Socio-psychological Pathways to Ameliorating Economic Hardship Among Low-income Groups

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Abstract

This study aims to integrate perspectives from psychology and behavioral economics to systematically construct a 'cognitive restructuring-behavioral nudging' theoretical framework for alleviating the economic predicament of low-income populations, and to propose concrete strategies grounded in the Chinese context. Specifically, cognitive restructuring seeks to stimulate endogenous development motivation by transforming attribution patterns, enhancing sense of control, and role modeling; behavioral nudging aims to optimize economic decision-making by eliminating socio-ecological threats (such as conditional cash transfers), refining decision frameworks, and strengthening self-regulation capabilities. The development of such context-specific strategies can provide scientifically grounded and actionable intervention programs for promoting common prosperity among low-income groups.

Full Text

Preamble

Social-Psychological Pathways to Alleviating the Economic Difficulties of Low-Income Individuals

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Abstract

Psychology is the scientific study of human cognition and behavior. A major trend in its current development involves addressing pressing societal issues by providing theoretical explanations and intervention strategies for complex social

problems [?]. In recent years, psychology's role at the societal level has gained increasing recognition, demonstrating its disciplinary significance in promoting social development and enhancing collective well-being. This paper systematically explores the distinctive contributions of psychology and behavioral economics in understanding and addressing the developmental challenges faced by low-income populations. It constructs a theoretical framework centered on cognitive restructuring and behavioral nudging, which seeks to move beyond purely material or structural explanations. Instead, it examines the psychological and behavioral mechanisms underlying the reproduction of disadvantage and proposes feasible intervention strategies. The paper argues that the short-term decision-making patterns and self-limiting behaviors observed among low-income individuals are not psychological "defects," but rather adaptive responses to threatening and uncertain social environments. Building on this perspective, the study identifies two key intervention pathways—cognitive restructuring and behavioral nudging—and outlines corresponding strategies that provide psychological insights for achieving sustainable and internally driven poverty alleviation.

Keywords: low-income groups, upward mobility, nudge, wise intervention

1. Introduction

With the first centenary goal of building a moderately prosperous society achieved on schedule, promoting common prosperity through high-quality development has become a critical national priority in the new era. Against this backdrop, the key to advancing common prosperity lies in benefiting low-income groups. These populations face persistent challenges including economic hardship, health risks, and limited educational opportunities, making them a primary focus of societal concern and support, as well as a key demographic requiring targeted assistance on the path toward common prosperity [?, ?]. The central task in this new phase is no longer about solving basic subsistence problems, but rather about consolidating poverty alleviation achievements, preventing relapse, and ultimately promoting sustainable upward mobility for low-income groups [?, ?]. Consequently, exploring how to effectively stimulate the internal motivation of low-income populations and optimize their developmental decision-making has become an urgent and critical issue for both theoretical and policy research.

Extensive sociological and economic research has revealed the structural predicaments faced by low-income groups in employment, income, health, and education [?, ?, ?, ?]. However, relying solely on macro-level resource allocation and policy adjustments often fails to address individual-level psychological and behavioral mechanisms, thereby limiting the sustainability of policy effects. In this context, psychology and behavioral economics demonstrate unique value. Understanding the mechanisms behind short-sighted decision-making among low-income groups requires moving beyond the traditional "deficit perspective"

to adopt a more insightful "adaptation perspective." The conventional deficit perspective attributes short-sighted behaviors among low-income individuals to cognitive deficiencies or personality flaws [?]. In contrast, the adaptation perspective posits that these seemingly "irrational" behaviors are not intrinsic defects but rather rational adaptive strategies that individuals employ to optimize survival in resource-scarce, threatening, and uncertain social-ecological environments [?, ?, ?, ?, ?]. However, this adaptation oriented toward short-term survival can lead to "maladaptation" in the long-term developmental dimension, trapping individuals in a vicious cycle of "poverty—psychology—behavior" that hinders upward mobility. This perspective not only reveals how disadvantage is psychologically reproduced but also provides actionable entry points for intervention.

The unique value of psychological and behavioral perspectives lies in their transcendence of traditional economic assumptions of rational actors, emphasizing how cognitive biases and socio-psychological factors amplify structural inequalities. For instance, prior research demonstrates that psychological poverty can influence decision-making independently of material poverty, making it more difficult for low-income individuals to accumulate human capital, while behavioral interventions such as nudges can reverse these biases through low-cost environmental adjustments, providing sustainable pathways out of poverty [?].

