An aspect of an individual's general make-up characterized by dispositions toward particular patterns of emotional reactions, mood shifts and levels of sensitivity resulting from stimulation. The standard view is that temperament has a significant genetic disposition largely because fairly striking differences in reactivity to stimulation can be observed in neonates, especially to stimuli such as loud noises, bright lights, sudden movements, touching and physical contact. Similar differences have been observed in the young of many other species reinforcing the importance of evolutionary mechanisms.

Temperament is the emotional and regulatory core of personality, incorporating traitlike individual differences in emotional, attentional, and motor reactivity and in self-regulation. Temperament is biologically based, present early in life, and develops through a person's interactions and experiences with the environment. As self-regulation develops across childhood, individuals gain more conscious control of their emotions and activity, influencing the expression of temperament. This entry describes dimensions of temperament, stability of temperament, links to personality, measurement, and the role of temperament in human relationships.

Mary Rothbart depicts temperament as having two major components: emotion reactivity and emotion regulation. Emotion reactivity involves individual differences in physiological and behavioral responses, such as exuberance when receiving a gift or fearfulness when meeting new people. Emotion regulation refers to higher-order attentional processes and cognitive control in response to emotion reactivity. Temperamental effortful control, for example, is the ability to suppress a dominant response to perform a secondary response, such as counting to 10 when angry rather than striking another person. Temperament is rooted in the infant's neurophysiology and shaped by both genetic and environmental factors. With development, individuals gain more conscious control of their emotions and activity. By interacting with the environment over time, temperament evolves into a predictable pattern of behavior or personality style. Thus, temperament is conceptualized as constitutionally based individual differences in emotional and motor reactivity and self-regulation.

The study of temperament has a long history in the field of developmental psychology, and Rothbart’s theory stems from the pioneering work of two psychiatrists, Alexander Thomas and Stella Chess. Based on parental descriptions of infant behavior and observations across a number of different contexts, Thomas and Chess identified nine dimensions to describe characteristic ways of responding emotionally and behaviorally to environmental events. These nine dimensions are activity level, rhythmicity or regularity of functioning, approach-withdrawal in novel situations, intensity of emotional expression, overall valence of mood, adaptability to changes in routine, persistence, distractibility or soothability, and threshold of sensory responsiveness.
Thomas and Chess formed three temperamental types from these dimensions: easy, slow-to-warm up, and difficult. Easy children are high in rhythmicity (high regularity in sleep, eating, defecating), high in adaptability (accept change readily), and not overly active, intense, or moody. Slow-to-warm-up children have slower adaptability and higher negative responsivity. Difficult children are characterized by low rhythmicity (irregularity in biological functions), low adaptability, and high negative moodiness. Children classified as difficult are more likely to experience later behavioral problems than are easy or slow-to-warm-up children; however, the prediction depends on the goodness of fit with their environment.

Goodness of fit refers to the match between the child's temperament and the demands of the situation or expectations of others. A good fit predicts healthy development, whereas a poor fit generates stress and leads to problem behaviors and disorders. For example, highly irritable children need predictable family routines to assist them in regulating these behaviors, whereas children low on irritability are less sensitive to unstructured environments.

Contemporary empirical studies have demonstrated that Thomas and Chess's nine dimensions of temperament are overlapping; thus, Rothbart's two components of temperament are more typically used in research today.

**Stability of Temperament**

Temperament is relatively consistent across situations and stable over time, developing through interactions with the environment. In general, temperament has modest stability during infancy and toddlerhood and then shows an increase in stability around age 3, when emotion regulation plays a larger role in behavior. Although attentional orienting is quite stable from infancy on, other dimensions are less stable. In infancy, approach-withdrawal, sociability, shyness, and behavioral inhibition (wariness of new people or situations) are moderately stable, with negative emotionality being less stable in infancy and childhood. Activity level is not stable in infancy, but becomes more so with age.

Twin studies have found genetic influences on temperament account for stability in behavioral inhibition, shyness, attentional orienting, sociability, and activity level. Changes in temperament across childhood appear to result from environmental influences, with shyness increasing when, for example, a child moves to a new school.

By the preschool years, temperament is stable enough to predict adult personality, but there is still some change across middle childhood and adolescence. Temperament is shaped in part by the ways individuals engage and evoke responses from their environments as well as how they interpret their experiences. For example, anxious and irritable children tend to perceive negative events in their lives as more threatening than do other children. Conversely, temperament affects responses from other people. For example, mothers of irritable, difficult-to-soothe infants experience lower confidence and greater depression than do mothers of easy infants, further shaping the development of temperament.

