IDENTIFICATION OF FACTORS ASSOCIATED WITH PUBLIC HEALTH WORKFORCE RESILIENCE

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Abstract

This study identifies and prioritizes the factors associated with public health workforce resilience. It involves a comprehensive and systematic literature review that categorizes the identified factors as either individual characteristics or external environmental factors. It analyzes these factors' internal logic relationship and hierarchical structure using the Interpretive Structure Model (ISM) and determines their importance using the Analytic Hierarchy Process (AHP). The paper concludes by suggesting interventions that could enhance the resilience of the public health workforce and provides a framework that could be adapted to prioritize resource allocation in different situations.

Introduction

During disasters like the pandemic (COVID-19), terrorist attacks, political unrest, economic instability, and the Ukraine war in 2022, public health workers play a critical role in protecting public health. The stress and potentially traumatic experiences faced by workers can lead to burnout and intentions to leave work. A survey was conducted in the United States and showed that public health workers' intentions to leave work had increased between 2014 and 2021 due to the pandemic where they experienced a high level of stress due to work overload and burnout. However, some workers are resilient and can adapt positively to stress and adversity. To build a healthy community, the resilience of public health workers is important. There are different internal and external factors in the literature that are used to enhance the resilience of public health workers in different manners such as the development of training programs, promoting individual characteristics, etc. These interventions, which was used for any stress and difficulties in the workplace.

Methodology

We conducted a search in major databases such as Google Scholar, PubMed, Science Direct, Sage Pub, and Springer Link and applied appropriate inclusion and exclusion criteria to identify relevant papers. Search results in the electronic databases indicate that you have found a significant number of papers, but you have been able to narrow them down to a relevant set of papers for your review by screening the titles and abstracts of the papers to exclude irrelevant ones. Overall, it appears we have followed a rigorous and systematic approach to identifying the resilience factors for public health workers.

Research Framework:
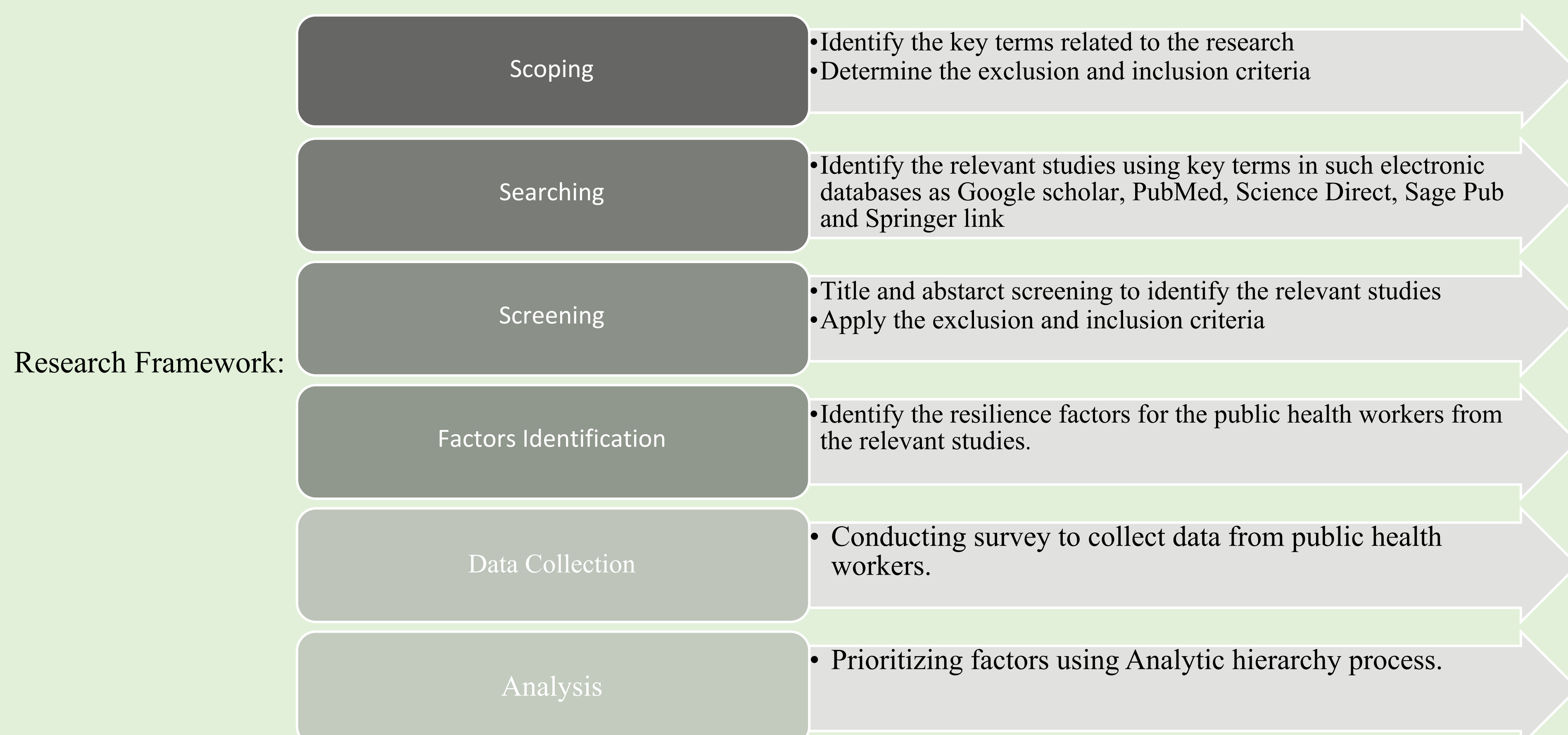
The above figure describes the process of identifying and analyzing factors that help develop resilience in public health workers during disasters. After identifying relevant studies, a survey will be conducted to prioritize factors based on pairwise comparison using Saaty's scale of preference. Responses will be collected and analyzed using the Analytic hierarchy process (AHP) method to determine the most prioritized factors for enhancing resilience. Finally, the framework will be developed with the most prioritized factors from the Analytic hierarchy process.

Findings

Each of these factors is categorized as either external or internal, and the interventions listed under each factor can help to develop resilience based on the corresponding factors. The sources of each factor are also provided for further reference.

❖ Having resilience-promoting workshops (External)
❖ Having computer-based resilience training (External)
❖ Having primary and secondary prevention programs (External)
❖ Having programs to address wellness practices (External)
❖ Integration of professional wellness in education (External)
❖ Self-care (Internal)
❖ Mindfulness (Internal)
❖ Internal control (Internal)
❖ Communication (External)
❖ Having resilience-educational programs (External)
❖ Having skill training and professional education programs (External)
❖ Having safety programs for health workers (External)
❖ Conducting a self-assessment survey in the organization (External)

Summary

The paper discusses the importance of prioritizing resilience factors for public health workers during adverse events. A survey was conducted using AHP methodology to identify the most important internal and external factors that enhance resilience, such as self-care and curriculum revisions for resilience education. Training programs, workshops, and surveys were suggested as effective ways to raise awareness and promote resilience. The prioritized factors will be used to develop a framework for managing interventions and allocating resources to improve resilience in public health workers.

Future Work

The most prioritized factors will be identified based on the data collected from the survey of public health workers. This data will be analyzed using the Analytic Hierarchy Process (AHP) multi-decision-making method for pairwise comparisons between the factors and the framework will be developed for resource allocation.

References

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