# Poverty and Intertemporal Decision-Making: Psychological Transformation Mechanism from a Threat Perspective

**Authors:** Hu Xiaoyong, Du Tangyan, Yang Jing, Li Lanyu, Wang Tiantian, Hu Xiaoyong

**Date:** 2022-01-22T13:23:43+00:00

## Abstract

After eliminating absolute poverty, China still faces the formidable challenge of relative poverty. Substantial evidence demonstrates that individuals in poverty frequently exhibit "myopic behaviors,"such as underinvesting in education, accumulating higher levels of debt, and maintaining lower savings, which in turn perpetuate and exacerbate poverty. Perceived threats induce psychological transformations that direct the attention of impoverished individuals toward scarcity-related concerns, leading them to represent events in a concrete and contextualized manner while concurrently predisposing them to adopt fast life-history strategies, ultimately resulting in myopic decision-making behaviors. Future research should not only delve more deeply into the multi-level and multi-layered pathway mechanisms underlying poverty-related behavioral decision traps but also more extensively and intensively develop effective intervention programs tailored to China' s national conditions, thereby providing scientific psychological pathways for the long-term governance of relative poverty.

## Full Text

## Poverty and Intertemporal Decision-Making: The Psychological Shift Mechanism from a Threat Perspective

**Du Tangyan, Hu Xiaoyong, Yang Jing, Li Lanyu, Wang Tiantian**
(Faculty of Psychology, Southwest University; Key Laboratory of Personality and Cognition of Ministry of Education, Southwest University, Chongqing 400715, China)

**Abstract:** After eliminating absolute poverty, China still faces the arduous challenge of relative poverty. Extensive evidence shows that individuals in

poverty often engage in "short-sighted behaviors," such as underinvesting in education, accumulating excessive debt, and saving insufficiently—behaviors that further perpetuate poverty. Threat perception triggers psychological shifts that cause impoverished individuals to focus attention on scarcity-related matters, represent events concretely and contextually, and adopt fast life-history strategies, ultimately leading to myopic decision-making. Future research should not only explore the multi-level pathways underlying poverty' s behavioral decision-making traps more deeply but also develop effective intervention strategies tailored to China' s national conditions, providing scientific psychological pathways for long-term relative poverty governance.

**Keywords:** poverty, intertemporal decision-making, threat, psychological shift

According to the *China Statistical Yearbook 2020* published by the National Bureau of Statistics, China had 560 million low-income individuals (monthly income below 1,000 yuan) in 2019. This indicates that after eliminating absolute poverty, China continues to face severe relative poverty challenges. Relative poverty refers to a condition where individuals or families possess resources sufficient to meet basic needs but insufficient to engage in normal social life, maintaining a living standard far below the average (Townsend, 1979; World Bank, 1981). Characterized by its long-term and dynamic nature, relative poverty is typically measured as income below 50% of the national median or average income (Atkinson et al., 2002; Wang & Liu, 2020). Addressing relative poverty thus represents a long-term task requiring deep understanding of poverty' s formation mechanisms.

Early academic work primarily attributed poverty to external factors such as geographical environment and institutional structures (Myrdal, 1957; Nurkse, 1953; Rosenstein-Rodan, 1943), arguing that lack of financial support, market failures, and social-institutional dysfunctions constituted the root causes of poverty (Moore & Hossain, 2005). More recent research has shifted focus to internal psychological and behavioral factors, demonstrating that disadvantaged circumstances trigger special psychological processes that produce poverty-perpetuating behaviors, trapping individuals in a "poverty-behavioral decision-making-poverty" cycle (Cannon et al., 2019; Hamilton et al., 2019; Haushofer & Fehr, 2014; Ong et al., 2019).

Material scarcity demonstrably affects decision-making across domains—from finance to education to health—with impoverished individuals appearing to focus on meeting immediate needs rather than long-term benefits. They exhibit higher debt and lower savings (Kim et al., 2017; Moav & Neeman, 2012), underinvest in education (Blanden & Gregg, 2004), and engage more frequently in unhealthy behaviors like smoking (Jahnel et al., 2018). These behaviors may further deepen poverty, creating a self-reinforcing trap where current poverty becomes a direct cause of future poverty (Farah & Hook, 2017). Why are impoverished individuals more prone to such "short-sighted" behaviors?

Early studies suggested that poverty shapes preferences and values and impairs

self-control, making poor individuals more susceptible to irrational decisions (Lewis, 1966; Vohs, 2013). Recent research, however, frames poverty-related decision-making as a product of general psychosocial mechanisms, arguing that seemingly irrational behaviors actually represent adaptive responses to threatening environments. When immediate needs are high and the future uncertain, securing smaller but currently available benefits becomes more advantageous than waiting for larger future rewards (Frankenhuis et al., 2019; Pepper & Nettle, 2017; Sheehy-Skeffington, 2019). This adaptive perspective provides a more comprehensive and accurate description of decision-making processes among impoverished individuals while reducing stigmatization. This paper therefore examines the social-psychological mechanisms through which poverty affects behavioral decision-making from an adaptive perspective, aiming to establish a theoretical foundation for breaking behavioral poverty traps and providing theoretical guidance for China' s long-term relative poverty governance.

Notably, intertemporal choice represents a ubiquitous decision-making behavior. Since time flows in only one direction, many fundamental life choices involve trade-offs between present and future outcomes, including decisions about spending, investing, eating, relationships, fertility, crime, and education (Berns et al., 2007). These choices affect not only personal health, wealth, and well-being but also national economic prosperity (Frederick et al., 2002). Consequently, intertemporal decision-making has become the central focus in behavioral poverty trap research, and the behavioral decision-making trap discussed in this paper specifically refers to intertemporal choice behavior.