**Temperament and Personality**

Along with experience, temperament influences the development of personality. Personality is a broader concept, including habits, skills, goals, values, needs, the content of individual thought, and the perception of self in relation to others. Thus, personality is a characteristic pattern of thinking, feeling, and acting. The Big Five Personality factors, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness, can be predicted by early temperament. Specifically, childhood fearfulness and irritability predict adult neuroticism, whereas childhood positive approach behaviors predict openness, agreeableness, and extraversion, and childhood inhibitory control predicts adult
Conscientiousness. Although temperament and personality are not the same thing, temperament forms the affective core of later personality.

**Assessment of Temperament**

Temperament is most commonly assessed through parental report, examiner report, or behavioral observation techniques. Behavior observation paradigms include both structured, such as Hill Goldsmith and Mary Rothbart’s Laboratory Temperament Assessment Battery, and unstructured paradigms, such as observations on the playground. Each method of assessment comes with advantages and disadvantages. Parental report is inexpensive and taps the extensive knowledge of parents who have observed their children's responses to a variety of stimuli in several different contexts. However, parental report is limited in that parents only observe their children's behavior when in their own presence and children may act differently when not with their parents. Although parents are high-quality informants of their own children's behavior, parents' responses might be influenced by their own personalities or psychopathology or they may adjust their responses to create a particular impression on the researcher. Structured observational assessments, although expensive, allow precise control, but are limited to behaviors that can be elicited in the laboratory setting.

Temperament is hierarchically organized and can be assessed on various levels. Temperament researchers come from a variety of perspectives, from emphasizing the importance of mother's perceptions of her child's temperament to considering biological indicators or correlates such as heart rate and stress hormone levels. A complete assessment of temperament typically involves a combination of multiple approaches to maximize validity and minimize the weaknesses of any one approach.

**Ties to Attachment Style and Relationships**

Temperament has an impact on infant attachment to caregivers, and likewise, attachment can affect temperament. Securely attached infants are appropriately soothed and regulated by their caregivers, whereas insecurely attached infants have a less positive and more unstable bond with their care-givers. Although temperament is associated with behavior during the Strange Situation attachment assessment, it does not relate to the attachment classification of secure or insecure. The Strange Situation is a series of parental separations and reunions with their infant that predicts future relationships. With preschool children, negative temperamental reactivity is modestly associated with attachment assessed using Q-sort methods (raters sort descriptive statements into categories indicating how typical the descriptions are of a child). In addition, attachment classification is associated with later temperament, and an interaction of emotion reactivity and attachment classification influences later fear of novelty. Thus, temperament and attachment are different constructs, yet related to the extent that they both influence future relationships.

Temperament plays a key role in forming parental, sibling, peer, and romantic relationships. Children's temperament can elicit different responses from caregivers. An environment that might be a good fit for one child may provide a poor fit for a sibling with a different temperament. For example, difficult children are more negatively reactive to parental punishment. Also, parents who gently discourage shyness have children who are less shy later on. Temperament also influences the quality of the developing parent-child relationship. If the parent or child has higher levels of negative mood, the parent-child relationship can be marked by increased conflict and decreased warmth and connectedness.

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Sibling relationships are also influenced by temperament. Differences in sibling temperament (i.e., withdrawal, unadaptability, mood, persistence, and threshold) have been linked to more sibling conflict. Recent studies show that similarities in difficult temperament are related to more conflict, whereas similarities in easy temperament produce less conflict. When there is a temperament mismatch, regardless of the age and sex of siblings, siblings with strongly active and intense temperaments have more sibling conflict. The positive influence of an easy temperament is stronger if it belongs to the older sibling. Traditionally, the older sibling dominates throughout middle childhood, so an easy temperament in a younger sibling would not have the same effect on the relationship. Older siblings also change the overall family environment and affect the younger sibling’s goodness of fit; the same temperament traits that suited the older sibling well may not be as adaptive for a younger sibling.

Temperament also affects the development and quality of peer relationships. High activity level, low regulation, and negative mood result in more negative peer experiences that lead to peer rejection, neglect, and bullying. Through direct modeling, peers play an integral part in social development.

Temperament is also associated with romantic relationships in adulthood. Higher levels of temperamental regularity and adaptability are related to more successful romantic relationships, whereas higher levels of negative moodiness and anger have been linked to dating violence and less successful relationships. Contrary to the popular belief that *opposites attract*, the evolutionary perspective of positive assortative mating holds that *like attracts like*. Individuals are naturally attracted to others who display similar characteristics because of the increased likelihood of successful mating and reproduction. For example, according to this perspective, a well-regulated individual would seek or prefer a partner who also exhibits good regulation. Temperament is a stable individual characteristic that influences all relationships.

**See also**
Agreeableness, Anger in Relationships, Approach and Avoidance Orientations, Emotion in Relationships, Emotion Regulation, Developmental Influences, Extraversion and Introversion, Neuroticism, Effects on Relationships, Personality Traits, Effects on Relationships

**Further Readings**

- Scarr, S.; McCartney, K. How people make their own environments: A theory of genotype-
APA

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https://search.credoreference.com/content/topic/temperament

Harvard

MLA