

## Global Health Promotion

### Addressing Current Challenges in Population Health Intervention Research for Health Promotion

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Keywords:	Population health intervention research, Community of practice, Health promotion
Abstract:	<p>This article explores the role of Population Health Intervention Research (PHIR) in enhancing health promotion in France, stressing the importance of a more in-depth understanding and thorough analysis of healthcare interventions. Established in 2022, the So-RISP network aims to structure the PHIR field, consolidating expertise from renowned teams specializing in PHIR, primary cancer prevention, and addiction. In January 2023, So-RISP members convened a national workshop. The workshop aimed to share the specificities of PHIR and particularly to clarify specifically the use of theories in PHIR. A qualitative analysis of this workshop was conducted to aid in building a shared and well-defined knowledge base for PHIR stakeholders. Results highlight the necessity of developing a unified terminology and increasing reflexivity among PHIR stakeholders for enhanced effectiveness. The article also identifies key challenges, including the need for interdisciplinary collaboration, facilitating social transformation, and integrating various contexts in intervention analysis.</p>

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## INTRODUCTION

Health promotion aims to improve population health by fostering individual and societal change. The challenge lies in gaining a deeper understanding of the mechanisms that contribute to the promotion of good health and the ways in which they do so. Population Health Intervention Research (PHIR), which seeks to “*use scientific methods to generate knowledge about policies and programs that operate within or outside the health sector and have the potential to impact on health at a population level*” (1), represents a proposed response to this challenge (1). PHIR indeed has the potential to formalize our understanding of how health interventions function and their potential impact on population health. It allows us to better grasp the contribution of the interventional components of healthcare interventions and analyze their potential for scalability and transferability (2). Interventions in health promotion are inherently complex as they aim to change the conditions underlying the distribution of health risks in society. Analyses and research on interventions are essential for ensuring “*evidence informed health promotion*” (3). Unfortunately, many interventions still rely on intuition or experiential knowledge, often neglecting the contributions of science. This is partly due to issues related to the accessibility and adaptability of knowledge and the lack of a connection between scientific findings and practical action (4,5).

The field of PHIR is still in the process of structuring itself. It is imperative to establish a knowledge base that can guide PHIR stakeholders, including researchers and field professionals, in designing, implementing, analyzing, and evaluating health interventions. Collaborating and pooling expertise, as well as experiential, scientific, and contextual knowledge, are crucial for the development of PHIR. This approach enables us to unite around a “*science of solutions*” (6). These issues related to structuring are not new in public health debates. In fact, as far back as 2010, a Delphi consensus among international PHIR experts identified common competencies for PHIR researchers (7), including demonstrating

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3 foundational knowledge relevant to PHIR, project management and planning (including  
4 research method selection), conducting PHIR, and being a reflective researcher. Additionally,  
5 a definition of PHIR based on attributes was proposed in 2015, emphasizing the partnership  
6 between field actors and researchers, interdisciplinarity, and the societal role of research (8).  
7  
8 Despite these efforts, PHIR still struggles to gain institutional recognition (9). In France,  
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10 specifically, despite initiatives that have emerged in the past decade, such as the concerted  
11 action on intervention research in public health (10), there was no reference structure for  
12 training and developing PHIR until now. In 2022, the So-RISP network was established with  
13 the aim of structuring the PHIR field by consolidating the disciplinary expertise of recognized  
14 teams in PHIR, primary cancer prevention, and addiction. The network comprises four research  
15 teams (Epsilon in Montpellier, Equity in Toulouse, Evidans in Bordeaux, Presage in Saint-  
16 Etienne) and a prevention organization of field professionals (Epidaure).  
17  
18 In January 2023, members of the So-RISP network convened for a national workshop. The  
19 organization of this workshop led to a series of meetings that helped identify key issues  
20 requiring collective clarification among network members. Firstly, despite the clear definition  
21 proposed by Hawe and Potvin (11), network stakeholders encountered difficulties in  
22 determining which types of research or projects fall within or outside the scope of PHIR.  
23  
24 Secondly, PHIR continues to face operationalization challenges, particularly in terms of the role  
25 of theory. The lack of a clear identity in defining PHIR and unresolved questions regarding  
26 these fundamental issues can hinder the formation of a community of stakeholders with  
27 common concerns and objectives. For this reason, the workshop aimed to share the specificities  
28 of PHIR and particularly to clarify specifically the use of theories in PHIR. A qualitative  
29 analysis of this workshop was conducted to aid in building a shared and well-defined knowledge  
30 base for PHIR stakeholders.  
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## METHODS

### Objectives

The objectives of this analysis are: i) to identify points of divergence and convergence to help define PHIR, ii) to identify the challenges of PHIR and propose potential solutions to address them, iii) to propose a common knowledge base to contribute establishing the foundations of PHIR.

