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What scholarly practice means to respiratory therapists: An interpretive description study

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Abstract

Rationale: Engagement in scholarly practice has been associated with professional empowerment, role satisfaction and improvements in care delivery and patient outcomes across many healthcare professions. However, in evolving professions like respiratory therapy, scholarly practice is excluded from competency frameworks, resulting in a gap in education and subsequent application of this competency in practice. An exploration of scholarly practice in respiratory therapy may provide insights into evolving professions that face tensions between meeting competency requirements as outlined in frameworks and providing quality healthcare to the populations they serve.

Aims and Objectives: The aim of the study was to explore what scholarly practice means, and how it manifests in practice from respiratory therapists' (RTs) perspectives.

Methods: We used interpretive description methodology. We purposively sampled participants to obtain varied perspectives of scholarly practice in respiratory therapy. We conducted 26 semistructured interviews with RTs in different roles (clinicians, educators, researchers, leaders and managers) across Canada and analysed the data using inductive analysis. Data collection and analysis proceeded concurrently.

Results: We developed five main themes: (i) the identity of a scholarly practitioner in RTs; (ii) factors influencing scholarly practice; (iii) one's impression of their professional self-image; (iv) scholarly practice as a vehicle for changing practice and (v) the complex interconnections between knowledges and practices.

Conclusion: Scholarly practice appears to be a multifaceted phenomenon encompassing a wide range of activities and skills including conducting research, reflective practice, application of research to practice, and contributing to the advancement of the profession and healthcare. Scholarly practice is influenced by organisational context and culture, available resources, intrinsic motivation and external political context. We identified similarities between professional identity and the description

of the scholarly practitioner, suggesting that these two phenomena may be interconnected. Furthermore, participants believed that scholarly practice could enhance the image, credibility, legitimacy and professionalisation of the profession.

KEYWORDS
clinical competence, professional identity, qualitative research, respiratory therapy, scholarly practice

1 | INTRODUCTION

One in every three people (approximately 2.4 billion individuals) worldwide will need rehabilitation care sometime during their recovery from illness or injury.[1,2] Rehabilitation professionals (e.g., occupational therapists [OTs], physiotherapists [PTs], respiratory therapists [RTs]) are expected to integrate high-quality evidence into routine practice to ensure patients receive the most up-to-date care. The ability to ground one's practice in theory and research, question current practices, search and identify evidence-based literature, and integrate evidence into professional practice is associated with a professional competency referred to as scholarly practice.[3–7] Scholarly practice is broadly understood as a process whereby clinicians engage with and apply multiple sources of knowledge (i.e., experiential, evidence from research) in ongoing, critical, reflective and evaluative ways in their daily practice.[3–8] Scholarly practice has been associated with professional empowerment and role satisfaction, a positive work environment as well as improved care delivery and patient outcomes.[9–15] While many health professions education programmes worldwide aim to support learners' development as scholarly practitioners, the teaching and assessment of this competency is challenging. A growing body of research suggests that this may be due to a lack of clarity about what scholarly practice *is*, how it develops, and what it looks like in practice.[8,16,17] Such definitional and operational challenges have not only impacted the teaching and assessment of scholarly practice, but appear to have negatively influenced clinicians' confidence in their ability to adopt this role successfully.[16–20]

Scholarly practice is widely discussed in the medical, nursing and occupational therapy literature, but research in other evolving rehabilitation professions, like respiratory therapy, which frequently faces challenges of legitimacy and limited public knowledge of the profession, is scarce.[8,21,22] Respiratory therapy is a relatively new rehabilitation profession whose origin lies in its focus on providing technical support to physicians.[22] However, over the last 60 years, RTs' roles have evolved from having a primarily technical focus to one that is more clinically oriented, patient-centred and therapeutic.[22] This change reflects a rapidly evolving healthcare landscape where RTs, like many healthcare professionals,[3–7] are expected to deliver effective, efficient and evidence-based care, integrate into interprofessional teams, foster change within hospital systems as well as participate in, critique, and integrate research into practice.[23–25] Therefore, to meet these expectations, RTs could benefit from embracing and adopting a scholarly approach to practice. However, in North America, where the respiratory therapy profession is most developed, the professional licensure bodies have not included scholarly practice as part of their competency frameworks for entry-to-practice.[26,27] Although there has been no justification cited for this decision, the result is that respiratory therapy graduates are not required to possess any of the component parts of this competency, which is central to professional frameworks of several other healthcare professions.[3–7]

In many countries worldwide, competency profiles are used to inform the design and implementation of educational curricula.[28] Therefore, if a specific competency is excluded from a professional competency framework, it is likely excluded from educational programmes. Excluding this competency from entry-level education in respiratory therapy could have undesirable effects for the profession and, consequently, patient care. First, if RTs are perceived as the only professionals in an interprofessional team without this competency, they may be challenged to uphold their legitimacy and recognition as healthcare professionals among their interprofessional colleagues.[21,22] Second, RTs may not be compelled to engage in scholarly practice since it is not required of them as per their competency frameworks. Third, without targeted educational preparation, integrating new research findings into their practice, which is a core component of scholarly practice, may be challenging; this, in turn, may lead to using outdated treatment methods, ultimately leading to suboptimal care and a loss of trust and credibility in RTs' work.[29,30]

Given the positive association between scholarly practice and work satisfaction, improved care delivery, and better patient outcomes, a deeper understanding of how RTs perceive the relationship between scholarly practice and routine clinical care may assist in designing interventions to improve this competency in the profession. Moreover, an exploration of scholarly practice in respiratory therapy may provide valuable insights into evolving professions that face tensions between meeting competency requirements as outlined in professional frameworks and providing quality healthcare to the populations they serve. Thus, the aim of this study was to explore what scholarly practice means, and how it manifests in daily practice from the perspectives of RTs.

