Men's Responses to Social Stress: Individual Differences and Implications for Relationship Aggression

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Presentation Goals

- Importance of examining the perpetration of violence against women
- Theoretical explanation for men’s perpetration of violence
- Emotion regulation as a proximal, mechanistic variable
- Examination of emotion regulation within a social context
- Preliminary data from second study

Violence against Women

- High prevalence rates of violence
  - College relationships
    - Up to 90% for psychological aggression
    - 20-37% for physical aggression
    - 3-18% for sexual aggression
  - College men
    - 21% report perpetrating physical aggression
    - 14%-58% report perpetrating sexual aggression

Risk for Violence against Women

- Many identified risk factors for men:
  - Childhood experiences
  - Peer group associations
  - Psychopathology
  - Sexual experiences (early and increased frequency)
  - Attitudes about women
  - Gender role stereotypes
  - Substance Use
  - General Aggression

Desmarais et al., 2012; Koss et al., 1987; Loh et al., 2007; Parkhill & Abbey, 2006; Shump et al., 2008

Abbey et al., 2006; Nguyen & Parkhill, in press; Schumacher et al., 2001; Stith et al., 2001; Tharp et al., 2013
Confluence Model

- Developed to explain men’s perpetration of sexual aggression
  - Early childhood experiences (CSA, specifically)
  - Association with delinquent peer groups
    - Promotion of masculinity, power, aggression
    - Impersonal sexual encounters with women
    - Negative attitudes about women

Malamuth et al., 1991; Finkelhor, 1987

Extensions of the Confluence Model

- Additional research:
  - Alcohol consumption/problems
  - Delinquency
  - Sexual dominance
  - Depressive episodes

- However, factors are still relatively distal
  - Emotion regulation may be a more proximal, perhaps mechanistic factor

Nguyen & Parkhill, 2014; Abbey et al., 2006

Emotion Regulation Development

- What is Emotion Regulation?
- Several developmental and environmental factors may play a role
- Key underlying themes:
  - Security
  - Stability
  - Predictability
- Disruptions may lead to unpredictable, prolonged, intense emotional experiences

Cummings & Davies, 1996; Grou, 1998; Thompson & Calkins, 1996

Maladaptive Emotion Regulation in Men

- Gender role socialization may play an important role

Fales & Martin, 1991; Grou & John, 1998; Jakupcak et al, 2003; Romano & Die Luca, 2001; Rozin & Denison, 2010
Maladaptive Emotion Regulation Outcomes

- Adverse childhood experiences associated with:
  - Emotional clarity
  - Recognition of emotional cues, including facial affect
  - Non-acceptance of emotions
  - Disruptions in goal-directed behavior
  - Impulse control difficulties

Arting & Peterson, 2013; Gratz et al., 2009; Pollak et al., 2000; Shipman et al., 2000; Shorey et al., 2011

Associations with Aggression

- Maladaptive emotion regulation is associated with:
  - Psychological aggression
  - Physical aggression
  - Sexual assault perpetration

Gratz et al., 2009; Jakupcak et al., 2002; Parkhill & Pickett, 2014; Shorey et al., 2011

Current Research

- Much of the previous research is cross-sectional
- Contextual variables are not examined
- Does situational social stress impact men’s perceptions and behaviors?
  - Does emotion regulation impact the relationship between social stress and perceptions and behaviors?

Study 1 – Pilot Study

- Examined the manipulation of evaluative feedback given by a Female confederate during a social stress task on:
  - Men’s emotional experience
  - Men’s perceptions of the Female confederate
  - Men’s reports of competitive intent
  - Disclaimer: competition does not equal aggression or violence, but may be a precursor to aggressive behavior
- Experimental group received negative feedback and the control group received neutral feedback.
**Study 1 – Pilot Study**

- **Hypothesis 1**
  - The experimental group compared to the control group would report more negative and less positive emotions from pre- to post-task.
- **Hypothesis 2**
  - The experimental group compared to the control group would report less positive attributes and more negative attributes of the Female confederate from pre- to post-task.
- **Hypothesis 3**
  - The experimental group compared to the control group would report more competitive intent against the Female confederate from pre- to post-task.
  - Individual factors (hostility, physical aggression, emotion regulation difficulties, psychopathology symptoms) would further influence the reports.

**Participants**

- 110 Male college students who received partial course credit for participation
- 89% under 22, M = 20 years old
- 60% Freshman or Sophomores
- 75% White/Caucasian, 8% African-American/Black, 7% Arabic/Middle Eastern, 4% Asian, and 7% Multiracial/Other

**Methods**

- Arrived to the laboratory and waited with another “participant” for the study to begin
  - Female confederate engaged in small talk with the participant while waiting
  - Two Male researchers entered the room and began instructions
- Described the task (a modified Trier Social Stress Task) in which one person would deliver a job proposal speech and one person would be instructed how to evaluate the performance
  - A drawing was staged so that the Male participant was always the job candidate
- Escorted to separate rooms to complete pre-task questionnaires

