

BACKGROUND

- Suicide is the third leading cause of death in adolescents (Centers for Disease Control and Prevention, 2007).
- Both depression and disruptive disorders such as conduct disorder (CD) have been found to substantially increase a youth's risk of suicide ideation and attempts (Bridge, 2006; VanDer Stoep, 2011)
- This increase is found particularly in females (Keenan et al., 1999; Loeber & Keenan, 1994) and for those in youth custody (Smajkic & Clark, 2007)
- Suicide ideation has been found to be best predicted by depression, however, impulse control disorders, such as CD, were found to be the strongest predictors of ideators who made suicidal plans and attempts (Hwang et al., 2010).
- Although conduct problems have been linked to suicide, much of the research has been with normative populations (VanDer Stoep, 2011) or general clinical samples primarily diagnosed with depression (Hwang et al., 2010).
- Although gender plays an important role in the course and prevalence of depression, CD and rates of suicide, research on gender differences in the risk for suicide for CD populations has been limited.

PURPOSE

The purpose of this study was to :

- 1) Examine the risk for suicidal ideation and attempts in youth presently diagnosed primarily with a CD concurrently and over a one year period.
- 2) Examine whether youth with comorbid depression and CD had an increased risk for suicidal ideation and attempts over a one year period.

MEASURES

Depression and Conduct Disorder

The Ontario Child Health Study (OCHS) was used to assess self-reported depressive and CD symptoms at the first wave of the study. All items are scored on a 3-point scale ranging from 0 (*Never or not true of me*) to 3 (*Often or very true of me*), and ask about symptoms occurring in the present or past six months.

The depression subscale includes 15 summed items such as "I am unhappy, sad, or depressed" and "I get no pleasure from my usual activities."

The CD scale includes 11 summed items such as "I am mean to animals" and "I threaten to hurt people".

Suicidal Ideation and Attempts

The Suicidal Inventory Questionnaire (SIQ; Reynolds, 1987) was used to assess self-reported suicidality. Suicidal ideation was assessed using items such as "Have you wished you were dead?" and "Have you thought about killing yourself?" and past attempts was assessed using the question "Have you ever tried to kill yourself?". All questions were scored as *yes* or *no* for the past 6 months.

PARTICIPANTS

Participants were adolescents diagnosed with CD (N = 133, 40% female) that were drawn from a larger longitudinal project examining gender and psychopathology among high-risk youth. Approximately half (55%) of the participants were drawn from centres servicing youth involved in the justice system and the remainder were from a provincial assessment centre.

