

Collaborative Problem-Solving in the Educational Context: The Role of Emotional Intelligence

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The development of such skills, especially those required for collaborative problem-solving (CPS) and teamwork, is vital for both individual and societal progress in the contemporary world. Among other factors, CPS may be greatly facilitated by team members' ability to accurately perceive and understand, and effectively manage emotions—in short, by their emotional intelligence (EI) abilities. Therefore, the objective of our study was to provide a systematic review of current empirical research on the effects of emotional intelligence on CPS in the educational context. The standardized literature search was conducted in March 2022 in three electronic databases: PsycINFO, PubMed, and World of Science. The review was performed according to the PRISMA 2020 guidelines, using the following inclusion/exclusion criteria: Study variables included at least one ability/skill from the domain of EI; the collaboration involved a small group of peers and took place within an educational context (school, university); a scientifically valid method was used to explore the possibility that EI affects the quality of CPS. Our final sample consisted of 40 publications, reporting the results of 43 single studies. Only two of these studies involved school-aged participants, as the vast majority of research has been conducted with university students. Also, experimental (n=8) and qualitative studies (n=7) were less represented, with the bulk of relevant research employing a correlational design (n=28). Studies involving experimental manipulations (i.e., induction, facilitation, or training) of EI abilities were all conducted with university students. These studies confirm that enhancing EI abilities can directly or indirectly improve performance in CPS. All but one qualitative study focused on emotion regulation skills, two of which were conducted in the school context. Overall, there is consistent and robust evidence that students' EI abilities contribute to better team performance and positively affect relational aspects of CPS, most notably team cohesion, team trust and conflict resolution, and moderate effects of other group variables. In particular, EI abilities moderate the effects of team diversity on CPS by minimizing its negative and bolstering the positive effects. Studies focusing on how emotional abilities affect individual-level outcomes in CPS are scarce, and the findings are less

consistent. Based solely on correlational evidence, some findings suggest EI abilities positively affect individual performance in CPS, while others report non-significant correlations. It is important to note that the relationship between EI abilities and CPS has been explored much more comprehensively in higher education compared to basic or secondary education. Apart from several qualitative studies with preadolescents, there are virtually no studies on the given topic with participants from the high-school population, though this might be the right age to focus on EI abilities and collaboration skills. Even at the university level, students of business have been recruited as participants disproportionately more than students from other fields, which thus remain underrepresented. This imbalance calls upon future studies to recruit students from other domains, especially since the present findings demonstrate the general importance of EI abilities for CPS.

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