Predicting Internalising Symptom Outcomes: The Contributions of Ethnic Identity, a School-Based Universal Intervention Program, and Risk and Protective Factors

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Depression and Anxiety

- Approximately 2-6% of children suffer from a current episode of clinical depression
- Depressive disorders are increasing in prevalence and age of onset is decreasing
- Childhood anxiety disorders have an estimated point prevalence of 8-15%
- Anxiety disorders also remain among the most prevalent mental health disorders in children
- Comorbidity is estimated between 15.9-61.9%
- It is likely that a number of undetected children suffer from subthreshold depression and anxiety

Risk Factors for Childhood Internalising Disorders

- Female gender
- Family history of internalising disorders
- Negative attributional style
- Elevated internalising symptoms
- Social skill deficits
- Poor academic achievement & beliefs about academic ability
- Peer rejection
- Abuse or neglect
- Chronic illness
- Presence of another psychiatric disorder

Ethnic Identity

- Ethnic identity is a social construct that refers to an affiliation with an ethnic or cultural group
- It includes ethnic awareness, ethnic self-identification, ethnic attitudes, and ethnic behaviours
- Strong ethnic identity is a protective factor against negative stereotypes and social denigration (Martínez and Dukes, 1997)
- Several theories of ethnic identity development have been proposed
- Of these, Social Identity Theory (Tajfel and Turner, 1979) has received the most support
- The relationship between ethnic identity and childhood internalising symptomology has not been examined in previous studies

Aussie Optimism Positive Thinking Program

- A universal school-based program aimed at preventing anxiety and depression in children 8 – 9 years of age
- Based on CBT
- Dual role of prevention and treatment
- 10 one hour modules taught by classroom teachers
Predictors of Outcome

- Ethnic identity
- Aussie Optimism
- Gender
- Attributional style for positive events
- Attributional style for negative events
- Family history of internalising disorders
- Pre-test levels of depressive symptoms
- Pre-test levels of anxiety symptoms

Research Design

- Cluster randomised control trial
- Intervention & usual care groups
- Assessment at pre-, post-intervention & 6-month follow-up
- Multiple assessments:
  - Self-report internalising symptoms
  - Self-report attributional style
  - Self-report sense of ethnic identity
  - Parent-report of demographics

Participants

- 20 government primary schools chosen from low socioeconomic areas
- 933 Year 4 students recruited in 2003
  - Intervention group; 461 students, 10 schools
  - Control group; 472 students, 10 schools
- The sample for this study consists of the 851 students who remained in the study at the 6-month follow-up
- Mean age at baseline was 8.745 years and 9.745 years at follow-up
- ??? males and ??? Females

Measures

- Depressive symptomology - Children’s Depression Inventory (Kovacs, 1992)
- Anxious symptomology - Spence Children’s Anxiety Scale (Spence, 1997)
- Attributional style for positive and negative events - Children’s Attributional Style Questionnaire (Seligman, Peterson, Kaslow, Tannenbaum, Alloy, & Abramson, 1984)
- Sense of ethnic identity - Children’s Ethnic Identity Questionnaire (Humphrey, 2004)
- Gender and parent history of internalising disorders reported in parent questionnaires

Analysis

- 400 cases were randomly selected out of the total sample at the 6-month follow-up for analysis
- Binary hierarchical logistic regression analysis conducted
- Blocks of predictors were entered in hierarchical order, with blocks that were most likely to explain a significantly large proportion of the variance in internalising outcome entered first
  - Block 1: gender
  - Block 2: pre-test depression and anxiety
  - Block 3: attributional style for positive and negative events
  - Block 4: parental history of internalising disorders
  - Block 5: ethnic identity
  - Block 6: Aussie Optimism Positive Thinking Program
- Blocks were tested for their contribution to internalising outcome at the 6-month follow-up

Outcome Variable

- Internalising problems – measured by the CDI & SCAS
  - Reliable change in internalising outcome was determined using the reliable change index method (Jacobson & Truax, 1991)
- Clinical/Increase group
  - Those who reliably increased in either depression or anxiety
  - Those whose scores remained above the clinical cut-off on the CDI or SCAS at the 6-month follow-up
- Prevention/Decrease group
  - Those who reliably decreased in either depression or anxiety
  - Those who reliably remained below the clinical cut-off on the CDI or SCAS at the pre-test or 6-month follow-up
### Binary Hierarchical Logistic Regression Analysis of Predictors (WALD)

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<td>Aussie Optimism</td>
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### Summary of Outcomes
- 14.2% of the variance in internalising symptoms was accounted for by the model.
- Those with low ethnic identity, high levels of pre-test depression symptomology, and a tendency to attribute negative events to internal, stable, and global causes were significantly more likely to be in the clinical/increase group.
- No other variables predicted internalising outcome after controlling for other risk variables.

### Conclusions
- The results presented are consistent with the social identity theory of ethnic identity development, and support the bolstering of ethnic identity as a protective factor against internalising problems in childhood.
- Attribution style for negative life events was an important risk factor for children as young as 8 - 9 years, however the poor internal consistency of the CASQ may have affected the reliability of this result.
- Participation in the Aussie Optimism - Positive Thinking Program was not associated with improvement in internalising symptoms, which may be due to:
  - Dose effects of the program were not accounted for.
  - Combination of depression and anxiety symptoms into a single outcome.
  - Exclusion of other predictors.

### Future Directions
- Clarifying the relationship between ethnic identity and childhood depression and anxiety at different ages.
- Future program development should incorporate ways of enhancing ethnic identity into prevention programs.