### Data collection

The workshop spanned two days and brought together a diverse group of 26 researchers, comprising 16 women and 10 men. The participants included 8 psychologists, 8 public health professionals, 4 epidemiologists, 2 socio-anthropologists, 2 clinical research specialists, 1 neuroscience researcher, and 1 management science researcher. All discussions and summaries from the workshop were meticulously recorded, transcribed, and analyzed, serving as the basis for this analysis.

The objective of the first half-day was to establish a consensus on the fundamental components of PHIR. To achieve this, a "world cafe" format was employed, organized around three key themes: i) Defining what constitutes a PHIR project and what falls outside its scope, ii) Research and evaluation, and iii) Commencement and conclusion of a PHIR project.

The second half-day was structured to encourage the synergy and complementarity of each team's approaches. Following the presentation of one or more PHIR projects (or the utilization of theory within these projects) by the respective teams, a synthesis of these presentations was generated and deliberated upon by all workshop participants.

The focus of the third half-day once again revolved around world cafe sessions, with the aim of addressing three primary questions: i) How does a theory or theoretical concept translate into an intervention? ii) When is a theory or concept developed or employed within a PHIR? iii) How is theory shared with stakeholders?

### **Data analysis**

A thematic coding analysis was conducted by the first three authors of this paper, all of whom actively participated in the workshop. The analysis was centered around the following key categories: "definition of PHIR," "PHIR interventions," "stakeholder participation," "context," and "PHIR paradigms/theories." These categories encompassed the primary themes that emerged during the workshop discussions. Within this initial coding process, various sub-themes also surfaced, including the presence of defining attributes for PHIR, the challenges associated with interdisciplinary collaboration, and the role of context in shaping interventions. The proposed themes and sub-themes were thoroughly deliberated with all co-authors of the paper, leading to a more refined coding framework.

Ultimately, an abstraction process was undertaken to distill the analysis into two overarching themes that are expounded upon in the results section of this paper: i) the definition of PHIR, ii) the inherent challenges within PHIR, encompassing topics such as the examination of context and theory utilization, interdisciplinary collaboration, and the social transformations intrinsic to PHIR. Additionally, to enhance the robustness of the analysis, the data that was analyzed underwent triangulation with results from a comprehensive bibliographic search. This step was taken to corroborate the issues identified by workshop participants within the context of contemporary scientific concerns.

### **Ethical consideration**

An information and consent form were provided to all participants at the commencement of the workshop with the aim of documenting the discussions' content. In an effort to mitigate power dynamics within the discussions and to capture a comprehensive range of viewpoints, the composition of discussion groups was carefully designed to include a diverse array of participant profiles. These profiles encompassed variations in gender, professional status, academic discipline, and team affiliation. To ensure the anonymization of the transcribed

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3 discussions, only the gender identity and academic discipline of individuals are disclosed in the  
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5 recorded verbatims.  
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## 7 RESULTS

### 8 **Defining PHIR: A Proposal of PHIR Attributes**

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10 PHIR has been the focus of numerous attempts at definition following the initial proposal by  
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12 Hawe and Potvin (11). Within the So-RISP network, participants have identified four specific  
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14 attributes of PHIR that serve as a shared foundation. These attributes, elaborated upon below,  
15  
16 provide a common basis for consensus in delineating what does or does not qualify as PHIR.  
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- 19 • Population health issue

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21 PHIR aligns with the core principles of health promotion. In fact, population health promotion  
22  
23 places a strong emphasis on equity and endeavors to address all factors influencing health. As  
24  
25 articulated by a public health professional, "*The principles of population health involve*  
26  
27 *interventions that aim to achieve health equity and primarily target structural determinants of*  
28  
29 *health, which in turn impact various individual determinants.*" PHIR explicitly incorporates  
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31 actions that extend beyond the healthcare sector, encompassing domains such as education,  
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33 urban planning, agriculture, and more.  
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- 36 • Objectives focused on describing, explaining and analyzing complex interventions