**Modified Trier Social Stress Task (TSST)**

- Five minutes to prepare the job proposal
- Delivers five minute speech in front of the panel of judges (i.e., 2 Male researchers and Female confederate)
  - Female confederate informs the participant to continue until the five minutes if he stops talking
  - Evaluative feedback is given at the end of the speech
    - Experimental condition: negative feedback
    - Control condition: neutral feedback
  - Performs an arithmetic task for five minutes
    - Count backwards from 1022 in increments of 13
    - Experimental condition: Female confederate informs him of his mistakes and requests that he start over at 1022
    - Control condition: No corrections

Kirschbaum et al., 1993
Study 1 – Pilot Study

• Measures
  - Positive and Negative Affect Schedule (Pre- and Post-task)
  - Attributions about the Female confederate (Pre- and Post-task)
    - positive (e.g., likeable, friendly, attractive, sincere, trustworthy, desirable)
    - negative (e.g., arrogant, bossy, inconsiderate, greedy, rude, distant/impolite)
  - Competitive Intent (Pre- and Post-task)
    - Three items:
      1. I would try to win in a competition against the other participant
      2. I don’t think the other person has what it takes to win a competition against myself
      3. I would have a no-holds barred approach when negotiating with the other participant

Watson et al., 1988

Study 1 – Pilot Study

• Individual Difference Measures
  - During Pre-task questionnaires
    - General Aggression Questionnaire
    - Hostility
    - Physical Aggression
    - Difficulties in Emotion Regulation Scale
      - Total score
      - Six domains not examined
    - Depression, Anxiety, and Stress Scales
      - Three subscales

Buss & Perry, 1992; Gratz & Roemer, 2004; Lovibond & Lovibond, 1995

Study 1 – Pilot Study

• Results – Hypothesis 1
  - The experimental group compared to the control group would report more negative emotions and less positive emotions from pre- to post-task.
  - Two separate 2 (condition: experimental vs. control) X 2 (time: pre-task vs. post-task) repeated measure ANOVAs

Study 1 – Pilot Study

• Results – Hypothesis 2
  - The experimental group compared to the control group would report less positive attributes and more negative attributes of the Female confederate from pre- to post-task.
  - Two separate 2 (condition: experimental vs. control) X 2 (time: pre-task vs. post-task) repeated measure ANOVAs
Study 1 – Pilot Study

Results – Hypothesis 3

- The experimental group compared to the control group would report more competitive intent against the Female confederate from pre- to post-task.
  - Individual factors (hostility, physical aggression, emotion regulation difficulties, psychopathology symptoms) would further influence the reports.
- 2 (condition: experimental vs. control) X 2 (time: pre-task vs. post-task) repeated measure ANCOVA with depression and aggression as continuous predictors

$$t(23) = -2.47, p < .05$$

$4.33 \pm 0.90$ $4.25 \pm 0.91$
$4.30 \pm 0.90$ $4.15 \pm 0.91$

$4.4$ $4.2$ $4.3$ $4.1$

Low Depression High Depression Low Depression High Depression
Study 2 – Aggression Study

- Replication of the previous study, but included a validated Aggression Paradigm
  - Taylor Aggression Paradigm
    - A rigged game in which the participant and confederate “compete” in a reaction time task
    - When the confederate wins she is allowed to deliver white noise blasts of varying decibels
    - When the participant wins he can do the same
    - Both “win” 50% of the time
    - The confederate wins first and randomly delivers one of the lowest three levels
  - The participant’s decibel choice for the white noise blasts are recorded and serve as a proxy for aggression

- Hypothesis
  - The experimental group compared to the control group would deliver higher average decibel white noise bursts to the Female confederate.
  - Emotion regulation would further influence the delivery of white noise bursts.

Study 2 – Aggression Study

- Results
  - Average of all responses
    - No differences were noted
  - First Block
    - Condition X Emotion Regulation Interaction, F(1, 85) = 6.84, p < .001
  - No differences on the Second and Third Blocks

- Discussion
  - Change in emotional experience replicates previous research
    - Reductions in positive affect for the experimental condition
    - Increase in negative affect in both conditions
  - Interesting findings related to changes in attributions
    - Reductions in positive attributes for the experimental condition
    - Increase in negative attributes for both conditions
    - May be related to threat versus no-threat context
    - Short interaction may reduce validity of the measure

See for a review on TST responses: Campbell & Ehlers, 2012; Moore & Stuart, 2004
Discussion

- Competitive intent was greater for the experimental versus control condition
  - Hypotheses for hostility, stress, and anxiety were not supported
  - Hypotheses for physical aggression, emotion regulation, and depression were supported
  - Using adaptive strategies may reduce aggression
  - Adds to a growing body of literature that suggest maladaptive emotion regulation, in social contexts, may increase risk for aggression

Limitation and Future Directions

- College student sample
  - Limits generalizability
- Used an artificial social context
  - May not relate to intimate relationships
- Competitive intent as a proxy
  - Should not assume that competition is equivalent to aggression
- Other distal factors should also be examined to strengthen theoretical work with empirical support

Conclusions

- Within a social context in which social stress or rejection is generated, men with higher dispositional aggression, emotion regulation difficulties, and depression symptom severity may be more likely to respond aggressively
- Within a relationship context, this may mean that in situations where social stress (i.e., relationship conflict, criticism) or social rejection (i.e., rejection of sexual advances) are generated, men with particular individual factors may be at higher risk for aggressive responding toward their relationship partner

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