

Forces of Nature: Are there strengths that underlie the challenges of a "difficult temperament" in infancy and early childhood?

Macall Gordon, M.A., Dept. of Applied Psychology, Antioch University Seattle



BACKGROUND

Approximately 10% of infants can be classified as difficult (Thomas & Chess, 1977) (also *irritable, fussy, temperamentally frustrated, or unsettled*). Such terms refer to a constellation of traits related to difficulties with self-regulation and heightened reactivity resulting from low sensory thresholds and higher levels of emotional intensity (Rothbart, 2011). Temperamentally difficult infants typically have eating and/or sleeping problems (Novosad et al., 1999), are more reactive, and less able to calm down without assistance (Calkins et al., 2002). As a result, parents experience higher rates of stress (e.g. Oddi et al., 2013), depression, and anxiety (e.g. Britton, 2011).

Difficult temperament in infancy has also been strongly linked to later externalizing disorders, ADHD (Hemmi, Wolke, & Schneider, 2011), obesity (Anzman-Frasca, Stifter, & Birch, 2012), and later

problems inschool settings (Stright et al., 2008)

Popular parenting discourse, however, has identified various positive aspects of a challenging temperament. These constructions (e.g. *active/alert*, Budd, 2003; *highly sensitive*, Aron, 2002; *high needs*, Sears & Sears, 1996; *spirited*, Kurcinka, 1999) highlight both the challenge and the potential value of difficult traits. A qualitative study found that, though parents of temperamentally-intense children reported significant problems with sleep, self-soothing, and tantrum behaviors, they also reported high levels of alertness, perceptiveness, empathy, and precocious verbal and/or motor ability (Kurcinka, 2011).

Are there, then, potential positive aspects of difficult infant temperament that have been overlooked? Further, is it possible that the same features of sensitivity, perceptiveness, etc. underlie both the challenging and positive traits?

METHODS

Recruitment: Invitations to participate in this online survey were targeted at parents of young children via announcements on relevant Facebook groups and mailing lists. The sampling frame included parents of infants (6- to 18-months) and children (2- to 6-years). The two frames were intended to capture both current experiences, as well as some limited assessment of experience over time. The two frames will also allow for later examination of age-related differences in temperament and behavior.

Survey Instrument: The survey was created and deployed on SurveyMonkey.com. Questions were largely response scale format with ranges between 1 and 10. Parents were asked about early infancy, aspects of temperament, behavior, sleep, and parenting variables. Several open-ended questions inquired about parents' impressions of their child's birth, development, temperament, and sleep behavior. Qualitative questions asked for parents' assessment of their child's temperament and their experiences of parenting in short and longer format open-ended questions.

Sample: A total of 856 surveys were completed.

Child group: $n=452$;
Mean age= 43.1 mos.; SD=15.38

Infant group: $n=404$;
Mean age=11.2 mos; SD=3.8

Parent Age: $M=32.4$ yrs.; SD=6.42

Education: 40.1% College diploma,
36.7% Graduate school

Income: $Mdn = \$76-100,000$;
Mode: \$41-75,000

Heritage:

African/Mixed	0.8%
Latinx/Hispanic/Mixed	5.9%
American Indian/Mixed	3.4%
Middle Eastern/Mixed	0.8%
Black/Mixed	1.9%
Southeast Asian/Mixed	2.6%
East Asian/Mixed	2.0%
White/European	82.3%

RESULTS

Data Analysis: A simple linear regression was used to model the influence of the score on the "Difficult" subscale of the Infant Characteristics Questionnaire (ICQ)(x) on a variety of outcomes (y). Differences between mean ICQ scores on categorical variables were analyzed with independent samples *t*-tests. Frequencies were computed for some of the qualitative data. Thematic analysis will be conducted in future research.

consistent with research...

Scores on the Difficult subscale were predictive of problems with intensity, regulation, and sleep.

Intensity

Strong emotional reactions 1.26+(.21xICQ), $R^2=.50, p<.001$
(1) Not strong/Fairly even tempered
(10) Very strong/Everything is a big deal

Upset quickly 0.85+(.23xICQ), $R^2=.49, p<.001$
(1) It takes a lot to really upset them
(10) Very quickly/Goes from zero to sixty

Meltdowns -0.65+(.21xICQ), $R^2=.49, p<.001$
(1) Significantly less than expected
(10) Significantly more than expected

Frustration (CHILD ONLY) 1.8+(.19xICQ), $R^2=.44, p<.001$
(1) Doesn't seem bothered. (10) Gets extremely frustrated

Self-soothing ability 1.42+(.17xICQ), $R^2=.35, p<.001$
(1) Really good; (10) Needs a lot of help

Need for interaction

Ability to be left alone .66+(.16xICQ), $R^2=.26, p<.001$
(1) Not a problem
(10) Gets extremely upset (more than expected for age)

How much interaction do they want/need? 3.32+(.13xICQ), $R^2=.32, p<.001$
(1) Much less than other children the same age
(10) Significantly more than other children

How interested in toys? 1.13+(.12xICQ), $R^2=.16, p<.001$
(1) Loves them/plays for a long time
(10) Not that interested or loses interest quickly

Sleep Problems

Easy fall asleep 1.72+(.17xICQ), $R^2=.25, p<.001$
(1) They would just conk out; (10) Didn't want to go to sleep ever

Go to sleep, stay asleep 1.14+(.19xICQ), $R^2=.26, p<.001$
(1) Excellent, just a few problems
(10) Terrible, sleep was a huge struggle

How much bedtime effort 0.81+(.18xICQ), $R^2=.23, p<.001$
(1) Not very much; (10) A significant amount

