

A critical discussion of psychological theories and interventions for enhancing self-regulation in young children with ADHD and ODD

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Abstract

In the academic literature, discussions about behaviorism prevail, when it comes to understanding and dealing with difficulties in children who present with the comorbidity of attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) in order to increase the capacity of self-regulation of these children. However, meta-analytic results of class-based behavioral interventions reveal their inability to create portability of self-regulatory behaviors in everyday life. This may highlight the inability of behavioral theories to capture the onset of both self-regulation difficulties and the aforementioned disorders. On the other hand, meta-meta-analytic evidence of parental interventions succeeded into reducing emerged difficulties. This success signifies the essence of psychodynamic approaches both to explain onsets of children' self-dysregulation and mental disorders as well as reducing emerged difficulties. The present study critically views behavioral and psychodynamic perspectives, both in a theoretical and in an applicable axis, by highlighting crucial literature gaps. Alternative approaches and a novel method regarding the enchantment of self-regulation capacity in children with ADHD and ODD are discussed.

Keywords

Self-regulation; Children; ADHD; ODD; Behaviorism; Psychodynamics

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Introduction

A plethora of behavioral studies have succeeded into establishing control behavior abilities in children 0-18, as the meta-analysis of Pandey et al. [1] yielded that self-regulation in children and adolescents can be improved through a variety of school-based behavioral therapies which utilize positive reinforcement. And regardless the fact that the mentioned meta-analysis included gender, culture, and socio-economic-status as independent variables among others that self-regulation is depended yet, mental health variable was not considered. When it comes to children diagnosed with Attention Deficit and Hyperactivity Disorder and Oppositional Defiant Disorder [2], they miss to transfer their interventional skills in the ability to self-regulate within environments that requires interaction. Psychodynamic developmental theories [3] seen self-regulation capacity as a limited dynamic that will receive pressure from the parent environment and can be easily distorted [4]. On the contrary, behaviorism approaches are taken from the belief that self-regulation is an acquired acquisition of a behavioral level which can be taught, regardless the dynamics of a young person's family spectrum. To this axis, the meta-analysis of Veeman et al. [5] revealed the ineffectiveness of either one-to-one or classroom-based behavioral interventions of positive reinforcement on assisting children 6-12 to manifest far-transference in control their externalized behavior of impulsive aggression when they present in a social environment. However, the meta-meta-analysis of Mingeback et al. [6] yielded a large effect size on the effectiveness of parent-training to assist these children in manifesting behavioral controls. This success supports the effectiveness of psychodynamics in explaining and capturing parenting style as a risk factor that promotes the development of ADHD and ODD traits towards self-dysregulation. Considering this perplexing comorbidity and that psychodynamic and behavioral perspectives are holding totally opposed explanations regarding the acquisition or development of self-regulation, in the present study, theoretical, metanalytic and trial research evidence, will be critically discussed, to conceptualize and reinforce self-regulation, a malleable entity of children that can be maladaptively transformed by ADHD and ODD difficulties.

Self-regulation: from psychodynamics to behaviorism and back

Self-regulation encompasses a wide spectrum of mental traits and represents one of five components of Emotional Intelligence. Is regarded to be a finite, consumable resource that

interacts with personal, behavioral, and environmental processes [7]. Key self-regulatory skills are required for a variety of tasks, including stress management, negative affect regulation, and attentional focus, impulse and emotional control, cognition and behavior planning, self-reliance, and socially responsible behavior [8]. Given that self-regulatory abilities are also major concerns when it comes to impulsive control and socially responsible behaviors respectively for ADHD and ODD, it would be prudent to reconsider their immediate capture. After employing self-regulation for these aims, the amount of self-regulation available may be reduced, making subsequent attempts at self-regulation more likely to fail [9]. As a result, school performance is marked by underachievement, disciplinary concerns, and externalized behaviors [10]. Thus, to explore reasons why self-regulation has not developed smoothly is crucial yet, developmental and learning theories hold opposite opinions.

