PROSPECTIVE TEACHERS' SELF-ASSESSED CONFIDENCE IN THEIR OWN MATHEMATICAL KNOWLEDGE AND ON THEIR ABILITY TO EXPLAIN THIS KNOWLEDGE

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To teach mathematics, it is not only important to have mathematical knowledge but also to know the limitations of one's knowledge. That is to say, to be aware of things that one does not know. A possible manner to address this issue is to measure students' degree of confidence in their mathematical knowledge, as done by researchers such as Leclerq (2014).

In the context of an institutional diagnostic assessment on mathematical knowledge (Martínez et al., 2019) applied to prospective teacher students at the very beginning of their study plan, we included a set of questions asking students to indicate, on a scale of 0% to 100%: (a) how confident they were that their answer to a mathematical knowledge question was correct, and (b) how confident they were that they could explain to someone else why that answer was correct.

In this presentation, we will show preliminary results based on data from two teacher training programs of a Chilean university, Primary Education (PE, n=22) and Secondary Mathematics Education (SME, n=18). The results showed that SME students have a higher degree of both knowledge and confidence than those of PE students. However, in SME students this level of confidence remains very high even in the case of test items answered incorrectly, which suggests a lower level of awareness regarding the limitations of their own knowledge. We will discuss these and other elements that arise when considering confidence levels in diagnostic data analysis, including the value and importance of obtaining this information in evaluations in the context of initial teacher training.

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