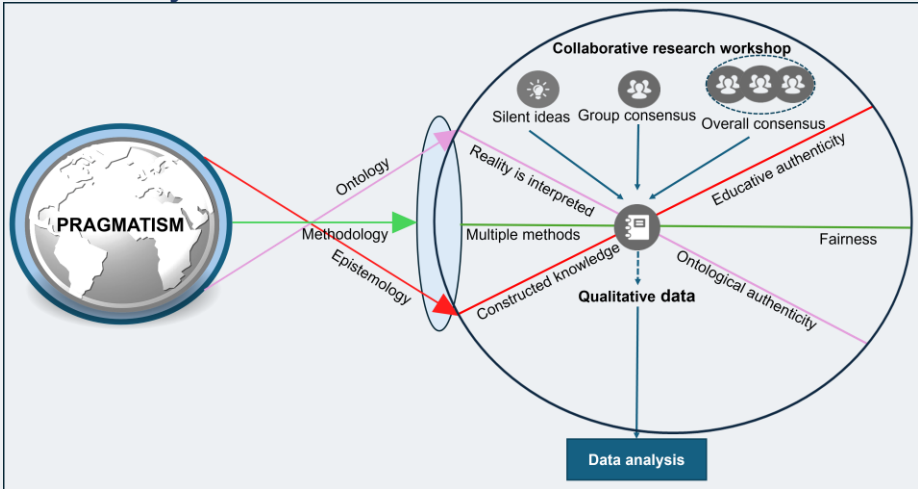
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8.   Data Collection

The strength of using a workshop to collect data and co-construct content lies in the potential for data crystallisation. The workshops employed multiple methods for data collection, including:

- *Observation*: Researchers documented interactions and group dynamics. (Structured observation templates ensured consistency in data collection.)
- *Audio recordings*: Captured verbatim contributions for deeper analysis.
- *Artifacts*: Group outputs and draft documents served as tangible data.
- *Participant reflections*: Artifacts were supplemented with participant reflections recorded post-workshop.

9.   Results

The workshop served as the second phase of a broader research project and was held in-person with 19 critical care nurses from multiple private hospitals in South Africa. Over a single day, participants engaged in structured ideation, group-based discussion, and consensus-building processes. As a tangible output, a collaboratively developed draft CP for APRV ventilation for ARDS patients was produced. This output was further refined post-workshop through member checking. The collaborative format also sparked new insights, including the addition of sedation guidelines not initially planned. These outcomes demonstrate how a pragmatically designed workshop, when aligned with authenticity principles, can lead to ethically sound and practice-relevant results.

The workshop affirmed the value of a pragmatic approach in fostering authenticity within a structured, collaborative environment aimed at generating actionable solutions. Several key outcomes emerged:

- *Co-creation of knowledge*: Participants engaged meaningfully in the problem-solving process, demonstrating the effectiveness of dialogic interaction in generating shared understanding.
- *Alignment with authenticity criteria*: The workshop process reflected core authenticity principles:

- o *Ontological authenticity*: Participants deepened their understanding of APRV therapy and its practical application.
- o *Educational authenticity*: Active engagement promoted individual and collective, collaborative learning.
- o *Fairness*: Equitable participation was supported by intentional facilitation and confirmed through anonymous feedback, which validated the inclusivity of the process.