According to Freud's theory [11], humans are born with three fundamental drives which hold individuals' psychological energy, executive control, and the ability to mediate between the personal desires and society's moral standards, all reflected to the development of self-regulation. Erikson [3], on the other hand, considered the ego as a self-contained structure that attempts to self-regulate needs and adapt to its circumstances. Hence, holding a psychodynamic belief, self-regulation can be characterized as predestined [12]. Freud and Erikson had spoken about developmental stages, psychosexual and psychosocial respectively, within which individuals will confront specific conflicts to resolve, whereby resolving conflicts towards self-regulation development results to as a beneficial outcome in children that had been delivered careful parenting and thus, balanced societal interactions, to successfully pass to the next stage. Therefore, despite the retrograde belief that self-regulation capacity may be fixated, psychodynamic theories pose self-regulation as to be of a universal nature that is in danger of being distorted by parenting styles that reduce secure attachment [13]. Towards attachment, according to attachment theory [14], a parent's and child's experiences in a particular relationship determine attachment patterns. The tendency of humans to create deep, warm relational relationships with others is referred to as attachment. The internal working models of relationships that children build because of their attachment relationships, according to this theory, lay the foundation for the development of self-regulation skills, grounding on the development of secure attachment. Hence, this may explain the cruciality of the mentioned developmental stages in which parents must establish a secure bond with their [15]. Yet, criticism has been leveled at these stages, claiming that they are extremely prescriptive for the

wide range of child development, that they ignore the nuances of an individual's life, and that they are too uniform to explain the marked disparities in individual differences towards the range of self-regulation that is not may affected [16].

In an oppositional axis to the psychoanalytical school of thought, behavioral theorists like Skinner [17] define self-regulation as taught mechanism easily to access. Self-regulation is a taught behavior that depends on positive feedback from the environment and is hence beneficial to provide, exploiting motivation seeking in childhood. Yet, according to Bandura [18; 19] self-regulation learning occurs through observation without the requirement for external reward; through observation and judgment, the individual learn to self-regulate behaviors that value for society and not. Unlike Skinner, who seen that self-regulation development is controlled by external feedback devices, Bandura argued for internal dynamics of self-reinforcement, which may explain better of what might happen when untypical developed children repeat unwanted behaviors. This belief may favor the need of explaining internal criteria, influenced by parents, that promote ADHD, ODD and self-dysregulation traits. To this point the evidence of Veeman et al. [5] meta-analysis, which signified that behavioral approaches of positive reinforcement cannot reduce self-regulatory difficulties in such comorbidity, degrades Skinner's argument for the effectiveness of utilizing external reinforce devices, and promotes the meta-meta-analytic evidence of Mingebach et al. [6] that parents may be the major critical devices for assisting these children in waiving such difficulties. This may turn the discussion to psychodynamic beliefs that parenting style may block self-regulation development [20]. Hence, a factor that classroom-bases interventions are ineffective may be grounded on the fact that parents, are not engaged in the first line of intervention, when it comes to children with ADHD and ODD.

ADHD and ODD and self-dysregulation

It is estimated that 1.221 in 30.532 children will confront with the mentioned comorbidity [21] whereby this comorbidity poses risks in children's biological, cognitive, social, and emotional development. ADHD is a three-type neurodevelopmental disorder, whereby each type captures specific disorder's traits: inattention, hyperactivity-impulsivity, and a combination of them, whereas symptoms of uncooperating, belligerent, and antagonistic behavior toward friends, parents, teachers, and other authority figures, which causes more concern for others than for themselves are explained by ODD [2]. A peculiarity in the ODD disorder arises from the fact that selectively and almost unconsciously, children may not express the relevant

difficulties in all the environments with which they come into contact [2]. However, despite the academic consensus that poses self-regulation as a crucial trait for a personality to stand and exist in society, when it comes to ADHD and ODD, academic discussion is focused on the behavioral issues that arise from the main characteristics of each disorder, such as impulsivity and antisocial behaviors, respectively, overshadowing deficits in the ability to self-regulate. Self-regulation deficits are evident when kids with ADHD and ODD are required to complete school-related tasks and interact effectively with classmates and adults [22]. Some specialists believe that ODD is linked to impulsivity caused by ADHD [23]. They misbehave because they can't manage their impulses, not because they're deliberately antagonistic. According to Ghosh and Sinha [23], ODD is a mechanism for children to cope with the stress and emotional pain that comes with ADHD. However, these behavioral beliefs are more explanatory regarding the expression and manifestation of the discussed difficulties, rather than capturing their onset. Within a psychodynamic perspective and towards self-dysregulation, ADHD appears due to unsuccessful attempts of parents to satisfy needs of children, and so ODD results from children's unconscious need to punish their parents, as a defense strategy to reduce the experienced denial anxiety [4]. In a similar axis holding the theory of attachment, Theule et al. [24] conducted a meta-analysis that provided evidence regarding the prevail of insecure or disorganized attachment in children diagnosed with ADHD and ODD. Psychoanalytic perspectives have recognized how vital is the conflict resolvent for self-regulation and typical behavior development. However, as mentioned, a plethora of class-based behavioral interventions amended to capture impulsivity and externalized behavior firstly, without setting self-regulation as a first variable to consider and secondly, without involving parents of children with ADHD and ODD in the first line of strategic plans.