How much nightwaking? 2.09+(.15xICQ), $R^2=.15, p<.001$
(1) Slept through the night early and easily; (10) Extremely wakeful

How much effort to get baby back to sleep? 1.70+(.16xICQ), $R^2=.18, p<.001$
(1) Almost none/minimal help; (10) Consistently needed a lot of help

Sleep training strategies 1.87+(.06xICQ), $R^2=.08, p<.001$
(1) One; (6) >5

Were you successful? 0.95+(.15xICQ), $R^2=.12, p<.001$
(1) Definitely yes; (7) Definitely no

Parental Toll

Level of Emotional Fatigue 1.82+(.18xICQ), $R^2=.32, p<.001$
(1) No, or very little emotional fatigue
(10) Significant emotional fatigue

Level of Physical Fatigue 2.74+(.16xICQ), $R^2=.30, p<.001$
(1) No, or very little physical fatigue
(10) Significant physical fatigue

Did you have or suspect PPD or PPA in the first year? 1.42+(.10xICQ), $R^2=.11, p<.001$
(1) No (4) Possibly (7) Yes

Do you suspect it now? 0.71+(.09xICQ), $R^2=.11, p<.001$
(CHILD ONLY) (1) No (4) Possibly (7) Yes

Parental Competence 6.06+(.58xICQ), $R^2=.47, p<.001$
e.g. I feel like I know what I'm doing; This is similar to expectation; This is similar to other parents; Parenting comes easy to me (Range 6-36; Higher score= lower sense of competence)

related variables...

Colic (Y/N) $t(450)=11.0, p<.001$

Reflux (Y/N) $t(852)=16.62, p<.001$

Food intolerance (Y/N) $t(355)=4.66, p<.001$

Snoring/Apnea (Y/N) $t(402)=3.15, p=.002$

Total # of problems $-0.11+(.07xICQ), R^2=.17, p<.001$

Difficult Labor $3.99+(.05xICQ), R^2=.03, p<.001$

Difficult Birth $4.06+(.05xICQ), R^2=.02, p<.001$

however...

A variety of potentially positive traits were also related to "difficult" temperament

PERCEPTIVENESS

Notice subtle smells, sounds, textures, etc. 2.37+(.08xICQ), $R^2=.05, p<.001$
(1) Doesn't really seem to notice; (10) Notices things that others don't

Notice small, subtle changes in environment 3.26+(.08xICQ), $R^2=.05, p<.001$
(1) Doesn't seem to notice; (10) Notices even tiny details

PERSISTENCE

How easily will they give up on something they want? 2.63+(.14xICQ), $R^2=.26, p<.001$
(1) Usually with minimal or no resistance; (10) They never give up

Question the reason/logic for rules (CHILD ONLY) 3.92+(.05xICQ), $R^2=.02, p=.003$
(1) Not more than is normal for age; (10) All the time/fairly constantly

SENSORY SENSITIVITY

As an infant, startle? 1.36+(.13xICQ), $R^2=.17, p<.001$
(1) No, not at all; (10) Startled frequently/easily

Sensitive to seams in socks, tags, textures of foods, etc.? 0.57+(.14xICQ), $R^2=.16, p<.001$
(1) No, not really; (10) Yes, definitely

React to loud noises, etc.? 2.2+(.09xICQ), $R^2=.08, p<.001$
(1) Doesn't really react; (10) Reacts very strongly

EMOTIONAL SENSITIVITY

Pick up on distress of others? (Child group: n.s.) 3.28+(.09xICQ), $R^2=.10, p<.001$

Notice exclusion or bullying? (CHILD ONLY) 3.36+(.05xICQ), $R^2=.02, p<.001$

Perfectionism (CHILD ONLY) 3.15+(.09xICQ), $R^2=.06, p<.001$

Fairness/ethical behavior (CHILD ONLY) 3.9+(.04xICQ), $R^2=.01, p<.001$

Nonsignificant variables included: Memory, intuitiveness, verbal ability, asking a lot of questions, asking "surprising" questions, amount of creative activity.

qualitative results

Subjects were asked to write three words to describe their experience of parenting this child.

The two groups had contrasting responses. Top words: **Exhausting, Challenging, Frustrating, Rewarding, and Loving/Joyful**. Low Difficult parents, on the other hand, reported that parenting was **Easy, Fun, Joyful, Amazing, and Rewarding**.

Open-ended responses suggested that parents understood that challenging behaviors might be by-products of nascent abilities.

"He's a force of nature – good and bad." "He is the most fun kid I've met at his age—also the most intense and exhausting. He is super smart, intuitive, and loving, but struggles with anger. . . ." (27 months)

"I'm both amazed and exhausted by how much my child, knows, feels, and does. I question all the time if I'm good enough to handle her....She's the biggest challenge I've ever faced, but the most proud of anything I have ever done." (36 mos.)

"She's my Sour Patch Kid—super sassy and sour; but can be the sweetest and most polite little girl...It's like her personality is too big for her little body." (45 mos.)

DISCUSSION

It is clear that children considered temperamentally "difficult" have a variety of significant challenges, including sleep difficulties and self-soothing deficits. However, these children also appear to have higher levels of sensitivity, perceptiveness, and persistence that may help to explain these difficulties.

Parents of challenging children struggle significantly with the amount of energy these children require. Indeed, their experience differs dramatically from parents of non-difficult children for whom the parenting journey is "easy," "fun," and "joyful." While parents seem to appreciate the underlying abilities their children have, they also appear to be in need of support and guidance about how to cope with the higher level of energy and skill these children require.

Contact: Macall Gordon, M.A., Antioch University Seattle • mgordon@antioch.edu