## 2. Poverty and Intertemporal Decision-Making

Intertemporal choice refers to the process of weighing gains and losses occurring at different time points (Bulley & Schacter, 2020; Frederick et al., 2002). In experimental settings, participants typically choose between a smaller-sooner (SS) reward and a larger-later (LL) reward—for example, receiving 100 yuan now versus 150 yuan in one month. The key metric for intertemporal choice preference is the delay discount rate: higher discount rates indicate greater preference for smaller immediate rewards, reflecting lower patience and foresight (Jimura et al., 2018).

Numerous studies demonstrate that impoverished individuals exhibit higher delay discount rates, preferring immediate smaller gains over larger future returns —a pattern of "short-sightedness" (Carvalho et al., 2016; Pepper & Nettle, 2017). Research published in *Science* shows that poverty experiences make individuals reluctant to forgo immediate income for higher future earnings, leading to underinvestment in education and health with long-term returns (Haushofer & Fehr, 2014). Related studies confirm that poorer households are more likely to choose smaller, earlier monetary rewards over larger, later ones (Reimers et al., 2009). Longitudinal research similarly finds that lower childhood socioeconomic status predicts higher adult delay discount rates (Griskevicius et al., 2013). Experimental studies further establish causality: laboratory manipulations of negative

income shocks (e.g., income loss from natural disasters or unemployment) increase delay discount rates, while positive shocks decrease them (Haushofer & Fehr, 2019). Real-world experiments yield consistent results—for instance, when given options to receive pension funds either as a lump sum or in installments with higher interest, impoverished populations still prefer the immediate lump sum (Brown et al., 2015). Across cross-sectional, longitudinal, and experimental studies, evidence consistently shows that poor individuals have higher delay discount rates and make impulsive, short-sighted decisions that hinder poverty escape.

The consequences of such short-sighted behavior include deepening poverty traps. Controlling for disposable income, demographics, and credit constraints, research using credit reports and tax returns finds that higher delay discounting correlates with greater credit card debt (Meier & Sprenger, 2010). A 50-year longitudinal study of 11,000 Swedes revealed that delay discount rates measured at age 13 negatively predicted adult income, even after controlling for family socioeconomic status and cognitive ability (Golsteyn et al., 2014). Most compellingly, a study combining experimental data with 30 years of government records for 2,548 individuals born between 1952-1955 found that high discounters accumulated average wealth 215,000 Danish kroner lower than low discounters—equivalent to half the median wealth distribution, placing them in relative poverty (Epper et al., 2020). Since heavy discounting of future benefits is both a consequence and cause of poverty, it constitutes a behavioral decision-making trap (Haushofer & Fehr, 2014; Kraay & McKenzie, 2014).

## 3. Mechanisms of Poverty' s Impact on Intertemporal Decision-Making: A Threat Perspective Psychological Shift Model

Psychological research identifies two major decision-making mechanisms: self-regulation and cognitive function (Sheehy-Skeffington, 2020). Unhealthy eating, unwise consumption, excessive borrowing, and insufficient savings observed in impoverished populations partly stem from psychological stress undermining these regulatory and cognitive processes (Haushofer & Fehr, 2014). However, poverty involves more than resource scarcity—it includes instability, unpredictability, and adverse childhood environments. These threat cues trigger psychological shifts: adaptive changes in self-regulation and cognitive function that produce seemingly irrational short-sighted decisions (Sheehy-Skeffington, 2018).

### 3.1 Theoretical Sources of the Psychological Shift Model

Scarcity theory (Mullainathan & Shafir, 2013), construal level theory (Trope & Liberman, 2010), and life history theory (Griskevicius et al., 2013) represent three influential theoretical perspectives since the 1990s that incorporate environmental factors (resource scarcity, unstable/unpredictable environments,

adverse childhood conditions) into poverty research from a person-environment interaction perspective. All three theories highlight threat' s crucial role in poverty' s impact on decision-making, with threat perception triggering psychological shifts that lead to short-sighted decisions (Pepper & Nettle, 2017; Sheehy-Skeffington, 2018, 2020).

**3.1.1 Scarcity Theory** Scarcity theory posits that poverty' s defining feature is resource scarcity, which fosters a scarcity mindset—a psychological state where chronic resource inadequacy creates spontaneous, difficult-to-suppress preoccupation with scarce resources (Haushofer & Fehr, 2014; Norris et al., 2019). This mindset narrows cognitive scope when dealing with scarcity-related problems, crowding out other information to address immediate scarcity, producing a "tunneling effect"and imposing a "bandwidth tax"that impairs cognitive capacity and executive function, leading to irrational, short-sighted decisions (Mullainathan & Shafir, 2013).

Empirical evidence supports scarcity theory' s claims. Scarcity increases cognitive load, directly affecting cognitive function and triggering detrimental behaviors such as attentional neglect, impulsive consumption, and short-sightedness (Cannon et al., 2019; Hamilton et al., 2019; Mani et al., 2013; Mullainathan & Shafir, 2013; Ong et al., 2019; Shah et al., 2012; Zhao & Tomm, 2018). First, scarcity captures attention: Shah et al. (2018) found that under financial scarcity, poor individuals exhibit a "cocktail party effect" for money, with money-related thoughts easily triggered and difficult to suppress. Since cognitive processing capacity is limited, engaging in one process consumes resources needed for another (Luck & Vogel, 1997). In a field experiment using a restaurant ordering task, scarcity-condition participants (with $20) focused more on prices and encoded them better than affluent-condition participants (with $100), yet neglected discount information at the menu' s bottom—demonstrating how attentional focus on prices caused them to miss opportunities to save money (Tomm & Zhao, 2016).