Class-based behavioral interventions

By general confession and in agreement with the meta-analysis of Pandey et al. [1], behavioral interventions in classroom, and in particular operant conditioning whose main axis is to establish desirable behaviors through external positive rewards, in comparison with the controls, were successful in enhancing self-regulation in children and adolescents, increasing the levels of self-control, as they also served to improve the health and behavioral outcomes of most intervention groups. Yet, as mentioned, positive reinforcement in children with ADHD and ODD is not seeker and thus, the manifestation of impulsivity

or externalized behaviors are intensified, rather than self-regulations enhanced. Veeman et al. [5] meta-analytic data based on 19 randomized clinical trials including 18,047 elementary school children with ADHD and ODD revealed that such behavioral classroom programs result in substantial, in helping to prevent the escalation of problem behavior in the classroom, but minor changes in teacher-rated disruptive classroom behavior for a large group of children. Classroom-observed on-task behavior at school was not improved. This fact reveals the weakness of classic behaviorism to create transference in self-regulatory skills in children with ADHD and ODD [25]. Their findings also imply that the effects on disruptive behavior are unrelated to age, gender, problem behavior type (ADHD vs. ODD), or clinical background, and that shorter sessions are more successful than longer ones in producing control skills towards externalization. Due to the minor impacts of these programs, other forms of therapies (e.g., medication or mixed psychosocial interventions) or improved treatment fidelity may be required to normalize disruptive classroom conduct. Hence, concluding both meta-analytic evidence [1, 5] it arises that positive reinforcement may not seal desirable behaviors, whereas the fact that such programs may lead children with ADHD and ODD to develop tolerance, especially when interventions are long-lasting, reveals the greater need in assisting parents of these children with long-term interventions, affirming the psychodynamic views on the effect that parental style has on the formation and expression of self-regulation, ADHD and ODD [6].

Parent-based interventions

Mingebach et al. [6] provided meta-meta-analytic evidence that parent-based interventions were beneficial in enhancing children's behavior with externalizing behavior problems, as evaluated by parent-reports and observation - based measures. This effectiveness highlights an important correlation to the emergence of the ability in children with ADHD and ODD to self-regulate externalized behaviors. And this is the adoption of a parenting style that allows them to bind with parents safely, whereby parenting, the indulgent style one, identified by greater warmth and poor rigidity, was the socialization strategy associated with the best psychosocial adjustment of self-regulation outcomes in children with ADHD and ODD [26]. Relevant parenting styles and behaviors are specifically targeted by parent-based interventions. There is evidence that parent-based interventions for the treatment of externalizing behavior problems have a positive effect on parental characteristics such as parenting behavior, parental

perceptions, and parental mental health and enhance children's behavior. This evidence supports the psychodynamic argument of Silva [4]. According to the last-mentioned specialist, the dissatisfaction, and the feeling of denial, arises in children with ADHD and ODD as a cognitive bias of the parents towards the needs of the child. Therefore, it would be reasonable to assume that parents need to be transformed into emotional devices that will satisfy these children's need for positive reinforcement by reducing denial stress, to benefit the development of self-regulation. This phenomenological transformation, when it exists, may explain the success of behavioral interventions in the classroom, as it seems that parental interventions tend to reassure children, and therefore, are able to both benefit from the effect of behavior but also to transfer self-regulation skills, from home to the classroom [6, 27]. The capability for such transference may also explain the metanalytic evidence of Theule et al. [24] in accordance with which the creation of stronger bonds when educating parents towards to that, may reduce insecure or disorganized attitudes of children towards attachment.

