## **Abstract**

The purpose of the current study was to measure teacher empathy in a simulation workshop with actors (acting as students) by adapting the 'Empathic Communication Coding System' ("ECCS", Bylund & Makoul, 2002) into the educational framework. This is a valid observational tool which has previously been used in the medical field to measure physicians' empathic responses while interacting with their patients.

Empathy is the ability to identify another person's feelings and experiences and view the world from the individual's perspective (Neumann et al., 2015). The process involves recognizing someone else's feelings, identifying their possible causes, and sharing the emotional experience of the individual from the outside (Keen, 2007).

Teacher empathy involves both cognitive and affective elements and has been defined as the ability of a teacher to express concern for and adopt the perspective of a student or students (Tettegah & Anderson, 2007). In education, empathy can be considered to be 'an ability to access the life of the mind of others in their bodily and behavioral expressions' (Zahavi & Overgaard, 2012; p. 10).

Teachers can enhance or strengthen their empathy skills through experiences that increase self-awareness, listening, awareness of commonalities, respect and tolerance for others. Promoting such attitudes and behaviors is important in order to cultivate teachers who are motivated to demonstrate empathic capacities (Swan & Riley, 2015).

Empathy is a complex and multifaceted process. Its complexity is further demonstrated in the various ways that are used to measure the construct. This consists of self-report questionnaires and observational measures. Despite the widespread use of self-report questionnaires, they do have shortcomings. Firstly, responses may be biased due to a respondent's tendency to answer in a certain way regardless of the question. Secondly, there is a risk of obtaining different interpretations by different responses of the same questions

(Demetriou et al., 2015). Self-report measures are an inexpensive and relatively quick way to collect much data. However, these measures may lack credibility due to biased responding (Jeong et al., 2018). Lastly, self-reporting has limited access to conscious content, lacks temporal resolution, and is subject to response sets and memory biases. As such, this research method should be complemented by alternative measures (Pekrun, 2020).

The current study introduced the use of an observational measurement tool to determine teacher empathy. Following the ECCS observational measurement tool guidelines, thirty simulation videos that were all filmed at "Halev" (the Center for Simulation in Education at Bar-Ilan University), were observed and analyzed. Each video contained a unique simulation-based conflictual scenario between a teacher and a student. The teachers who were filmed during the simulation videos always portrayed themselves, whereas actors played the roles of the students.

The ESSC consists of three phases: acceptance of reliability among the observers (intercoders), identifying student empathic opportunities (clear and direct statements expressing the emotions, challenges or progress made by the student), and coding teachers' responses to those empathic opportunities (these responses are placed into one of six levels, ranging from 0 to 5).

The adaptation of the ECCS observational tool to the educational framework generated two sub-research questions: (1) to determine whether teachers express a greater response to a specific empathic opportunity category offered by the students (emotion, progress, or challenge); (2) to establish whether there was an equal division between the use of the three empathic opportunities.

The sample included 30 teachers (23 female, 7 male) who participated in 30 simulation workshops at "Halev" simulation center. All participants were high school teachers who voluntarily chose to take part in the study and agreed in advance to be filmed while participating in a unique simulation-based conflictual scenario with a student. This type of simulation

workshops forms part of the ongoing professional development programs for high school teachers. All participants were between 21 to and 40 years old (Mean age=27), hold undergraduate degrees and have less than ten years of teaching experience.

The main findings of the study showed that the teachers' level of empathy is greatest when the empathic opportunity presented by the students during the simulation scenarios included 'Statement of Progress'. These are statements made by the students that indicate positive physical or psychosocial developments, which indicate positive turning points of the discussion. It was also found that there is an equal division between the use of the three different types of empathic opportunities that were presented to the teachers (emotion, progress, or challenge).

Adapting such an observational tool into the educational field and identifying and evaluating empathic responses of teachers to empathic opportunities can be integrated into future teacher training programs, particularly those that deal with the acquisition of social emotional competencies. Research findings also highlight the importance of using simulation tools in order to facilitate the direct analysis of teacher-student interactions.

This study may also shed light on the potential of using experiential simulation-based learning workshops to develop teachers' abilities and skills to improve their empathy towards their students.