

Teaching Soft Skills in Healthcare and Higher Education: A Scoping Review Protocol

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ABSTRACT

Background: Soft skills and the need for their development have been discussed across industries for many years, predominantly in engineering, hospitality, and IT sectors. The importance of soft skills to career success has been well-documented, but gaps exist on how to teach them. Inter-industry variability and a lack of consensus in identifying and defining important soft skills adds to the problem. New research in teaching soft skills needs to be formally incorporated into training curricula, especially within healthcare and education sectors. This scoping review will answer these research questions: How are soft skills conceptualised, taught and assessed for healthcare and education professionals?

Methods/Design: A search of health, education, and social science databases will be conducted including peer-reviewed and grey literature. Data will be extracted using a combination of the PRISMA ScR and PAGER framework. Analysis will be carried out utilising the PAGER framework and will yield descriptive summaries.

Discussion: The review will collate literature on teaching and assessing soft skills in healthcare and higher education. It will map evidence in relation to current practices and research, gaps, evidence for practice, and research recommendations. The findings will be discussed in the full Scoping Review along with implications for teaching.

Keywords: soft skills, teaching, assessment, healthcare, education

1. Background

Soft skills have been a hot topic of discussion for the last three decades. The demand for soft skills in the workforce is more evident than ever, as countries move away from industrial economies into service-based economies. This move has also been referred to as fourth industrial revolution or 4IR (Chaka, 2020; Dean & East, 2019). Historically, it has been industry-specific technical skills that were important for employment and career progression (Robles, 2012). Recently, authors have suggested that while technical skills will help you *gain* employment, it is soft skills that will determine if you *keep* that employment (Tulgan, 2015). With soft skills having been described as “essential to survive and succeed in personal, professional and social life” (Rao, 2018; 216). Research supports this more recent position. As much as 75% of long-term career success can be attributed to soft skills and only 25% to technical skills (Chaka, 2020; Rao, 2018; Robles, 2012; Wats & Wats, 2009). It should be noted that the importance of soft skills may be industry-specific, with some sectors (e.g., manufacturing) placing greater emphasis on the tangible and measurable techniques and skills required for that industry to thrive (Rao 2018).

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Soft skills are non-technical, transferable skills, whereas technical skills or industry knowledge are referred to as hard skills. Although there is general agreement that soft skills are non-technical and transferable, there is no clear consensus on their definition (Rao, 2018; Touloumakos, 2020). This lack of consensus is likely because soft skills encompass a variety of individual skills, attributes and values. Soft skills have been referred to using a range of different terminology, including: people skills, interpersonal skills, social skills, employability skills, transferable skills, life skills, emotional intelligence, essential skills, behavioural skills, non-cognitive skills, and 21st century skills. Despite the wide variability in the terms used to describe soft skills, there are commonly held perceptions of the more important ones. Robles (2012) identified the top ten as communication, courtesy, flexibility, integrity, interpersonal skills, positive attitude, professionalism, responsibility, teamwork, and work ethic. A more recent review suggested an expansion of soft skills into nine much broader categories. These included: qualities; volitions; problem solving; leadership skills; interpersonal skills; communication skills; emotional labour; aesthetics; and others (Touloumakos, 2020). In addition to the variability in definitions, historically, soft skills were seen as personality traits or abilities that are innate (we either have them or we do not), despite the term ‘skill’ implying that it can be taught (Rao, 2012; Touloumakos, 2020).

Corporate business as well as science, technology, engineering, and maths (STEM) industries have been leading the research into soft skills over the last two decades. As early as early 90s, research focused on assessment and evaluation of soft skills, in particular for management personnel (Earl, 1993; Hughes, 1992; McKay, 1990; Terry, 1990). Research into teaching soft skills to engineers started to emerge at the turn of the last century (McLaughlan et al., 2001; Pulko & Parikh, 2003)

Research into soft skills in health and higher education, in particular the education of health practitioners, is not as prevalent in the published literature. This gap could be influenced by the return on investments in business and the rapid growth in the engineering and technology sectors, which have been driven by profits and innovation. The health and education sectors however, are predominantly service-based, thus not profit-driven. Health and education also attract workers with different values to those in the above mentioned industries.