Discussion

This present study critically viewed theoretical and meta-analytic data to draw conclusions about the ability of psychodynamic and behavioral perspectives to explain, capture, and improve self-regulation in children diagnosed with ADHD and ODD. The analysis of the data used for the consolidation of the study highlights important factors and limiters that must be considered by the scientists dealing with the explored difficulties. Behaviorism approaches which are utilizing positive reinforcement are widespread when it comes to childhood and succeeded in raising self-regulation capacity yet, only with regards to typical developed children. Psychodynamic perspectives, seem to have a significant effect regarding raising self-regulation capacity in children with ADHD and ODD yet, in an indirect way.

In relation to the ability to explain and capture the main difficulties encountered by ADHD and ODD, behavioral theories seem capable of categorizing these disorders when they are externalized, but discriminatory in their internalizing nature. In contrast, psychodynamic approaches seem to be the catalyst for both explaining and capturing the origins of the development of self-dysregulation, ADHD and ODD. And this is evident through a key difference that characterizes the interventions reflected by the two schools of psychology. This is about understanding positive feedback devices. On the one hand, Skinner held the belief that self-regulation is a skill

that depends on positive reinforcement holistically from the external environment, far from Bandura's belief in the prevalence of internal motivations, which may frame better the self-regulation difficulties presented by children with ADHD and ODD. Freud, Erikson, Ainsworth, and Bowlby, on the other hand, focused their academic attention on the impact parents have on their parenting style, and the type of attachment they have to their children, as determinants of positive and / or emotional reinforcement, despite the criticism that is raised and was discussed here superficially. This explanatory success of psychodynamic approaches is seen in the beneficial effects when parental education is defined as the primary intervention, versus the use of behavioral approaches in the classroom as a unique or first line strategy.

To this axis the meta-analysis of Veeman et al. [5], despite the ineffectiveness of class behavior strategies to eliminate ADHD and ODD externalized difficulties towards self-dysregulation, yielded also for methodological issues that most of the randomized clinical trials are falling in. One of these emerged from the meta-analysis of Pandey et al. [1]. Most randomized clinical trials analyzed in this study did not include mental disorders as an independent variable, and therefore acted in a discriminatory manner into the enhancing role of operant conditioning in children's self-regulation. The meta-meta-analysis of Mingebach et al. [6] however, demonstrated parental education as a crucial intervention in strengthening children's self-regulation to manipulate the difficulties of ADHD and ODD, and to transfer these skills to the classroom. Yet, parental awareness of these difficulties is quite low, which favors the non-involvement of parents in such strategies.

Limitations

With respect to possible limitations in understanding this current exploratory phenomenon, both the present study and the broader literature have fallen into some of them. The present study critically unfolded the present literature but did not delve into specific ages of childhood. And so, the critical views created for both psychodynamic and behavioral perspectives may not explain specific age spectra or individual cases. As emerges, psychodynamics has an indirect effective role on assisting these children. This indirect way is explained by the positive effect that parental involvement has as a primary strategy. However, the initial search for conducting the present study, assuming that psychodynamic considerations can penetrate this phenomenon, revealed that there is not a single randomized clinical trial of engaging young individuals with ADHD and ODD in psychodynamic interventions. In

addition, no studies with a psychodynamic background were found regarding the framing of parents of such children, while no modern research was found that psychodynamically frames the current explored issue. In relation to behavioral interventions in the classroom, while they are widely used, they tend to ignore specific variables, such as self-regulation and mental health. In addition, there is a general to global tendency to prefer quantitative research, which promotes generalization rather than qualitative research, rather than offering better access to such abstract and tangled phenomena.

Future directions

To waive the mentioned limitations, specific guidelines will be proposed in the present study. Initially, when this specific co-occurrence appears, parental interventions should be put in the forefront. In relation to classroom behavioral interventions, more anthropocentric approaches should be adopted as well as qualitative methods, as suggested by the systematic review of Ladas, Iliopoulou and Louka [28] for utilizing effective methods, when children with neurodevelopmental difficulties are about to be assessed. Furthermore, to observe the effect of psychodynamics in children with ADHD and ODD, this study gives a call to psychodynamic professionals to mobilize for the first test of relevant interventions.

Conclusions

Self-regulation in children with ADHD and ODD is raised when parent training is settled as a first line strategy. In contrast to behaviorism, psychodynamic perspectives better conceptualize the development and the onset of ADHD, ODD and self-dysregulation. Psychodynamic interventions may have an effect in improving self-regulation abilities in children with ADHD and ODD.

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