RESULTS

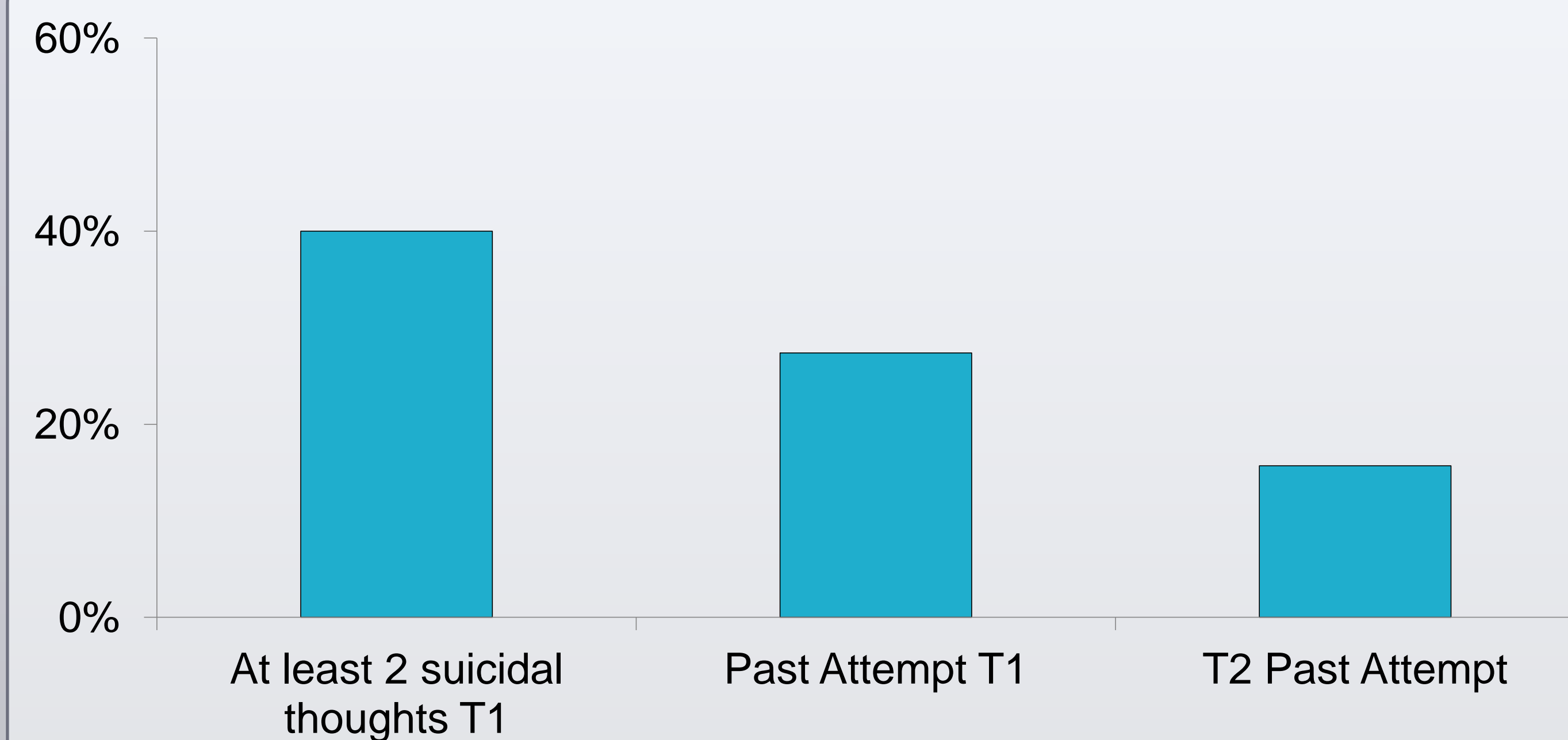


Figure 1. Rates of suicidal ideation and attempts across time points