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38 PHIR enables the examination of how intervention components interact with one another and  
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40 with the context in which they are implemented. This interaction can result in modifications to  
41  
42 the interventions throughout their implementation. This inherent complexity is particularly  
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44 pronounced in interventions that target human beings. PHIR goes beyond the mere assessment  
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46 of whether an intervention is effective; it seeks to comprehend the effects of interventions and  
47  
48 the underlying processes, both at the individual and collective levels, that lead to these effects.  
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50 Complexity, in this context, can be defined as the dynamic nature of interventions, including  
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52 how they can vary based on factors such as the context, including the individuals involved, the  
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3 evolving ecosystem, and other pertinent variables. (12). The core of the PHIR approach  
4  
5 revolves around elucidating the mechanisms underlying how this “intervention-context” or  
6  
7 interventional system (2) operates.  
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10 • Intervention methodology: tailored methods addressing the complexity of interventions  
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12 PHIR strives to generate knowledge that can be widely applied to interventions, encompassing  
13  
14 their creation, execution, functionality, and potential for long-term sustainability. To achieve  
15  
16 this, specialized methods are employed to develop and apply theories upon which interventions  
17  
18 are founded. These theories may draw from theoretical models, established scientific  
19  
20 knowledge, or practical experiential insights. Central to the methodology of interventions is the  
21  
22 analysis of their applicability, feasibility, sustainability, and scalability. A particular emphasis  
23  
24 is placed on evaluating the transferability of interventions. This process incorporates concepts  
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26 such as "key (or core) components of the intervention" (representing dimensions of the  
27  
28 intervention that are potentially transferable) and "forms" (the practical implementation of key  
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30 (or core) components through specific activities) (13), which facilitate the adaptation of an  
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32 intervention to produce similar mechanisms, enabling the achievement of similar outcomes in  
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34 one context as observed in another:  
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40 *“The key function is to do something where there's a moment of fun between people.*  
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42 *Now, whether that's... in the form of soccer or rugby or... or baking a cake [...]. That's*  
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44 *form” (Public health researcher)*  
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- 47 • Social Relevance and an Effective Connection with Society

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49 The goal of PHIR, as described by an epidemiologist, is “to do good” As articulated by one of  
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51 the workshop participants, a public health professional, the objective of intervention research  
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53 is to achieve social utility. Therefore, PHIR must encompass actions within the ecosystem, both  
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55 in the content of the intervention and in the way stakeholders are mobilized, to ensure that the  
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57 changes persist beyond the research phase. It also involves what some workshop attendees refer  
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3 to as 'after-sales services' associated with interventions. These services may include knowledge  
4 transfer to enhance the utilization of generated knowledge or support for the transferability of  
5 interventions to replicate results obtained in one context within another.  
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### 9 10 **The various challenges inherent in PHIR**

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12 Three challenges were identified by So-RISP network participants: i) studying context, ii)  
13 fostering interdisciplinarity, iii) promoting social transformation.  
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- 15 • The challenge of studying context: identifying invariants