Although the immediate focus of the workshop was on developing a CP, the methodological insights gained have broader relevance. The iterative, responsive design of the workshop allowed for a continuous refinement of ideas, enhancing both the credibility and transferability of the process for use in other practice-based research and professional development contexts.
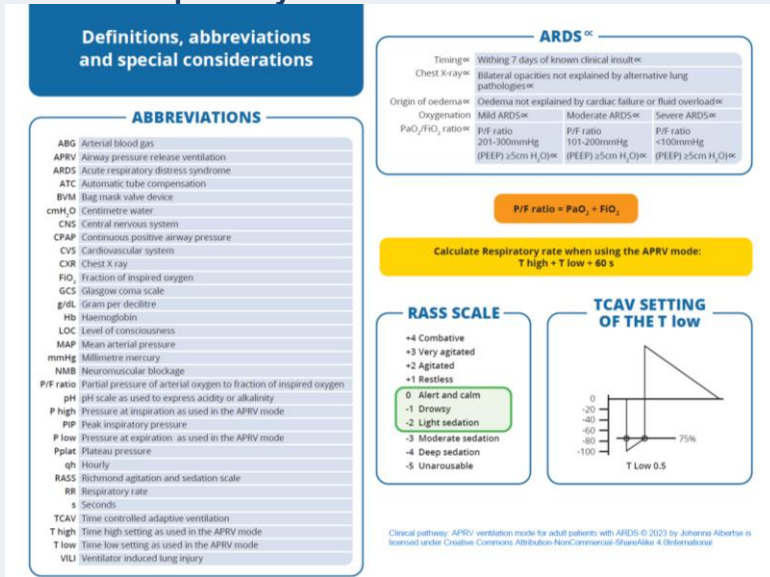
Figure 6.1
The clinical pathway for using the APRV mode
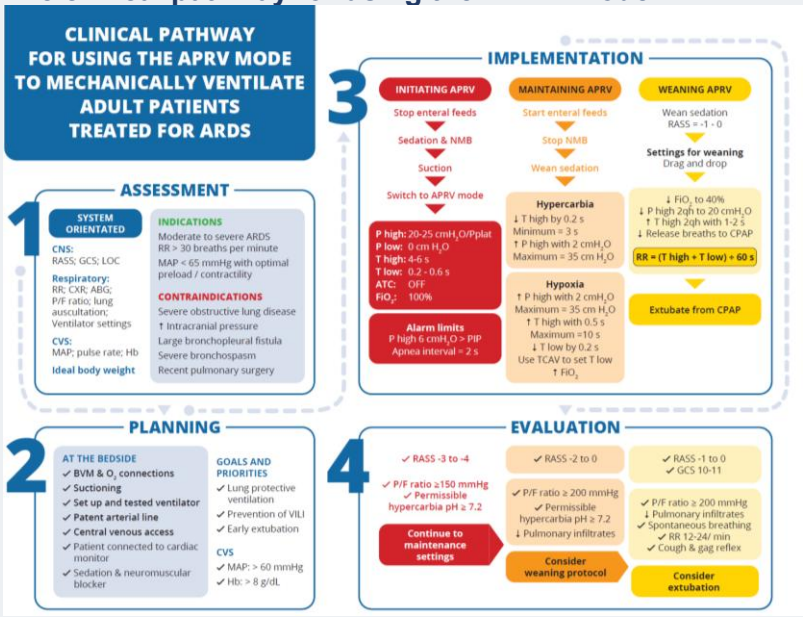
(Source: Albertse, 2023).

Figure 6.2
The clinical pathway definitions and abbreviations

(Source: Albertse, 2023).

10.   Discussion

This reflective paper demonstrates how workshops, as research methodologies, align with the pragmatic paradigm by offering a dynamic, participatory, and action-oriented approach to knowledge generation. In particular, the integration of authenticity criteria within the workshop design added critical ethical depth, ensuring that the collaborative process was not only methodologically sound but also respectful of participant experiences and contributions.

Pragmatism, as adopted here, encourages methods that are contextually responsive and outcome focused. The three-step workshop process, rooted in structured interaction and dialogic consensus-building, proved well-suited to addressing the practical problem of developing a CP for APRV use in critical care. The emphasis on authenticity was not a philosophical abstraction, but a practical necessity. By aligning the ontological, epistemological, and methodolo-

gical assumptions of the pragmatic paradigm with the sub-criteria of authenticity by Lincoln and Guba, the workshop design aimed to address the ethical tensions that naturally arise in researcher-participant collaborations.

Ontological authenticity was facilitated by the way participants engaged in meaning-making processes that altered their perspectives on APRV therapy. For example, the extended debate around sedation practices – initially not part of the planned discussion – resulted in the inclusion of international sedation guidelines in the draft CP. This shift illustrates how structured collaboration can stimulate deeper reflection and change in understanding, thereby generating new realities in line with the pragmatic notion of truth as that which 'works' in context.

Educational authenticity was also clearly observed. Participants were not passive data sources, but co-constructors of knowledge. Their exposure to curated resources, involvement in silent ideation, and participation in dialectical processes enabled both individual and collective learning. As Figure 4 illustrates, participants progressed from information sharing to knowledge construction, and ultimately to idea augmentation and consensus, with tangible outputs such as the draft CP serving as evidence of learning.