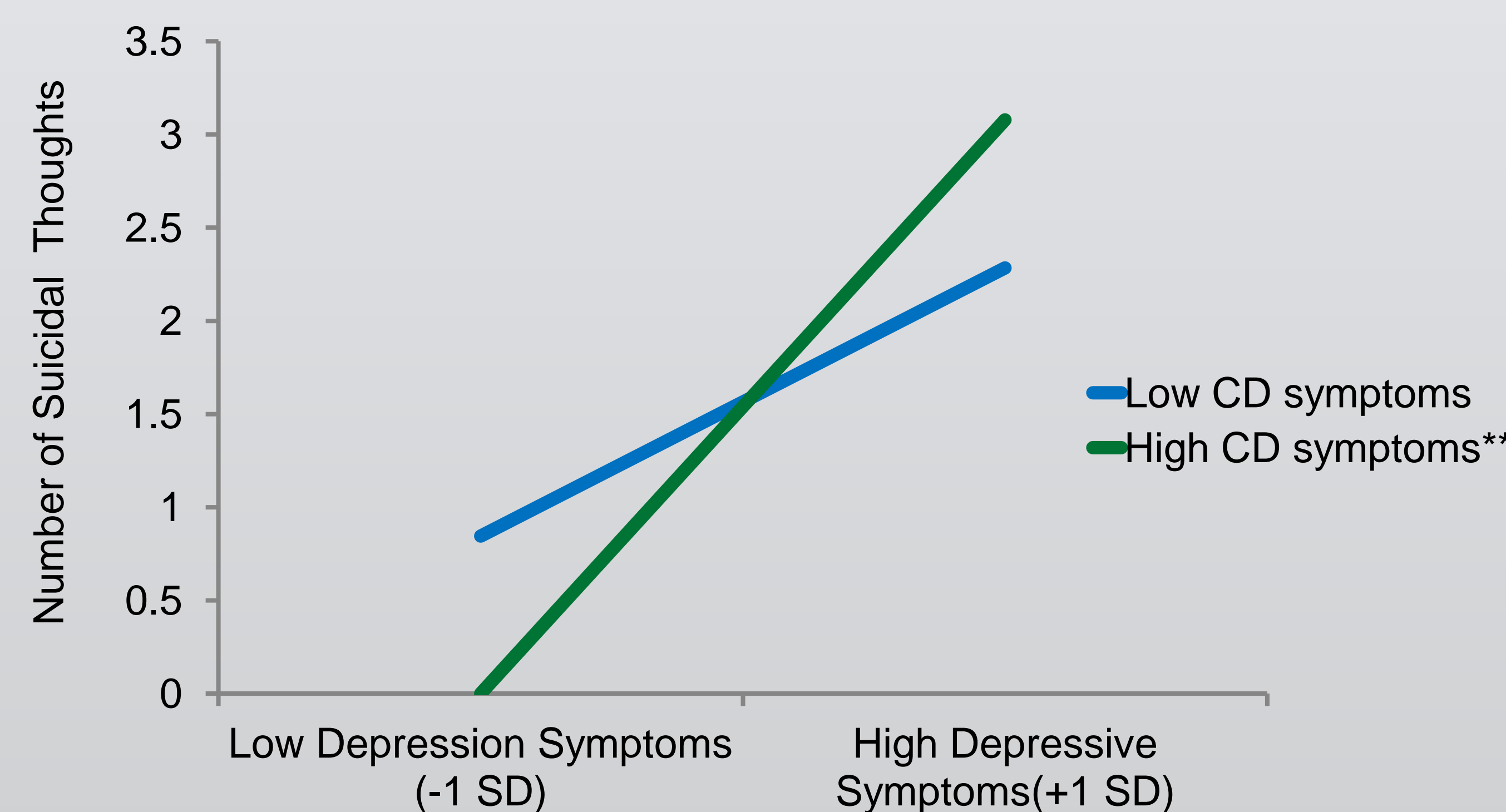


Figure 2. Interaction graph for suicidal ideation as predicted by depression and CD symptoms, ** $p < .01$