Tertiary education providers in engineering and information technology (IT) have been making attempts to teach necessary soft skills as part of their professional training programmes (Bastos et al., 2019; Cately, 2020; Matturro et al., 2019). This is in contrast with the health sector which yields more research from ‘on the job training’ which has highlighted the need for soft skills in managerial roles (Abraham et al., 2021; Tsey et al., 2018) and the provision of compassionate care (Andzik & Kranak, 2020; Lown, 2016; Taylor et al., 2019).

The proposed scoping review aims to examine existing research into how soft skills are conceptualised and taught within healthcare and higher education. Scoping reviews are relatively new in social science research (having been widely used in health research for some time) and are ideally suited to mapping the available evidence in a specific research area (Arksey & O’Malley, 2005; Tricco et al., 2016). A scoping review is particularly useful in a research field which is complex or heterogeneous in nature and may not befit a more traditional systematic review (which usually seeks to evaluate the effectiveness of a particular intervention or approach). A scoping review aims to explore the depth and breadth of a field of study, ‘scope’ or map the main concepts within that field of study and elucidate relevant terms or definitions. This process will identify any knowledge gaps in how soft skills are taught in healthcare and higher education; identifying what is currently being taught and how.

2. Methods/Design

2.1 Design

This scoping review will be conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews (Peters et al., 2020) and will utilise the PAGER framework (Bradbury-Jones et al., 2021) to analyse the data yielded. The PAGER framework was developed recently to enhance the analysis and reporting of scoping reviews. It enables researchers to analyse patterns, advances and gaps in the literature and report their findings in a coherent manner to an audience who may not be familiar with the field.

Research questions:

The review seeks to answer the following questions:

- Q1: How are soft skills conceptualised and taught for health and education professionals?
- Q2: How are soft skills assessed for health and education professionals?

2.2 Inclusion criteria

The review will consider all publications that feature soft skills teaching, training and/or assessment in healthcare and/or higher education. Specifically, it will consider research pertaining to individuals engaged in post-secondary education. This includes tertiary, community college, and on-the-job training.

2.3 Types of sources

Consistent with a scoping review methodology, this review will consider literature from peer-reviewed primary research studies, review articles, editorials, as well as any grey literature that is available online. An open-source approach will allow for inclusion of all types of evidence. Only articles published in English will be included in the search. There will be no date limitation on earlier publications.

2.4 Search strategy

The search strategy will aim to locate both published and unpublished primary studies, reviews and text opinion papers that are available online. A preliminary limited search was conducted in Scopus and Web of Science to identify any articles on the topic. The original text terms were: ["soft skills" OR "interpersonal skills" OR "social skills" OR "compassionate care"] AND [teach* OR train*] AND [health* OR education OR nurs*]. Following the initial search, text words contained in the abstracts were analysed. This resulted in a large number of unrelated items, so the text terms were refined to: "soft skills training"; "training soft skills"; "teaching soft skills"; "soft skills teaching", in order to more accurately capture literature that addresses both classroom-based and on-the-job training. These search terms will be used in the scoping review to identify how soft skills are conceptualised, taught and assessed by the healthcare industry and tertiary education providers. Any revisions or changes to the search terms and sources that are likely to occur through the review process will be documented as recommended by Arksey and O'Malley (2005). The search strategy will also include the screening of any additional sources that are identified from full text reviews by reviewing reference lists. If further information is required, the authors of primary sources will be contacted.

The identified databases will be searched in one day and the citations exported into Zotero (5.0.97-beta.25) referencing software.

2.5 Procedure

The following databases will be searched: Web of Science; Scopus; PubMed; Sage Journals; APA PsychInfo; EBSCOhost (Academic Search Premier; Business Source Premier; Child Development & Adolescent Studies; CINAHL Plus; Computers & Applied Sciences Complete; Criminal Justice Abstracts with Full Text; Education Research Complete; Health Business Elite; Humanities International Complete; MEDLINE; Psychology & Behavioral Science Collection; Business Source Alumni Edition; Australia/New Zealand Reference Centre Plus); ProQuest Health Research Premium Collection; ProQuest ERIC; ProQuest Central Education Database; ProQuest Education Magazine; ProQuest Dissertations and Theses @ University of Auckland; and ProQuest Dissertations & Theses Global. All identified records from each database will be exported to Zotero (5.0.97-beta.25) where duplicates will be removed. The titles will be screened against the inclusion criteria and all exclusions removed. The reasons for excluding an item will be documented and reported. A third of the excluded titles will be screened by two independent reviewers against the inclusion criteria. Should any disagreements occur, a further screen of the title and abstract will be carried out and the disagreement resolved through discussion, whereby both reviewers will agree to the exclusion or for the article to be included in the next level of screening. This process will be repeated for papers reviewed by abstract and full text. The results of the search will be summarised in a Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) flow diagram for the scoping review process (Peters et al., 2015). Details and full citations of the selected full text sources will be provided in the Appendix of the scoping review.