Fairness, as a methodological concern, was addressed through intentional facilitation strategies. For example, group formation considered power dynamics, mixing senior and junior staff to ensure that diverse voices were heard. Equal presentation times and a collaborative agenda setting helped mitigate the dominance by authoritative figures. Anonymous post-workshop feedback validated participants' perceptions of fairness and inclusivity. These strategies helped to democratise the knowledge production process, giving weight to experiential knowledge and fostering mutual respect.

Crucially, the iterative nature of the workshop – where ideas were generated, debated, revised, and refined in real time – enhanced both the rigour and the relevance of the output. The methodological design allowed for data crystallisation through triangulation across multiple sources: Group artifacts, participant reflections, observations, and audio recordings. For example, audio transcripts were reviewed alongside visual pinboard data and participant-written group notes to validate emerging themes and decisions.

The practical and ethical implications of this approach are noteworthy. The design allowed participants to shape both the process and the outcome, thereby increasing the credibility of the findings and the likelihood of successful implementation. The process did not simply generate data – it fostered ownership, built consensus, and created a safe space for contested ideas to be explored and negotiated.

Beyond its immediate application to CP development, the methodology used in this workshop offers a replicable model for other practice-based contexts. In settings where stakeholder engagement, ethical complexity, and actionable outcomes are essential, workshops grounded in pragmatic and authentic design principles can offer meaningful alternatives to traditional data collection methods. Importantly, the combination of analogue tools (e.g., pinboards and silent ideation) with digital platforms (e.g., WhatsApp for pre-engagement) hints on a hybrid model of workshop facilitation that can be further explored to enhance accessibility and scalability.

This paper contributes to the emerging discourse on workshops as research methodology by demonstrating how authenticity, when integrated into a pragmatically structured process, can support ethical, rigorous, and impactful research practices. This alignment not only fosters the co-creation of knowledge but also the co-ownership of outcomes – an essential element in any research that aims to inform practice in real-world settings.

11. Ethical Considerations

Ethical integrity was central to the design and facilitation of this workshop, aligning with both the pragmatic paradigm and authenticity principles. Pragmatism emphasises contextually responsive, purpose-driven inquiry, which in turn requires sensitivity to the ethical implications of researcher-participant interaction. Within this framework, the workshop was designed not only to generate actionable knowledge but also to ensure respectful, inclusive, and transparent engagement throughout the research process.

The study received ethical approval from the University of Pretoria (ethics reference number 119/2022) and Mediclinic Southern Africa (reference number 20220523). All procedures adhered to the

ethical standards outlined in the Declaration of Helsinki, including voluntary informed consent, confidentiality, and protection of participant anonymity.

Authenticity was operationalised through intentional design strategies that emphasised fairness, ontological expansion, and participant ownership of the process and outcomes. Prospective participants were given clear, accessible information about the workshop goals and their potential role in shaping the CP. Joining a WhatsApp group prior to the workshop enabled equal access to preparatory materials and provided opportunities for early engagement and collaborative agenda setting.

During the workshop, power dynamics were carefully managed through structured group composition, equitable time allocation, and facilitation that encouraged all voices to be heard. A co-facilitator assisted with data collection and observer triangulation to further ensure neutrality and transparency. The use of multiple data sources (observations, group artifacts, audio recordings, and anonymous feedback) allowed for data crystallisation while preserving participant confidentiality.

Post-workshop, authenticity was reinforced through member checking, with participants reviewing and validating successive drafts of the CP. This iterative process respected their lived experiences and ensured that the final output reflected their collective contributions. Participants also engaged in a debriefing process, affirming that their voices were fairly represented and ethically considered.

In this way, the ethical stance of the research extended beyond compliance to embody a pragmatic commitment to collaborative knowledge generation grounded in respect, fairness, and authentic engagement.

12.   Contribution to Educational Research

This paper contributes to the field of educational research by positioning workshops as pragmatic and ethically sound research methodologies that align with the principles of the SoTL. It demonstrates how structured, participatory workshops can support co-creation, ethical engagement, and dialogic consensus-building, particularly in practice-

based settings. By offering a replicable model for collecting rich, experiential data and fostering collaborative problem-solving, this work reinforces the value of workshop-based inquiry in advancing both educational scholarship and professional practice.

