ABSTRACT

The transition to the workplace is challenging across disciplines, but particularly decisive for statisticians since the demand for statistical skills is growing across many different fields and sectors. The employment of statisticians is expected to increase drastically, however, employers currently express difficulties in hiring. Indeed, a misalignment between practices developed by students in academic settings and practices expected of a statistician at the workplace has been identified. Despite some recent efforts to promote authentic statistical practices in academic settings, there is a need to understand how statistical practices transition to the workplace.

To study the phenomenon of the transition in detail, I considered a qualitative methodology with a quantitative component. Members of the statistical community were recruited at conferences around the world. They engaged in a sorting task to explore their inner perspective on the role of statistician at the workplace and reflected on their own experiences through a survey. Furthermore, a selection of participants who recently experienced the transition or accompanied statisticians in the transition were interviewed. Participants represented the diversity of the education and profession of statisticians. A cross-case analysis allowed for an in-depth description of the phenomenon of boundary crossing conceptualizing the transition, and identified the elements involved in learning statistical practices.

Findings revealed contributions and implications for statistical practices in academic settings and at the workplace. First, important statistical practices were recognized by the members of the statistical community, contrasting different perspectives, and identifying practices that were previously overlooked. Second, participants confirmed that there was a misalignment between academic settings and the workplace by comparing practices developed in each system. Third, junior statisticians and their mentors identified boundaries occurring during

the transition, uncovering what elements in academic settings or the workplace facilitate boundary crossing. Finally, the triangulation of findings formulated recommendations to promote the different statistical practices that emerged in this study. Implications addressed to the statistical community advocate for transformations in academic settings and at the workplace, promoting authentic statistical practices to facilitate the transition between education and profession for future statisticians.