

# Measures and instruments used in the Australian Temperament Project

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## 1. 1983: 4–8 MONTHS

### **Parent (N = 2443)**

#### 1. *Revised Infant Temperament Questionnaire*

Carey, W. B. & McDevitt, S. D. (1978). Revision of the Infant Temperament Questionnaire. *Paediatrics*, 60, 735–739.

Sanson, A., Prior, M., Oberklaid, F., Garino, E., & Sewell, J. (1987). The structure of infant temperament: Factor analysis of the Revised Infant Temperament Questionnaire. *Infant Behavior and Development*, 10, 97–104.

#### 2. *Mother's Overall Rating of the Child's Temperament (MOR)* (ATP devised measure)

#### 3. *Behaviour Problems* (ATP devised measure)

4. *Family Demographic Details*: birth order, number of children in family, marital status, living arrangements, parents' occupational and educational level, ethnic background.

### **Infant Welfare Sister (N = 2443)**

#### 1. *Nurse's Overall Rating of the Child's Temperament* (ATP devised measure)

#### 2. *Rating of Mother-Baby Pair Relationship* (ATP devised measure)

#### 3. *Birth and Developmental History* (ATP devised measure)

## 2. 1984: 1–2 YEARS (two-thirds of sample)

### **Parent (N = 1279)**

#### 1. *Toddler Temperament Questionnaire*

Fullard, W., McDevitt, S. C. & Carey, W. B. (1984). Assessing temperament in one to three-year old children. *Journal of Pediatric Psychology*, 9, 205–216.

Sewell, J., Oberklaid, F., Prior, M., Sanson, A., & Kyrios, M. (1988). Temperament in Australian toddlers. *Australian Paediatric Journal*, 24, 343–345.

#### 2. MOR (as above) (ATP devised measure)

#### 3. *Behaviour Problems Checklist (BPC)* (ATP devised measure)

#### 4. *Family Demographic Details* (as above)

## 3. 1985: 2–3 YEARS (two-thirds of sample)

### **Parent (N = 1360)**

#### 1. *Toddler Temperament Questionnaire*

Fullard, W., McDevitt, S. C. & Carey, W. B. (1984). Assessing temperament in one to three-year old children. *Journal of Pediatric Psychology*, 9, 205–216.

Sewell, J., Oberklaid, F., Prior, M., Sanson, A., & Kyrios, M. (1988). Temperament in Australian toddlers. *Australian Paediatric Journal*, 24, 343–345.

#### 2. MOR (as above) (ATP devised measure)

#### 3. *Behaviour Problems Checklist (BPC)* (ATP devised measure)

#### 4. *Behaviour Checklist*

Richman, N., Stevenson, J., & Graham, P. J. (1982). *From pre-school to school: A behavioural study*. London, UK: Academic Press.

5. *Aggression Questionnaire*

Arnold, G. (1984). *Aggression Questionnaire* (unpublished scale in Master of Psychology Thesis, LaTrobe University.)

6. *Family Demographic Details* (as above)

#### 4. 1986: 3–4 YEARS

**Parent (N = 1716)**

1. *Childhood Temperament Questionnaire*

Thomas, A., & Chess, S. (1977). *Temperament and development*. New York: Brunner/Mazel.

Sanson, A., Smart, D., Prior, M., Oberklaid, F., & Pedlow, R. (1994). The structure of temperament from three to seven years: Age, sex and sociodemographic differences. *Merrill-Palmer Quarterly*, 40, 233–252.

2. *Behar Pre-school Behaviour Questionnaire*

Behar, L., & Stringfield, S. (1974). A behavioral rating scale for the pre-school child. *Developmental Psychology*, 10, 601–610.

3. *Aggression Questionnaire*

Arnold, G. (1984). *Aggression Questionnaire* (as above)

4. *Ratings of Physical and Language Development and Problems* (ATP devised measure)

5. *Family Demographic Details* (as above)

#### 5. 1988: 5–6 YEARS

**Parent (N = 1581)**

1. *Childhood Temperament Questionnaire*

Thomas, A., & Chess, S. (1977). *Temperament and development*. New York: Brunner/Mazel.

Sanson, A., Smart, D., Prior, M., Oberklaid, F., & Pedlow, R. (1994). The structure of temperament from three to seven years: Age, sex and sociodemographic differences. *Merrill-Palmer Quarterly*, 40, 233–252.