Although many recent studies have made theoretical and methodological advances, they remain largely based on Western paradigms and often fail to adequately adapt to China' s unique institutional and cultural context [?, ?, ?]. This reliance may result in ineffective interventions or cultural mismatch. Drawing on cutting-edge international research [?, ?, ?, ?, ?] and addressing gaps in domestic research regarding theoretical integration and localization [?, ?, ?], this paper constructs a dual-pathway theoretical framework of "psychological empowerment-behavioral nudging" based on the adaptation perspective. The framework comprises two components: first, "behavioral nudging" targeting the external environment, which reduces environmental threat cues by redesigning choice architecture, thereby guiding better decisions at the behavioral level and alleviating cognitive and willpower burdens; second, "psychological empowerment" targeting internal psychological processes, which helps individuals break free from mindsets solidified by environmental pressure.

Compared with existing research, this paper' s contribution lies in being the first to systematically integrate psychological poverty theory with behavioral nudging theory, proposing a dual-pathway intervention model. This model emphasizes both intrinsic changes in attribution patterns, sense of control, and cognitive function to stimulate endogenous motivation, and environmental cue adjustments to optimize economic decision-making and self-regulation capabilities. Additionally, it proposes culturally adapted intervention strategies tailored to the Chinese context, offering a new psychological approach for achieving common prosperity among low-income groups.

2. Psychological Empowerment for Overcoming Psychological Poverty

Long-term material deprivation is not merely an economic issue; through complex psychological mechanisms, it creates a distinct state of "psychological poverty." This state manifests as a constellation of negative cognitive, emotional, and behavioral patterns intertwined with material poverty, exerting independent negative effects on individuals [?, ?]. The harms of psychological poverty are profound and far-reaching. First, it undermines the intrinsic motivation and beliefs of low-income groups to improve their circumstances, trapping them in a "poverty breeds short-sightedness" cycle. It also impairs cognitive functioning and decision-making capacity, leading to myopic behaviors and irrational choices that cause missed opportunities for escaping poverty. Furthermore, it may perpetuate intergenerationally, solidifying a culture of poverty that makes destitution seem like an unbreakable fate [?, ?, ?]. Consequently, psychological poverty has become a key factor hindering upward mobility for low-income groups.

The formation of psychological poverty is a multifactorial and multilayered complex process, with mechanisms that can be understood through three core dimensions: social, cultural, and cognitive. First, social class psychology emphasizes that low socioeconomic status leads to external attribution preferences, where individuals attribute poverty to uncontrollable factors such as luck or birth, thereby reducing motivation to exert effort [?]. This mechanism originates from identity threat, triggering low self-efficacy and avoidance behaviors. Second, poverty culture theory posits that long-term resource scarcity fosters a unique set of conservative values—such as devaluing education, pursuing immediate gratification, and lacking long-term planning—that transmit across generations, creating a solidified "culture of poverty" that reinforces the "poverty—values—persistent poverty" cycle [?]. Finally, scarcity theory reveals from a cognitive science perspective the immediate impact of poverty on individual cognition. Resource scarcity induces a "scarcity mindset" that consumes attentional and cognitive resources through a "bandwidth tax," causing excessive focus on immediate survival pressures that crowds out cognitive resources needed for long-term planning, skill acquisition, and rational decision-making [?, ?]. This increased cognitive load significantly reduces working memory and executive function, making individuals more likely to make myopic and suboptimal decisions, thus falling into a "poorer and busier, busier and poorer" cycle [?, ?].

Although these theories reveal the complexity of psychological poverty from different perspectives—social class psychology and poverty culture theory emphasize how social structure and cultural environments shape psychological patterns, highlighting social attribution and intergenerational transmission mechanisms, while scarcity theory reveals the immediate effects of cognitive load and attention allocation in poverty contexts, emphasizing the finiteness of psychological resources—they share a common view that material deprivation is not merely an economic problem but solidifies poverty states through psychological mech-

anisms [?, ?]. Synthesizing these perspectives, psychological poverty formation involves both motivational and belief barriers caused by social structure and cultural environments (the "support aspirations" problem) and cognitive and decision-making failures caused by scarcity mindsets (the "support intelligence" problem). Therefore, "supporting aspirations" and "supporting intelligence" constitute effective means for achieving psychological poverty alleviation. Building on the "boost" paradigm proposed by Grüne-Yanoff and Hertwig [?], this paper further argues that psychological empowerment—enhancing individuals' cognitive, motivational, and behavioral competencies to equip them with self-development capabilities—is an effective solution for helping low-income groups escape psychological poverty [?, ?]. Operationally, psychological empowerment originates from psychological practices such as cognitive-behavioral therapy, emphasizing the transformation from "situation-dependent" to "self-empowered" through changing negative cognitive frameworks [?].