2.6 Data extraction

Data will be extracted using an adaptation of the extraction instrument from Joanna Briggs Institute Reviewer's Manual (Peters et al., 2020) and the PAGER framework (Bradbury-Jones et al., 2021). Data extracted will include details about the type of study, sample size, field/industry, occupation/profession training, location, cultural consideration, how soft skills were taught, how soft skills were assessed/measured, intervention type, measurement, findings, and limitations (see Table 1).

2.7 Analysis of the evidence

The data analysis will utilise the PAGER framework proposed by Bradbury-Jones et al., (2021). This consists of 'patterns', 'advances', 'gaps', 'implications for practice', and 'research recommendations' (see Table 1). *Patterns* refers to the descriptive characteristics of the included sources, which will be identified using the data extraction tool. These descriptive characteristics will populate a 'pattern chart' as proposed by Bradbury-Jones and colleagues. *Advances* from the body of reviewed sources will be reported for each source, with consideration of what each source adds to the field. *Gaps* will report and analyse the limitations of each source to identify if there is anything in particular that the sources are failing to address. *Evidence for practice* will identify any current practices that are being used or any new practices that are emerging in the field of teaching soft skills in tertiary education and healthcare. Although the effectiveness of interventions will not be evaluated, there may be potential practices that would be commented on. *Research recommendations* combines the identified gaps and evidence for practice that future research could address. If conducted well, data analysis should be able to identify research recommendations that will guide future research.

Table 1. Draft data extraction table.

| Evidence Source Details and Characteristics | |
|--|---|
| Patterns | Citation details (author/s, date, title, journal, volume, issue, pages) |
| | Types of evidence source |
| | Aims of the research |
| | Country |
| | Cultural considerations |
| | Context |
| | - Field/Industry |
| | Participants N= |
| | - Age |
| | - Ethnicity |
| - Student | |
| - Job training | |
| Advances | Role/Profession training |
| | Location |
| | Study design |
| | Intervention |
| | Methods |
| | Measurement |
| | Findings |
| | Soft skills defined |
| | How soft skills taught |
| | How soft skills assessed |
| Gaps | Limitations ID by authors |
| | Limitations ID by reviewer |
| Evidence for Practice | Recommendations by author |
| | Practice applications by reviewer |
| Research Recommendations | Future research considerations ID by author |
| | Future research ID by reviewer |

2.6 Data presentation

The individual characteristics of the data sources will be displayed on a pattern chart (Bradbury-Jones et al., 2021). The data will also be tabulated using the PAGER framework analysis. The source data display may be further refined during the review process. A narrative descriptive summary of the findings will also be provided, drawing on the key themes and patterns of how soft skills are taught in healthcare and education.

3. Discussion

This review will add to the literature on teaching and assessing soft skills, in particular, for healthcare and education professionals. It will map out the evidence how soft skills are currently being taught to health and education professionals. This will help identify any common practices that are currently being implemented by professional training institutions. By mapping out the current practices, this scoping review may provide consensus to common soft skills that are important in those fields.

Potential limitations of the scoping review is that it will not be evaluating the quality of the research. Thus, findings will need to be viewed cautiously. Educators, professionals and researchers who will consider the proposed scoping review, will need to conduct their own evaluation of the quality of the research papers that will be discussed.

The synthesis of the data from the proposed scoping review will provide future direction for educators, researchers as well as healthcare and educational organizations. Although the review will provide evidence for current and emerging practices, future research will need to look at the effectiveness of these practices in actually teaching and assessing the soft skills for health and education professionals.

Declarations

Competing interests: The authors declare no conflicts of interest. All procedures in this review are in accordance with the ethical standards of The University of Auckland Human Participant Ethics Committee (UAHPEC) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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