

## IMPULSIVITY AND EMOTION REGULATION IN GIFTED ADULTS WITH ADDICTIVE BEHAVIORS

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### Abstract

Empirical evidence pointed out giftedness, as defined by high intellectual abilities (IQ  $\geq$  130 according to the WHO), to be a protective or a neutral factor in the development of psychopathologies in children and adolescents (e.g., Martin et al., 2010, Alexopoulou, 2020). Nevertheless, very few studies demonstrated interest regarding addictions and giftedness. The few ones that have attempted to explore this subject focused only on academic giftedness and their relation to substance use. For instance, Williams and Hagger-Johnson (2017) found an increased risk of drinking alcohol regularly and cannabis use during adolescence and early adulthood in academic gifted students at age 11, whereas Peairs et al. (2010) studied the probability to try alcohol in students and found no difference between academic gifted students and their non-gifted peers. Overall, there is a huge lack of data regarding addictions and factors strongly associated with addictive behaviors, like impulsivity (Berg et al., 2015) or emotion regulation (Estevez et al., 2017), in gifted people, and more especially in gifted adults.

The purpose of this research is to better understand gifted adults with addictive behaviors by studying impulsivity and emotion regulation in this specific population.

The sample consists of adults ( $\geq$  18 years) divided into 4 groups according to their condition: giftedness or not, with or without addiction. The 4 groups will be compared based on scientifically validated tools in impulsivity (UPPS) and emotion regulation (DERS). The IQ scores is evaluated with a full Wechsler Intelligence Scale. An interview is made systematically to check the addiction criteria of the DSM-V. We voluntarily chose to consider every kind of addictions to stay in line with an exploratory goal.

The preliminary results (n = 150) will be exposed in this poster. We expect that the gifted adults with addictive behaviors would show better scores in emotion regulation abilities overall than the non-gifted ones, but lower scores regarding the sphere of emotional identification and awareness. This would be consistent with the results of Brasseur (2013) that suggested less emotional intelligence in gifted adolescents regarding identification and understanding of their own emotions. We also believe that they would show lower scores in impulsivity compared to the non-gifted ones because of a positive correlation between emotion regulation overall and low impulsivity.

**Keywords:** *Impulsivity, emotion regulation, addiction, gifted, adults.*

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### 1. Introduction

Empirical evidence sustained by recent literature reviews OR meta-analysis pointed out giftedness, as defined by high intellectual abilities (IQ  $\geq$  130 according to the WHO), to be a protective or a neutral factor in the development of psychopathologies in children and adolescents, such as anxiety or depression (e.g., Alexopoulou, 2020; Martin et al., 2010). Nevertheless, very few studies demonstrated interest regarding addictions and giftedness, especially in adults. The few studies that have attempted to explore this area focused only on academic gifted students and on their relation to substance use. For instance, Williams and Hagger-Johnson (2017) found an increased risk of drinking alcohol regularly and cannabis use during adolescence and early adulthood in academic gifted students assessed at age 11, whereas Peairs et al. (2010) studied the probability to try alcohol in students and found no difference

between academic gifted students and their non-gifted peers. Overall, there is a huge lack of data regarding addictions and factors strongly associated with addictive behaviors, like impulsivity (e.g., Berg et al., 2015) or emotion regulation (e.g., Estevez et al., 2017), in gifted adults. Some studies have examined the emotional skills issues in gifted children and adolescents, including emotion regulation abilities, by demonstrating interest in emotional intelligence (see Zeidner & Matthews, 2017, for a review). Focusing on emotional intelligence-trait (i.e., perceived emotional self-efficacy in daily life), a recent meta-analysis reported no difference overall between gifted and their non-gifted peers (Ogurlu, 2020), but several studies detailed this result by lower scores in gifted regarding intrapersonal ability face to higher scores in the interpersonal one (Brasseur, 2013; Schwean et al., 2006). Especially, the results of Brasseur (2013) emphasized more difficulties in gifted adolescents (15-19 years old) understanding their own emotions and suggested difficulties in identifying them, compared to their non-gifted peers. In the adult population, one case study also reported a specific difficulty in a patient with giftedness and addictive behavior about the identification of his own emotions (Theodorou et al., 2019). However, there is no empirical evidence in larger population of gifted adults with addictive behaviors compared to control groups.

## 2. Research goal

The purpose of this research is to better understand gifted adults with addictive behaviors by studying sub-areas of impulsivity and emotion regulation in this specific population compared to control groups.

## 3. Methods and materials

The sample consists of adults ( $\geq 18$  years) divided into four groups according to their condition: giftedness or not, with or without addiction. The four groups will be compared based on scientifically validated tools on impulsivity (UPPS) and difficulties in emotion regulation (DERS). In this study, we consider participants to be gifted when they have a total IQ  $\geq 126$  to take into consideration the confidence interval, since it is well documented that substance abuse can impair cognitive functions (Fernandez-Serrano et al., 2011). Nevertheless, the results will be compared with the ones of a threshold at 130 to meet the scientific consensus and check the pertinence of this choice. The IQ score is evaluated with a full Wechsler Intelligence Scale. An interview is made systematically to check the addiction criteria of the DSM-V. We voluntarily chose to consider every kind of addictions to stay in line with an exploratory goal.

## 4. Expected results

Preliminary results ( $N = 150$ ) will be exposed in this poster. We expect that gifted adults would show better emotion regulation abilities overall than non-gifted ones (i.e., lower mean scores on DERS). This would be consistent with the results of Brasseur and Grégoire (2010) who found a positive development of emotion regulation abilities with age in gifted adolescents overall, compared to non-gifted ones for whom emotion regulation tended to stagnate. Nevertheless, we expect to observe more difficulties in both gifted groups regarding the specific spheres of emotional identification and awareness (i.e., higher scores on DERS in these sub-scales) in line with the results of Brasseur (2013). We also believe that the gifted group with addictions would have even higher scores in these sub-scales, in accordance with the case study of Theodorou et al. (2019). Finally, we expect higher scores in both groups with addictions, either gifted or not, regarding emotional dysregulation and impulsivity. However, we believe that the gifted ones would show lower emotional dysregulation overall, compared to its non-gifted match group. Consequently, we also expect to observe lower scores regarding impulsivity in the gifted group with addictions, compared to the non-gifted one, as several studies showed significant positive correlations between emotional dysregulation overall and impulsivity measures (e.g., Schreiber et al., 2012).

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