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17 The intervention methodology used in PHIR provides a better understanding of how an  
18 intervention component can, in a given context, activate one or more mechanisms. These  
19 mechanisms, in turn, can lead to an effect, such as an impact on motivation to adopt health-  
20 promoting behavior. Therefore, the primary focus of PHIR is not the effectiveness of the  
21 intervention but rather the examination of underlying mechanisms central to the analysis. PHIR  
22 seeks to identify the underlying mechanisms that lead a person to change their behavior in a  
23 given context and how these mechanisms are activated or not activated within that context.  
24 Consequently, recommendations have emerged to encourage members of research teams to  
25 systematically consider the context at all stages of PHIR, with the following definition (12,14–  
26 20). This consensus and the definition of the context were shared during the national workshop:  
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42 *“When we talk about context, for example, we're going to talk about the initial training*  
43 *of the professional, because context can be the professional's background, what he or*  
44 *she is, what he or she brings to the intervention, as well as the background of the*  
45 *beneficiary of the intervention, as well as the lighting in the room, as well as the*  
46 *duration of the intervention, as well as a whole host of other things in fact” (public*  
47 *health researcher)*  
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3 However, there are still questions and challenges, especially concerning the implications for  
4 the transferability and long-term sustainability of interventions (21). Various research practices  
5 coexist to address the role of context. These practices include approaches that focus on  
6 understanding the mechanisms of psycho-social effects and approaches that study how context  
7 affects interventions. These approaches generate and utilize theories to explain the interaction  
8 between intervention and context. An exhaustive review of these methods, considering their  
9 advantages and disadvantages in relation to the concept of 'context,' along with a  
10 characterization of the essential elements that should be considered in PHIR concerning  
11 context, is now essential to guide research in this area. Current thinking on PHIR emphasizes  
12 the need to identify 'invariants,' which can be likened, in a way, to the search for constants in  
13 the anthropological sense of the term (22) or in the statistical sense of the term (23). Continuing  
14 with the iterative study of intervention-context interaction, understanding it, explaining it, and  
15 accumulating detailed results should allow us to identify these recurring patterns.  
16 Recommendations that promote this clarification over time should facilitate the conduct of  
17 meta-analyses as results become more generally applicable. Furthermore, the identification of  
18 these constants should address questions raised by PHIR practitioners regarding the practical  
19 application of knowledge generated within PHIR. Indeed, these PHIR stakeholders are  
20 concerned with the feasibility of adapting an intervention to a new context or designing a new  
21 intervention.

- 22 • The challenge of fostering interdisciplinarity: methodical and concerted action

23 A multi-level, systemic, and population-based approach inherently requires interdisciplinary  
24 collaboration. While hybridizing methods is common, one of the current challenges in PHIR is  
25 to ensure the effectiveness of interdisciplinarity (24).

26 The challenge of interdisciplinary thinking became particularly evident in discussions about the  
27 use of theory. Disciplinary distinctions are clear on this matter. Firstly, psychology researchers

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3 mentioned the use of behavior change theories, which are designed to explain the psychological  
4 processes involved when an individual decides to adopt a health-promoting behavior. These  
5 theories have been developed through scientific experimentation and are supported by empirical  
6 evidence. One of the most widely cited examples is the theory of planned behavior, which  
7 serves as the foundation for intervention development, construction, clarification, and  
8 evaluation. Secondly, epidemiologists have introduced concepts such as 'causal theory,' 'causal  
9 model,' 'logic model,' or 'logic framework,' which aim to formalize potential causal links  
10 between different components of an intervention. Thirdly, public health researcher have  
11 emphasized the development of 'intervention theory,' which seeks to elucidate how an  
12 intervention is supposed to work, what underlying assumptions are at play, and what the  
13 expected outcomes are. This theory is intrinsic to the intervention process and encompasses the  
14 action model and causal theory (25). These three examples illustrate two primary ways of  
15 utilizing theory: i) as a guiding framework for intervention, and ii) as a subject of study. These  
16 approaches also encompass different types of knowledge, including academic, experiential, and  
17 contextual. While these models may initially appear divergent, they are, in fact, complementary,  
18 addressing different stages in the PHIR process. They can be employed upstream (a priori) for  
19 intervention construction, such as the theories used by psychology researchers, or downstream  
20 (a posteriori) for intervention analysis. These boundaries can be overcome through coordinated  
21 collaboration and structured decision-making throughout the intervention process. Research  
22 teams make epistemic choices during the collective problematization process, considering the  
23 complementarity of various methods and the possibility of applying them to the same  
24 intervention. Teams can collaborate to determine how these different models can be combined  
25 based on objectives, partnerships, funding, or intervention design, as each model is not mutually  
26 exclusive:  
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3 *“But it's true that when I talk about theory, I tend to talk about universal theories of*  
4 *high abstraction or demonstrated theories. When I talk about intervention theory, I'm*  
5 *already going down one level, and that's how it's implemented at the end of the*  
6 *intervention. In other words, how do we put TCP [theory of planned behavior] into*  
7 *this intervention?” (public health researcher)*

14 Establishing a common language is crucial for operationalizing interdisciplinarity (24,26), and  
15 regular face-to-face meetings foster trust among stakeholders, facilitating collaborative  
16 thinking on PHIR.