2.1 Supporting Aspirations: Strategies to Stimulate Intrinsic Motivation

The supporting aspirations pathway enhances intrinsic motivation through psychological empowerment. Low-income groups often attribute their difficulties to uncontrollable factors, creating a "poverty breeds short-sightedness" state that weakens developmental beliefs [?]. Targeting external attribution and conservative value mechanisms, psychological empowerment interventions guide individuals to reinterpret their experiences and distinguish between structural constraints and personal agency. For example, through community workshop-based psychoeducation programs, participants learn psychological empowerment skills: identifying negative thoughts (e.g., "I was born poor, I cannot change"), challenging their evidence (e.g., listing domains controllable through personal effort), and replacing them with adaptive beliefs (e.g., "Despite limited circumstances, I can break through via skill learning"). This process, grounded in self-affirmation theory, helps restore internal attribution and enhance motivation.

One specific strategy is control enhancement training. Sense of control refers to perceived mastery over events [?]. Targeting the external attribution mechanism in social class psychology, interventions can employ self-affirmation exercises where participants write about core values (e.g., family responsibility) to strengthen self-integrity and alleviate identity threat. Research shows this approach significantly enhances sense of control and promotes motivation [?]. To adapt to Chinese low-income groups (e.g., rural poor households), indigenous cultural elements can be integrated, such as incorporating Confucian ideals of "self-improvement" through group discussions sharing small success stories to reduce perceived institutional barriers. Simultaneously, at the institutional level, nudges can enhance resource availability: simplifying welfare application processes and setting default options help individuals perceive "control" [?]. A longitudinal study of low-income individuals found such interventions reduced negative attributions by over 20% and enhanced career aspirations [?].

Another strategy is role model demonstration, targeting the intergenerational transmission mechanism of poverty culture. Conservative values lead low-income individuals to pessimistically expect upward mobility; psychological empowerment reconstructs "possible selves" frameworks by showcasing successful individuals from similar backgrounds. For example, organizing screenings of poverty-alleviation documentaries or inviting local successful individuals to share experiences prompts participants to reflect: "If they can, why can' t I?" Research in rural India showed this approach enhanced career aspirations and opportunity perception [**?**], while an Ethiopian experiment confirmed that viewing success cases increased educational investment by 30% [**?**]. In the Chinese context, APPs or community lectures could be developed focusing on migrant worker populations, integrating "rural revitalization" narratives to strengthen collective efficacy. Psychological empowerment here emphasizes narrative reconstruction: participants rewrite personal stories incorporating role model elements, transforming their identity from "victim" to "agent." This strategy is low-cost, highly effective, and suitable for large-scale intervention.

2.2 Supporting Intelligence: Strategies to Enhance Cognitive Function

The supporting intelligence pathway enhances cognitive function through psychological empowerment. Scarcity mindset causes attentional narrowing and executive function depletion, leading to myopic decision-making [**?**]. Targeting scarcity mindset mechanisms, psychological empowerment interventions focus on internal restructuring to help individuals reallocate attention and repair cognitive failures. Combining external nudges with internal mental training ensures comprehensive strategies.

External support strategies employ cognitive nudges to simplify decision architecture. Low-income groups with low education levels are vulnerable to information overload; psychological empowerment reduces burden by restructuring environmental interpretation. For example, poverty alleviation policies use plain language and default options: setting savings plans as automatic deductions guides "long-term perspective" cognition [**?**]. Targeting scarcity mechanisms, this approach reframes "choice architecture" : participants learn to view complex information as "manageable challenges" rather than threats. Kenyan research shows simplified financial tools improved decision rationality by 20% [**?**]. In China, this could integrate with "Digital Village" initiatives, using APPs to deliver personalized prompts that enhance cognitive flexibility.

Internal capacity building relies on mental interventions such as mindfulness meditation. Targeting cognitive load, mindfulness training teaches individuals to reinterpret "scarcity signals" : shifting attention from immediate urgency to overall balance [**?**]. Specific forms include meditation, vipassana, or mindfulness-based stress reduction: 10-minute daily practices focusing on breathing challenge "tunnel vision."Empirical evidence shows this approach improves executive function and working memory while enhancing cognitive flexibility [**?**]. Non-

meditation interventions like acceptance and commitment therapy encourage accepting scarcity emotions while committing to long-term goals, reconstructing decision patterns [?]. For localization, Tai Chi or Qigong elements could be integrated, with online courses for urban migrant workers combined with group support to reduce isolation.