2. *MOR* (as above) (ATP devised measure)

3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

4. *Child Health Questionnaire*

Eisen, M., Donald, C. A., Ware, J. E., Brook, R. H. (1980) *Conceptualization and measurement of health for children in the health insurance study*. Santa Monica, California: The Rand Corporation. R-2313–HEW.

5. *Family Demographic Details* (as above)

**Teacher (N = 1428)**

1. *Teacher Temperament Questionnaire*

Keogh, B., Pullis, M. E. & Cadwell, J. (1982). A short form of the Teacher Temperament Questionnaire. *Journal of Educational Measurement*, 19, 323–329.

2. *Teacher's Overall Rating (TOR)* (ATP devised measure)

3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

4. *School Readiness Questionnaire* (ATP devised measure)

## 6. 1990: 7–8 YEARS

### **Parent (N = 1727)**

#### 1. *Childhood Temperament Questionnaire*

Thomas, A., & Chess, S. (1977). *Temperament and development*. New York: Brunner/Mazel.

Sanson, A., Smart, D., Prior, M., Oberklaid, F., & Pedlow, R. (1994). The structure of temperament from three to seven years: Age, sex and sociodemographic differences. *Merrill-Palmer Quarterly*, 40, 233–252.

#### 2. MOR (as above) (ATP devised measure)

#### 3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

#### 4. *Child Health Questionnaire*

Eisen, M., Donald, C. A., Ware, J. E., Brook, R. H. (1980) *Conceptualization and measurement of health for children in the health insurance study*. Santa Monica, California: The Rand Corporation. R-2313–HEW.

#### 5. *Life Events Scale*

Smith, J., & Prior, M. (1995). Temperament and stress resilience in school-age children: A within families study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 168–179.

#### 6. *Family Demographic Details*

### **Teacher (N = 1264)**

#### 1. *Teacher Temperament Questionnaire*

Keogh, B., Pullis, M. E. & Cadwell, J. (1982). A short form of the Teacher Temperament Questionnaire. *Journal of Educational Measurement*, 19, 323–329.

#### 2. TOR (as above) (ATP devised measure)

#### 3. *Rutter Problem Behaviour Questionnaire* (as above)

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

#### 4. *Interpersonal Competence Scale*

Cairns, R. B. & Cairns, B. D. (1984). Predicting aggressive patterns in girls and boys: A developmental study. *Aggressive Behaviour*, 11, 227–242.

#### 5. *School Functions Questionnaire* (ATP devised measure)

#### 6. *ACER Word Knowledge Test*

Australian Council for Educational Research (1969). *Primary Reading Survey, Word Knowledge Test. Level BB*. Melbourne, Australia: ACER.

## 7. 1992: 9–10 YEARS

### **(N = 1536)**

#### 1. *EAS Temperament Questionnaire*

Buss, A., & Plomin, R. (1984). *Temperament: Early developing personality traits*. Hillsdale, NJ: Erlbaum.

#### 2. MOR (as above) (ATP devised measure)

#### 3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

#### 4. *Social Behaviour Questionnaire*

Over, R. (1992). *Social Behaviour Questionnaire* (unpublished scale)

#### 5. *Mentor Relationship* (ATP devised measure)

#### 6. *Family Demographic Details* (as above)

## 8. 1994: 11–12 YEARS

### **Parent (N = 1469)**

#### 1. *School-Age Temperament Questionnaire*

McClowry, S. G. (1995). The development of the School-Age Temperament Inventory. *Merrill-Palmer Quarterly*, 41, 271–285.

#### 2. MOR (as above) (ATP devised measure)

#### 3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

#### 4. *Social Skills Rating System*

Gresham F.M., & Elliott, S.N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

#### 5. *Peer Relationships*

Short Form of Peers scale from Walker, H. M., & McConnell, S. R. (1988). *Walker-McConnell Scale of Social Competence and School Adjustment*. Austin TX: Pro-Ed.

#### 6. *Deviant Peer Associations*

Adapted from Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Anti-social Boys*. Eugene, OR: Castalia.

#### 7. *Child Health Questionnaire* (as above)

Eisen, M., Donald, C. A., Ware, J. E., Brook, R. H. (1980) *Conceptualization and measurement of health for children in the health insurance study*. Santa Monica, California: The Rand Corporation. R-2313–HEW.

