

Soft skills: The underappreciated determinants of success in health research

Kayondo Jane Frances Kengeya

Rounding up the Edges (ROUTE)

International

Correspondence:

Kayondo Jane Frances Kengeya
kengyakayondo@gmail.com

Submitted: July 2024

Accepted: August 2024

Published: November 2024

Introduction and definition

Technical expertise is often regarded as the primary driver of success in health research. While undoubtedly crucial, a growing body of evidence shows that an essential set of soft skills is just as important as technical expertise for success in educational attainment, employment, research, and earnings.^[1] Success in health research involves more than excelling in statistical analysis and research procedures. Soft skills complement and enhance technical expertise.

Soft skills are personal and interpersonal attributes, behaviours, and attitudes that influence how effectively individuals interact with others and navigate research environments.^[2] They include communication, teamwork, empathy, adaptability, confidence, time management, critical thinking, social aptitude, organizational skills, leadership abilities, ethical attitudes, problem-solving, self-evaluation, and delegation.

While technical skills may secure you a position in health research, soft skills are the keys to your professional and career advancement and success.^[3] Soft skills are needed by every type and cadre of health research operative: doctors, medical assistants, nurses, pharmacists, technologists, technicians, psychiatrists, counsellors, health educators, managerial and support personnel, medical and nursing students, community health professionals, and field workers.^[4]

Examples of the role of soft skills in health research

In order to succeed in health research, one must be able to assemble an interdisciplinary research team that works well together in an environment of respect and good conflict resolution.^[5] Successful research teams are formed and strengthened by soft skills, including effective communication, teamwork, adaptability, problem-solving, leadership, emotional intelligence, time management, and conflict resolution.

To clearly express research ideas and win over potential partners, effective communication is essential.^[6] It facilitates communicating research to coworkers, collaborators, sponsors, and the general public while also converting complex concepts into comprehensible spoken or written language.

While not all researchers will assume formal leadership roles, leadership skills are required to identify research gaps and formulate compelling research questions. Everyone in a research team needs to be able to inspire, motivate, and influence colleagues.

Research is, by its very nature, a problem-solving endeavour. To overcome obstacles and accomplish research objectives, one must possess critical thinking

Citation: Kengeya, Soft skills: The underappreciated determinants of success in health research, *South Sudan Medical Journal*, 2024;17(4):221-223 © 2024 The Author(s) **License:** This is an open access article under [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) DOI: <https://dx.doi.org/10.4314/ssmj.v17i4.14>

and creative problem-solving skills.^[7]

To master new techniques and technologies and get beyond unforeseen obstacles, researchers and teams need to be adaptable and flexible.^[8] Building solid connections, settling disputes, and upholding a supportive research environment all depend on emotional intelligence, which is the capacity to recognize, comprehend, and control one's emotions and that of others.^[9]

As it requires building rapport with study participants, conducting transparent interviews or surveys, and coordinating data-gathering activities among team members, data collection largely depends on communication and cooperation.^[10]

Adaptability and a high level of emotional intelligence are necessary for treating delicate subjects with empathy, keeping participant anonymity, and modifying data collection techniques in response to unforeseen difficulties.

Soft skills are also required for data interpretation and analysis. Strong communication skills are necessary to convey complex statistical findings to audiences that are both technical and non-technical.^[11] Working as a team to interpret data with statisticians and other specialists is necessary. Critical thinking and problem-solving abilities are required to spot patterns and trends in data and generate well-founded judgments.

Soft skills have a big impact on how research findings are shared. Effective communication is necessary when creating readable and captivating research articles and presentations. Working in tandem with other authors and journal editors requires teamwork skills.

Leadership abilities are frequently required when presenting research findings at conferences and to the general public.^[12] Flexibility is also required when reacting to criticism and revising study protocols and manuscripts.

How soft skills are acquired

Soft skills are not innate talents but are developed through deliberate learning, training, practice, experience, and conscious effort. While some individuals may exhibit natural inclinations towards certain soft skills, everyone has the capacity to cultivate and refine them. Recognizing that soft skills are learnable abilities empowers individuals and organizations to invest in their development.^[13] A comprehensive approach is necessary, including soft skill integration into educational curricula, individual and group training, coaching and mentoring, and creating a culture of support within organizations.^[14] To assess the

effectiveness of soft skill, implementation research and case studies for outcome measurement are essential.^[15] Health research organizations and institutions may change the health research landscape by prioritizing soft skills, which will enhance public health, patient care, teamwork, and overall research efficiency.

Enhancing soft skills at the individual level may involve asking mentors and colleagues for feedback on your communication and interpersonal style regularly, actively listening to others, becoming more self-aware by realizing how emotions affect interactions, growing your professional network through participation in online forums, conferences, and workshops, working with people from different backgrounds to widen your perspective, and practicing public speaking to get over any fear and effectively communicate your research findings.^[16]

Research institutions and researchers can significantly improve their research success and contribution to knowledge advancement by investing time, energy, and resources in developing soft skills.

References

1. Heckman JJ, Kautz T. Hard evidence on soft skills. *Labour Econ.* 2012;19(4):451-64.
2. Robles MM. Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly.* 2012;75(4):453-65.
3. Lambe P, Bristow D. What are the most important non-academic attributes of good doctors? A Delphi survey of clinicians. *Med Teach.* 2010;32(8).
4. Sonnino RE. Health care leadership development and training: progress and pitfalls. *J Healthcare Leadership.* 2016; 8:19-29.
5. Cooke NJ, Hilton ML, editors. *Enhancing the effectiveness of team science.* Washington: National Academies Press; 2015.
6. Bennett LM, Gadlin H. Collaboration and team science: from theory to practice. *J Investigative Med.* 2012;60(5):768-75.
7. Peirce E, Ricci M. *Science and Engineering Ethics: A Global Perspective.* Springer; 2018.
8. Srivastava S, Rodin H, Niu N, et al. Resilience in research: Five strategies for navigating challenging times. *Nat Career Column.* 2020.

9. Mattingly V, Kraiger K. Can emotional intelligence be trained? A meta-analytical investigation. *Human Resource Management Review*. 2019;29(2):140-55.
10. Harwell MR. Research design in qualitative/quantitative/mixed methods. In: Leek JT, Peng RD, editors. *The Sage handbook for research in education: Pursuing ideas as the keystone of exemplary inquiry*. Los Angeles: SAGE; 2011. p. 147-82.
11. Leek JT, Peng RD. Statistics: P values are just the tip of the iceberg. *Nature*. 2015;520(7549):612.
12. Brownson RC, Dodson EA, Kerner JF, Moreland-Russell S. Communicating evidence-based information on cancer prevention to state-level policy makers. *J Natl Cancer Inst*. 2018;110(7):742-7.
13. Kechagias, K. (Ed.). 2011. *Teaching and assessing soft skills*. MASS Project
14. Frenk, J., Chen, L., Bhutta, et al. (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923-1958.
15. Bauer MS, Damschroder L, Hagedorn H, et al. An introduction to implementation science for the non-specialist. *BMC Psychol*. 2015;3(1):32.
16. Skaik Y. The role of personal initiative in developing soft skills among researchers. *Int J Res Educ Sci*. 2020;6(4):629-37.