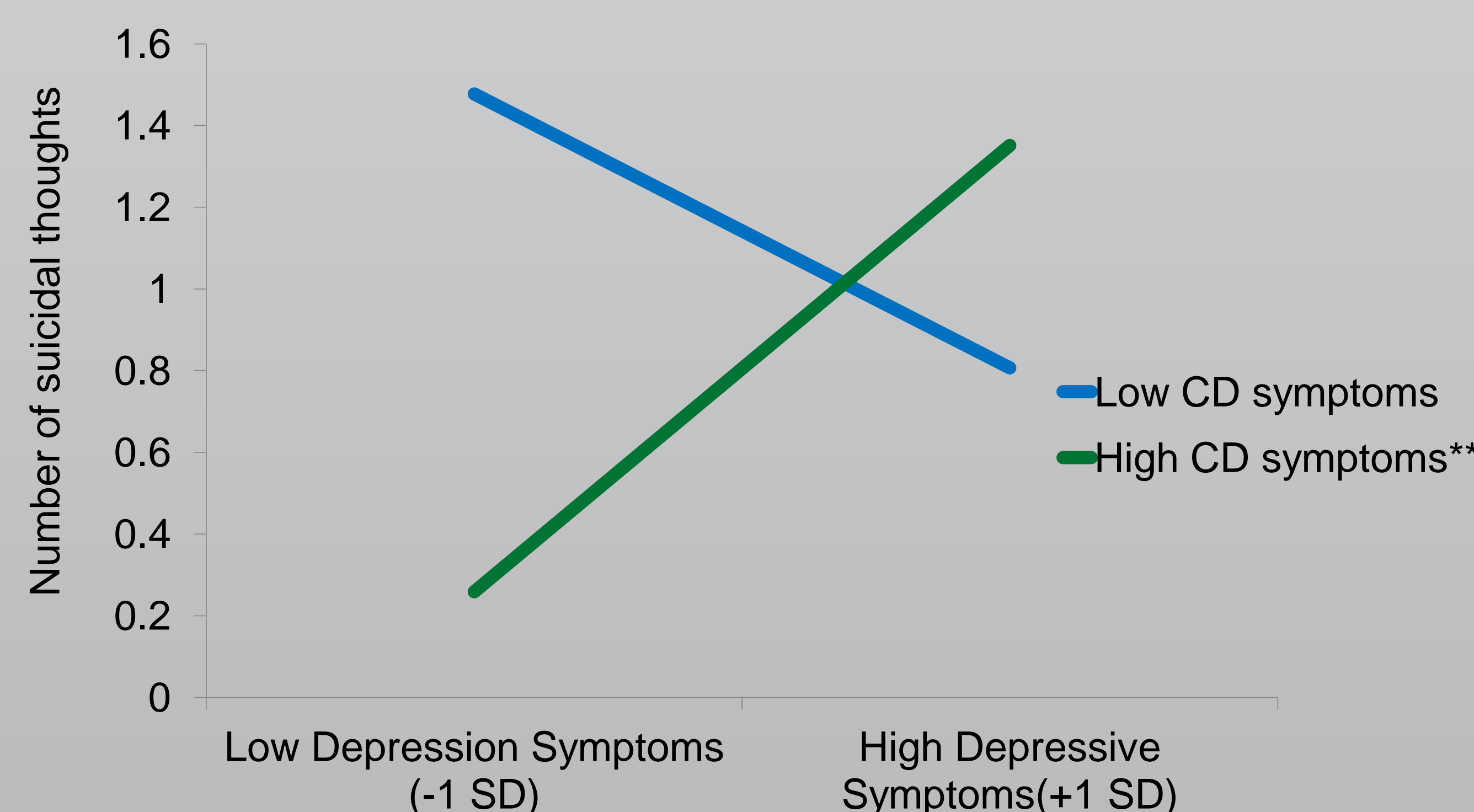


Figure 3. Interaction graph representing the moderating effects of CD symptoms on the relationship between depressive symptoms and number of suicidal thoughts, ** $p < .01$

RESULTS

| Outcome | | β | ΔR^2 |
|----------------------------------|--------------------------|---------|--------------|
| T1 Suicide ideation (n=88) | Depressive symptoms | .37** | .22*** |
| | CD symptoms | -.12 | .02 |
| | Depressive X CD symptoms | .24* | .03* |
| Past suicide attempts (n=130) | Depressive symptoms | .39*** | .22*** |
| | CD symptoms | -.01 | .00 |
| | Depressive X CD symptoms | .18* | .03* |

*** $p < .001$, * $p < .05$

Table 1. Linear Regression Models of the Effects of Depressive and CD Symptoms on Suicide Ideation and Past Attempts

GENDER RESULTS

- Gender differences emerged within model parameters ($\Delta\chi^2 = 3.84$, $p < .05$).
- For girls, higher depressive symptoms were associated with increased suicidal ideation ($\beta = .69$, $p < .001$).
- For boys, higher levels of depressive symptoms increased risk for those with higher levels of CD symptoms but not for those with lower levels of CD symptoms ($\beta = .30$, $p < .05$; Figure 1).
- The same gender pattern was found for suicide attempts.
- Finally, depressive and CD symptoms at Time 1 were unable to predict suicide attempts at Time 2, one year later.

DISCUSSION AND CLINICAL IMPLICATIONS

- Consistent with past research (e.g., Joiner, 2005) depressive symptoms were found to be the strongest risk factor for suicide ideation and attempts in youth with CD.
- Depressive symptoms were a risk factor for girls with high and low levels of CD symptoms which is consistent with research using normative populations (Keenan et al., 1999).
- For boys, depressive symptoms were a risk factor only for those with the higher CD symptoms. This finding may add to our understanding of CD and problems with impulse control as an additional risk factor for boys.
- More longitudinal research is needed with behaviour disordered youth to better understand the risk factors for suicidality.
- When assessing risk if harm to self in youth with conduct problems, clinicians may want to pay attention to the presence of depressive symptoms in assessing risk of harm to self.