- 21 • The challenge of social transformation: acting on structures to go beyond a keyword

23 To ensure the effectiveness of PHIR's social impact, it is crucial to explicitly address the social  
24 commitment of PHIR stakeholders, especially concerning health inequalities and the goal of  
25 social transformation. As one epidemiologist explains, '[PHIR's goal] is to transform the system,  
26 achieve social transformation, and ensure widespread adoption of interventions.' This  
27 clarification necessitates considering the multiple levels at which the intervention can operate  
28 and its potential for transformation: i) the individual level, focusing on behavior change, ii) the  
29 organizational or mesoscopic level, addressing living conditions and environments, iii) the  
30 macroscopic level, targeting structural modifications that influence the other levels:

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33 *“It's about health, but not just health care, and so health can be structural*  
34 *determinants, it can be meso determinants, it can be systems of governance, political*  
35 *systems. In short, it can be many determinants that are very, very far from the*  
36 *individual, potentially” (epidemiologist)*

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42 *“We're trying to act, in fact, at all... at all "rocket" levels” (psychology researcher)*

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54 The influence of social structures is crucial to consider. Yet, implementing concrete and  
55 effective measures to address the social inequalities generated by these structures is challenging  
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3 and demands a long-term vision, significant investment, and genuine political commitment. A  
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5 psychology expert cited an experience to illustrate the impact of commercial determinants:  
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8 *"We're in a position where we're entering a system where they [lobbies] are already*  
9  
10 *well established. For example, we used to promote ... education in nutrition and*  
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12 *physical activity in high schools where the canteen was disgusting. And they [the*  
13  
14 *pupils] crossed the street, they had a McDonald's restaurant ... and you can't*  
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16 *unstructure McDonald's. You can't... unstructure everything. We can't... everything's*  
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18 *already... so we try to make with the means we have: "Well, if I can't change the*  
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20 *environment, I'll try to armour people so that they can adapt to that environment"*  
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23  
24 *(psychology researcher)*  
25

26 There are two potential approaches to influencing structures. For instance, in addressing the  
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28 influence of commercial determinants, one suggestion is to draw inspiration from the  
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30 techniques employed by major private companies, which have effectively altered behavior for  
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32 decades (27,28) :

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35 *"Over the last fifty years, we've changed people's behavior. We've made them all fat*  
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37 *(laughs), in slightly different ways, we've made them all smokers [...] I'm caricaturing*  
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39 *the messages, but they've been very good at social marketing to be able to modulate*  
40  
41 *people's health in a way: how does it work? How did they do it? Where did they get*  
42  
43 *these obvious facts from? I'm curious. How could we use the same things in social*  
44  
45 *marketing to finally rebalance in the right direction?" (epidemiologist)*  
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49 Secondly, in addition to commercial determinants, there is a consensus on systemic inequality  
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51 issues (29). The *"political, cultural, economic and social structures [that] forge the processes*  
52  
53 *that create social inequalities in money, power and resources, generate and reinforce social*  
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55 *stratification based on socioeconomic position"* (30). To reduce the impact of these structures,  
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57 PHIR stakeholders can enhance their reflexivity (31). For instance, hierarchizing knowledge as  
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3 'scientific knowledge,' 'lay knowledge,' and 'experiential knowledge' during PHIR partnerships  
4 and public involvement in decision-making can perpetuate inequality in PHIR practices. It is  
5  
6 crucial to stay vigilant in participatory processes, considering: who speaks, on behalf of whom,  
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8 and for what purpose; how knowledge serves specific goals; and the biases associated with  
9  
10 valuing one form of knowledge over others (31).  
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## 14 DISCUSSION