#### 8. *Mentor Relationship* (ATP devised measure)

#### 9. *Parental Monitoring* (ATP devised measure)

#### 10. *Family Demographic Details* (as above)

### **Teacher (N = 1232)**

#### 1. *Teacher Temperament*

Keogh, B., Pullis, M. E. & Cadwell, J. (1982). A short form of the Teacher Temperament Questionnaire. *Journal of Educational Measurement*, 19, 323–329.

#### 2. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

#### 4. *Social Skills Rating System*

Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

#### 5. *Peer Relationships*

Short Form of Peers scale from Walker, H. M., & McConnell, S. R. (1988). *Walker-McConnell Scale of Social Competence and School Adjustment*. Austin TX: Pro-Ed.

#### 6. *ACER Word Knowledge Test*

Australian Council for Educational Research (1972). *Primary Reading Survey, Word Knowledge Test. Level D Form R*. Melbourne, Australia: ACER.

### **Child (N = 1453)**

#### 1. *Self-Concept*

Marsh, H. W., Barnes, J., Cairns, L., & Tidman, M. (1984). Self-Description Questionnaire: Age and sex effects in the structure and level of self-concept for pre-adolescent children. *Journal of Educational Psychology*, 76, 940–956.

#### 2. *Berndt Friendship Questionnaire*

Berndt, T. J., & Perry, R. B. (1986). Children's perceptions of friendships as supportive relationships. *Developmental Psychology*, 22, 640–648.

#### 3. *Social Skills Rating System*

Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

4. *ATP adaptation of Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

## 9. 1995: 12–13 YEARS

### **Parent (N = 1274)**

1. *School-Age Temperament Questionnaire*

McClowry, S. G. (1995). The development of the School-Age Temperament Inventory. *Merrill-Palmer Quarterly*, 41, 271–285.

2. MOR (as above) (ATP devised measure)

3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

4. *Academic & Social Progress at School* (ATP devised measure)

5. *Eating Behaviours Inventory* (Short Form )

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34.

6. *Parent-Child Communication* (ATP devised measure)

7. *Parental Monitoring* (ATP devised measure)

8. *Family Demographic Details* (as above)

### **Child (N = 1228)**

1. *Self-Concept* (re physical appearance)

Marsh, H. W., Barnes, J., Cairns, L., & Tidman, M. (1984). Self-Description Questionnaire: Age and sex effects in the structure and level of self-concept for pre-adolescent children. *Journal of Educational Psychology*, 76, 940–956.

2. *Social Skills Rating System*

Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

3. *Rutter Problem Behaviour Questionnaire*

Rutter, M., Tizard, J., & Whitmore, K. (1970). *Education, Health and Behaviour*. London: Longmans.

4. *Academic and Social Progress at School* (ATP devised measure)

5. *Eating Behaviours Inventory* (Short Form)

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34.

6. *Child Communication Patterns* (ATP devised measure)

## 10. 1996: 13–14 YEARS

### **Parent (N = 1391)**

1. *School-Age Temperament Questionnaire*

McClowry, S. G. (1995). The development of the School-Age Temperament Inventory. *Merrill-Palmer Quarterly*, 41, 271–285.

2. MOR (as above) (ATP devised measure)

3. *Revised Behaviour Problem Checklist*

Quay, H. C. & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist*.

Odessa, FL: PAR Inc.

4. *Social Skills Rating System*

Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

5. *Peer Relationships* (ATP devised measure)

6. *Deviant Peer Associations*

Adapted from Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Anti-social Boys*. Eugene, OR: Castalia

7. *Academic and Social Progress at School* (ATP devised measure)

8. *Parenting Practices Questionnaire* (ATP devised measure)

9. *Pubertal Development* (ATP devised measure)

10. *Family Demographic Details* (as above)

11. *Parental Smoking and Drinking Habits* (ATP devised measure)

**Child (N = 1358)**

1. *Social Skills Rating System*

Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.

3. *Revised Behaviour Problem Checklist*

ATP adaptation, Quay, H. C. & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist*. Odessa, FL: PAR Inc.

4. *Short Mood and Feelings Questionnaire*

Angold, A., Costello, E. J., & Messer, E. C. (1995). Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International Journal of Methods in Psychiatric Research*, 5, 237–249.

5. *Academic and Social Progress at School* (ATP devised measure)

6. *Inventory of Peer Attachment* (Short Form)

Armsden, G. C. & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological wellbeing in adolescence. *Journal of Youth and Adolescence*, 16, 427–454.

