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The Strengths of People in Poverty

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Abstract

Psychological variables are often statistically different, on average, in people living in poverty compared to those living in affluence. The default academic response to this pattern is often the deficit model: poverty damages or impairs brain function, which leads to poor performance that only exacerbates the poverty. Deficits and damage are real phenomena. However, there are also other possibilities: people living in poverty may have made reasonable psychological responses to their circumstances; or have developed strengths that enhance their ability to cope with challenges in their lives. We illustrate these points by discussing the linked examples of time preference, early reproduction, and hidden talents. We argue for a balanced approach to the psychology of poverty that integrates deficit and strength-based models. Future research could focus on the ways in which impairment and adaptation interact.

Keywords: poverty; socioeconomic status; time preference; reproductive decisions; hidden talents.

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Introduction

According to the APA Task Force on socioeconomic status: “Deficit models dominate much of the psychological literature” (2007, p. 25). Deficit models describe how poverty might impair brain structure and function in ways that undermine social and cognitive abilities. Understanding the development of deficits is crucial to preventing and repairing deficits; which, in turn, can help to reduce social inequality and improve health, wealth, and wellbeing (Duncan, Magnuson, & Votruba-Drzal, 2017). However, the deficit model is incomplete. Some of the behavior by people in poverty characterized in the literature as ‘negative’ might actually be ‘reasonable’ in context. For instance, if current need is high and the future is uncertain, it can be beneficial to spend money now rather than save for the future (Pepper & Nettle, 2017; Sheehy-Skeffington, 2018). In addition, people in poverty may develop ‘hidden talents’; that is, intact or enhanced abilities for solving recurrent challenges in their environments (Ellis, Bianchi, Griskevicius, & Frankenhuis, 2017; Frankenhuis & de Weerth, 2013). A current direction in psychological science is to acknowledge such strengths and investigate them. The deficit model is thus being complemented with models of reasonable responses and hidden talents.

This broader perspective has merit for several reasons. First, it has generated new ideas and predictions, which have advanced knowledge (see review below). Second, it can inform policy and intervention. For instance, learning and employment environments could be designed to leverage strengths that develop in response to adversity (Ellis et al., 2017). Third, focusing only on deficits can be stigmatizing, and by lowering student self-esteem, and motivation as well as teacher expectations, create self-fulfilling prophecies

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(Rubie-Davies, 2014). Finally, a theoretical frame that acknowledges strengths can counteract publication bias. Without this frame, scholars are more likely to interpret non-deficit results (i.e., intact or enhanced performance) as a fluke and journals might hesitate to publish such results, when actually the data offer genuine insight. With this frame, scholars who unexpectedly find non-deficit results can describe this violation of their predictions as such, and then consider whether performance reflects adaptation to context.

The majority of scientists have developed in affluent conditions (Lee et al., 2016). For them, it might be more difficult to recognize the strengths of people living in poverty than to spot their weaknesses. Or, scientists might misconstrue a behavior as a deficit, when it is a reasonable response or skill in the context of poverty (as we discuss below). However, in studying human behavior in different contexts, social scientists need to be able to transcend their own cultural frames. We agree with social anthropologists, critical sociologists, and cultural psychologists, who argue that disciplines like developmental and educational psychology are replete with normative assumptions. These disciplines frequently define what is ‘normal’ or ‘good’ as that which is typical of privileged classes (Geronimus, 2004; Valencia, 2010). Through that lens, other groups often end up looking deficient.

This article presents theories and findings from three linked areas in which research on strengths is taking place: time preference, reproductive decisions, and hidden talents. Our review focuses on reasonable responses and talents. We discuss deficits, but not as extensively. After reviewing research, we provide brief reflections in our Conclusion. Throughout, we use the word ‘reasonable’ to mean that behaviors can be

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understood as a response to the costs and benefits associated with living in poverty, as opposed to, for instance, a pathology or failure of willpower. This word does not imply that people arrive at their decisions via extensive or conscious reasoning (more on this later).

Time preference

About 736 million people worldwide live in poverty (World Bank, 2018). By definition, people in poverty struggle to meet basic needs, have less control over their environment, and are exposed to higher levels of violence. Due to such hardships, they have higher rates of disability and death at all ages. Disadvantageous morbidity-mortality schedules are, in turn, associated with an increased focus on the present. Compared with people living in affluence, people in poverty are more focused on current threats and opportunities, discount the future more (i.e., prefer sooner-smaller over later-larger rewards), and orient less towards distant goals (Daly & Wilson, 2005; Kruger, Reischl, & Zimmerman, 2008; Mullainathan & Shafir, 2013; Pepper & Nettle, 2017; Sheehy-Skeffington, 2018). This focus on the present might in some cases cause lower levels of investment in health, education, and savings (studies reviewed in Frankenhuis, Panchanathan, & Nettle, 2016; Pepper & Nettle, 2017).