Psychological empowerment as a systematic psychological intervention strategy provides a new perspective and toolkit for addressing psychological poverty among low-income groups. It transcends mere material aid by directly targeting the psychological roots of poverty. Through aspiration-supporting empowerment, it helps reshape attribution patterns, enhance self-efficacy, and rebuild hope for the future; through intelligence-supporting empowerment, it repairs impaired cognitive functions and improves decision-making capacity. These two strategies are not isolated but complementary. When individuals possess stronger intrinsic motivation (aspiration support) alongside clearer cognitive abilities (intelligence support), they can truly achieve the psychological transformation from "passive recipients" to "active creators," thereby breaking the intergenerational cycle of poverty and realizing sustainable, endogenous poverty alleviation.

3. Behavioral Nudging to Optimize Economic Decision-Making

The economic decision-making patterns of low-income groups exhibit a strong "short-sighted" tendency, preferring immediate small rewards over delayed larger ones [?, ?]. This tendency, known in behavioral science as "high delay discounting," involves excessive devaluation of future rewards. This myopic decision-making manifests across life domains: low savings rates, high debt levels, borrowing for immediate consumption, and reduced long-term investment in education and health to cope with current economic pressures. The harm of this short-sighted decision-making pattern is persistent and profound. It not only hinders wealth accumulation for individuals and families, making it difficult to escape poverty traps [?, ?, ?, ?], but also creates a negative cycle. For instance, to cover immediate medical expenses, individuals may forgo purchasing health insurance, leading to greater economic crisis when serious illness strikes. Such short-sighted behaviors ultimately solidify poverty, leaving low-income groups in long-term economic vulnerability and instability [?].

Understanding the mechanisms behind short-sighted decision-making requires moving beyond the "deficit perspective" to adopt the more insightful "adaptation perspective." The deficit perspective views myopic behaviors as resulting from cognitive deficiencies or personality flaws [?], potentially stigmatizing vulnerable groups. In contrast, the adaptation perspective offers a more constructive explanation: the socio-ecological environment of low-income groups is filled with uncertainty and threat cues [?]. Facing persistent resource scarcity, unstable living conditions, and unpredictable futures, individuals' psychological and behavioral strategies undergo adaptive shifts to optimize limited energy reserves

for immediate survival challenges [?]. Therefore, short-sighted decision-making is not a defect but an adaptive response to uncertain environments. When the future is uncertain and future rewards cannot be guaranteed, seizing "certain" immediate returns becomes a rational survival strategy. This threat perception triggers shifts in cognitive and self-regulation strategies, forming high-discount-rate decision patterns. This provides clear intervention direction for behavioral nudging [?]: not to "correct" their "wrong" decisions, but to change their decision-making environment so that adaptive behaviors shift toward directions more conducive to long-term development. This can unfold through three core pathways: eliminating socio-ecological threats, optimizing cognitive frameworks, and enhancing self-regulation capacity.

3.1 Nudging Strategies to Eliminate Socio-Ecological Threats

Interventions targeting socio-ecological threats directly address resource scarcity and uncertainty mechanisms. Perceived threats amplify myopic tendencies among low-income groups; nudges alleviate this by stabilizing environments. Conditional cash transfer programs exemplify this approach, providing cash to poor households contingent on fulfilling obligations (e.g., education, health investments) to promote human capital accumulation. A Malawi project showed cash transfers reduced psychological burden by 40% and prevented decision errors [?]; Mexico' s national intervention increased educational investment [?]; Colombian research found that a structure of two-thirds immediate payment plus one-third delayed payment optimally incentivized long-term behavior [?]. Chinese pilots using this method significantly increased educational investment in poor families [?]. Recent RCT research shows that in vulnerable Spanish families, combining cash with SMS nudges and information interventions improved food choice quality by 8.43%, outperforming cash alone and demonstrating the cost-effectiveness of non-monetary nudges in economic decision-making [?]. This strategy is highly operational: designing default enrollment mechanisms ensures automatic participation by low-income individuals (e.g., rural poor households), reducing uncertainty.

