

Doctoral Degree Programs and Soft Skills: Reflections by Faculty Members (Paper)

Abstract:

Soft skills are people-oriented skills, and they, like technical (hard) skills, are essential for employees including faculty members. A qualitative pilot study was conducted with eight current and retired faculty members to learn how they acquired and/or honed soft skills during their doctoral program. The analysis of semi-structured interviews revealed that the participants explicitly and implicitly gained soft skills through formal and informal opportunities during their program of study. This study will contribute to literature related to soft skills, particularly in the context of academic work. The study also aims to draw attention to the ways in which soft skills can be systematically and intentionally taught and nurtured during a doctoral student's program of study.

1. Introduction

Employees must have the relevant hard skills as well as soft skills for a successful professional career. Hard skills are “techniques and essential know-how necessary to operate in specific professions” (Rongraung et al, 2014, p. 957) and soft skills are “the interpersonal, human, people or behavioral skills” (Weber et al., 2009, p. 354). Tsirkas et al. (2020), drawing on past research, stated that “soft skills play a significant role in applicants’ employability and in the job search, recruitment, selection and hiring process” (p. 357). Soft skills are very important for a successful career in academia (El-Fakahany, 2022). Researchers have examined specific soft skills such as time management (e.g., Badiozaman et al., 2022; Brent et al., 2001; Conway & Burton, 2011; Culpepper et al., 2020; Hansen, C. K., 2011; Varkey et al., 2009), communication and conversation skills (e.g., Badiozaman et al., 2022; Barge, 2014), and leadership skills (e.g., Armstrong & Wolshyn, 2017; Boggs, 2003; Cormer et al., 2002; Middlebrooks & Haberkorn, 2009) in the context of academia. This study seeks to examine soft skills in the context of academia, particularly to understand the soft skills that are important for faculty members as they move through their educational program and academic careers.

2. Literature Review

Researchers have conducted primary research and examined literature to gain a deeper understanding of the soft skill domain in different contexts. For example, Marin-Zapata et al. (2002) conducted a literature review to understand the conceptualization of soft skills and competencies, and Tsirkas et al. (2020) surveyed employees and employers to understand the gap in their perceptions related to soft skills. Researchers have examined different aspects of soft

skills in academic settings including doctoral programs. For example: the role of mentoring in developing interest in doctoral students to pursue a career in academia (Curtin et al., 2016); “work demands, work-life balance and wellbeing in UK academic staff” (Kinman & Jones, 2008, p. 41); faculty mentoring and the development of “leadership self-efficacy (LSE)” in doctoral students (Orsini & Coer, 2022 p. 115); role of funding support in the development of both hard skills (e.g., research skills) and soft skills (e.g., teamwork and communication skills) in doctoral students (Grote et al., 2021); mentoring and its influence on political and leadership skills of students (Chopin et al, 2012); relationship between soft skills gained and the quantum of “leadership education completed by graduates” (Brungardt, 2011, p. 1), and; acquisition of diverse soft skills by doctoral students from participation in conference organization (Camarinha-Matos et al., 2020).

3. Methodology

A pilot qualitative research was conducted to learn about diverse opportunities that helped faculty members to develop soft skills during their doctoral degree program. Semi-structured interviews were conducted with eight faculty members from Canadian, US, and Australian universities. The study participants were asked if they received any formal or informal training to develop soft skills during their PhD programs. The study participants were primarily English-speaking and their academic careers trajectory ranged from a recent hire to a retiree. The interviews were conducted using a video conferencing application and the interviews were (auto) transcribed using the transcription feature of the application. The machine-transcribed data was edited by human(s), as required. The data was thematically analyzed to identify themes and trends (Bogdan & Biklen, 1992; Miles & Huberman, 1998) and relevant quotes were extracted for the identified themes. The study has limitations such as the number of participants interviewed, as well as that all participants identified as women. There might have been limited recollection of events by some participants from their doctoral study days considering the time elapsed since they completed their doctoral degree.

4. Findings and Discussion

The participants reflected on their doctoral program journey, and most of the participants noted that, along with hard (technical) skills, they learned and honed soft skills explicitly and implicitly during their program of studies through a variety of formal and informal opportunities (see Figure 1).

- **Coursework:** The faculty members interviewed noted that, along with hard skills, they learned some teaching soft skills such as planning for teaching through their coursework. One of the participants stated that “I remember two classes in particular, one class had PhD students from the whole faculty. There was a time where each of us taught, and so we prepared the materials for that class. I see that as kind of helping you develop a bit of that kind of preparation and planning and just teaching skills in general”.

