

Ruminations on Rumination: Anger and Sadness Rumination in a Clinical Adolescent Sample

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INTRODUCTION

- Rumination refers to conscious, repetitive thoughts that revolve around a common theme. Many studies have been conducted on sadness rumination and depression, whereas few ecologically-valid studies exist on anger rumination and its consequences.
- The published findings on anger rumination have pertained only to adults and therefore may not generalize to other populations such as adolescents.
- No published research to date has examined rumination on anger and sadness within the same study.
- The present study examined rumination on anger and sadness concurrently in a clinical adolescent sample. **The goal was to assess whether the two forms of rumination predict distinct outcomes, and whether gender differences exist in the relations between rumination and the predicted outcomes.**

METHOD

PARTICIPANTS were 114 adolescents (65 girls, 49 boys) in provincial assessment and forensic facilities within British Columbia, Canada. They ranged in age from 12 to 18 years ($M = 15.3$ years).

MEASURES. *Sadness and Anger Rumination Inventory (SARI)*. Two parallel scales, containing 11 items each, were devised by adopting items from Conway et al.'s (2000) Rumination on Sadness Scale (RSS) and Sukhodolsky et al.'s (2001) Anger Rumination Scale (ARS). The questionnaires contain analogous items, with the words *angry* and *anger* in the anger rumination measure replaced with *sad* and *sadness* in the sadness rumination measure.

The Integrated Measurement Framework of Aggression (Little et al., 2003) is a 25-item self-report that was used to measure **overt and relational aggression**.

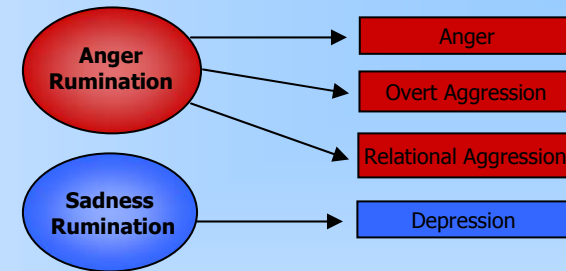
Youth Self Report (Achenbach & Rescorla, 2001) measured the presence and severity of **depression** (15 items) and **anger** (4 items).

RESULTS

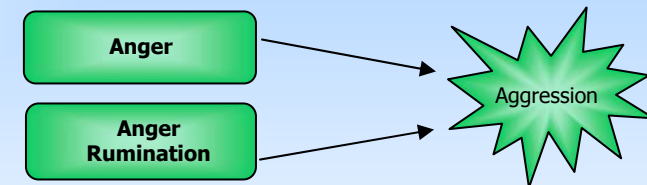
A multiple regression was conducted with both forms of rumination as predictors, and anger, overt aggression, relational aggression and depression as outcome variables.

- Anger rumination but not sadness rumination predicted anger ($F=18.54$, $p<.001$, $\eta^2=.17$), overt aggression ($F=31.43$, $p<.001$, $\eta^2=.25$) and relational aggression ($F=11.65$, $p=.001$, $\eta^2=.11$).
- Sadness rumination but not anger rumination predicted depression ($F=30.64$, $p<.001$, $\eta^2=.25$).

Results supported predictions of outcome specificity.

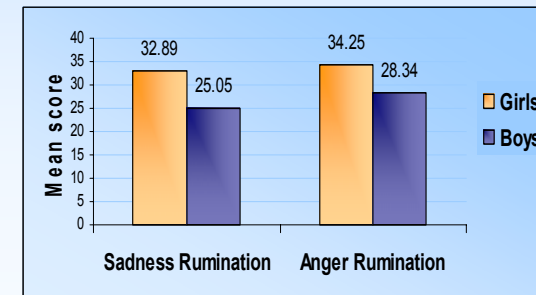


- Another regression—with both forms of rumination, gender, anger and depression as predictors—indicated that anger ($F=31.12$, $p<.001$, $\eta^2=.25$), anger rumination ($F=12.47$, $p=.001$, $\eta^2=.12$), and gender (i.e., being male; $F=6.37$, $p=.01$, $\eta^2=.07$) predicted overt aggression.



Thus, anger rumination and its affective counterpart (i.e., anger) independently contributed to predicting aggressive behaviour.

- Girls scored higher than boys on anger rumination, $t(101)=2.76$, $p=.01$, and sadness rumination, $t(99)=3.42$, $p=.001$.
- Boys rated themselves as engaging in more anger rumination than sadness rumination, $t(43)=2.62$, $p=.01$.
- Girls endorsed comparable levels of anger rumination and sadness rumination, $t(56)=1.63$, $p=.11$.
- Gender did not moderate the relations between anger rumination and overt aggression ($t=.41$, $p=.68$), anger rumination and relational aggression ($t=.78$, $p=.44$), or sadness rumination and depression ($t=.80$, $p=.43$).



DISCUSSION

Findings supported the notion that rumination on anger and sadness are distinct processes with unique emotional and behavioral outcomes. Adolescent girls compared to boys engaged in more sadness rumination, which is consistent with previous research conducted on adolescents (Broderick & Korteland, 2002) and adults (e.g., Nolen-Hoeksema & Jackson, 2001). Adolescent girls also engaged in more anger rumination than did adolescent boys, which was discordant with results from a normative adult sample (Peled & Moretti) where there were no gender differences in anger rumination. Future studies could investigate whether gender differences in anger rumination exist in a normative adolescent sample.

Future studies also could examine ways to reduce rumination among adolescents. Mindfulness-based cognitive therapy (MBCT) has shown promising results in reducing sadness rumination and depression (Ma & Teasdale, 2004), and perhaps certain components could help decrease anger rumination and aggression. It will be paramount to assess whether gender-specific interventions are required to reduce rumination and to foster healthy outcomes for females and males.