2 | METHODS

We used interpretive description (ID) methodology.[31,32] ID is grounded in a constructivist paradigm which recognises that human experience is socially constructed and influenced by the context

where the experience takes place. We chose ID as it is designed to generate meaningful, clinically relevant findings while allowing for multiple possible viewpoints in contrast to other methodologies, such as Grounded Theory which aims to generate or develop a substantive theory.[31,32] Importantly, ID acknowledges that the researchers' theoretical and experiential knowledge they bring to a project influences and shapes the findings.[31,32] More specifically, the first author (MZ) used their professional knowledge as a practicing RT as the lens through which to better understand the data. This study was approved by McGill University's institutional review board (study number A01-E04-22A). We followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist to enhance the comprehensiveness of the analysis (Supplementary File 1).[33]

2.1 | Participants and recruitment

To be eligible to participate in this study, individuals had to be an RT holding credentials to practice in a Canadian jurisdiction. To enhance the comprehensiveness and diversity of understanding of the topic, we recruited participants with various professional roles, namely: (1) bedside care, (2) teaching in an academic institution, (3) having an active research programme, (4) holding a leadership position in a provincial regulatory or national professional organisation or (5) managing an RT department. We excluded student and retired RTs as they are considered not active in the profession. All potential participants were known to the research team and purposively sampled from across Canada based on their professional roles. To avoid any undue influence to participate, a research assistant who had no prior connection with the potential participants sent an e-mail invitation and a copy of the consent form. We then used snowball sampling to identify participants for specific professional roles who did not respond to the initial e-mail.

2.2 | Data collection

The research team created a preliminary interview guide based on their subject matter expertise and the findings from a scoping review about scholarly practice.[8] The guide was then shared with a group of OTs, PTs and health professions educationalists currently registered in postprofessional education (e.g., graduate and doctoral degrees) for feedback related to the length, language suitability and clarity of the questions. The research team revised the interview guide before conducting three pilot interviews (Supporting Information: Appendix 1). MZ then conducted the remaining individual semistructured, virtual interviews in either English or French between April and July 2022.

2.3 | Data analysis

Data collection and analysis occurred concurrently.[31,34] All interviews were audiotaped, transcribed verbatim and deidentified. The interview text was uploaded to the NVivo qualitative data analysis software programme to facilitate data management, coding and sorting.[35] MZ conducted inductive coding on all transcripts to explore and identify commonalities and differences between participant accounts. The codes were initially kept broad to identify recurrent ideas and patterns.[31] These were then shared with the research team for feedback. We then began to aggregate codes to build categories. MZ used constant comparison analysis across the 26 transcripts to re-examine and refine the codes and categories. The organised categories were circulated to the full research team for critical review and feedback. MZ then applied the updated categories to all transcripts, while another research team member with qualitative research expertise (SK) applied the categories to 30% of the transcripts. MZ and SK had discussions about discrepancies between the proposed categories until reaching consensus. After reaching consensus, we organised the categories into preliminary themes. This involved a process of synthesising and describing the meaning of the themes by examining the participant quotes and patterns of the data in relation to the research aim. The preliminary themes were critically reviewed with the full research team at multiple meetings to finalise the themes. Concurrently with data collection and analysis, we continued to recruit participants until we reached thematic sufficiency, defined as the stage in data analysis at which the categories we created appear to manage new data from the transcripts without requiring further modifications.[36–38] However, we acknowledge that there may exist alternative perspectives and experiences not captured with our collected data.

We integrated several steps in our analytical process based on Lincoln and Guba's quality criteria for trustworthiness.[34] Specifically, MZ wrote reflective memos to record and examine their assumptions about the research topic and reflected on the understanding of the data immediately after each interview. After each reflection, MZ wrote a synopsis of the interview process to ensure they remained mindful of the whole of each participant's responses. Another team member (SK) cocoded transcripts to enhance the credibility of the findings.[34] SK is knowledgeable about the phenomena and methodology but not about the context, positioning them well to facilitate intercoder agreement checks. The research team engaged in collaborative reflexivity by periodically coming together as a group to discuss the codes and themes and to discuss any converging or contrasting views.[39] Finally, MZ recorded every step of the research path in an audit trail to enhance the dependability of the findings.[34]

3 | RESULTS

Twenty-six individuals were interviewed (Table 1). Sixteen were female (61.5%), with a median age of 41.5 years. In the following sections, we describe and provide illustrative quotes for each of the five themes that reflect RTs' views on scholarly practice, what scholarly practice means for them and how it might manifest in their practice. Supporting Information: Appendix 2 includes longer and more detailed excerpts to enrich the description of each theme and

TABLE 1 Characteristics of participants.

Demographic characteristics	*n* = 26	%
Gender		
Male	10	38.5
Female	16	61.5
Province		
Québec	8	30.7
Ontario	7	26.9
British Columbia	4	15.4
New Brunswick	3	11.5
Alberta	2	7.7
Nova Scotia	1	3.8
Saskatchewan	1	3.8
Age in years		
20–30 years old	2	7.7
31–40 years old	7	26.9
41–50 years old	13	50
51–60 years old	3	11.5
61–70 years old	1	3.8
Highest earned qualification		
Professional RT diploma	5	19.2
Post RT Diploma (e.g., CRE)	3	11.5
Undergraduate degree	8	30.7
Graduate degree[a]	7	26.9
Doctoral degree[a]	3	11.5
Employment status		
Educator	4	15.4
Regulator	5	19.2
Clinician	11	42.3
Manager	2	7.7
Researcher	4	15.4
Full-time (30-40 h/week)	26	100
Years in practice		
Less than 5 years	1	3.8
From 5 to 9 years	3	11.5
From 10 to 14 years	4	15.38
From 15 to 19 years	6	23
20 years and over	12	46.2

Abbreviations: CRE, certified respiratory educator; RT, respiratory therapist.

[a]These graduate or doctoral degrees are in subjects outside of respiratory therapy (No graduate or doctoral degrees in respiratory therapy exist in Canada).

Supporting Information: Appendix 3 illustrates a simplified sample coding scheme.

3.1 | The identity of a scholarly practitioner in RTs

Participants described what a scholarly practitioner might look like in practice and what they believe sets them apart in the profession. Specifically, they described what appeared to be a composite profile of the scholarly practitioner, as they thought of and spoke about individuals they currently or previously worked with. This first theme (i.e., the identity of a scholarly practitioner) was comprised of three subthemes: who they are, their skills and what they do.