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16 This analysis reveals two main phenomena. First, it is crucial to establish consensus on central  
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18 topics within PHIR to facilitate collaboration, especially on operational matters. Second,  
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20 building a network cannot solely rely on assembling experts from a specific field. It is essential  
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22 to create both social and epistemic foundations for an effective and sustainable network.  
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26 The community of practice model, extensively documented in Canadian management practices,  
27  
28 offers a framework for collaborative progress on a given subject Wenger-Trayner and Wenger-  
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30 Trayner's model defines three prerequisites for building a community of practice (32) : i)  
31  
32 defining the 'domain,' which signifies a shared center of interest; ii) building a 'community,'  
33  
34 which involves interactions among members; and iii) maintaining the 'practice,' reflecting a  
35  
36 shared willingness among members to collectively and interactively progress. While the last  
37  
38 two elements are present in the formation of the So-RISP network, fully defining the 'domain'  
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40 has not been accomplished yet. This article's analysis contributes to defining the RISP 'domain'  
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42 for network stakeholders and enhancing the knowledge base on the subject.  
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47 Precisely defining this 'field' is particularly crucial in an unstable environment. Ecosystem  
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49 changes in the health promotion sector, such as increased influence from private stakeholders  
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51 and economic interests, funding dependency, and professional turnover, can weaken the  
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53 establishment of robust, sustainable networks. In such circumstances, agreeing on common  
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55 objectives and approaches to address divergent views becomes even more important.  
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57 Developing interdisciplinarity, while essential for tackling intervention complexity, can also be  
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3 a source of divergence (24,26). The establishment of a PHIR network can strengthen the field,  
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5 enhance health promotion practices, and ensure accountability for public investments both in  
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7 France and globally (33). PHIR and health promotion still lack the solid knowledge needed to  
8  
9 ensure the implementation of cost-effective, sustainable, and equitable interventions. For  
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11 instance, in the USA during the Obama administration, journalists reported in 2013 that less  
12  
13 than 1% of public funding had evidence supporting its wise expenditure (34). By collectively  
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15 advancing intervention methodology and identifying 'invariants' to better understand the role of  
16  
17 context in interventions, we can contribute to the development of more effective interventions  
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19 (18). We hope the So-RISP network will support stakeholders interested in investing in this  
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21 field and facilitate knowledge transfer to those in health promotion, ultimately enabling genuine  
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23 social transformation by and for all stakeholders  
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## 28 CONCLUSION

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30 In summary, the analysis presented here reveals crucial insights for the advancement of PHIR.  
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32 It underscores the need to establish a common language and enhance reflexivity among PHIR  
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34 stakeholders to ensure its effectiveness. The challenges of interdisciplinary collaboration, social  
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36 transformation, and context integration are clearly identified. This analysis contributes to  
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38 defining the domain of PHIR, providing a solid foundation for the establishment of the So-RISP  
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40 network in France while also offering essential elements for its institutionalization at the  
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42 international level. By consolidating our knowledge and collaborating innovatively, we are  
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44 better equipped to address the challenges of health promotion, improve practices, and ensure  
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46 accountability for public investments, both in France and worldwide.  
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## 50 BIBLIOGRAPHIE

- 51  
52  
53  
54 1. Jourdan D, Potvin L, editors. Global Handbook of Health Promotion Research, Vol. 3:  
55  
56 Doing Health Promotion Research [Internet]. Cham: Springer International Publishing;  
57  
58  
59  
60

- 1  
2  
3 2023 [cited 2023 Dec 5]. Available from: [https://link.springer.com/10.1007/978-3-031-](https://link.springer.com/10.1007/978-3-031-20401-2)  
4  
5 20401-2  
6  
7
- 8 2. Cambon L, Terral P, Alla F. From intervention to interventional system: towards greater  
9 theorization in population health intervention research. *BMC Public Health*. 2019 Mar  
10 25;19(1):339.  
11  
12
  - 13 3. Schloemer T, De Bock F, Schröder-Bäck P. Implementation of evidence-based health  
14 promotion and disease prevention interventions: theoretical and practical implications  
15 of the concept of transferability for decision-making and the transfer process.  
16 *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2021;64(5):534-43.  
17  
18
  - 19 4. Cambon L, Alla F. Transfer and sharing of public health knowledge: reflections on the  
20 components of a national information system in France. *Sante Publique (Bucur)*.  
21 2013;25(6):757-62.  
22  
23
  - 24 5. Dagenais C, Malo M, Robert É, Ouimet M, Berthelette D, Ridde V. Knowledge Transfer  
25 on Complex Social Interventions in Public Health: A Scoping Study. *PLoS ONE*. 2013  
26 Dec 4;8(12):e80233.  
27  
28
  - 29 6. Potvin L, Petticrew M, Cohen ERM. Population health intervention research:  
30 Developing a much needed science of solutions. *Prev Med*. 2014 Apr 1;61:114-5.  
31  
32
  - 33 7. Government of Canada CI of HR. PHIRIC Publications & Resources - CIHR [Internet].  
34 2010 [cited 2018 Feb 12]. Available from: <http://cihr-irsc.gc.ca/e/41349.html#conf1>  
35  
36
  - 37 8. Alla F, Kivits J. La recherche interventionnelle en santé publique: partenariat  
38 chercheurs-acteurs, interdisciplinarité et rôle social. *Santé Publique*. 2015 Aug  
39 24;27(3):303-4.  
40  
41
  - 42 9. Cambon L, Alla F. Recherche interventionnelle en santé publique, transfert de  
43 connaissances et collaboration entre acteurs, décideurs et chercheurs. *Les défis français*  
44 de l'innovation. *Inst Rech En Santé Publique*. 2014;(27).  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

