## Education and Social Skills: Possibilities of Using Board Games as a Teaching Tool

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According to the Global Burden of Diseases, Injuries, and Risk Factors Study 2017 (GBD), mental disorders affect people of all ages worldwide. Frequently, health problems such as an idiopathic intellectual disability or Autism Spectrum Disorder emerge even in childhood. Depression, anxiety, and schizophrenia are most common in people of advanced ages (GBD, 2018). Depression is one of the leading causes of disease worldwide, and suicide is the second-largest cause of death in young people from 15 to 29 years old. Severe mental disorders can decrease lifespan by up to two decades due to physical conditions that could be prevented (World Health Organization [WHO], 2020a).

Considering the increasing mental disorder statistics, the Goals for Sustainable Development included mental health as a goal (WHO, 2020a). According to WHO, the following guidelines should direct mental health interventions: (a) the promotion of social networks and support environment, (b) the strengthening of resilient behaviors and emotional regulation, and (c) addition to the duty to seek to offer better alternatives to risky behaviors. These intervention programs should apply to several scenarios, such as schools, health institutions, social care centers, digital media, and the overall community. They also need to reach adolescents through specific strategies (WHO, 2020b).

Academic performance and mental health are closely related to each other (cf. Cornaglia et al., 2012; Galindo et al., 2018). Children and adolescents who have mental health impairments are used to present low academic performance and labor market abandonment (Cornaglia et al., 2012). In contrast, school interventions have proved to be a promising alternative for decreasing mental illness statistics. Kutash et al. (2006) have already noted that the school context has improved students' mental health quality throughout many years. Therefore, school is a breeding ground for mental health promotion actions.

Socio-emotional skills have played an essential role in holistic students' development since their primary goal is reaching a comprehensive approach. Social-emotional education implies developing critical and competent subjects academically and in all other daily life situations. "Social and Emotional Learning" (SEL) concerns children and young people's critical issues that involve social, emotional, and educational development in a variety of contexts such as school, family, and community (Pfeilsticker, 2020). In Brazil, the National Common Curriculum Base (BNCC), the document that guides what Brazilian students are supposed to learn, in terms of rights and competencies, states that schools should promote socio-emotional skills (Ministério da Educação, 2018). In the United States, although the federal legislation ESSA (Every Student Succeeds Act - 2015) does not mention SEL, it allows financial resources to promote SEL (Grant et al., 2017).

Despite the importance of socio-emotional skills, scholars of Education have not dedicated their efforts to investigate how to teach them. Conversely, Psychology has long years studying how to teach and assess social skills (Gonçalves & Murta, 2008; Kasari et al., 2011; Waugh & Peskin, 2015). Behavior Analysis, notably, provides a theoretical framework and a broad range of empirical literature on social skills teaching (Bolsoni-Silva & Carrara, 2010; Bornstein et al., 1977; Del Prette & Del Prete, 2010; Galindo et al., 2018). Social skills can be considered part of socio-emotional skills.

Interventions based on Behavior Analysis can convert the school into a rich environment for social skills teaching. The school, like any other social environment, provides occasions for numerous behaviors. Social performance refers to the range of behaviors emitted during interpersonal exchanges. Social skills consist of social conduct appropriated to a given society, considering a specific

context. Social competence comprises an evaluative dimension of social performance, corresponding to the consequences experienced by an individual due to their behavior during social interaction. Social skills acquisition does not necessarily entail a competent social performance. An individual can have some social skills in their repertoire but does not perform them during a situation that requires them (Del Prette & Del Prette 2001).

Del Prette and Del Prette (2001) designed some criteria for assessing competencies. These criteria include: (a) accomplishing interaction goals; (b) maintaining or improving self-esteem; (c) maintaining or improving the quality of interpersonal interactions; (d) counterbalancing losses and gains allocated to people involved in interpersonal relationships; and (e) respecting and expanding human rights. A socially competent individual behaves to obtain social approval, minimizing losses and maximizing gains to themselves and their group. To do this, a person considers the actual scenario, patterns of interactions in a group, his feelings, thoughts, and goals. Although the competent individual may not achieve all of the criteria in every situation, the more criteria are met, the more skilled the individual is.

The social skills description in terms of behaviors (e.g., Del Prette, 2013; Del Prette & Del Prette, 2018) allows assessing these skills and teaching them. However, schooling models with the primary goal of conveying information to students may not promote social skills acquisition and development. Board games can be a powerful tool to teach these skills in school environments. Games make possible simulations of daily life situations (do Prado, 2018). During childhood, children learn the social rules through games (Weiss & Harris, 2001). Furthermore, board game settings provide various interpersonal situation experiences since they enable multiple mechanics (Boardgamegeek, n.d.; Engelstein & Shalev, 2019), and games tend to keep the motivation of players (Mascioli, 2004). Since interest is in place, evoking the desired behavior becomes more effortless. The games have been used for different purposes, such as to teach Brazilian biomes (Canto & Zacarias, 2009), reading and writing skills (de Souza & Hubner, 2010), and monetary skills (Xander, 2013). The variety of possibilities that a board game can provide makes these games suitable for teaching social skills. Considering the diverse range of experiences present in games currently available on the marketplace (e.g., adventure games, cooperative games, logical reasoning, among others) and their motivational benefits, investigating possible relationships between board games and social skills can be useful. Therefore, this project proposes a way to explore these potential relationships and directions and describe the contextual game elements that can play a crucial role in acquiring and maintaining the different social skills studied.

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