Additionally, enhancing community trust alleviates threats. In high-trust environments, low-income individuals exhibit lower discount rates [?, ?]. Nudges can achieve this through social norm prompts: community APPs sending messages like "Your neighbors have joined the savings plan" trigger herd effects. A 2025 behavioral public policy review noted that such social pathways require considering heterogeneity—low-SES groups respond more strongly to trust nudges but require caution to avoid adverse effects like increased stigma [?]. In China, this could integrate with "rural revitalization" initiatives, building trust networks through village-level workshops to optimize decisions regarding health and education.

3.2 Nudging Strategies to Enhance Subjective Value of Long-Term Returns

Cognitive strategies target threat-induced cognitive shifts by enhancing the subjective value of long-term returns. Under adaptation mechanisms, perceived uncertainty devalues future benefits; nudges adjust this through framing manipulations [**?**]. For example, "waiting-delay framing" postpones decision timing to enhance patience [**?**]. Monetary presentation frameworks matter: the "explicit-zero frame" clarifies that immediate choices yield zero future rewards (e.g., "100 yuan today, nothing later" vs. "Nothing today, 200 yuan in three weeks"), weakening immediate preferences [**?**]. These low-cost adjustments suit financial APPs: default displays of long-term benefit calculators help low-income individuals reconstruct value perception. Recent evidence strengthens this pathway: a 2025 inequality and nudging study found low-SES individuals show strong heterogeneous responses to framing effects—in educational investment, growth frames (emphasizing effort returns) increased participation by 20%, but require cultural adaptation to avoid inefficiency [**?**]. Another 2025 systematic review found cognitive nudges effective in health-economic decisions, such as default healthy food options increasing nutritional investment in low-income families [**?**]. In practice, WeChat mini-programs could be developed using localized frames (e.g., "Accumulating for descendants") to optimize savings decisions among migrant workers. Poverty alleviation loan and skill training program promotions could explicitly inform individuals of long-term opportunity costs from immediate gratification (e.g., consumption) to optimize investment choices.

3.3 Nudging Strategies to Reduce Waiting Costs

Reducing waiting costs enhances patience and promotes forward-looking choices. Anxiety during waiting and immediate temptation weaken delay gratification capacity. Therefore, creating a distracting environment itself constitutes a nudge. Research indicates that introducing distraction sources (information entertainment, social spaces) or reducing time cues in waiting scenarios (e.g., interviews, queues) can lower waiting anxiety and increase patience [**?**]. Empirical evidence shows that reducing time monitoring and emotional costs during waiting facilitates delay gratification. Additionally, using reminder mechanisms (e.g., SMS reminders for repayment dates) and automation tools (e.g., setting automatic repayments, automatic savings) transforms behaviors requiring continuous willpower into one-time settings, thereby liberating valuable self-regulation resources for more important life planning. For example, default automatic savings combined with SMS reminders improved retirement plan participation among low-income individuals [**?**]; mindfulness reminders reduced impulsive consumption, applicable in poverty contexts [**?**]. Pre-commitment is similarly effective. Human decisions exhibit "hyperbolic discounting" : we show patience for distant futures (e.g., preferring 110 yuan in 13 months over 100 yuan in 12 months) but patience drops sharply when temptation is imminent (preferring 100 yuan today over 110 yuan in one month). The "pre-commitment" strat-

egy leverages this characteristic [**?**]. For instance, allowing employees to decide in advance whether to automatically deposit part of their year-end bonus into pension accounts. Since the decision occurs long before receiving the bonus, individuals remain in a "cool" state, making rational long-term planning easier and effectively avoiding consumption impulses when facing large cash sums.

In summary, behavioral nudging offers a low-cost, high-efficiency solution for optimizing economic decision-making among low-income groups. It moves beyond traditional moral exhortations of "fighting poverty starts with fighting aspirations" to scientifically guide individuals toward better choices by altering decision contexts. At the macro level, conditional cash transfers and community trust building can eliminate external threats, creating a stable, predictable future that fundamentally reduces the drivers of short-sighted behavior. At the micro level, cognitive interventions like "waiting-delay framing" and "explicit-zero framing" can cost-effectively adjust individuals' decision cognition to more clearly perceive long-term rewards' value. At the individual level, self-regulation strategies like distraction, pre-commitment, and commitment mechanisms can enhance resistance to immediate temptation. These strategies are not isolated but complementary. Through systematic behavioral nudging interventions, we can help low-income groups establish more forward-looking economic decision-making patterns, break poverty' s vicious cycle, and ultimately achieve sustainable, endogenous common prosperity.