3.1.1 | Who scholarly practitioners are

Participants described the apparently innate attributes, personality traits, or characteristics of scholarly practitioners in RTs that they inferred, such as being creative, inquisitive, having a flexible ethos and having emotional intelligence. Among these attributes, some were mentioned more frequently including: being intrinsically motivated ('they're engaging, approachable, they definitely strive to better themselves, but also to better the people they're working with' [P2-Educator]); ambitious ('they're pushing, they're always looking at, yes, I'll do that, I'll take more responsibility on, I want to be part of this team' [P12-Regulator]); and possessing an open and responsive attitude ('they're going to be someone who isn't biased, they're open to seeing things from all sides so that they can actually think about the problem in a very well-rounded manner.' [P11-Manager]).

Some participants also reported that they self-identified as a scholarly practitioner and found it difficult to connect with colleagues who they viewed as not possessing similar characteristics and values.

> I'm at a loss, because for me, it [being a scholar] was such a natural thing. I have a hard time understanding the thought processes for someone who comes to work to get a paycheck and leave. My brain is just not wired that way. (P4-Researcher)

Thus, participants described a sense of disconnect from colleagues who did not share their commitment to staying current with the latest research and advancements in their field.

3.1.2 | Skills of a scholarly practitioner

Participants highlighted specific skills or abilities that they believed a scholarly practitioner possesses. For example, reflective practice was considered a critical skill, which involves examining their own practice. As one participant explained: '[My colleague] set me down a path of reflective practice and a recognition that respiratory

therapy should be evidence-based and should be a little bit self-critical.' (P15-Researcher).

Additionally, several participants mentioned that the skills of a scholarly practitioner often centre on research literacy as it is critical for delivering competent and effective care. As one participant explained: 'In our profession, we are constantly evolving and constantly being exposed to [new research and new findings] and if you don't know how to read it and how to interpret it, you're not really effective [in practice].' (P20-Clinician) Furthermore, participants highlighted the importance of possessing skills to effectively communicate the knowledge acquired through research to their colleagues and inter-professional teams.

3.1.3 | What scholarly practitioners do

As a function of those apparently innate attributes and skills, participants described what they perceived scholarly practitioners do in practice, or the specific roles they may adopt. Participants admired these individuals, emphasising that they were role models or mentors. They mentioned that they guided students and novice clinicians from the beginning of their careers to when these individuals took on leadership positions. As one participant explained: '[They] made me who I am today, but at the same time I think that mentorship and that buddy system earlier on with a leader would have helped me climb up the ladder and guided my practice.' (P9-Regulator).

Participants highlighted how important transferring and sharing knowledge was in the mentoring relationship. As one participant highlighted:

> Once they feel educated enough in that topic I think they're also somebody that shares that knowledge, because they want everyone to come to the top of their scope and be as educated as they are. They want to lift their team so that you have everybody coming up. (P11-Manager)

As such, individuals who were perceived to be scholarly practitioners were often involved in knowledge-sharing activities, including knowledge translation or knowledge brokering.

3.2 | Factors influencing scholarly practice

This second theme captured participants' perceptions of the factors that influence scholarly practice. We categorised these factors into two sub-themes based upon whether they enabled or hindered the development of RTs as scholarly practitioners, namely, resources, culture, access to research and research training.

3.2.1 | Enablers of scholarly practice

Participants frequently mentioned that resources (e.g., money, protected time) should be readily available to support RTs in being scholarly practitioners, as exemplified by one participant, '[we need] support for ongoing engagement in the profession and care—whether it's travel and conference support to attend conferences and hear about new practices.' (P14-Clinician). However, for these resources to be available, participants recognised that buy-in from multiple stakeholders (e.g., managers) is needed. Unless scholarly practice was a shared priority, it would be difficult to provide resources (e.g., money, protected time) needed to encourage scholarly practice. As one participant explained:

> It's important that they [scholarly practitioners] engage with the management to be able to provide some mechanism to make it easier for them to do this; so that they're not doing it on their 'free time;' so that it's actually incorporated within their position. (P5-Researcher)

Participants also noted that a supportive workplace culture (e.g., open communication, collaborative and sufficient resources) facilitated one's engagement in scholarly practice.

> I definitely noticed that where some sites seem to be a little bit more quality improvement focused, and that openness to new ideas and that openness to do better in that constant advancing of knowledge [and] that lifelong learning, and other sites that seemed to be a bit more like in the mud and slow to move forward. (P2-Educator)

Participants emphasised the importance of having readily available resources, such as funding, protected time, sufficient training and a supportive work culture to support RTs in their scholarly practice.

3.2.2 | Barriers to scholarly practice

Participants acknowledged that while scholarly practice can manifest in many ways, they found it difficult to enact, largely due to inadequate research literacy skills. They reported that challenges in locating, understanding, critically evaluating and applying scholarly work hindered their ability to engage in scholarly practice. Because research literacy skills were seen as critical to scholarly practice, the absence of such skills was described as a main barrier to scholarly practice, as illustrated by the following participant: 'You can purposely read [research articles] and that's another skill that we're not taught in RT school, and that makes it a big deterrent to being able to apply research into our practice.' (P1-Clinician)

Lack of formal research training was identified as a barrier across participants, who suggested that to be an effective healthcare professional in today's healthcare system, research literacy is a necessity, not an option.

> There're always recommendations in various things like trauma practice, transfusion practice, and we're just not trained to keep up with that. We just rely on what other people tell us, and I think it makes you a better RT to, yourself, be able to look up papers, look things up. (P21-Clinician)

Participants underscored the need for increased emphasis on developing research literacy skills among RTs to help overcome barriers to scholarly practice.

3.3 | One's impression of their professional self-image

This third theme captured participants' views of their professional identity, their skills, abilities and competence in the respiratory therapy profession, and how other professionals (e.g., physicians, nurses) perceive the respiratory therapy profession. When reflecting on the potential responsibilities of an RT as a scholarly practitioner in the workplace and in healthcare, participants frequently expressed feelings of inadequacy. There was a desire to enhance the value and legitimacy of the profession, as one expressed: 'we need to feel valued in the workplace.' (P12-Regulator). Another commented: 'the entire healthcare team must view the respiratory therapy department as, not just part of the team, [but] as a vital part of the team.' (P13-Educator).

Such feelings of being undervalued led some participants to have negative views of the respiratory therapy profession; one participant shared: 'If I really pull myself out of that and look globally, the RT is just not there, it's not respected; [seen to be] easily replaceable, in my opinion.' (P20-Clinician).

