

Introduction

Disruptive behavior disorders are the most common reason for mental health referrals among youth (Muntz et al., 2004) and therefore represent significant societal costs (Herbert, 1995). The prevalence of oppositional defiant disorder (ODD) has been estimated as high as 16% (DSM-IV-TR, 2000), highlighting the public health relevance of this diagnosis, particularly among adolescents, in whom this diagnosis is most common. While research on ODD is sparse, clinical and attachment theory based conceptualizations of ODD unanimously stress its interpersonal nature (DSM-IV-TR, 2000; Berlin et al., 2008; Allen, 2008; Speltz et al., 1994). However, to our knowledge, no existing research has explored interpersonal functioning among adolescents diagnosed with ODD. Recently, behavioral economics games have been used to investigate social interaction and interpersonal functioning in a range of psychiatric disorders (see Sharp, Monterosso, & Montague, in press). The trust task (Berg, Dickhaut, & McCabe, 1995), in particular, has been used in several studies to probe the mechanics of interpersonal behavior, and recently in children (Sharp, Ha, & Fonagy, 2011), but not in relation to ODD.

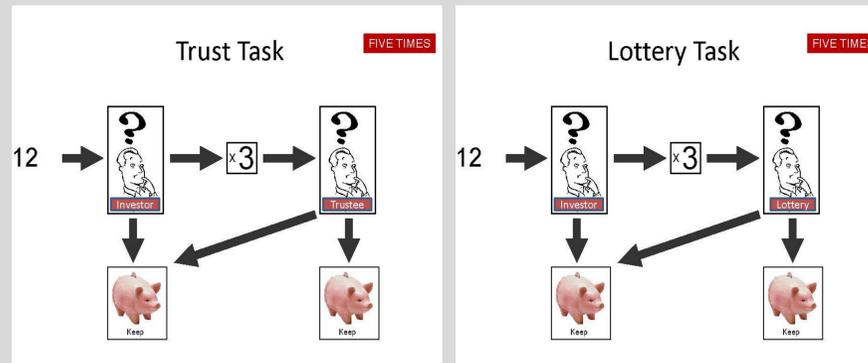
Aim

To assess differences in trust behavior between adolescents with and without a diagnosis of ODD using a trust game that contrasts trust in a person vs. trust in a lottery.

Hypothesis

Adolescents with ODD would be as trusting with regard to the lottery as psychiatric controls, but less trusting in the person condition.

Task



Methods

A sample of inpatient adolescents was recruited to ensure a sufficient proportion diagnosed with ODD. Out of the 109 adolescents ($M_{age} 14.53$; $SD = 1.94$; 64.7% female), 25 reported clinically significant symptoms of ODD on the Youth Self-Report (Achenbach, 1995). A modified version of the trust task (Kosfeld et al., 2005; Unoka et al., 2009) was used. This game has two conditions where subjects receive 12 points in each of 5 rounds. In the first condition (person trust) they can invest any proportion of their 12 points with their partners. In the second condition, they invest in a lottery.

Results

A three-way repeated measures ANOVA with ODD diagnosis as the between-subjects factor and game type (lottery vs. trust) and trials (rounds 1 - 5) as within-subjects factors was performed. There was a significant main effect of trials ($F = 3.494$, $p = .010$) such that investment per trial increased in both games, for both diagnostic groups. The 3-way interaction among ODD status, game type, and trials was also significant ($F = 2.585$, $p = .041$). ODD adolescents invested generally less than non-ODD adolescents in the trust condition but not in the lottery condition.

Figure 1. Estimated investment for Trust Task

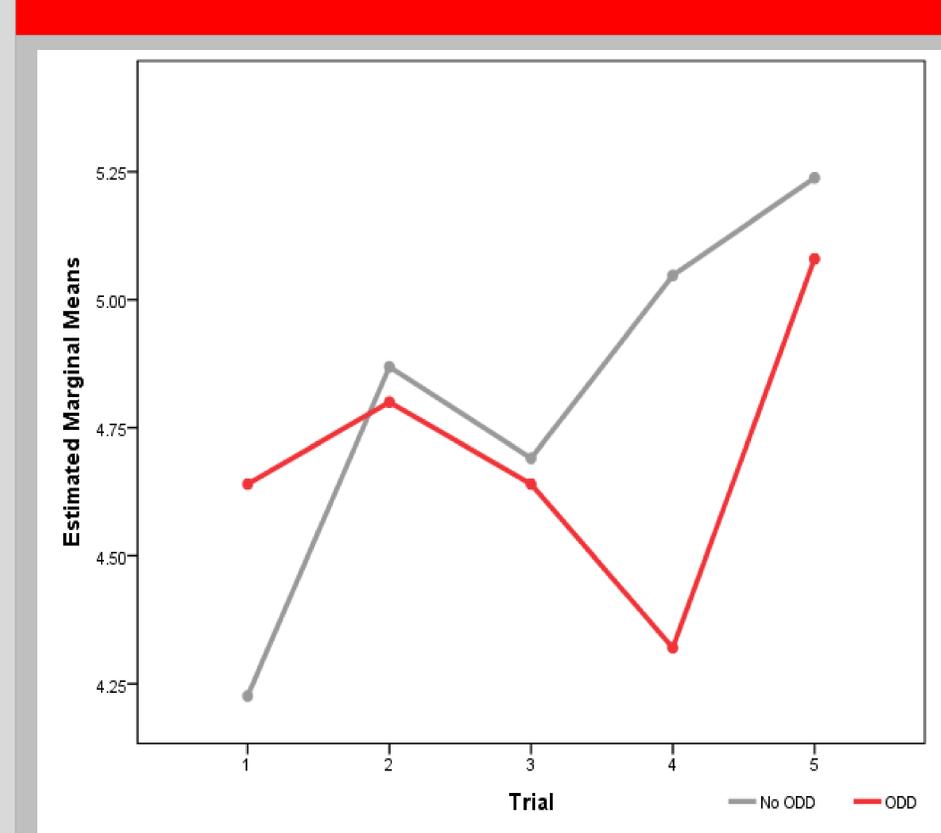


Figure 2. Estimated investment for Lottery Task

