Children's Personality Traits Predict Their Exposure to Adversity in Adolescence

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Two contrasting examples . . .





Why it is important to study predictors of adversity exposure

- Adversity = “events and conditions judged by outside observers as likely to be stressful to most individuals” (Gest, Reed, & Masten, 1999).
- Adversity and stress are risk factors
  - Psychological disorders in general (Grant et al., 2003, McLaughlin et al., 2012)
  - Internalizing problems (Hamilton et al., 2013)
  - Externalizing problems (Caspi et al., 2003)
  - Problems with health (Wickrama et al., 2005)

Personality as a potential cause of adversity exposure

- A number of individual differences have been identified as predictors of stress generation and exposure to adversity
  - Cognitive vulnerabilities (e.g., rumination and pessimism) (Hamilton et al., 2013)
  - Depressive and anxious symptoms (Uliaszek et al., 2012)
  - Other psychological symptoms (Conway et al., 2012)
  - Neuroticism (Jeronimus et al., 2014; Uliaszek et al., 2012)

Dependent vs. independent adversity/ stressors

- It is important to distinguish two types of adversity
  - Dependent – the result of the person's own behavior
  - Independent – caused by something other than the person's own behavior
- The existing research on individual differences and adversity has focused mainly on dependent adversity exposure

The goal of the present study

- To investigate whether children's personality traits predict their exposure to adversity over the next 10 years in adolescence
  - Dependent adversities
  - Independent adversities: family and community
- We predicted that dependent adversities would be predicted by most childhood traits

Project Competence longitudinal study

PI: Ann Masten

205 children (8-12) from urban schools

29% minority

114 girls, 91 boys

Normative sample

3 waves of data: Ages 10 (T1), 17 (T2), 20 (T3)

Excellent retention (90% for age 30 follow-up)

Multi-method, multi-informant

Big Five traits at age 10

- **Extraversion:** Outgoing, leader, expresses self vividly
- **Neuroticism:** gets upset easily, worries, complains "no one loves me"
- **Conscientiousness:** Serious about schoolwork, rushes through work (reversed)
- **Agreeableness:** Kind, considerate, cruel or hurtful (reversed)
- **Openness to Experience:** Creative, persistent in face of difficulty, enthusiastic about activities

Adversity
Best, Reed, & Masten (1999)

- Life chart of adversities
  - Information from multiple sources: 1) maternal interviews and life events questionnaires and 2) participant life events questionnaires
- Time periods in life chart
  - Childhood adversity: Birth to pre-T1 (age 9)
  - T1 to T2 (age 10 to age 15)
  - T2 to T3 (age 16 to age 19)
- Adolescent adversity: average of two later time periods

Adversity ratings from life charts

- Life events categorized
- **Dependent**—a result of participants' behavioral or psychological functioning (e.g., failed a grade, suspended, frequent arguments with parents)
- **Independent**—not a result of participants' behavioral or psychological functioning
  - **Family** (e.g., parent fired, divorce, sibling in hospital)
  - **Community** (e.g., best friend moves, natural disaster)
- Overall rating made for life events for each time span
  - 1 – 7 scale (none to catastrophic)

Results

- Correlations between childhood personality and prior adversity (birth to age 9) and averaged adversity during adolescence (age 10 to age 19)
- Regressions predicting adolescent adversity exposure from childhood personality traits
- Three types of adversity
  - Dependent
  - Independent: Family
  - Independent: Community

Regressions predicting adversity in adolescence from childhood personality

- Stepwise regressions predicting each type of adversity in adolescence
  - Steps 1 and 2: gender and age
  - Step 3: childhood adversity of the same type
  - Step 4: one of the Big Five childhood personality traits
- Thus a total of 15 regressions (family, community, and dependent adversity for each of the Big Five traits)

Results: *Correlations between age 10 traits and dependent adversity*

	Childhood Adversity	Adolescent Adversity
Extraversion	-.12	.06
Neuroticism	.24**	.25***
Conscien.	-.15*	-.29***
Agreeable.	-.24**	-.38***
Openness	-.14	-.19**

Results: *5 Regressions predicting change in dependent adversity from childhood to adolescence*

STEP	R^2 change
1 Sex	.001
2 Age	.03** (B =.19)
3 Childhood dependent adversity	.02* (B =.16)
4 Extraversion	.01
Neuroticism	.04** (B =.22)
Conscientiousness	.11*** (B =-.36)
Agreeableness	.13*** (B =-.37)
Openness	.02* (B =-.16)

Results: *Correlations between age 10 traits and family adversity*

	Childhood Adversity	Adolescent Adversity
Extraversion	.04	-.02
Neuroticism	.18**	.16**
Conscien.	-.11	-.05
Agreeable.	-.22**	-.24***
Openness	-.15*	-.24***

Results: *5 Regressions predicting change in family adversity from childhood to adolescence*

STEP	R^2 change
1 Sex	.00
2 Age	.03* (B =-.17)
3 Childhood family adversity	.32***(B =.57)
4 Extraversion	.00
Neuroticism	.00
Conscientiousness	.00
Agreeableness	.01* (B =-.11)
Openness	.03** (B =-.17)

Results: *Correlations between age 10 traits and community adversity*

	Childhood Adversity	Adolescent Adversity
Extraversion	-.06	.15*
Neuroticism	.05	.03
Conscien.	.00	-.21**
Agreeable.	.04	-.14
Openness	-.04	.08

Results: *5 Regressions predicting change in community adversity from childhood to adolescence*

STEP	R^2 change
1 Sex	.00
2 Age	.00
3 Childhood family adversity	.05** (B =.22)
4 Extraversion	.03** (B =.18)
Neuroticism	.00
Conscientiousness	.05** (B =-.23)
Agreeableness	.02* (B =-.15)
Openness	.01

Conclusions: Dependent adversity

- As expected, predicted by all childhood traits except for Extraversion
  - *Increases* predicted by Neuroticism and Openness
  - *Decreases* predicted by Conscientiousness and Agreeableness
- This finding is relevant for the development of psychopathology
  - The childhood traits that particularly predict increases in stressful self-generated events are the same ones that predict onset of disorders

Conclusions: Family and community adversity

- Smaller subset of childhood traits predicted these types of adversity exposure
- Family
  - Decreases predicted by Agreeableness and Openness
- Community
  - Increase predicted by Extraversion
  - Decreases predicted by Conscientiousness and Agreeableness
- Raises questions about whether these are really “independent” of the child

Future directions

- Agreeableness seems especially important as a trait that predicts decreased exposure to adversity of all kinds.
- Other analyses from this sample suggest that overall "independent" adversity exposure in childhood predicts increases in Neuroticism into adulthood.
  - Transactional relationship between traits and adversity
- Mechanisms by which childhood traits influence adversity exposure need further study.
  - Potential target for treatment