This attentional focus consumes limited "mental bandwidth," overburdening cognition and leading to disadvantageous decisions like short-sightedness (Mullainathan & Shafir, 2013). Research confirms that financial scarcity impairs cognitive and executive functions, while improving scarcity conditions significantly enhances them (Ong et al., 2019; Mani et al., 2013). Impaired cognitive and executive functions directly affect decision-making, with experiments showing that under such conditions, individuals exhibit greater short-sightedness in monetary intertemporal tasks (Deck & Jahedi, 2015).

However, these findings face challenges. One study comparing large samples before and after payday found no cognitive differences, contradicting scarcity theory' s prediction that pre-payday scarcity should impair cognition (Carvalho et al., 2016). How can this inconsistency be explained? Researchers have proposed a threat perspective, arguing that "scarcity is a threat" (Goldsmith et al., 2020). The scarcity mindset reflects a state where individuals perceive their abil-

ity to meet needs as threatened by resource inadequacy (Hamilton et al., 2019). For impoverished individuals, a primary threat is financial scarcity: money is a fundamental resource providing access to material (e.g., food) and social (e.g., prestige) rewards and facilitating daily goal achievement (Fritsche & Jugert, 2017; Lea & Webley, 2006). Financial scarcity directly threatens people' s belief in their ability to overcome challenges and achieve desired outcomes (Boardman & Robert, 2000). This threat distracts attention, consumes limited cognitive resources, and leads to short-sighted, impulsive decisions (Sheehy-Skeffington, 2019). Research treating scarcity as a threat suggests its effects on cognition and decision-making are moderated by whether individuals' need-satisfaction abilities are threatened (Goldsmith et al., 2020). For pre-payday participants, although experiencing scarcity, stable salaries and employment provided strong control beliefs; their need-satisfaction abilities weren' t threatened, so scarcity didn' t impair cognitive performance.

**3.1.2 Construal Level Theory** Construal level theory proposes that when making decisions about events at different time points, delay length changes temporal representation, affecting outcomes (Trope & Liberman, 2003). For distant future events, individuals tend to use high-level construal—representing events abstractly and in terms of superordinate, essential features. For near-term events, they use low-level construal—representing events concretely, subordinately, and contextually (Trope & Liberman, 2010). As temporal distance decreases, low-level construal becomes more likely. When low-level construal features are more valued, future events' attractiveness decreases over time, increasing preference for immediate rewards (Trope & Liberman, 2003). For impoverished individuals whose lives are filled with challenges, instability, and threats, the value of concrete, proximal low-level construal events exceeds that of abstract, distal high-level construal events, leading them to discount future gains heavily (Zaleskiewicz et al., 2020).

Extensive experimental evidence shows that low-level construal (concrete, proximal thinking) significantly affects delay discount rates (Bischoff & Hansen, 2016; Fujita et al., 2006; Malkoc et al., 2010; Sheehy-Skeffington & Haushofer, 2014). Fujita et al. (2006) found that participants induced into concrete thinking preferred immediate over delayed rewards. In their study, 30 participants completed construal-level manipulation tasks: half considered *why* they engaged in behaviors (abstract thinking), while half considered *how* (concrete thinking). After four rounds of questioning, participants indicated their willingness-to-pay for four items (restaurant coupons, DVD players, movie tickets, bookstore coupons) available immediately or after a delay. Results showed concrete-thinking participants exhibited stronger preferences for immediate rewards than abstract-thinking participants. Malkoc et al. (2010) replicated these findings. As Bischoff and Hansen (2016) summarize, abstract thinking "may trigger an expectation that resources will be equally available in the near and distant future, which would counteract the delay discounting effect. In contrast, a concrete mindset will strengthen delay discounting because it enhances attention to detail and

context-dependent representation of resources and reduces sensitivity to delay." Low-level construal-induced short-sightedness is associated with self-regulation health problems (Chiou et al., 2013; Fujita et al., 2006; Fujita & Han, 2009) and disadvantageous economic decisions (Bischoff & Hansen, 2016; Fujita et al., 2006; Malkoc et al., 2010). High delay discounting and impulsivity can lead to adverse financial conditions and poverty traps (Epper et al., 2020; Farah & Hook, 2017; Haushofer & Fehr, 2019). Thus, construal level plays an important role in poverty research.

In summary, impoverished individuals' impulsive decision-making patterns can be attributed to reduced construal levels. When their construal level is manipulated to process information abstractly, they can engage in decontextualized, high-level processing, resulting in lower delay discount rates (Malkoc et al., 2010). However, in threatening environments with severe liquidity constraints, focusing on concrete, proximal events and representing them contextually while preferring immediate rewards constitutes a rational adaptive strategy.

**3.1.3 Life History Theory** Life history theory offers an evolutionary perspective on how environments—particularly childhood environments—influence decision-making tendencies among impoverished individuals. The theory posits that all organisms face the fundamental challenge of allocating time, resources, and energy to avoid natural selection, but since these resources vary across individuals, some adopt fast strategies (preferring immediate gratification, producing more offspring) while others adopt slow strategies (preferring delayed gratification, producing fewer but higher-quality offspring) to adapt to different developmental environments (Boyce & Ellis, 2005; Griskevicius et al., 2011). Impoverished individuals raised in harsh environments face various threats and resource constraints, perceiving the future as unstable and insufficient, thus emphasizing short-term effects, pursuing rapid development, and seeking immediate satisfaction. Childhood poverty experiences therefore foster fast strategies (Griskevicius et al., 2011; Guan & Zhou, 2016; Wang et al., 2017). Fast life-history strategies are characterized by early reproduction, more offspring, less parental investment, and lower education levels (Figueredo et al., 2004). Biologically, fast strategies are not inherently wrong but represent appropriate responses to environmental conditions; however, their behavioral consequences deepen poverty.