4. Summary and Outlook

Psychology is the scientific study of human mind and behavior, with a current development trend being active engagement with major social issues to provide theoretical explanations and intervention ideas for complex social problems [**?**]. In recent years, psychology' s societal role has gained increasing recognition, particularly in promoting social development and improving group well-being, demonstrating important disciplinary value. This paper systematically reviews the unique value of psychology and behavioral economics in understanding and intervening in low-income groups' developmental dilemmas, constructing a theoretical framework centered on "psychological empowerment-behavioral nudging." This framework aims to transcend single-factor material or structural explanations, deeply exploring how disadvantage is reproduced at individual psychological and behavioral levels, and proposing actionable intervention strategies. The paper argues that low-income groups' short-sighted decisions and self-limiting behaviors do not stem from "defects" but represent adaptive responses to threatening and uncertain socio-ecological environments. Building on this foundation, it elaborates two intervention pathways—psychological empowerment and behavioral nudging—and their specific strategies, providing psychological insights for achieving sustainable, endogenous poverty alleviation.

This paper' s core contribution is constructing a multi-level intervention framework that examines low-income groups' psychological poverty and economic decision-making issues from a dynamic social psychology perspective. First,

regarding psychological poverty alleviation, it emphasizes psychological empowerment as a key tool. Through aspiration support (stimulating intrinsic motivation) and intelligence support (enhancing cognitive function) pathways, psychological empowerment directly targets mechanisms including external attribution, conservative values, and scarcity mindsets. For instance, control enhancement training and role model demonstration strategies help individuals shift from "situation-dependent" to "self-empowered" states and enhance career aspirations [**?**]. Meanwhile, mindfulness meditation and cognitive nudges repair cognitive failures, improving executive function and working memory [**?**, **?**]. Second, in the behavioral nudging module, the paper focuses on optimizing economic decision-making, adopting an adaptation perspective to explain short-sighted behaviors' causes, and proposing three pathway strategies: eliminating socio-ecological threats, enhancing long-term returns' subjective value, and reducing waiting costs. Conditional cash transfer programs (e.g., Malawi and Mexico cases) reduce psychological burden through environmental stabilization, increasing educational investment [**?**]; cognitive framing manipulations (e.g., explicit-zero framing) cost-effectively adjust time discounting rates [**?**]; self-regulation tools (e.g., pre-commitment) circumvent immediate temptation and enhance patience [**?**]. These strategies integrate behavioral economics principles, emphasizing environmental cue adjustments over coercive change, making them suitable for China's rural revitalization context. The framework's unique value lies in its integration: psychological poverty alleviation as the starting point reconstructs cognitive foundations; behavioral nudging as the bridge optimizes decision-making processes to enable capacity development. This sequential logic avoids single-perspective limitations, combining passive structural dilemmas (e.g., resource inequality) with active behavioral biases (e.g., short-sighted decisions), providing a complete chain from mechanism explanation to intervention strategy.

This framework offers clear action guidelines for policymakers and practitioners. Against the backdrop of China' s transition from targeted poverty alleviation to rural revitalization, psychological empowerment can be embedded in community workshops, such as pushing role model stories through APPs to enhance migrant workers' motivation [**?**]. Behavioral nudging applies to financial and educational domains: default automatic savings reduce debt [**?**]; conditional cash transfers combined with SMS reminders increase health investment [**?**]. These low-cost strategies can be scaled up. Despite its important implications, this framework faces numerous challenges in practice and research. First, **heterogeneity**: low-income groups' psychological and behavioral patterns vary by region, culture, age, and education level. For example, urban migrant workers and rural poor households may face different scarcity threats. Future research requires more nuanced analysis to explore psychological mechanism differences across subgroups and design more targeted interventions. For instance, urban migrant worker interventions might emphasize enhancing social trust and belonging, while rural left-behind group interventions might focus more on empowerment and collective efficacy. Second, **sustainability and long-term effectiveness**: while short-term effects of behavioral nudging and psychologi-

cal empowerment have substantial empirical support, their long-term impacts require more longitudinal research. When external nudging forces are withdrawn, can individuals maintain internalized cognitive patterns and behavioral habits long-term? This necessitates deeper exploration of intervention internalization mechanisms. For example, through meta-cognitive training, teaching individuals to autonomously identify and reconstruct their negative cognitions to achieve true "self-empowerment" rather than relying solely on external assistance [**?**]. In conclusion, through deep integration of psychological science and social practice, we can provide more scientific and humane solutions for low-income groups' upward mobility, contributing to a fairer and more resilient society.

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