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LONGITUDINAL CHANGE IN ATTACHMENT RELATIONSHIPS AND THEIR IMPLICATIONS FOR ADOLESCENT PSYCHOLOGICAL HEALTH

Adolescence

- A period of dramatic changes in cognition, biology, psychology, and society

- Increase in prevalence and incidence of psychological health issues (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005)

- Psychological health issues and health-risk behaviors precursor to more severe and disabling conditions later in life (WHO, 2010)

- Attachment theory a useful conceptual framework for understanding these relationships
  - Parent and peer relationships central to adolescent adjustment

Attachment Theory

- Bowlby (1969/1997) - it is necessary to explain normal attachment processes in order to fully understand maladaptive variations

- **Normative Approach**
- Sequential movement of attachment functions
- A peer replaces the parent as primary attachment figure by late adolescence

- **Individual Differences Approach**
- Attachment working models or expectancies
- Guide future interactions with others

Adolescent Psychological Health

- **Normative Approach**
  - Placement of fathers and friends in hierarchy predictive of psychological distress (Rosenthal & Kobak, 2010)
  - Peers no longer indicative of externalizing behaviors by late adolescence (Nomaguchi, 2008)

- **Individual Differences Approach**
  - Anxious attachment most predictive of poor psychosocial outcomes (Cooper , Shaver, & Collins,1998; Cooper, Albino, Orcutt, &Williams, 2004)
  - Anxiety more predictive of psychological distress (Mikulincer & Shaver, 2007)

The Present Study

- **Investigates the longitudinal model of attachment formation**

- Hazan and Zeifman (1994)
- Friedlmeier and Granqvist (2006)

- **Investigates the relative importance of different aspects of attachment for adolescent psychological health**

- Normative attachment reorganization
- Individual differences in attachment expectancies

Method

Wave One (*N* = 511)
  (164 Males; 347 Females)

Early Adolescents (*n* = 183):
- 64 Males; 109 Females
- 11.83 to 14.24 years (*M* = 12.83, *SD* = .51)
- 20.2% (27 Males; 10 Females) reported romantic relationships

Late Adolescents (*n* = 328):
- 90 Males; 238 Females
- 15.41 to 18.50 years (*M* = 17.13, *SD* = .61)
- 40.5% (28 Males; 105 Females) reported romantic relationships

- Predominantly from intact families of middle to upper SES class

Wave Two (*N* = 156)
  (29 Males; 127 Females)

Early Adolescents (*n*= 53):
- 9 Males; 44 Females
- 13.08 to 15.50 years (*M* = 13.81, *SD* = .45)
- 7.5% (0 Males; 4 Females) reported romantic relationships

Late Adolescents (*n* = 103):
- 20 Males; 83 Females
- 17.17 to 20.75 years (*M* = 18.35, *SD* = .65)
- 50.9% (10 Males; 42 Females) reported romantic relationships

- Predominantly from intact families of middle to upper SES class

Method

Wave One
- Self-report questionnaire packages administered in the classroom during normal school hours

Wave Two
- Online self-report survey completed in own time
- Two email reminders (one month apart)
- Lottery incentive (i.e., 5 pairs of movie tickets)

'**Youth and Relationships' Questionnaire Package contains:**
- Modified Attachment Network Questionnaire (modified ANQ; Doherty & Feeney, 2004)
- Experiences in Close Relationships – Revised – General Short Form (ECR-R-GSF; Wilkinson, 2010)
- Centre of Epidemiological Studies Depression Scale (CES-D; Radloff, 1977)
- Self-Liking/Self-Competence Scale – Revised Version (SLSC; Tafarodi & Swann, 2001)
- Adolescent Stress Questionnaire (ASQ; Byrne, Davenport, & Mazanov, 2007)
- School Attitude Scale (SAS; Wilkinson, & Kraljevic, 2004)

Results: All Adolescents

Means and Standard Deviations of Mean Attachment Strength to Target According to Cohort at Wave 1 and Wave 2

Target	Mother		Father		Friend	
	M	*SD*	*M*	*SD*	*M*	*SD*
Early Adolescents (*n* = 53)						
Wave 1	1.96	.86	.96	.75	1.30	.91
Wave 2	1.72	.96	.78	.79	1.54	.83
Late Adolescents (*n* = 103)						
Wave 1	.98	.92	.31	.53	1.89	.89
Wave 2	1.01	.96	.29	.49	1.69	.94

*$p < .05$.

Results: Late Adolescents with Romantic Partners

Means and Standard Deviations of Mean Attachment Strength to Targets for Late Adolescents with Romantic Partners at Wave 1 and/or Wave 2

Target	Mother		Father		Friend		Romantic Partner	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
All adolescents with Romantic Partners (*n* = 52)								
Wave 1	.84	.81	.30	.57	1.81	.91	1.23	1.30
Wave 2	.90	.84	.22	.41	1.42	.85	2.33	.81
Adolescents with Same Romantic Partner (*n* = 30)								
Wave 1	.72	.82	.20	.44	1.73	.90	1.74	1.27
Wave 2	.93	.88	.21	.45	1.32	.91	2.49	.69
Adolescents with Different Romantic Partner (*n* = 22)								
Wave 1	1.00	.80	.45	.69	1.91	.94	.53	.98
Wave 2	.84	.81	.23	.37	1.55	.76	2.11	.91

*p < .05.