Numerous studies confirm life history theory' s validity. The UK Millennium Cohort Study of 8,660 families found that women in the most deprived areas preferred faster strategies and reproduced earlier than those in affluent areas (Nettle, 2010). Such reproductive decisions represent environmental adaptation: chronic stress and poor conditions accelerate physical deterioration, increasing mortality or disability risk before or during adulthood (Belsky, 2019; Rickard et al., 2014); earlier reproduction occurs when kin and friends are healthier and better able to provide support, and when elderly family members are less likely to compete for maternal attention (Frankenhuis & Nettle, 2020).

Despite its adaptiveness, fast strategies carry costs: shorter breastfeeding duration, less paternal investment, higher child mortality and morbidity, and lower educational achievement, all of which perpetuate poverty (Nettle, 2010). Education represents investment in the future and serves as a common indicator of life-history strategy. Fast-strategy impoverished individuals underinvest in education, achieving lower educational outcomes. For example, a 1960s survey of approximately 650,000 US students and 70,000 teachers found that among numerous predictors—including school curriculum, equipment expenditures, teacher quality, family background, and individual abilities (e.g., cognitive ability)—social class most strongly predicted academic achievement, with children from poor families performing far worse than affluent peers (Coleman et al., 1966). Children from impoverished families are significantly less likely to pass exams and enter university than those from wealthy families (Caner & Okten, 2013; Heckman et al., 2018). Since good education typically means good income potential, poor individuals' educational disadvantages further entrench them in poverty (Hout, 2012).

Experimental evidence also confirms childhood poverty' s impact on fast strategies. Situational priming experiments show that economic recession news increases retirement contributions among individuals raised in high socioeconomic status families (consistent with slow strategies), while consumers from low socioeconomic status backgrounds respond oppositely—spending now with less concern for the future (consistent with fast strategies) (Mittal & Griskevicius, 2016). Experimental studies further demonstrate that individuals raised in harsh, unpredictable environments behave more impulsively under threat conditions (e.g., electric shock) (Griskevicius et al., 2013; Pepper et al., 2017). When presented with mortality cues, individuals with childhood poverty prefer immediate rewards, while those from non-poor backgrounds prefer larger future rewards (Griskevicius et al., 2011). Notably, childhood poverty' s impact on long-term decisions is minimal in low-threat environments, but in high-threat conditions, those raised in poverty show less interest in long-term care insurance, allocate fewer resources to retirement, and prefer shorter-term bonds—demonstrating stronger immediate gratification preferences (Mittal et al., 2020).

Thus, individuals with childhood poverty experiences are more likely to adopt fast strategies in threatening environments. While this represents an adaptive response, its consequences include more poverty-perpetuating decisions (e.g., early reproduction, more offspring, lower education, short-sighted economic choices) that trap them in poverty.

### 3.2 Threat Perspective Psychological Shift Mechanism

The primary difference between poor and affluent individuals lies in their probability of encountering risks and threats—impoverished individuals constantly face various risks and threats (Pepper & Nettle, 2017; Sheehy-Skeffington, 2020). Resource scarcity, environmental instability and unpredictability, and adverse childhood experiences constitute immediate threats that impoverished individu-

als experience or face. The threat perspective psychological shift model proposes that these three prominent aspects of poverty trigger psychological process shifts to cope with threats, optimizing the use of limited energy reserves across the current moment and lifespan (Sheehy-Skeffington & Haushofer, 2014). These shifts include: (1) reduced evaluation of control over life outcomes, causing attentional focus to shift toward the present (away from the future), local (away from distant), socially close (away from socially distant), and actual (away from hypothetical)—in essence, from abstract to concrete thinking; (2) related to this reduced sense of control, a shift from pursuing long-term to short-term goals, from approaching rewards to avoiding threats, and from slow to fast strategies; (3) concentration of cognitive resources on tasks (e.g., alleviating current scarcity) and stimuli (e.g., money, food) to meet urgent needs (Sheehy-Skeffington, 2018, 2020). In other words, impoverished individuals' short-sighted decisions result from threat perception (resource scarcity, future uncertainty) triggering psychological shifts (attentional focus/neglect, abstract/concrete thinking, slow/fast strategies), which then produce environmentally adaptive decisions (Sheehy-Skeffington, 2020; Sheehy-Skeffington, 2018).

This core perspective reveals a multi-level, multi-path mechanism in poverty' s impact on intertemporal decision-making. When facing scarcity threats, impoverished individuals concentrate attention on events that alleviate or exacerbate scarcity. For example, under economic threat, individuals with childhood poverty show low insurance purchase willingness because insurance represents an additional expenditure that may worsen money scarcity threats, such as inability to meet basic survival needs (Mittal & Griskevicius, 2016). Money scarcity directly threatens people' s intrinsic need to believe they can overcome challenges and achieve expected daily outcomes (Boardman & Robert, 2000). This threat focuses attention on scarcity-related matters, consumes limited cognitive resources, and leads to short-sighted, impulsive decisions (Sheehy-Skeffington, 2019). When facing uncertainty threats, impoverished individuals' focus shifts away from the future toward the present, away from distant toward local, and away from hypothetical toward actual. This concrete mindset strengthens delay discounting by enhancing attention to detail and context-dependent resource representation while reducing sensitivity to delay. Concrete thinking-induced short-sightedness not only causes self-regulation health problems (Chiou et al., 2013; Fujita et al., 2006; Fujita & Han, 2009) but also leads to disadvantageous intertemporal economic decisions (Bischoff & Hansen, 2016; Fujita et al., 2006; Malkoc et al., 2010).

