INTRODUCTION

In adolescence depression increases drastically, particularly for girls (Rankin & Abel, 2005).

Depression is associated with impairments across a variety of domains, including deficits in social functioning (Renouf et al., 1997).

Limited research has tested mechanisms of the relation between depression and impaired social functioning.

- Disrupted sensitivity to reward and punishment may play a key role mediating this relation.
- Depression is related to decreased sensitivity to reward and increased sensitivity to punishment (Elliott, 1996; Forbes et al., 2006).
- Sensitivity to social reward (willingness to seek out social praise) and social punishment (avoidance of experiences where criticism is likely) may be particularly disrupted for adolescents with depression.
- Disrupted social approach and avoidance processes may contribute to deficits in social functioning.

RESEARCH AIMS

Aim 1: Replicate the association between adolescent depression and deficits in social functioning

Aim 2: Test disrupted behavioral sensitivity to social reward and social punishment as mediators of the relation between depressive symptoms and social functioning

METHOD

Participants

- 112 females between the ages of 13 and 18
- 50 community participants (M = 15.62, SD = 1.29); 62 college participants (M = 18.05, SD = .86)

Procedure

- Participants completed self-report measures and a behavioral sensitivity to social reward and punishment task

Measures

- Depression: 20-item Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977), scored on a 0-3 Likert scale; α = .87
- Social Functioning: 5-item Social Competence subscale of the Self-Perception Profile for Adolescents (SPPH, Harter, 2012); 1-4 Likert scale; α = .88
- Behavioral Sensitivity to Social Reward and Social Punishment
  - Profile Questionnaire: First, participants created brief profiles of themselves describing their likes and dislikes (e.g., favorite music)
  - Peer Rating: Next, they rated profiles of three "participants" allegedly participating at other sites (e.g., I have a lot in common with this person). In reality profiles of other "participants" were standardized.
  - Social Feedback Task: Participants worked (i.e., pressed the space bar) to receive feedback from three "participants" via a willingness to work task. Participants received feedback across three conditions: positive, negative, and neutral.
  - The number of presses to receive positive social feedback = sensitivity to social reward (SR)
  - The number of presses to continue receiving negative social feedback = sensitivity to social punishment (SP)

RESULTS AIM 1

- Bivariate correlations tested the relation between depression and social functioning.
- Depression was negatively related to social functioning in both community and college samples (see Table 1).

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<tbody>
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<td>1. Depression</td>
<td></td>
<td>.36**</td>
<td>.31**</td>
<td>-.29*</td>
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<tr>
<td>2. Sensitivity to Social Reward</td>
<td>-.05</td>
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<td>-.52**</td>
<td>.03</td>
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<td>3. Sensitivity to Social Punishment</td>
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<td>4. Social Functioning</td>
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Table 1. Correlations for community participants below the diagonal, college participants above the diagonal *p < .05, **p < .01

RESULTS AIM 2

Differences between community and college participants emerged on sensitivity to social feedback, thus results are presented separately.

- Depression was related to decreased sensitivity to social reward and increased sensitivity to social punishment (see Figure 1).
- Depression was related to increased sensitivity to social reward and decreased sensitivity to social punishment (see Figure 2).


disrupted sensitivity to social reward and social punishment may be beneficial for teens with depressive symptoms.

DISCUSSION

- Individuals who experience higher levels of depression also experience deficits in social functioning (Hirschfeld et al., 2006).
- Alterations in sensitivity to social reward and social punishment may mediate the relation between depression symptoms and disrupted social functioning.
- Community adolescents with elevated depressive symptoms worked less for both positive and negative feedback; however, college students with elevated depressive symptoms worked more for both positive and negative social feedback.
- The relation between depression and sensitivity to social feedback may depend on age and/or developmental level.
- Regarding sensitivity to social feedback and social functioning, results from community participants suggested that adolescents who actively seek out positive feedback from peers may display greater social functioning, whereas college participants who actively avoid negative feedback from peers may display greater deficits in social functioning.
- Due to the distribution of our mediator variables, formal tests of mediation were not conducted. Future work is needed to test this model longitudinally.
- Behavioral tasks assessing approach and avoidance of social feedback may better approximate adolescent's "real-world" behavior; however, additional research is needed to confirm this.
- Finding high social reward, low social risk opportunities may be beneficial for teens with depressive symptoms.

Figure 1. Community Sample

- Sensitivity to Social Reward
  - b = -.05(.01)
  - .02(.01)
  - .12(.02)

- Social Functioning
  - NS

Figure 2. College Sample

- Sensitivity to Social Reward
  - b = -.02(.01)
  - .01(.01)
  - .28(.03)

- Social Functioning
  - NS

Note. Community sample (n = 50), college sample (n = 62). All paths significant unless denoted by NS (non-significant). * = decreased approach to negative feedback (i.e., fewer button presses to receive negative feedback) suggesting increased sensitivity to SR, ° = increased approach to negative feedback (i.e., greater button presses) suggesting decreased sensitivity to SR.