As a focus on the present is associated with negative outcomes later in life (e.g., addiction, crime, debt, and unstable social relationships), researchers often use pejorative terms to describe it ('impatience', 'shortsightedness', or 'failure to delay gratification'), implying dysfunction (Daly & Wilson, 2005). Researchers working from a deficit perspective do acknowledge that being focused on present needs helps people to 'make ends meet'. Nonetheless, they stress that this focus is detrimental in the long term, even

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2
3 for people living in chronic poverty, because it undermines investment in health,
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5 education, and savings – behaviors that can make poverty worse. When poverty leads to
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7 behavior that makes poverty worse, this is called a ‘poverty trap’ (Haushofer & Fehr,
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9
10 2014).

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12 We agree that a focus on the present carries long-term costs and might lead to
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14 poverty traps, but not that such a focus is on the whole detrimental for all people. Some
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16 people obviously need to use their resources immediately to meet basic needs (e.g., food,
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18 shelter), or live in conditions in which future rewards are unlikely to materialize.
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20 Mathematical modeling shows that in such conditions, a focus on the present can lead to
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22 higher long-run payoffs (Stephens, 2002; Tomlin, Rand, Ludvig, & Cohen, 2015). This
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24 theoretical finding aligns with human behavior. Mischel (1974) showed that adults prefer
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26 immediate rewards when they believe a promised future reward is unlikely to materialize.
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28 Experimental studies show that children adjust delay their gratification in reasonable
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30 ways, depending on the reward probability and magnitude (Kidd, Palmeri, & Aslin, 2013;
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32 Lee & Carlson, 2015). And, more ‘impulsive’ children (Humphreys et al., 2015) and
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34 adults (Otto, Markman, & Love, 2012) indeed achieve higher payoffs when operating in
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36 unpredictable task environments.
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42 Why would the same principles that apply on (short) decision-making timescales
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44 not also apply on (longer) developmental timescales? In both cases, the ‘smart’ thing to
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46 do depends on the expected payoffs of options, which depend on the structure of the
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48 environment. To illustrate, we turn to the reproductive decisions of women living in
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50 poverty.
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Reproductive decisions

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3 Since the 1970s, it is a widely held prescriptive norm in America that teenagers
4 should not have children. The persistence of teenage childbearing has been a puzzle and a
5 source of social concern (Geronimus, Bound, & Waidmann, 1999). In welfare reform
6 debates in the 1990s, there have been proposals ranging from discouraging teenage
7 childbearing (e.g., by placing extra requirements, such as finishing high school, on
8 teenage mothers who receive benefits, or eliminating eligibility for welfare for them and
9 their children all together), to placement of children from mothers in financial need into
10 foster care (!) (Geronimus, 1997).

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12 Deficit models have emphasized that women lack the information or foresight to
13 know the costs associated with becoming a young mother. However, these models have
14 done less to illuminate the fact that many women choose to become pregnant at a young
15 age (Nettle, Coall, & Dickins, 2010). Note: we do not imply that women perform explicit
16 calculations when deciding when to have children, though in fact some young women
17 living in poverty have sophisticated insight into their situations (Geronimus, 1996). There
18 is a wide range of psychological mechanisms that could deliver contextually reasonable
19 behavior (e.g., automatic motivational responses, modeling the behavior of other people
20 in the environment, awareness of benefits), not all of them involving conscious reasoning
21 (Nettle, 2011; Pepper & Nettle 2017). Even if some of these processes are unconscious,
22 their output may be consciously accessible: the best predictor of the age a woman will
23 first become pregnant is the age she states, at age 16, as being the ideal one to have a
24 family (Nettle, Coall, & Dickins, 2010). This does not mean that teenage motherhood,
25 overall, is a good thing, but rather that in the context of poverty, some women prefer to
26 start having children at a younger age.