Why do some individuals adopt fast strategies while others adopt slow strategies under the same threatening conditions and adult economic status? Childhood threat environments may explain this difference. When adult environments are safe and low-stress, childhood influences may remain latent and invisible (Taylor, 2010); once threat cues appear, individuals with childhood poverty may detect threats more quickly and shift into fast-strategy mode, making short-sighted decisions (Griskevicius et al., 2011).

In summary, the threat perspective psychological shift model views impoverished individuals' impulsive and short-sighted behaviors as products of general social-psychological mechanisms (Frankenhuis et al., 2019). Socioecological threat cues trigger psychological shifts: at the cognitive level, attention focuses on scarcity-related matters; at the thinking level, events are represented concretely and contextually; at the behavioral strategy level, fast life-history strategies are adopted. These shifts lead to short-sighted decision-making (Pepper & Nettle, 2017; Sheehy-Skeffington, 2018, 2020).

## 4. Summary and Outlook

Extensive research demonstrates that impoverished individuals have higher delay discount rates, preferring immediate smaller gains over larger future returns. These short-sighted behaviors deepen poverty. Scarcity theory, construal level theory, and life history theory represent three influential theoretical perspectives since the 1990s that incorporate environmental factors into poverty research from a person-environment interaction perspective. The psychological shift model suggests these theories can be integrated under a threat perspective, with threat perception triggering psychological shifts as the internal mechanism through which poverty affects intertemporal decision-making. Through large-sample surveys and randomized controlled experiments examining the psychological processes underlying intertemporal choice, researchers have revealed mechanisms behind impoverished individuals' decision-making, generating practical policy value for poverty psychology theories (Ximenes et al., 2019). However, limitations remain, and future research should proceed in four directions.

**(1) The adaptive perspective on short-sightedness as a survival strategy in poverty requires broader promotion.** Past research largely viewed impoverished individuals' impulsive and short-sighted behaviors as pathological (Mehryar, 1984; Small et al., 2010), which undoubtedly exacerbates stigmatization. Continuing this perspective in current relative poverty governance practice would further solidify stereotypes, increase social exclusion, and create additional disadvantages, ultimately hindering poverty resolution (Wasylyshyn et al., 2018). Increasingly, researchers adopt an adaptive perspective (Frankenhuis et al., 2019; Pepper & Nettle, 2017; Sheehy-Skeffington, 2019), arguing that impoverished individuals do not make poor decisions due to low intelligence or inability to inhibit impulses, but rather because threat perception triggers psychological shifts leading to "short-sighted behaviors" (Sheehy-Skeffington, 2018, 2020). This "short-sightedness" can be viewed as a survival strategy shaped by impoverished environments—indeed, a "far-sighted short-sightedness" where individuals suppress impulses for larger-later options after carefully considering waiting costs, ultimately choosing smaller-sooner options through deliberate thought (Amasino et al., 2019; Bulley & Schacter, 2020; Farah & Hook, 2017). This perspective recognizes impoverished individuals' adaptive efforts, reduces stigma, and contributes to "destigmatization," thereby facilitating poverty solutions (Bertrand et al., 2006). Future research should widely promote this

perspective, treating poverty-related decision-making as a product of general psychosocial mechanisms and deeply understanding the functional, adaptive nature of short-sighted decisions from an environmental perspective.

**(2) Mechanism research on poverty' s impact on intertemporal decision-making requires deepening.** Scarcity theory, construal level theory, and life history theory represent three major psychological poverty theories incorporating environmental factors. Attentional focus/neglect, abstract/concrete thinking, and fast/slow life-history strategies are merely psychological shifts occurring under perceived threat versus non-threat conditions, making threat perception a crucial cause of short-sighted decisions (Pepper & Nettle, 2017; Sheehy-Skeffington, 2020). However, this novel and insightful threat perspective psychological shift model requires extensive empirical testing. The complete behavioral poverty trap comprises multiple links, yet most current research examines only single mediating factors, lacking a holistic perspective. Moreover, while life history theory emphasizes childhood poverty' s impact on adult intertemporal choice, scarcity mindset and construal level theories focus more on current material scarcity and threats. Few studies examine poverty' s impact on intertemporal choice across different life stages. Future research should overcome these limitations by investigating multi-level relationships between poverty and intertemporal choice across developmental stages.

