Cognitive Distortions and Institutional Misconducts in Juvenile Delinquents

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Cognitive Distortions and Institutional Misconducts in Juvenile Delinquents

Shannah Gardiner & Jenna Berkstresser

Sponsors: Dr. Di Wu & Dr. David Leitch
Definitions

- **Cognitive distortions**: Inaccurate attitudes, thoughts, or beliefs concerning one’s own or others’ social behavior.

- **How I Think (HIT) questionnaire**: Measures four specific cognitive distortions (e.g., Barriga, Hawkins, & Camelia, 2008).
  - self-centered
  - blaming others
  - minimizing/mislabeling
  - assuming the worst
Previous Research

• It has been found that cognitive distortions are correlated with an individual’s aggressive or antisocial behaviors.
  
  • Self-serving cognitive distortions were linked to aggressive and delinquent behavior in troubled adolescents (e.g., Barriga, et al, 2008).

  • Compared to other high school students, male delinquents had higher cognitive distortions and self-reported antisocial behaviors, such as fighting and stealing (e.g., Liau, Barriga, & Gibbs, 1997).
Previous Research

- Intervention programs with cognitive component are found effective (e.g., Colins et al., 2013)
  - Aggression Replacement Training helped the participants recognize their internal cues for aggression and aggression signals and the program lowered levels of both cognitive distortions and antisocial behaviors (e.g., Gundersen & Svartdal, 2006)
  - A meta-analysis of 46 studies found that intervention programs with a component that dealt with removing cognitive distortions were twice as effective (Izzo & Rossas, cited in Brazao, Motta, & Rijo, 2013)
Present Study

- **Research Questions:**
  - Was there a correlation between the HIT cognitive distortion scores and antisocial misconduct in the program?
  - Would the HIT scores decrease significantly after the program?
  - Were there correlations between specific misconducts (Serious 1) and specific categories in the HIT questionnaire?
Predictions

• There would be a significant positive correlation between HIT scores and the number of misconducts observed in the participants.

• The HIT scores would be significantly lowered at the end of treatment.

• Specific misconducts would positively correlate with specific categories of HIT scores.
Method

- Participants:
  41 juvenile delinquents in a long-term, secure Midwest juvenile rehabilitation center, which offers a cognitive-behavioral and social skills development program that focuses on treating criminal thinking
  - Age range: 13-19; Mean: 16
  - Male: 29 Female: 12
  - Average days at center: 165
Method

• Measures:
  • HIT questionnaire
  • Misconduct forms (three categories: Minor, Serious I, Serious II)

• Procedures:
  • Participants were given the HIT questionnaire at the beginning of treatment (pretest) and at the end (posttest)
  • Participants were observed daily for the number of misconducts
Results

- Pearson correlation was conducted between the HIT pretest scores & number of misconducts. A positive correlation was found ($r(39)=0.329$, $p<.05$), revealing a significant linear relationship between the two variables.

- A paired-samples t-test was conducted to compare the participants’ HIT pre- and post-test scores. There were a significant decrease ($t(30)= 5.41$, $p<.001$) from pre- ($M=2.56$, $sd=0.73$), to post-test ($M=1.82$, $sd=0.66$).
Results (cont.)

- The Pearson Correlations were calculated to explore the relationships between Serious I misconducts and HIT pre- and post-test scores.
- No significantly correlation between Serious I misconducts and Pre-test scores was found.
- A significant positive correlation between the HIT posttest and Serious I misconducts was found \( (r(26)=0.412, p<0.037) \).
- Moreover, a significant positive correlation between the HIT Overt posttest scores and Serious I misconducts was found \( (r(26)=0.441, p<0.024) \).
The first two hypotheses were confirmed:

- The higher the HIT pretest scores, the higher amount of misconducts the participant had at the center.
- The Rehabilitation Center was effective in reducing the amount of cognitive distortions in the participants.

The third hypothesis was partially confirmed:

- The higher the HIT posttest scores and overt posttest scores in HIT, the higher amount of Serious I misconducts. But these relationships were not found between Serious I misconducts and the HIT pretest scores.
Limitations & Future Directions

Limitations

- Sample size is small
- Low external validity
- Perhaps with more data there would be a significant relationship between HIT pretest scores and Serious I misconducts

Future Directions

- A continuation of studying the relationship between specific cognitive distortions and certain misconducts