10. Moore G, Cambon L, Michie S, Arwidson P, Ninot G, Ferron C, et al. Population health intervention research: the place of theories. *Trials*. 2019 Jun 11;20(1):285.
11. Hawe P, Potvin L. What is population health intervention research? *Can J Public Health*. 2009;100(1):8-14.
12. Skivington K, Matthews L, Simpson SA, Craig P, Baird J, Blazeby JM, et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ*. 2021 Sep 30;374:n2061.
13. Villeval M, Gaborit E, Berault F, Lang T, Kelly-Irving M. Do the key functions of an intervention designed from the same specifications vary according to context? Investigating the transferability of a public health intervention in France. *Implement Sci*. 2019 Dec;14(1):1-13.
14. Edwards N, Barker PM. The Importance of Context in Implementation Research. *JAIDS J Acquir Immune Defic Syndr*. 2014 Nov 1;67:S157.
15. Hawe P, Shiell A, Riley T, Gold L. Methods for exploring implementation variation and local context within a cluster randomised community intervention trial. *J Epidemiol Community Health*. 2004 Sep 1;58(9):788-93.
16. Pfadenhauer LM, Gerhardus A, Mozygemba K, Lysdahl KB, Booth A, Hofmann B, et al. Making sense of complexity in context and implementation: the Context and Implementation of Complex Interventions (CICI) framework. *Implement Sci*. 2017 Dec;12(1):1-17.
17. Shoveller J, Viehbeck S, Di Ruggiero E, Greyson D, Thomson K, Knight R. A critical examination of representations of context within research on population health interventions. *Crit Public Health*. 2016 Oct 19;26(5):487-500.
18. Craig P, Ruggiero ED, Frohlich KL, Mykhalovskiy E, White M, on behalf of the CI of HR (CIHR) NI for HR (NIHR) CGAG (listed, et al. Taking account of context in