**(3) Interventions for short-sighted behavior among impoverished populations urgently require extensive development.** Although "far-sighted short-sightedness" helps impoverished individuals cope with current threats, its costs include more poverty-perpetuating decision consequences that trap them in poverty. The threat perspective psychological shift model suggests breaking this trap requires eliminating threats as the core mechanism. Randomized controlled experiments show that cash transfers (Handa et al., 2020) and debt relief (Ong et al., 2019) reduce scarcity threats materially and improve short-sighted behavior, while community trust enhancement and self-affirmation reduce threat perception psychologically and decrease delay discount rates (Farah & Hook, 2017; Moeini-Jazani et al., 2019). These findings demonstrate that short-sighted behaviors decrease when threats are reduced. However, research in China remains at the theoretical introduction and qualitative exploration stage, urgently requiring empirical development of effective interventions tailored to national conditions. Specifically, based on the core mechanism of threat elimination, future research should integrate China' s major relative poverty governance issues with valuable experiences from poverty alleviation efforts and internationally recognized strategies that effectively reduce short-sighted behavior, developing intervention programs that truly break behavioral poverty traps. For example, current social assistance systems, inclusive finance programs, and conditional cash transfer projects enhance impoverished groups' ability to withstand uncertainty and alleviate real threats (Xu et al., 2020; Zhang & Yin, 2018; Zheng et al., 2020). However, these interventions primarily address macro-policy and economic systems, rarely targeting individual psychological capacity-building. Fu-

ture research should therefore build upon existing effective institutional strategies while incorporating psychological interventions (e.g., self-affirmation, community trust) that reduce threat perception and enhance sense of control, intervening simultaneously at macro-institutional/economic and micro-individual psychological levels through randomized controlled experiments to identify optimal intervention models for China' s context.

**(4) Future research should also explore**··· [Note: The original text appears to be truncated here. The fourth point mentioned in the opening of the summary section is not fully developed in the provided text.]

管健, 周一骑. (2016). 生命史的快策略与慢策略: 理解心理与行为差异的新路径. 西北师大学报(社会科学版), (06), 115-121.

汪三贵, 刘明月. (2020). 从绝对贫困到相对贫困: 理论关系、战略转变与政策重点. 社会科学文摘, (12), 17-20.

王燕, 林镇超, 侯博文, 孙时进. (2017). 生命史权衡的内在机制: 动机控制策略的中介作用. 心理学报, 49(6), 783-793.

徐小阳, 李洁, 金丽馥. (2020). 普惠金融对农村教育贫困的纾解效应. 中国农村经济, (09), 41-64.

郑晓冬, 上官霜月, 陈典, 方向明. (2020). 有条件现金转移支付与农村长期减贫: 国际经验与中国实践. 中国农村经济, (09), 124-144.

张栋浩, 尹志超. (2018). 金融普惠、风险应对与农村家庭贫困脆弱性. 中国农村经济, (04), 54-73.

Amasino, D., Sullivan, N., Kranton, R., & Huettel, S. (2019). Amount and time exert independent influences on intertemporal choice. *Nature Human Behaviour*, 3(4), 383-392.

Atkinson, T., Cantillon, B., & Marlier, E. (2002). *Social Indicators: The EU and Social Inclusion*. Oxford: Oxford University Press.

Belsky, J. (2019). Early-life adversity accelerates child and adolescent development. *Current Directions in Psychological Science*, 28, 241-246.

Berns, G., Laibson, D. I., & Loewenstein, G. (2007). Intertemporal choice—toward an integrative framework. *Trends in Cognitive Sciences*, 11(11), 482-488.

Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral economics and marketing in aid of decision making among the poor. *Journal of Public Policy & Marketing*, 25(1), 8-23.

Bischoff, C., & Hansen, J. (2016). Influencing support of charitable objectives in the near and distant future: Delay discounting and the moderating influence of construal level. *Social Influence*, 11(4), 217-229.

Blanden, J., & Gregg, P. (2004). Family income and educational attainment: A review of approaches and evidence for Britain. *Oxford Review of Economic*

*Policy*, 20(2), 245–263.

Boardman, J., & Robert, S. (2000). Neighborhood socioeconomic status and perceptions of self-efficacy. *Sociological Perspectives*, 43(1), 117–136.

Boyce, W., & Ellis, B. (2005). Biological sensitivity to context: I. An evolutionary-developmental theory of the origins and functions of stress reactivity. *Development and Psychopathology*, 17(2), 271–301.

Brown, J. R., Farrell, A. M., & Weisbenner, S. J. (2015). Decision-making approaches and the propensity to default: Evidence and implications. *Journal of Financial Economics*, 121(3), 477–495.

Bulley, A., & Schacter, D. L. (2020). Deliberating trade-offs with the future. *Nature Human Behaviour*, 4(3), 238–239.

Caner, A., & Okten, C. (2013). Higher education in Turkey: Subsidizing the rich or the poor? *Economics of Education Review*, 35, 75–92.

Cannon, C., Goldsmith, K., Roux, C., & Kirmani, A. (2019). A self-regulatory model of resource scarcity. *Journal of Consumer Psychology*, 29(1), 104–127.

Carvalho, L. S., Meier, S., & Wang, S. W. (2016). Poverty and economic decision-making: Evidence from changes in financial resources at payday. *American Economic Review*, 106(2), 260–284.

Chiou, W.-B., Wu, W.-H., & Chang, M.-H. (2013). Think abstractly, smoke less: A brief construal-level intervention can promote self-control, leading to reduced cigarette consumption among current smokers. *Addiction*, 108(5), 985–992.

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of Educational Opportunity*. Washington, DC: US Office of Education.

Deck, C., & Jahedi, S. (2015). The effect of cognitive load on economic decision making: A survey and new experiments. *European Economic Review*, 78, 97–119.

Epper, T., Fehr, E., Fehr-Duda, H., Kreiner, C. T., Lassen, D. D., Leth-Petersen, S., & Rasmussen, G. N. (2020). Time discounting and wealth inequality. *American Economic Review*, 110(4), 1177–1205.

Farah, M., & Hook, C. J. (2017). Trust and the poverty trap. *Proceedings of the National Academy of Sciences*, 114(21), 5327–5329.