Despite the negative views, some participants believed that scholarly practice could improve the credibility and legitimacy of the profession, possibly create new professional opportunities (i.e., novel areas to work as RTs) such as, telehealth/tele-ICU, public health, and enhance the professionalisation of the respiratory therapy profession:

> RTs are tired of seeing a new role come up in the hospital and nursing grab it or physio[therapy], or another profession. We're tired of being told this is going to be what the focus or the priority area is for our department or our hospital. We're tired of not seeing ourselves in the research. We're tired of being overlooked for other professions, and by other professions, but we're not doing anything to push our practice. (P8-Regulator)

During the interviews, participants also talked about how certain engagement in scholarly practice, such as pursuing higher degrees or conducting research, could enhance the legitimacy and credibility of the RT profession. As one participant mentioned:

> If RTs don't step it up [and gain higher education] (a) they'll be left behind when it comes to their own practice, because they're not involved in the evaluation process, and (b) I have a feeling that the perceptions of these other professions are that, they won't think RTs have valid opinions, because they haven't gone through this process [of earning higher degrees] which, you know, [might be] right or wrong. (P5-Researcher)

Participants expressed concern that the respiratory therapy profession may lose its relevance and become obsolete in healthcare unless efforts are made to support scholarly practice and help RTs develop as scholarly practitioners.

3.4 | Scholarly practice as a vehicle for changing practice

This fourth theme captures the perspective of a smaller group of participants who associated the term *scholarly practice* with more than just research. For these participants, it involved a sense of obligation to advance the profession by introducing novel concepts into practice, emphasising the importance of RT in healthcare, and keeping abreast of the latest research needed to apply evidence-based techniques for their patients. Scholarly practice could be the mechanism, or means, by which to achieve this goal, as suggested by one participant:

> We're such a new profession, and the way that we're growing, I think that's exactly what we need. We started out just being people who were fixing machines, to being able to touch the machines, to being able to work with the machines, to being able to run them with open orders. Then you have people advancing their education. It just shows the world what we can do, and I don't think that we've tapped what we can do in terms of helping our clients. We still need people who are doing that masters and that PhD route to really do the research to show what we can do next. (P11-Manager)

The participants perceived scholarly practice as an essential aspect of their professional development. It was seen to represent their commitment to advancing the profession by fostering innovation, emphasising the critical role of this profession in healthcare, and using evidence-based practices to deliver optimal patient care.

3.5 | The complex interconnections between knowledges and practices

This final theme highlights the intricate and dynamic relationship between theoretical knowledge and its practical application. Participants moved from discussing the benefits of scholarly practice from a theoretical point of view to focusing on how to make the connection between knowledges and practices more tangible. Participants expressed that to engage in scholarly practice, there needs to be a meaningful connection between their clinical work and research, but that this connection is not well developed in the respiratory therapy profession, as one participant explained: 'Without doing scholarly activity, we can't demonstrate why we need to be there; we also can't figure out or answer the very questions that our own profession has.' (P8-Regulator) Additionally, participants stated that RTs sometimes view clinical practice and academic research as relatively incompatible activities. As one participant said:

> RTs feel that they can't really merge [research] with their clinical practice. So, then they feel that if they really love the clinical piece of it, they feel that if they go too much into the research, they will have to eventually go somewhere else, like teaching, etc. and not really clinical practice [anymore]. (P1-Clinician)

Conversely, participants who were more involved in research shared that, to stay connected with clinical practice, it is important to link knowledges to practices (and vice-versa) effectively. They recognised the need to keep both aspects of their work closely connected, as exemplified by this participant:

> To keep a foot in the clinical environment, stay connected, and be influenced by what the needs are in the clinical environment, then also be able to pursue research to address those same, questions or challenges or problems and have it function in the way that evidence-based medicine is intended to; where you've got clinical problems that are driving questions and hypotheses and leading to the design of interventions that you're then testing that whole cycle of knowledge creation and knowledge translation. (P15-Researcher)

The participants stated that to engage in scholarly practice, there must be a significant relationship between their clinical work and research. However, they also noted that this connection is poorly developed within respiratory therapy. Those who were more involved in research emphasised the crucial importance of maintaining a strong link between knowledge and practice. They recognised the need to stay connected with clinical practice to translate research findings into practice and make their care more effective for patients.

4 | DISCUSSION

In this study, we explored what scholarly practice means, and how it manifests in daily practice from the perspectives of RTs practicing in various roles. This paper contributes to the understanding of the positioning of scholarly practice at the intersection of research and practice, with a particular focus on the respiratory therapy profession and highlights the importance of recognising the value of scholarly practice within the respiratory therapy profession and the potential benefits it can bring to RTs and, eventually, patients.

The respiratory therapy profession has historically been rooted in technical skills, and formal competency requirements have not emphasised the role of scholar, scholarship, or scholarly practice. Our data suggest scholarly practice is a multifaceted phenomenon encompassing a wide range of activities and skills. It is not only about conducting research, but also about one's ability to reflect, critically evaluate and apply research findings to practice, and the ability to identify gaps in professional knowledge and contribute to advancing the profession and healthcare field. Scholarly practice is an ongoing process requiring continuous learning and engagement with new research and technology. Moreover, scholarly practice appears to be a function of the organisational culture and context, available resources, personal interest and motivation and external political context (Figure 1). It is not surprising that scholarly practice is interpreted as a multidimensional phenomenon, given the diverse literature on the topic and conflicting reports indicating that professionals often encounter difficulties fulfilling their roles as scholarly practitioners.[8,16,17,40]