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3 Although teenage childbearing is consistently associated with worse social and
4 health outcomes for both mothers and children (Geronimus, 1997), establishing causality
5 is difficult. There are many differences between teenage mothers and the larger
6 population (Geronimus, 2004). When teenage mothers are compared to appropriate
7 reference groups (i.e. matching on or controlling for pre-existing social disadvantage), the
8 evidence is mixed. In some studies, teenage mothers and their children have worse
9 outcomes; in others, equal or better outcomes (Geronimus, 2004). For instance, in one
10 disadvantaged sample of 4- to 14-year-olds, children whose mothers were 18 or 19 at
11 their birth performed better in reading and mathematics than those whose mothers had
12 been in their early 20s (Moore, Morrison, & Greene, 1997). Causation matters for our
13 argument. A pure deficit model suggests teenage childbearing always makes outcomes
14 worse. A reasonable response approach suggests that teenage childbearing can be neutral
15 or beneficial for women living in poverty, given the constraints they face. We now
16 discuss some of these constraints.
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35 For most people living in affluence, death is the predictable end station of a long
36 and healthy journey, travelled alongside healthy friends and kin. This prospect favors the
37 accumulation of cultural capital (e.g., education) before reproducing, though not
38 indefinitely. For women living in poverty, however, the costs of delay start to mount up
39 sooner than for women living in affluence. First, due to chronic stress, their bodies
40 deteriorate (“weather”) faster, increasing their probability of dying or becoming disabled
41 during or even before middle adulthood, when they would be producing and raising
42 offspring (Belsky, 2019; Geronimus et al., 1999; Geronimus, 1997; Geronimus, 2004;
43 Rickard, Frankenhuis, & Nettle 2014). Second, like women in affluence, women in
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3 poverty benefit from the help of kin and friends. As these caretakers “weather” faster,
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5 too, having children at a younger age increases the chances that these caregivers are
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7 healthier and more able to provide support. Third, many women have caregiving
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9 responsibilities for their elders, whose health tends to decline as they age. Having
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11 children younger means that children are less likely to compete with elders for the
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13 mother’s energies. Fourth, *postponing* childbearing improves the educational and
14
15 economic prospects of women living in poverty to a more limited extent than it does for
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17 women living in affluence (Geronimus, 2004). Fifth, in some marginalized groups,
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19 mothers actually produce healthier babies in their late teens – when most teenage
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21 pregnancies occur in the USA (Guttmacher Institute, 2017) – than in their 20s and 30s,
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23 potentially due to their own health deteriorating (Cohen, 2016). For these reasons and
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25 others, teenage childbearing can be a reasonable response to living in poverty. Nettle
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27 (2011) computed the optimal behavior that would be needed to satisfy the reasonable rule
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29 – ‘begin childbearing at the latest age such that you can, on average, expect to be in
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31 good health until your oldest grandchild is five’ – for women living at different levels of
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33 neighborhood poverty in the UK. Observations of actual behavior show that childbearing
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35 begins at least eight years earlier in the poorest neighborhoods than the richest, matching
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37 the predictions of this simple rule remarkably well. In sum, early fertility can be a
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39 reasonable response to particular demographic and environmental circumstances.
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Hidden talents

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49 The idea that the behavior of people in poverty is reasonable in context might be
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51 gaining ground. It is the cornerstone of new integrative frameworks on the psychology of
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53 poverty, which are organizing and inspiring empirical research (Pepper & Nettle, 2017),
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3 and which have started to inform social policy (Sheehy-Skeffington, 2018). Recently, a
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5 new and complementary line of work has emerged arguing that some people in poverty
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7 develop intact or enhanced abilities for solving challenges relevant in their environments
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9 (Ellis et al., 2017; Frankenhuis & de Weerth, 2013). As we have done for time preference
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11 and reproductive decisions, we present a selection of research on such ‘hidden talents’
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13 that focuses on responses to unpredictability in the environment.
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17 Hidden talents research shows that people might develop a suite of related
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19 abilities to deal with harsh and unpredictable environments, in which threat looms large
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21 and potential rewards are sparse and short-lived. For instance, people might become
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23 adept at detecting imminent dangers and opportunities (reviewed in Ellis et al., 2017;
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25 Frankenhuis & de Weerth, 2013), shifting efficiently between different tasks or mental
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27 sets (Mittal, Griskevicius, Simpson, Sung, & Young, 2015), tracking rapidly changing
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29 conditions (Young, Griskevicius, Simpson, Waters, & Mittal, 2018), persisting when
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31 procuring an immediate reward (Suor, Sturge-Apple, Davies, & Cicchetti, 2017), and
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33 reacting faster to, and recovering faster from, negative affect displayed by other people in
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35 their environment (Wass et al., in press).
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40 In harsh and unpredictable environments, there might be a premium on forming
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42 memories and associations quickly and efficiently. Consistent with this idea, stress
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44 affects the structure and function of distinct memory systems differently. Neuroscience
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46 studies show that stress causes a shift from hippocampal-prefrontal dependent explicit
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48 (top-down) memory systems to striatum-dependent procedural (bottom-up) memory
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50 systems (Leonard, Mackey, Finn, & Gabrieli, 2015; Schwabe & Wolf, 2013). Cognitive
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52 and behavioral studies show that, in some conditions, people living in poverty display
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3 similar (Leonard et al., 2015) or even better (Dang et al., 2016) performance on
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5 procedural memory tasks, than people living in affluence. Further research could explore
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7 the extent to which such findings depend on developed traits vs. current states, or their
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9 interactions. Future work should also explore the benefits of procedural memory in stable
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11 conditions (e.g., forming habits when action-outcome contingencies remain the same)
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13 and the benefits of explicit memory in unpredictable conditions (e.g., greater sensitivity
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15 to changing action-outcome contingencies; Schwabe & Wolf, 2013). Nonetheless, these
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17 studies and others (reviewed in Ellis et al., 2017) illustrate the current efforts to examine
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19 not only deficits, but also strengths, that develop in response to stressful conditions.
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Conclusion