Figueredo, A. J., Vásquez, G., Brumbach, B. H., & Schneider, S. M. R. (2004). The heritability of life history strategy: The k-factor, covitality, and personality. *Social Biology*, 51(3-4), 121–143.

Frankenhuis, W., Nettle, D., & Dall, S. R. X. (2019). A case for environmental statistics of early-life effects. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 374, 20180110.

Frankenhuis, W., & Nettle, D. (2020). The strengths of people in poverty. *Current Directions in Psychological Science*, 29, 16–21.

Frederick, S., Loewenstein, G., & O' Donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of Economic Literature*, 40(2), 351–401.

Fritsche, I., & Jugert, P. (2017). The consequences of economic threat for motivated social cognition and action. *Current Opinion in Psychology*, 18, 31–36.

Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, 90(3), 351–367.

Fujita, K., & Han, H. A. (2009). Moving beyond deliberative control of impulses: The effect of construal levels on evaluative associations in self-control conflicts. *Psychological Science*, 20(7), 799–804.

Goldsmith, K., Griskevicius, V., & Hamilton, R. (2020). Scarcity and consumer decision making: Is scarcity a mindset, a threat, a reference point, or a journey? *Journal of the Association for Consumer Research*, 5(4), 310–323.

Golsteyn, B. H. H., Grönqvist, H., & Lindahl, L. (2014). Adolescent time preferences predict lifetime outcomes. *The Economic Journal*, 124(580), F739–F761.

Griskevicius, V., Ackerman, J., Cantú, S. M., Delton, A. W., Robertson, T. E., Simpson, J., Thompson, M. E., & Tybur, J. M. (2013). When the economy falters, do people spend or save? Responses to resource scarcity depend on childhood environments. *Psychological Science*, 24(2), 197–205.

Griskevicius, V., Delton, A. W., Robertson, T. E., & Tybur, J. M. (2011). Environmental contingency in life history strategies: The influence of mortality and socioeconomic status on reproductive timing. *Journal of Personality and Social Psychology*, 100(2), 241–254.

Hamilton, R., Thompson, D., Bone, S., Chaplin, L., Griskevicius, V., Goldsmith, K., & Zhu, M. (2019). The effects of scarcity on consumer decision journeys. *Journal of the Academy of Marketing Science*, 47(3), 532–550.

Handa, S., Seidenfeld, D., & Tembo, G. (2020). The impact of a large-scale poverty-targeted cash transfer program on intertemporal choice. *Economic Development and Cultural Change*, 69(1), 485–512.

Haushofer, J., & Fehr, E. (2019). Negative income shocks increase discount rates. University of Zurich Working Paper.

Haushofer, J., & Fehr, E. (2014). On the psychology of poverty. *Science*, 344(6186), 862–867.

Heckman, S. J., & Montalto, C. P. (2018). Consumer risk preferences and higher education enrollment decisions. *Journal of Consumer Affairs*, 52(1), 166–196.

Hout, M. (2012). Social and economic returns to college education in the United States. *Annual Review of Sociology*, 38(1), 379–400.

Jachimowicz, J. M., Chafik, S., Munrat, S., Prabhu, J. C., & Weber, E. U. (2017). Community trust reduces myopic decisions of low-income individuals. *Proceedings of the National Academy of Sciences*, 114(21), 5401–5406.

Jahnel, T., Ferguson, S. G., Shiffman, S., Thrul, J., & Schüz, B. (2018). Momentary smoking context as a mediator of the relationship between SES and smoking. *Addictive Behaviors*, 83, 136–141.

Jimura, K., Chushak, M., Westbrook, A., & Braver, T. (2018). Intertemporal decision-making involves prefrontal control mechanisms associated with working memory. *Cerebral Cortex*, 28(4), 1105–1116.

Kraay, A., & McKenzie, D. (2014). Do poverty traps exist? Assessing the evidence. *Journal of Economic Perspectives*, 28(3), 127–148.

Kim, K. T., Wilmarth, M. J., & Henager, R. (2017). Poverty levels and debt indicators among low-income households before and after the Great Recession. *Journal of Financial Counseling and Planning*, 28(2), 196–208.

Lea, S., & Webley, P. (2006). Money as tool, money as drug: The biological psychology of a strong incentive. *Behavioral and Brain Sciences*, 29(2), 161–209.

Lewis, O. (1966/2010). The culture of poverty. In G. Gmelch & W. Zenner (Eds.), *Urban Life: Readings in the Anthropology of the City* (5th ed., pp. 175–184). Long Grove, IL: Waveland Press.

Luck, S., & Vogel, E. (1997). The capacity of visual working memory for features and conjunctions. *Nature*, 390, 279–281.

Malkoc, S. A., Zauberman, G., & Bettman, J. R. (2010). Unstuck from the concrete: Carryover effects of abstract mindsets in intertemporal preferences. *Organizational Behavior and Human Decision Processes*, 113(2), 112–126.

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341, 976–980.

Mehryar, A. H. (1984). The role of psychology in national development: Wishful thinking and reality. *International Journal of Psychology*, 19(1-4), 159–167.

Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. *American Economic Journal: Applied Economics*, 2(1), 193–210.

Mittal, C., & Griskevicius, V. (2016). Silver spoons and platinum plans: How childhood environment affects adult health care decisions. *Journal of Consumer Research*, 43(4), 636–656.

Mittal, C., Griskevicius, V., & Haws, K. L. (2020). From cradle to grave: How childhood and current environments impact consumers' subjective life expectancy and decision-making. *Journal of Consumer Research*, 47(3), 410–428.