Participants described the identity of a scholarly practitioner as being comprised of three dimensions: who they are (i.e., their personal attributes), the skills they possess, and what they do (i.e., the activities they engage in). These findings are consistent with the literature on the factors that influence professional identity formation in healthcare learners and professionals. Categories such as 'who I am' and 'what I do' have been identified as crucial for nurses' professional identity, as they are associated with increased job satisfaction, staff retention and improved patient outcomes.[41] Similarly, attributes such as maturity, self-reflection, courage and personal experiences have been found to be important for building a strong professional identity in nursing[42] and rehabilitation professionals.[43] The similarities between professional identity and the descriptions of scholarly practitioners suggest that these two phenomena may be interconnected. It is plausible that those who engage in scholarly practice may possess a stronger professional identity. Similarly, scholarly practice is a required competency in numerous healthcare professions,[3–7] and acquiring this competency can impact the development of their professional identity. Some researchers suggest that the acquisition of new knowledge, skills and attitudes (in general and specific to scholarly practice) can give professionals a sense of confidence, mastery and expertise in their field, which can contribute to a positive professional identity.[44–46] The nature of the relationship between scholarly practice as a

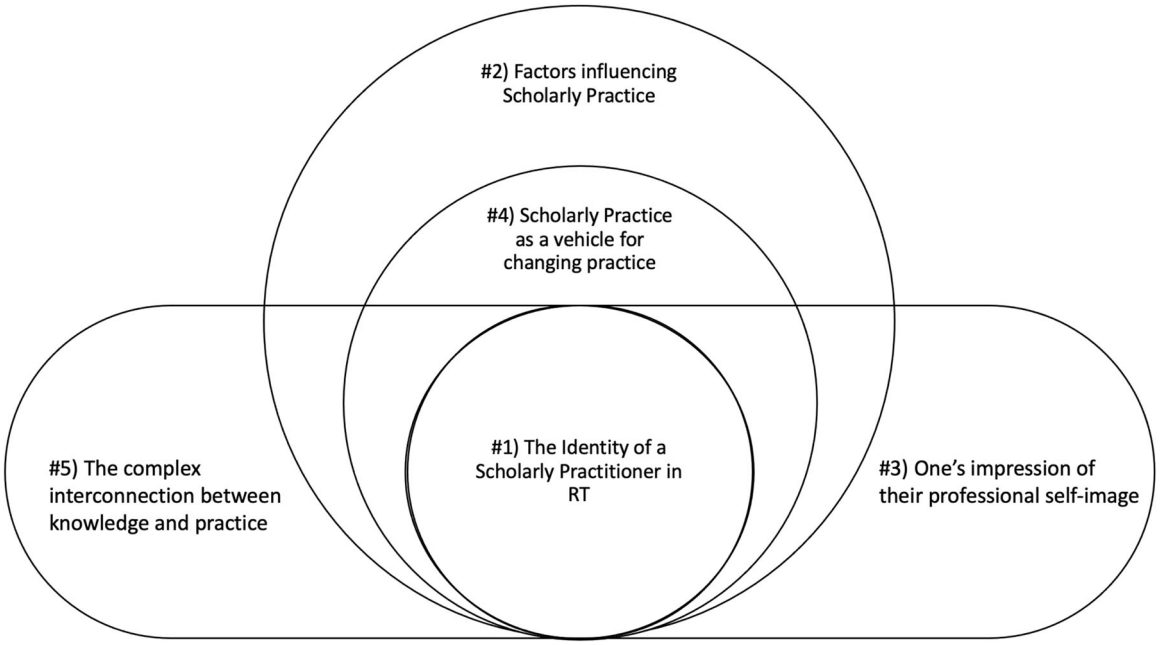

FIGURE 1 Concept map of scholarly practice. Identity is the core of the individual (#1) and scholarly practice is a vehicle for changing practice (#4) which is dictated by the context you work within and the associated factors influencing scholarly practice (#2). Simultaneously, your identity as a scholarly practitioner is being pulled in either direction and influenced by your impression of your self-image (#3) and the intricate and dynamic relationship between theoretical knowledge and practical application, which involves various factors, including how knowledge is generated and applied, and the social and cultural contexts that affect this relationship (#5).

competency influencing individuals' professional identity warrants further investigation.

Our findings indicate that scholarly practice can potentially enhance the professional self-image of the respiratory therapy profession. Similarly, it might create new occupational opportunities and advance the professionalisation of respiratory therapy, further increasing the legitimacy and credibility of the profession. Abbott's system of professions[47] is a helpful theory to better understand how RTs associate scholarly practice with a desire for enhanced professionalisation. Abbott postulates that professions' statuses constantly fluctuate because they develop and exist within a complex environment of professional, social and economic elements. All professions develop and evolve based on four interacting elements: their work (i.e., the sequence of logic and engagement to solve a problem), jurisdiction (i.e., control over a domain of work), competition (i.e., other professions adopting parts of the professions' jurisdiction) and abstract knowledge (i.e., the foundational information, principles and concepts that are necessary to do the work).[47] Our data underscore the importance of understanding and conducting research, creating paths toward higher education and translating research into practice for this profession and likely for other evolving ones. These are arguably critical components of developing abstract knowledge for a profession and is central to what it means to be a professional.[47–51] Abbott posits that professions are defined by their possession of abstract knowledge, which is knowledge that is not directly observable or measurable, but rather is theoretical and conceptual.[47] This knowledge is developed through education, research, and the application of research in practice, which aligns with our participants' discussions about the importance of scholarly practice and its actual enactment. Abstract knowledge demonstrates the rigour, clarity and scientifically logical basis of the profession's work, which helps to establish the legitimacy of a profession. Many participants in our study associated scholarly practice with this demonstration of coherence and scientific reasoning. Similarly, the ongoing pursuit and refinement of abstract knowledge enables professionals to adopt new jurisdictions of work and contribute to professionalisation. Participants in this study emphasised the importance of scholarly practice, abstract knowledge and professionalisation to remain relevant in modern healthcare.[52–55]

While individual RTs can contribute to enhancing the credibility and legitimacy of the profession through scholarly practice, we contend that it is not solely their responsibility. Rather, we argue that it is a shared responsibility among multiple stakeholders. For example, healthcare professionals (both educators and clinicians) can engage in ongoing education and training to stay current with the latest research and best practices in their field and participate in scholarly activities (e.g., research and publishing, quality improvement initiatives).[56,57] This can help to improve the overall quality of care that is provided and potentially enhance the self-image of the profession.[58,59] Regulatory bodies are responsible for ensuring that healthcare professionals meet certain standards of knowledge, skills, attitudes, behaviours and ethics. They can play an important role in enhancing the self-image of the profession by enforcing these standards and holding professionals accountable.[60] Additionally,

advocacy bodies (e.g., professional associations) can inform public policy decisions at a legislative level and increase the public's understanding and appreciation of the profession through media and education.[61] However, it is important to note that respiratory therapy is just one of many healthcare professions and that the boundaries between professions can overlap.[62] While enhancing credibility and legitimacy for RTs can be viewed as positive, it could also be viewed negatively by other professions as competition.[63–65]