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26 The theoretical landscape is becoming enriched with strength-based models.
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28 However, there is no revolution. Strength-based models do not undermine the deficit
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30 model, but complement it. Together, these models provide a well-rounded approach.
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32 Strength-based models have also started to grow connections with each other (Ellis et al.,
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34 2017). For instance, the hidden talents approach has recently built bridges with the
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36 resilience approach, which examines protective factors that enable people in poverty to
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38 overcome their challenging life circumstances (Masten, 2014); and with the successful
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40 intelligence approach, which studies the diverse skills and abilities that enable people to
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42 attain their life goals within a specific cultural context (Sternberg, 2014). Such
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44 connections are essential to establishing integration of strength-based models. Our larger
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46 goal, however, is to integrate strength-based models with deficit models and bring
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48 consilience to the psychology of poverty.
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54 People in poverty are more likely to be exposed to a variety of adversities, some
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3 of which they can developmentally adapt to (e.g., danger) and others which they cannot
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5 adapt to (e.g., exposure to toxins). Chronic stress associated with these adversities creates
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7 physiological strain, which can damage brain structure and function. In addition to such
8
9 deficit processes, individuals developmentally adapt to challenges in their environments.
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11 Future research could focus on the ways in which impairment and adaptation interact. For
12
13 instance, at an individual level, impairment processes may reduce one set of abilities,
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15 while adaptive processes might improve another set of abilities. Or, impairment processes
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17 may reduce abilities in general, but adaptive processes might counteract or supersede this
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19 reduction for some abilities. At a population level, these intra-individual processes could
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21 result in different patterns of variation across individuals (e.g., ordinal and disordinal
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23 interactions). Studies integrating impairment and adaptation, which bridge levels of
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25 variation, would enrich the psychological science of poverty.
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Recommended Reading

Ellis, B. J., Bianchi, J., Griskevicius, V., & Frankenhuis, W. E. (2017). (See References).

This paper extensively reviews empirical research on hidden talents in humans as well as other animals, such as birds, rodents, and non-human primates. It also includes proposals about how to redesign learning environments in order to maximize the motivation and performance of high-adversity youth.

Frankenhuis, W. E., de Vries, S. A., Bianchi, J., & Ellis, B. J. (2019). Hidden talents in harsh conditions? A preregistered study of memory and reasoning about social dominance. *Developmental Science*, e12835. doi:10.1111/desc.12835. This empirical paper provides some evidence for, and some evidence against, the hypothesis that people who had more exposure to violence show better memory and reasoning for social-dominance relationships than people who had less exposure to violence.

Frankenhuis, W. E., Panchanathan, K., & Nettle, D. (2016). (See References). This paper reviews and integrates research on hidden talents with research showing that people in harsh and unpredictable environments tend to be more vigilant, act more impulsively, and discount the future more. It argues that these behaviors are an integrated suite of traits reflecting a present-orientation produced by biological adaptations, even if these responses might cause harm to health and wellbeing.

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3 Frankenhuis, W. E., & de Weerth, C. (2013). (See References). This paper first proposed
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5 the hidden talents approach, which focuses on the intact or enhanced social and cognitive
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7 skills that people develop high-adversity conditions. The paper reviews relevant
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9 publications and proposes new research directions.
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16 Geronimus, A. T., Bound, J., & Waidmann, T. A. (1999). (See References). This
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18 empirical paper provides evidence supporting the hypothesis that teenage childbearing
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20 can be a reasonable response to living in poverty. It also offers theoretical insights
21
22 relevant to developmental theory and public health.
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36 manuscript.
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