7. *Deviant Peers* (ATP devised measure)

8. *Friendship Quality* (ATP devised measure)

9. *Inventory of Family Attachment* (Short Form)

Armsden, G. C. & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological wellbeing in adolescence. *Journal of Youth and Adolescence*, 16, 427–454.

10. *Delinquency Short Form*

Moffitt, T. E., & Silva, P. A. (1988). Self-reported delinquency: Results from an instrument for New Zealand. *Australian & NZ Jnl Criminology*, 21, 227–240.

11. *Smoking, Drinking and Other Drug Use* (ATP devised measure)

12. *Curiosity Scale*

Ainley, M. D. (1987). The factor structure of curiosity measures: Breadth and depth of interest curiosity styles. *Australian Journal of Psychology*, 39, 53–59.

13. *Emotional Control* (ATP devised measure)

## 11. 1998: 15–16 YEARS

### Parent

1. *School-Age Temperament Questionnaire*

McClowry, S. G. (1995). The development of the School-Age Temperament Inventory. *Merrill-Palmer Quarterly*, 41, 271–285.

2. *Five Factor Personality Questionnaire*

- Lanthier, R. P., & Bates, J. E. (1995). *Infancy era predictors of the big five personality dimensions in adolescence*. Paper presented at the 1995 Meeting of the Midwestern Psychological Association, Chicago, IL.
3. MOR (as above) (ATP devised measure)
  4. *Revised Behaviour Problem Checklist*  
Quay, H. C. & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist*. Odessa, FL: PAR Inc.
  5. *Teenager Substance Use*  
Adapted from Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Anti-social Boys*. Eugene, OR: Castalia.
  - 6 *Peer Relationships* (ATP devised measure)
  7. *Deviant Peer Associations*  
Adapted from Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Anti-social Boys*. Eugene, OR: Castalia.
  8. *Social Skills Rating System*  
Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.
  9. *Social Responsibility and Citizenship* (ATP devised measure)
  10. *Academic and Social Progress at School* (ATP devised measure)
  11. *Parenting Practices Questionnaire* (ATP devised measure)
  12. *Mentor Relationships* (ATP devised measure)
  13. *Teenager Eating Behaviours and Body Size* (Short Form)  
Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34.
  14. *Family Demographic Details*

### **Teenager**

1. *Five Factor Personality Questionnaire*  
Lanthier, R. P., & Bates, J. E. (1995). *Infancy era predictors of the big five personality dimensions in adolescence*. Paper presented at the 1995 Meeting of the Midwestern Psychological Association, Chicago, IL.
2. *Social Skills Rating System*  
Gresham F. M., & Elliott, S. N. (1990). *Manual for the Social Skills Rating System*. Circle Pines MN: American Guidance Service.
3. *Social responsibility and Citizenship* (ATP devised measure)
4. *Revised Behaviour Problem Checklist* (ATP adaptation of Quay & Peterson)
5. *Short form of Revised Manifest Anxiety Scale*  
Reynolds, C. R. & Richmond, B. O. (1997) What I think and feel: A revised measure of Children's manifest anxiety. *Journal of Abnormal Child Psychology*, 23, 15–20.
6. *Short Mood and Feelings Questionnaire*  
Angold, A., Costello, E. J., & Messer, E. C. (1995). Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International Journal of Methods in Psychiatric Research*, 5, 237–249.
7. *Life at School* (Short Form)  
ACER School Life Questionnaire 1984. Reported in Ainley, J., Reed, R., & Miller, H. (1986). *School organisation and the quality of schooling: A study of Victorian Government secondary schools*. ACER Research Monograph Number 29.
8. *Deviant Peer Associations* (ATP devised measure)
9. *Friendship Quality* (ATP devised measure)
10. *Delinquency* (Short Form)  
Moffitt, T. E., & Silva, P. A. (1988). Self-reported delinquency: Results from an instrument for New Zealand. *Australian & NZ Jnl Criminology*, 21, 227–240.

11. *Smoking, Drinking and Other Drug Use* (ATP devised measure)

12. *Sensation Seeking*

Zuckerman, M. (1994). *Behavioral Expressions and Biosocial Bases of Sensation Seeking*. Cambridge, UK: Cambridge University Press.

13. *Emotional Control* (ATP devised measure)

14. *Eating Behaviours and Body Image* (Short Form)

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34.