Finally, while the data indicate that scholarly practice is a multifaceted phenomenon, our findings suggest a consensus that research literacy is a fundamental aspect of scholarly practice. While not all RTs actively conduct research, they should likely have some understanding of research, be critical consumers of research, and apply research findings in their practice to optimise patient care.[66,67] Without some research literacy, RTs may struggle to engage in scholarly practice, and understand and use research evidence to inform their practice, which can lead to suboptimal patient outcomes.[68] Interventions or programmes such as regular continuing professional development focused on research literacy, training on critical appraisal, and developing scholarly communication skills framed in adult and social learning theories could be avenues worth pursuing.[69–71]

Understanding the significance of scholarly practice in RTs has several practice implications. First, it highlights the need to promote a professional culture that values research and innovation by providing resources and opportunities for RTs to engage in scholarly activities (e.g., research opportunities, higher education and quality improvement initiatives). Second, ongoing professional development in research literacy is necessary to keep up with the latest evidence-based practices to improve quality of care and patient outcomes. Finally, understanding the importance of and engaging in scholarly practice can enhance the profession's knowledge base, promotes evidence-based practice and advances the profession, all of which can increase the credibility and recognition of the respiratory therapy profession.

4.1 | Strengths and limitations

One strength of this study is that all participants were interviewed by MZ, who possesses intimate knowledge of the RT profession. Acknowledging and using one's knowledge of a practice context is a strength of ID methodology as it contributes to generating credible and meaningful disciplinary knowledge.[31,72] Additionally, another research team member who possesses knowledge about the phenomenon and methodology but not about the context, co-coded 30% of the transcripts and came to similar findings. This research also has limitations. First, the transferability of these findings might be limited to the Canadian context in which this study took place. Second, it is also likely that those who chose to participate in this study voluntarily had a vested interest in the topic. Therefore, we potentially did not capture contrary opinions. However, our study included a broad sample of clinicians, educators, researchers, managers and regulators who represent many facets of the respiratory therapy profession.

5 | CONCLUSION

The results of this study highlight the multifaceted nature of scholarly practice in the respiratory therapy profession and the need for a meaningful connection between clinical work and research. Promoting a professional culture that values research and innovation, ongoing professional development in research literacy, and understanding the importance of scholarly practice may increase the credibility and recognition of the respiratory therapy profession, potentially leading to improved patient outcomes and quality of care. RTs' feelings of inadequacy and desire to enhance the value and legitimacy of the profession suggest that it is vital to address the gap between scholarly practice in their formative training and their continuous professional development such that they may progressively develop competence in their roles as scholarly practitioners.

AUTHOR CONTRIBUTIONS

Marco Zaccagnini: Conceptualisation; obtaining, managing and analysing data; writing—original draft; writing—review and editing. **André Bussières:** Conceptualisation; writing—original draft; writing—review and editing. **Sungha Kim:** Analysing data; writing—review and editing. **Peter Nugus:** Conceptualisation, writing—review and editing. **Andrew West:** Conceptualisation, writing—review and editing. **Aliki Thomas:** Conceptualisation, writing—original draft; writing—review and editing. All authors approved the final version and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or the integrity of any part of the work are appropriately investigated and resolved. All authors listed in this manuscript meet the ICMJE criteria for authorship.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

This study was approved by McGill University's Institutional Review Board (#A01-E04-22A).