- 1  
2  
3 population health intervention research: guidance for producers, users and funders of  
4 research. NIHR Journals Library; 2018.  
5  
6  
7  
8 19. Moore G, Campbell M, Copeland L, Craig P, Movsisyan A, Hoddinott P, et al. Adapting  
9 interventions to new contexts—the ADAPT guidance. *BMJ*. 2021 Aug 3;374:n1679.  
10  
11  
12 20. O’Cathain A, Croot L, Duncan E, Rousseau N, Sworn K, Turner KM, et al. Guidance  
13 on how to develop complex interventions to improve health and healthcare. *BMJ Open*.  
14 2019 Aug 1;9(8):e029954.  
15  
16  
17 21. Alla F, Cambon L, Ridde V. La recherche interventionnelle en santé des populations:  
18 concepts, méthodes, applications. Paris: Institut Recherche Developpement; 2023.  
19 Available from: [https://www.librairie-ledivan.com/livre/9782709929981-la-recherche-](https://www.librairie-ledivan.com/livre/9782709929981-la-recherche-interventionnelle-en-sante-des-populations-concepts-methodes-applications-francois-alla-linda-cambon-valery-ridde/)  
20 [interventionnelle-en-sante-des-populations-concepts-methodes-applications-francois-](https://www.librairie-ledivan.com/livre/9782709929981-la-recherche-interventionnelle-en-sante-des-populations-concepts-methodes-applications-francois-alla-linda-cambon-valery-ridde/)  
21 [alla-linda-cambon-valery-ridde/](https://www.librairie-ledivan.com/livre/9782709929981-la-recherche-interventionnelle-en-sante-des-populations-concepts-methodes-applications-francois-alla-linda-cambon-valery-ridde/)  
22  
23  
24 22. Taylor AC. Invariants et variabilité en anthropologie. In: Lautrey J, Mazoyer B, Van  
25 Geert P, editors. Invariants et variabilités dans les sciences cognitives. Paris: Éditions  
26 de la Maison des sciences de l’homme; 2017. p. 269-86. Available from:  
27 <http://books.openedition.org/editionsmsmh/6717>  
28  
29  
30 23. Lubke GH, Dolan CV, Kelderman H, Mellenbergh GJ. Weak measurement invariance  
31 with respect to unmeasured variables: an implication of strict factorial invariance. *Br J*  
32 *Math Stat Psychol*. 2003 Nov;56(Pt 2):231-48.  
33  
34  
35 24. Villeval M, Ginsbourger T, Bidault E, Alias F, Delpierre C, Gaborit É, et al.  
36 L’interdisciplinarité en action: les « mots-pièges » d’une recherche interdisciplinaire.  
37 *Santé Publique*. 2014;26(2):155-63.  
38  
39  
40 25. Cambon L, Alla F. Understanding the complexity of population health interventions:  
41 assessing intervention system theory (ISyT). *Health Res Policy Syst*. 2021 Jun  
42 19;19(1):95.  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 26. Decroix C, Martin-Fernandez J, Cambon L, Ridde V, Alla F. Les défis de  
4 l'interdisciplinarité pour la recherche interventionnelle en santé des populations: le cas  
5 de la recherche VAPS. *Rech Qual.* 2023;190.  
6  
7  
8  
9  
10 27. Kotler P, Lee N. *Social Marketing: Influencing Behaviors for Good.* SAGE; 2008. 457  
11 p.  
12  
13  
14 28. Kickbusch I, Allen L, Franz C. The commercial determinants of health. *Lancet Glob*  
15 *Health.* 2016;4(12):e895-6.  
16  
17  
18  
19 29. Commission on Social Determinants of Health. Closing the gap in a generation: health  
20 equity through action on the social determinants of health: final report of the  
21 commission on social determinants of health. 2008;247.  
22  
23  
24  
25  
26 30. Pan American Health Organization, Commission of the Pan American Health  
27 Organization on Equity and Health Inequalities in the Americas. *Just Societies: Health*  
28 *Equity and Dignified Lives. Report of the Commission of the Pan American Health*  
29 *Organization on Equity and Health Inequalities in the Americas.* 1 Oct 2019. Available  
30 from: <https://iris.paho.org/handle/10665.2/51571>  
31  
32  
33  
34  
35  
36  
37 31. Fillol A, Fonquerne L, Cambon L, Ridde V. Pour une santé publique en faveur d'une  
38 justice épistémique. *Glob Health Promot.* 2023 Jul 13;17579759231183325.  
39  
40  
41  
42 32. Wenger-Trayner E, Wenger-Trayner B. Introduction to communities of practice: A brief  
43 overview of the concept and its uses. 2015. Available from: [http://wenger-](http://wenger-trayner.com/introduction-to-communities-of-practice/)  
44 [trayner.com/introduction-to-communities-of-practice/](http://wenger-trayner.com/introduction-to-communities-of-practice/)  
45  
46  
47  
48  
49 33. Stewart R, Langer L, Erasmus Y. An integrated model for increasing the use of evidence  
50 by decision-makers for improved development. *Dev South Afr.* 3 sept  
51 2019;36(5):616-31.  
52  
53  
54  
55  
56 34. Munday O. Can Government Play Moneyball? *The Atlantic* [Internet]. 20 juin 2013  
57 [cité 23 mai 2022]; Disponible sur:

1  
2  
3 [https://www.theatlantic.com/magazine/archive/2013/07/can-government-play-](https://www.theatlantic.com/magazine/archive/2013/07/can-government-play-moneyball/309389/)  
4 [moneyball/309389/](https://www.theatlantic.com/magazine/archive/2013/07/can-government-play-moneyball/309389/)  
5  
6  
7  
8  
9  
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