Moav, O., & Neeman, Z. (2012). Saving rates and poverty: The role of conspicuous consumption and human capital. *The Economic Journal*, 122(563), 933–956.

Moeini-Jazani, M., Albalooshi, S., & Müller Seljeseth, I. (2019). Self-affirmation reduces delay discounting of the financially deprived. *Frontiers in Psychology*, 10, 1729.

Moore, M., & Hossain, N. (2005). Elites, poverty and public policy. In E. P. Reis & M. Moore (Eds.), *Elite Perceptions of Poverty and Inequality* (pp. 195–197). New York: Zed Books Limited.

Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why Having Too Little Means So Much*. New York: Times Books.

Myrdal, G. (1957). Economic nationalism and internationalism. *Australian Outlook*, 11(4), 3–50.

Nettle, D. (2010). Dying young and living fast: Variation in life history across English neighborhoods. *Behavioral Ecology*, 21(2), 387–395.

Norris, A., Rao, N., Huber-Krum, S., Garver, S., Chemey, E., & Turner, A. N. (2019). Scarcity mindset in reproductive health decision making: A qualitative study from rural Malawi. *Culture, Health & Sexuality*, 21(12), 1333–1348.

Nurkse, R. (1953). *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford University Press.

Ong, Q., Theseira, W., & Ng, I. Y. (2019). Reducing debt improves psychological functioning and changes decision-making in the poor. *Proceedings of the National Academy of Sciences of the United States of America*, 116(15), 7244–7249.

Pepper, G., & Nettle, D. (2017). The behavioural constellation of deprivation: Causes and consequences. *Behavioral and Brain Sciences*, 40, e314.

Reimers, S., Maylor, E., Stewart, N., & Chater, N. (2009). Associations between a one-shot delay discounting measure and age, income, education and real-world impulsive behavior. *Personality and Individual Differences*, 47(8), 973–978.

Rickard, I. J., Frankenhuis, W. E., & Nettle, D. (2014). Why are childhood family factors associated with timing of maturation? A role for internal state. *Perspectives on Psychological Science*, 9(1), 3–15.

Rosenstein-Rodan, P. (1943). Problems of industrialisation of eastern and south-eastern Europe. *The Economic Journal*, 53, 202–211.

Scholten, M., & Read, D. (2010). The psychology of intertemporal tradeoffs. *Psychological Review*, 117(3), 925–944.

Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338, 682–685.

Shah, A. K., Zhao, J., Mullainathan, S., & Shafir, E. (2018). Money in the mental lives of the poor. *Social Cognition*, 36, 4–19.

Sheehy-Skeffington, J., & Haushofer, J. (2014). The behavioural economics of poverty. In *Barriers and Opportunities at the Base of the Pyramid: The Role of the Private Sector in Inclusive Development* (pp. 96–112). Istanbul, Turkey: UNDP Istanbul International Center for Private Sector in Development.

Sheehy-Skeffington, J. (2018). Decision-making up against the wall: A framework for understanding the behavioral dimension of low socioeconomic status. In *Socio-Economic Environment and Human Psychology: Social, Ecological, and Cultural Perspectives* (pp. 105–138). New York: Oxford University Press.

Sheehy-Skeffington, J. (2019). Inequality from the bottom up: Toward a "psychological shift" model of decision-making under socioeconomic threat. In *Psychological Perspectives on Poverty* (pp. 213–231). Springer International Publishing.

Sheehy-Skeffington, J. (2020). The effects of low socioeconomic status on decision-making processes. *Current Opinion in Psychology*, 33, 183–188.

Small, M. L., Harding, D. J., & Lamont, M. (2010). Introduction: Reconsidering culture and poverty. *The ANNALS of the American Academy of Political and Social Science*, 629(1), 6–27.

Taylor, A. (2010). Troubling childhood innocence: Reframing the debate over the media sexualisation of children. *Australasian Journal of Early Childhood*, 35(1), 48–57.

Tomm, B. M., & Zhao, J. (2016). Scarcity captures attention and induces neglect: Eye-tracking and behavioral evidence. In A. Papafragou, D. Grodner, D. Mirman, & J. C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 1199–1204). Austin, TX: Cognitive Science Society.

Townsend, P. (1979). *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living* (pp. 50–54). Harmondsworth: Penguin Books.

Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, 110(3), 403–421.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440–463.

Vohs, K. D. (2013). The poor' s poor mental power. *Science*, 341, 969–970.

Wasylyshyn, N., Hemenway Falk, B., Garcia, J. O., Cascio, C. N., O' Donnell, M. B., Bingham, C. R., & Falk, E. B. (2018). Global brain dynamics during social exclusion predict subsequent behavioral conformity. *Social Cognitive and Affective Neuroscience*, 13(2), 182–191.

World Bank. (1981). *World Development Report*. New York: Oxford University Press.

Ximenes, V. M., Cidade, E. C., & Silva, G. R. G. (2019). Psychology research in the poverty context: What for and for whom? In *Psychological Perspectives on Poverty* (pp. 3–16). Springer International Publishing.

Zaleskiewicz, T., Bernady, A., & Traczyk, J. (2020). Entrepreneurial risk taking is related to mental imagery: A fresh look at the old issue of entrepreneurship and risk. *Applied Psychology*, 69, 1438–1469.

Zhao, J., & Tomm, B. M. (2018). Psychological responses to scarcity. In *Oxford Research Encyclopedia of Psychology* (pp. 1–21). New York: Oxford University Press.

*Note: Figure translations are in progress. See original paper for figures.*