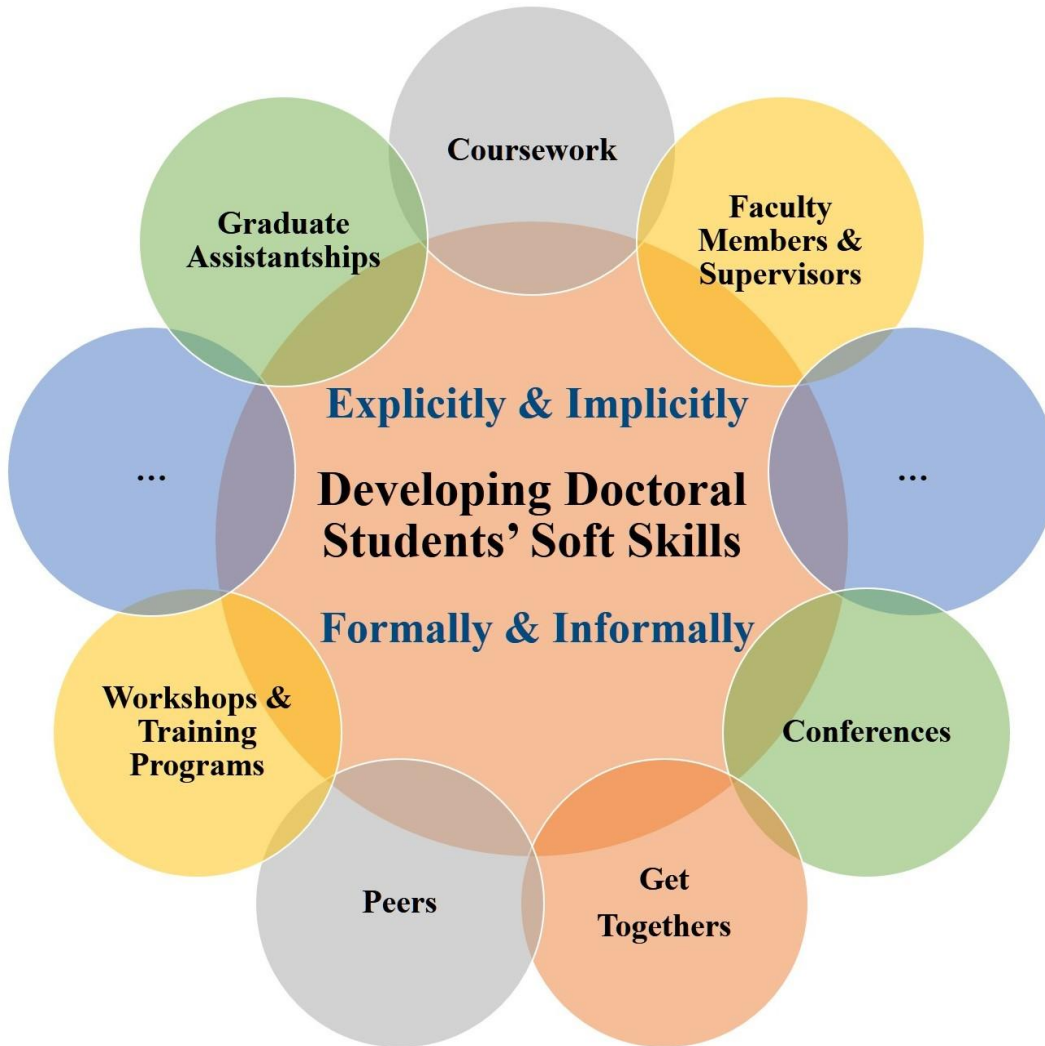


Figure 1: Ways to Learn Soft Skills during Doctoral Program

- ***Faculty Members and Supervisors:*** Faculty and supervisor played an important role in imparting soft skills both formally and informally to doctoral students. For example, a participant noted that “one of the things I learned from my doctoral program was how to be a supervisor for doctoral students ... my supervisor really spent some time with me to talk about how we work together ... you know she gave some examples from her own doctoral work.”
- ***Graduate Assistantships:*** Some of the participants felt that opportunities to work as teaching and/or research assistants contributed in honing their soft skills. One participant noted, “I feel that my graduate teaching assistant work and graduate research assistant work kind of also provided me experiences that built soft skills.”

- **Conferences:** The participants considered that attending conference(s) during their doctoral program was important. A participant noted that “I feel like I got good formal on the job training there. I was taken to conferences, learned how to present at a conference.”
- **Workshop and Training Programs:** Universities host extracurricular events including workshops and training programs, and attendance at such events help students to acquire soft skills. One of the participants shared that “there was a day-long doctoral workshop for all doctoral students. You know there were things included like library, doing a literature review... some of the soft skills like, what do you do when your committee is fighting.”
- **Peers:** The participants shared that they learned from their peers during their program of study. Both formal and informal conversation with their peers contributed to their learning such as appreciation for diversity and other cultures, and listening to others. A participant shared their experiences, "well, I think, because the program was small, we had an awful lot of dialogue and learning. To listen and understand other points of view... we had people from all over the world...it was very rich, with regard to understanding these points of view.”
- **Get Togethers:** The participants recalled that attending formal and informal get togethers helped them to gain soft skills. One participant shared, “Going out to dinner together and conversations that would happen in those spaces certainly contributed to soft skill awareness and soft skill development.”

The findings from this study resonate with discussion in the literature. Advisees, for example, learn soft skills implicitly from their advisors by emulating their working styles and manners (e.g., ways they manage time and collaborate with peers) (Goshen et al., 2022). Students gain soft skills through both extracurricular events (Fakhretdinova et al., 2021) such as workshop and conference attendance, and (formal) curricular activities such as coursework (e.g., Brown et al., 2009; Rendevski, & Abdelhadi, 2017). Anthony and Garner (2016) suggested that soft skills should be given due consideration in program curriculum and not just in specific courses. Camarinha-Matos et al. (2020) reflected on students’ participation in conferences and soft skills acquisition, and Grote et al. (2021) noted that assistantships including research and teaching contributed to developing and strengthening soft skills in students.

5. Conclusion

This research examined how faculty members acquired soft skills during their doctoral degree programs. The analysis of qualitative data revealed that the participants explicitly and implicitly gained and honed soft skills from diverse formal and informal sources and experiences such as classwork, conferences, faculty members and supervisors, graduate assistantships, workshop and training programs, peers and get togethers. Soft skills are critical for academic work and this paper aims to contribute to literature on soft skills in the context of faculty members and their academic career journey. This study provides support for systematically and intentionally providing students with opportunities to develop soft skills during their doctoral programs. In the next phase of this research project, additional interviews will be conducted with doctoral students currently in programs as well as more diverse faculty members from different disciplines and departments to further strengthen the generalizability of findings.

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