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REFERENCES

1. Cieza A, Causey K, Kamenov K, Hanson SW, Chatterji S, Vos T. Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396(10267):2006-2017. doi:10.1016/s0140-6736(20)32340-0
2. Mills T, Marks E, Reynolds T, Cieza A. Rehabilitation: Essential along the Continuum of Care. In: Jamison DT, Gelband H, Horton S, eds. *Disease Control Priorities: Improving Health and Reducing Poverty*. 3rd ed. The International Bank for Reconstruction and Development/The World Bank; 2017.
3. Canadian Nurses Association. *Advanced Nursing Practice: A National Framework*. Canadian Nurses Association; 2008.
4. Canadian Association of Occupational Therapists. *Profile of Practice of Occupational Therapist in Canada*. Canadian Association of Occupational Therapists; 2012.
5. Frank JR, Snell LS, Sherbino J, eds. *CanMEDS 2015 Physician Competency Framework*. Royal College of Physicians and Surgeons of Canada; 2015.
6. National Physiotherapy Advisory Group. *Competency profile for Physiotherapists in Canada (2017)*. National Physiotherapy Advisory Group; 2017.
7. The Canadian Alliance of Audiology and Speech-Language Pathology Regulators. *National Speech-Language Pathology Competency Profile*. The Canadian Alliance of Audiology and Speech-Language Pathology Regulators; 2018.
8. Zaccagnini M, Bussières A, Mak S, Boruff J, West A, Thomas A. Scholarly practice in healthcare professions: findings from a scoping review. *Adv Health Sci Educ Theory Pract*. 2022;28:973-996. doi:10.1007/s10459-022-10180-0
9. Aiken LH, Sloane DM, Bruyneel L, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *Lancet*. 2014;383(9931):1824-1830. doi:10.1016/s0140-6736(13)62631-8
10. Black AT, Balneaves LG, Garossino C, Puyat JH, Qian H. Promoting evidence-based practice through a research training program for point-of-care clinicians. *J Nurs Admin*. 2015;45(1):14-20. doi:10.1097/NNA.0000000000000151
11. Dahrouge S, Armstrong CD, Hogg W, Singh J, Liddy C. High-performing physicians are more likely to participate in a research study: findings from a quality improvement study. *BMC Med Res Methodol*. 2019;19(1):171. doi:10.1186/s12874-019-0809-6
12. Hanney S, Boaz A, Jones T, Soper B. *Engagement in Research: An Innovative Three-Stage Review of the Benefits for Health-Care Performance*. Health Services and Delivery Research; 2013.
13. Harding K, Lynch L, Porter J, Taylor NF. Organisational benefits of a strong research culture in a health service: a systematic review. *Aust Health Rev*. 2017;41(1):45-53. doi:10.1071/AH15180
14. Carrick-Sen D, Moore A. Editorial: improving care and outcome through NMAHP research-focused clinical academic roles—an international perspective. *Int J Pract Based Learn Health Soc Care*. 2019;7(2):ii-vi. doi:10.18552/ijpblhsc.v7i2.648
15. Jonker L, Fisher SJ, Dagnan D. Patients admitted to more research-active hospitals have more confidence in staff and are better informed about their condition and medication: results from a retrospective cross-sectional study. *J Eval Clin Pract*. 2020;26(1):203-208. doi:10.1111/jep.13118
16. Fillion B, Rochette A, Girard A. Challenges of being a scholarly clinician as perceived by stroke rehabilitation professionals. *Disabil Rehabil*. 2014;36(6):521-528. doi:10.3109/09638288.2013.797516
17. Rochette A, Brousseau M, Vachon B, Engels C, Amari F, Thomas A. What occupational therapists' say about their competencies' enactment, maintenance and development in practice? A two-phase mixed methods study. *BMC Med Educ*. 2020;20(1):191. doi:10.1186/s12909-020-02087-4
18. Binnendyk J, Pack R, Field E, Watling C. Not wanted on the voyage: highlighting intrinsic CanMEDS gaps in competence by design curricula. *Can Med Educ J*. 2021;12(4):39-47. doi:10.36834/cmej.70950
19. Friedman RH, Wahi-Gururaj S, Alpert J, et al. The views of U.S. medical school deans toward academic primary care. *Acad Med*. 2004;79(11):1095-1102.
20. Solaja O, Skinner TAA, McGregor TB, Siemens DR. CanMEDS scholars: a national survey on urology residents' attitudes towards research during training. *Can Urol Assoc J*. 2017;12(4):E191-E196. doi:10.5489/cuaj.4927
21. Prud'homme J. "Professional techs": machines, technical skills and professional aspirations in hearing prosthetics and respiratory care in Quebec, 1950–1990. *Sci Can*. 2011;33(1):71-94. doi:10.7202/1000845ar
22. Zaccagnini M, Bussières A, Nugus P, West A, Thomas A. Exploring the professionalization of respiratory therapy in Canada. *Can J Respirat Ther*. 2021;57:129-137. doi:10.29390/cjrt-2021-046
23. Barnes TA, Gale DD, Kacmarek RM, Kageler WV. Competencies needed by graduate respiratory therapists in 2015 and beyond. *Respir Care*. 2010;55(5):601-616.
24. Kacmarek RM, Durbin CG, Barnes TA, Kageler WV, Walton JR, O'neil EH. Creating a vision for respiratory care in 2015 and beyond. *Respir Care*. 2009;54(3):375-389.
25. Smith SG, Endee LM, Benz Scott LA, Linden PL. The future of respiratory care: results of a New York State survey of respiratory therapists. *Respir Care*. 2017;62(3):279-287. doi:10.4187/respcare.04768
26. The National Alliance of Respiratory Therapy Regulatory Bodies. *National Competency Framework for the Profession of Respiratory Therapy*. The National Alliance of Respiratory Therapy Regulatory Bodies; 2016.
27. American Association for Respiratory Care. *Competencies for Entry into Respiratory Therapy Practice*. American Association for Respiratory Care; 2016.
28. Batt AM, Tavares W, Williams B. The development of competency frameworks in healthcare professions: a scoping review. *Adv Health Sci Educ*. 2020;25(4):913-987. doi:10.1007/s10459-019-09946-w
29. Carpenter S, Haber-Curran P. The role of research and scholarship in the professionalisation of student affairs. *J Stud Aff Africa*. 2013;1(1):1-9. doi:10.14426/jsaa.v1i1-2.20
30. Ten Cate O. Health professions education scholarship: the emergence, current status, and future of a discipline in its own right. *FASEB BioAdv*. 2021;3(7):510-522. doi:10.1096/fba.2021-00011
31. Thorne S. *Interpretive Description: Qualitative Research for Applied Practice*. 2nd ed. Routledge; 2016.
32. Thompson Burdine J, Thorne S, Sandhu G. Interpretive description: a flexible qualitative methodology for medical education research. *Med Educ*. 2021;55(3):336-343. doi:10.1111/medu.14380

33. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. doi:10.1093/intqhc/mzm042
34. Lincoln YS, Guba EG. *Naturalistic Inquiry*. Sage; 1985.
35. QSR International Pty Ltd. NVivo. QSR International Pty Ltd; 2020.
36. Bradshaw C, Atkinson S, Doody O. Employing a qualitative description approach in health care research. *Glob Qual Nurs Res*. 2017;4(1-8):2333393617742282. doi:10.1177/2333393617742282
37. Thorne S. The great saturation debate: what the "S word" means and doesn't mean in qualitative research reporting. *CJNR*. 2020;52(1):3-5. doi:10.1177/0844562119898554
38. Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Med Educ*. 2017;51(1):40-50. doi:10.1111/medu.13124
39. Olmos-Vega FM, Stalmeijer RE, Varpio L, Kahlke R. A practical guide to reflexivity in qualitative research: AMEE guide no. 149. *Med Teach*. 2022;45:1-11. doi:10.1080/0142159X.2022.2057287
40. Kluijtmans M, de Haan E, Akkerman S, van Tartwijk J. Professional identity in clinician-scientists: brokers between care and science. *Med Educ*. 2017;51(6):645-655. doi:10.1111/medu.13241
41. Rasmussen P, Henderson A, Andrew N, Conroy T. Factors influencing registered nurses' perceptions of their professional identity: an integrative literature review. *J Contin Educ Nurs*. 2018;49(5):225-232. doi:10.3928/00220124-20180417-08
42. Öhlén J, Segesten K. The professional identity of the nurse: concept analysis and development. *J Adv Nurs*. 1998;28(4):720-727. doi:10.1046/j.1365-2648.1998.00704.x
43. Mak S, Hunt M, Boruff J, Zaccagnini M, Thomas A. Exploring professional identity in rehabilitation professions: a scoping review. *Adv Health Sci Educ*. 2022;27(3):793-815. doi:10.1007/s10459-022-10103-z
44. Fergusson L, Brömdal A, Gough M, Mears S. Competency, capability and professional identity: the case for advanced practice. *Work Based Learn e-J*. 2020;9(1):95-131.
45. Cavazos Montemayorr RN, Elizondo-Leal JA, Ramírez Flores YA, Cors Cepeda X, Lopez M. Understanding the dimensions of a strong-professional identity: a study of faculty developers in medical education. *Med Educ Online*. 2020;25(1):1808369. doi:10.1080/10872981.2020.1808369
46. Parsons AS, Kon RH, Plews-Ogan M, Gusic ME. You can have both: coaching to promote clinical competency and professional identity formation. *Perspect Med Educ*. 2022;10(1):57-63. doi:10.1007/s40037-020-00612-1
47. Abbott A. *The System of Professions: An Essay on the Division of Expert Labor*. The University of Chicago Press; 1988.
48. Wilensky HL. The professionalization of everyone? *Am J Sociol*. 1964;70(2):137-158.
49. Friedson E. *Professional Powers*. University of Chicago Press; 1986.
50. Thomas A, Law M. Research utilization and evidence-based practice in occupational therapy: a scoping study. *Am J Occup Ther*. 2013;67(4):e55-e65. doi:10.5014/ajot.2013.006395
51. Jacob H. Why all doctors should be involved in research. *BMJ*. 2016;352:i164. doi:10.1136/bmj.i164
52. Johannessen LEF. Workplace assimilation and professional jurisdiction: how nurses learn to blur the nursing-medical boundary. *Soc Sci Med*. 2018;201:51-58. doi:10.1016/j.socscimed.2018.02.004
53. Cooper JE. Reflections on the professionalization of occupational therapy: time to put down the looking glass. *Can J Occup Ther*. 2012;79(4):199-209. doi:10.2182/cjot.2012.79.4.2
54. Yam BM. From vocation to profession: the quest for professionalization of nursing. *Br J Nurs*. 2004;13(16):978-982.
55. Cobban S, Edgington E, Compton S. An argument for dental hygiene to develop as a discipline. *Int J Dent Hyg*. 2007;5:13-21.
56. Clavelle JT, Porter O'Grady T, Weston MJ, Verran JA. Evolution of structural empowerment: moving from shared to professional governance. *J Nurs Admin*. 2016;46(6):308-312. doi:10.1097/NNA.0000000000000350
57. Freeman AR, McWilliam CL, MacKinnon JR, DeLuca S, Rappolt SG. Health professionals' enactment of their accountability obligations: doing the best they can. *Soc Sci Med*. 2009;69(7):1063-1071. doi:10.1016/j.socscimed.2009.07.025
58. Clearfield SM. Professional self-image of the social worker: implications for social work education. *J Educ Soc Work*. 1977;13(1):23-30. doi:10.1080/00220612.1977.10671409
59. Milisen K, De Busser T, Kayaert A, Abraham I, Dierckx de Casterlé B. The evolving professional nursing self-image of students in baccalaureate programs: a cross-sectional survey. *Int J Nurs Stud*. 2010;47(6):688-698. doi:10.1016/j.ijnurstu.2009.11.008
60. Warren M, Braithwaite C. Understanding the relationship between professional regulation and professional identity in health care. *J Med Regul*. 2020;106(2):7-14. doi:10.30770/2572-1852-106.2.7
61. Girvin J, Jackson D, Hutchinson M. Contemporary public perceptions of nursing: a systematic review and narrative synthesis of the international research evidence. *J Nurs Manag*. 2016;24(8):994-1006. doi:10.1111/jonm.12413
62. Nancarrow SA, Borthwick AM. Dynamic professional boundaries in the healthcare workforce. *Sociol Health Illness*. 2005;27(7):897-919. doi:10.1111/j.1467-9566.2005.00463.x
63. Chen A, Brodie M. Resisting outdated models of pedagogical domination and subordination in health professions education. *AMA J Ethics*. 2016;18(9):903-909. doi:10.1001/journalofethics.2016.18.9.ecas3-1609
64. Jovic L, Bianchi E, Decouflet S, Loizeau V, Amiot P, Teixeira M. Nurses in France: between autonomy and subordination in front line care. *Glob Qual Nurs Res*. 2015;2:2333393615584550. doi:10.1177/2333393615584550
65. Fornasier R. A century-long struggle towards professionalism. Key factors in the growth of the physiotherapists' role in the United States, from subordinated practitioners to autonomous professionals. *Manag Organ History*. 2017;12(2):142-162. doi:10.1080/17449359.2017.1329090
66. Hines S. Research literacy: does education have something to teach us? *Int J Evid Based Healthcare*. 2016;14(4):202. doi:10.1097/01.XEB.0000511349.97198.c5
67. Grimshaw JM, Eccles MP, Lavis JN, Hill SJ, Squires JE. Knowledge translation of research findings. *Implement Sci*. 2012;7(50):50. doi:10.1186/1748-5908-7-50
68. Lafuente-Lafuente C, Leitao C, Kilani I, et al. Knowledge and use of evidence-based medicine in daily practice by health professionals: a cross-sectional survey. *BMJ Open*. 2019;9(3):e025224. doi:10.1136/bmjopen-2018-025224
69. Hines S, Ramsbotham J, Coyer F. The effectiveness of interventions for improving the research literacy of nurses: a systematic review. *Worldviews Evid Based Nurs*. 2015;12(5):265-272. doi:10.1111/wvn.12106
70. Forehand JA, Levis M, Watts BV, Finn CT, Shiner B. Research literacy for psychiatry residents: a 10-session curriculum using a problem-based learning approach. *Acad Psychiatry*. 2022;46(4):504-509. doi:10.1007/s40596-021-01487-y
71. Hines S, Ramsbotham J, Coyer F. A theory-based research literacy intervention for nurses: a pilot study. *Nurs Forum*. 2022;57(6):1052-1058. doi:10.1111/nuf.12780

72. Thorne S, Kirkham SR, O'flynn-Magee K. The analytic challenge in interpretive description. *Int J Qual Methods*. 2004;3(1):1-11. doi:10.1177/160940690400300101

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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