13.   Implications for Future Research

This reflective practice paper reinforces the value of workshops as participatory, context-responsive research methodologies grounded in pragmatic and ethical practice. Future research should explore how authenticity can be further integrated and evaluated across all phases of workshop-based inquiry, particularly in digitally mediated or hybrid environments. Investigating the use of emerging technologies (such as collaborative platforms, real-time polling tools, and AI-supported facilitation) for enhancing engagement, data collection, and analysis could extend the reach and impact of workshop methodologies. Cross-disciplinary applications, especially those involving distributed or interprofessional teams, may offer further insights into scalable models for co-creating actionable knowledge.

14.   Limitations and Pitfalls

While this paper offers methodological insights into the use of workshops within a pragmatic and authenticity-driven framework, certain limitations should be acknowledged (cf. Table 1 for a condensed summary).

    The workshop involved a single professional group (trained critical care nurses) within a specific healthcare context. The absence of multidisciplinary voices, such as physicians, respiratory therapists, or physiotherapists, may have limited the diversity of perspectives and scope of discussion. Including such stakeholders in future iterations could enrich the co-creation process and enhance the generalisability of findings.

    Time constraints within the single workshop format may also have restricted the depth of engagement, particularly in the final stages of refining the CP. A follow-up workshop could have allowed participants to complete the pathway collaboratively, reinforcing

ownership and potentially improving the sense of closure and implementation readiness.

Although the number of participants (n=19) exceeded the ideal range for collaborative workshops (typically 8-12), deliberate facilitation strategies helped mitigate potential participation imbalances. Nonetheless, not all participants may have contributed equally. Additionally, while all of them were experienced in critical care, none had prior experience in CP development. In future, including participants with design expertise or lived experience with pathway implementation could offer valuable additional insights.

Table 1
Summary of limitations and opportunities for future refinement

Limitation	Description	Implications for Future Research or Practice
Single professional group	Only critical care nurses participated.	Include multidisciplinary stakeholders to broaden perspectives and enhance relevance.
Time constraints	Only one workshop was conducted.	Consider multi-phase or follow-up workshops to deepen engagement and finalise outputs.
Group size	19 participants exceeded the ideal size for collaborative interaction.	Limit future workshops to smaller groups or enhance breakout facilitation strategies.
Limited experience in CP development	Participants had no prior experience in CP design.	Involve participants with pathway development experience or pair with design experts.
Depth of contribution	Not all participants may have contributed equally.	Use facilitation techniques and participation monitoring to support a balanced input.

These limitations, while important, also highlight opportunities for refining workshop-based methodologies to better accommodate

diverse inputs, extended engagement, and iterative design processes, particularly when applied in high-stakes, practice-based settings.

15.   Conclusion

In a time where healthcare and education systems are increasingly shaped by complex, real-world challenges, research approaches grounded in pragmatism offer practical relevance, flexibility, and ethical depth. This paper has demonstrated how workshops – when intentionally designed within a pragmatic paradigm and aligned with authenticity criteria – can serve as effective platforms for co-creating actionable knowledge. The structured yet adaptive process supported dialogic learning, collaborative decision-making, and meaningful engagement with end-users.

By aligning pragmatic assumptions with principles of authenticity, the workshop model addressed ethical tensions and strengthened the trustworthiness and contextual relevance of the outcomes. Although this project did not adopt an interdisciplinary design, it reflects the broader need to move beyond disciplinary silos and to engage diverse stakeholders in the co-creation of knowledge. The workshop methodology described here offers a replicable and ethically sound approach for addressing complex challenges in professional practice, affirming the continued relevance of pragmatism and SoTL in practice-oriented research.

Take-Home Message
- Workshops are effective platforms for generating actionable knowledge, especially in contexts requiring innovation and transformation.
- Involving end-users in the research process enhances ownership, contextual relevance, and implementation success.
- Structured, dialogic workshop formats promote collaborative learning and shared understanding.
- Workshop methodologies can bridge personal and professional boundaries through reflective, consensus-driven engagement.

- Data generated through workshops support a bottom-up approach to knowledge creation, offering the potential to directly influence practice.
- In-person workshops are valuable, but digital and hybrid formats can expand access and scalability.

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This manuscript was reviewed for clarity and grammar using a language model tool. All content decisions remained under the authors' control, and no new substantive material was generated by the tool.

16.   References

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