Results: Normative Change

Criteria for Categorization for Changes in Attachment Relationships

Group	Definition for Categorization	N (%)	Early	Late
Normative/ Stable	(=/↑FrAF or =/↑BgfAF, and ↓MoAF) or (↑FrAF or ↑BgfAF, and = MoAF) or (=FrAF or =BgfAF, and =MoAf) or (↑FrAF or ↑BgfAF, and ↑MoAF)	90 (57.7)	30 (56.6)	60 (58.3)
Contracted	(↓FrAF or ↓BgfAF, and =/↑MoAF) or (=FrAF or = BgfAF, and ↑MoAF) or (↓FrAF or ↓BgfAF, and ↓MoAF)	66 (42.3)	23 (43.4)	43 (41.7)

Chi-square analyses revealed no significant differences in proportion of
- early and late adolescents, (x^2 (1)= .001, p < .98)
- male and female adolescents , (x^2 (1) = 1.81, p = .18)

Results: Psychological Health Comparison Over Time

Means and Standard Deviations of the Adjustment Variables for All Adolescents Over Time

| | Depression (*N* = 156) | | Self-esteem (*N* = 156) | | Stress (*N* = 156) | | School Attitude (*n* = 132) | |
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Wave 1	18.63	6.21	50.35	11.86	45.63	11.59	29.17	3.78
Wave 2	18.72	6.02	50.78	10.46	45.53	10.81	29.05	4.01

Results: Depression at Wave 2

Summary of Hierarchical Regression Analyses for Variables Predicting
    Depression Over 12 Months

	B	SEB	β	R^2	$R^2 Change$
Step 3					
Age	.68	.20	.25**		
Sex	-2.73	1.13	-.18*		
Attachment Change	1.31	.89	.11		
Anxiety	.23	.07	.29**		
Avoidance	.06	.07	.07	.21***	.11***
Step 4					
Depression W1	.35	.09	.36***	.29***	.07***

* $p < .05$. * $p < .01$. *** $p < .001$.

Results: Self-esteem at Wave 2

Summary of Hierarchical Regression Analyses for Variables Predicting Self-esteem Over 12 Months

	B	SEB	β	R^2	$R^2Change$
Step 3					
Age	-.91	.32	-.19**		
Sex	5.46	1.82	.20**		
Attachment Change	-.41	1.43	-.02		
Anxiety	-.51	.11	-.37***		
Avoidance	-.29	.11	-.20*	.33***	.24***
Step 4					
Self-esteem W1	.53	.07	.60***	.50***	.18***

* p < .05. * p < .01. *** p < .001.

Results: Stress at Wave 2

Summary of Hierarchical Regression Analyses for Variables Predicting Stress Over 12 Months

	B	SEB	β	R^2	R^2Change
Step 3					
Age	.58	.36	.12		
Sex	-8.19	2.05	-.30***		
Attachment Change	1.82	1.61	.08		
Anxiety	.48	.12	.33***		
Avoidance	-.05	.13	-.03	.20	.10***
Step 4					
Sex	-5.23	1.92	-.19**		
Stress W1	.42	.07	.45***	.35	.15***

** $p < .01$. *** $p < .001$.

Results: School Attitude at Wave 2

Summary of Hierarchical Regression Analyses for Variables Predicting School Attitude Over 12 Months

	B	SEB	β	R^2	R^2Change
Step 3					
Age	.17	.15	.09		
Sex	-.45	.84	-.04		
Attachment Change	1.29	.66	.16		
Anxiety	-.11	.05	-.21*		
Avoidance	-.13	.05	-.24*	.18***	.15***
Step 4					
Age	.31	.13	.17*		
Attachment Change	1.29	.57	.16*		
School Attitude W1	.61	.09	.56***	.40***	.22***

* $p < .05$. *** $p < .001$.

Discussion

- **Longitudinal sequence of attachment reorganization partially supported**

- Age-related trends at level of specific attachment figures
- Attachment to romantic partners from friends and not parents
- Attachment relationships in a "state of flux" (Friedlmeier & Granqvist, 2006)

- **Minimal impact on adolescent psychological health with one exception – School Attitudes**

- ↑ Age, ↑ Attachment Change, ↑ School Attitudes = ↑↑ School Attitudes
- Attachment processes more consequential for some domains of psychological adjustment (Cooper et al., 2004)
- Accords with Nomaguchi (2008)

Discussion

- **Individual differences in attachment expectancies more predictive of adolescent psychological health**

- Anxiety the better predictor of psychological health

- Predisposition to the negative self-schemas that precipitate beliefs and cognitions seen in psychopathology (Wilkinson, 2006)

- Individuals behave in ways consistent with predominant attachment expectancies in times of transition (Scharfe, 2007)

Limitations of modified ANQ

- Reliance on cognitive accessibility (Freeman & Brown, 2001)

- Alternative motivations for functions, i.e., Proximity-seeking, Separation Protest (Kerns, Tomich, & Kim, 2006)

- Functions not systematically assessed (Kobak, Rosenthal, Zajac, & Madsen, 2007)

- Contexts do not necessarily represent threats to attachment system (Rosenthal & Kobak, 2010)

=> Identification of attachment markers exclusive to adolescence

Limitations and Future Directions

- **Longitudinal study only a period of 12 months**
  - Between 5 to 10 years necessary to demonstrate the process of attachment reorganization
  - Psychopathology suggested to adopt a developmental progression over adolescence

- **Issues of attrition**
  - Retainment of larger samples of adolescents, particularly males and early adolescents in romantic relationships

- **Reliance on only one measure of normative adolescent attachment**
  - To use other forms of measurement such as cognitive experiments or naturalistic observations

Thinking and Talking about Adolescent Relationships

- Parents are likely to remain primary attachment figures even in late adolescence

- Experimentation with peers

- Identification of attachment markers exclusive to adolescence

- Evolution of attachment relationships have minimal impact on adolescent psychological wellbeing

The End

- Thank You very much

- Any questions or suggestions?

- Come visit the RAPH Lab @ the Research School of Psychology:
  http://psychology.anu.edu.au/RAPH_Lab/