

young children who looked at the marshmallow were engaging in “hot thoughts.” The young children who engaged in cool thoughts were more likely to eat the marshmallow later or wait until the experimenter returned to the room. In one study using the delay of gratification task just described, longer delay of gratification at 4 years of age was linked to a lower body mass index (BMI) three decades later (Schlam & others, 2013).

Researchers have found that advances in executive function in the preschool years are linked with math skills, language development, and school readiness (Blair & Razza, 2007). For example, a recent study found that young children who showed delayed development of executive function had a lower level of school readiness (Willoughby & others, 2016).

Parents and teachers play important roles in the development of executive function (Cheng & others, 2018; Duncan, McClelland, & Acock, 2017). Ann Masten and her colleagues (Labella & others, 2018; Masten, 2013; Masten & others, 2008; Monn & others, 2017) have found that executive function and parenting skills are linked to homeless children’s success in school. Masten believes that executive function and good parenting skills are related. In her words, “When we see kids with good executive function, we often see adults around them that are good self-regulators. . . . Parents model, they support, and they scaffold these skills” (Masten, 2012, p. 11). For example, researchers have found that secure attachment to mothers during the toddler years was linked to a higher level of executive function at 5 to 6 years of age (Bernier & others, 2015).

Some developmental psychologists use their training in areas such as cognitive development to pursue careers in applied areas. To read about the work of Helen Hadani, an individual who followed this path, see the *Careers in Life-Span Development* profile.



How did Walter Mischel and his colleagues study young children's delay of gratification? In their research, what later developmental outcomes were linked to the preschoolers' ability to delay gratification?
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Careers in life-span development

Helen Hadani, Developmental Psychologist, Toy Designer, and Associate Director of Research for the Center for Childhood Creativity

Helen Hadani obtained a Ph.D. from Stanford University in developmental psychology. As a graduate student at Stanford, she worked part-time for Hasbro Toys and Apple testing children’s software and computer products for young children. Her first job after graduate school was with Zowie Intertainment, which was subsequently bought by LEGO. In her work as a toy designer there, Helen conducted experiments and focus groups at different stages of a toy’s development and also studied the age-effectiveness of the toy. In Helen’s words, “Even in a toy’s most primitive stage of development . . . you see children’s creativity in responding to challenges, their satisfaction when a problem is solved or simply their delight in having fun” (Schlegel, 2000, p. 50).

More recently, she began working with the Bay Area Discovery Museum’s Center for Childhood Creativity (CCC) in Sausalito, California, an education-focused think tank that pioneers new research, thought-leadership, and teacher training programs that advance creative thinking in all children. Helen is currently the Associate Director of Research for the CCC.



Helen Hadani, a developmental psychologist, has worked as a toy designer and is currently directing research on creativity at a children’s museum.

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