

Poor People or Poor Places? Regional Poverty Information Increases Willingness and Behavior for Poverty Assistance

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Abstract

Poverty is a global challenge. Encouraging public participation in poverty alleviation holds significant importance for reducing income inequality and achieving common prosperity. This study focuses on the presentation of geographic poverty information—namely, whether poverty is regional (“poor places”) or non-regional (“poor people”)—to investigate whether and how the manipulation of such regional poverty information affects individuals’ willingness and behaviors toward poverty assistance. Through four experiments, the results reveal that, compared to the non-regional poverty information group, participants in the regional poverty information group demonstrated greater willingness and engagement in poverty assistance (Experiments 1-4), and this effect was primarily driven by regional poverty information enhancing participants’ external attribution tendencies toward poverty (Experiments 2-4). This study innovatively manipulated the geographic information of poverty and empirically revealed its causal influence pathway on public poverty attribution and assistance behavior, carrying important theoretical and practical implications.

Full Text

Poor People or Poor Regions? Regional Poverty Information Increases Willingness to Engage in Poverty Alleviation

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Abstract

Poverty is a global challenge, and encouraging public participation in poverty alleviation is crucial for reducing income inequality and achieving common pros-

perity. This research examines how the framing of poverty background information—specifically, whether poverty is presented as regional (“poor regions”) or individual (“poor people”)—affects individuals’ willingness to help and their actual poverty alleviation behaviors. We hypothesize that framing poverty regionally will lead to a greater tendency for external attribution of poverty, which in turn will result in greater intentions and behaviors toward poverty alleviation. Four experiments were conducted to test these hypotheses.

In Experiment 1, regional poverty information was manipulated by presenting participants with either a regional poverty map or a political-administrative map of China (as a control group). The results showed that individuals exposed to regional poverty information were more willing to engage in poverty alleviation compared to those in the control group. Experiment 2 extended these findings by manipulating regional poverty information in an anonymous area. Participants were also asked to report their tendencies for external attribution and their willingness to engage in poverty alleviation. The findings indicated that regional poverty information increased participants’ external attribution of poverty, which, in turn, enhanced their willingness to engage in poverty alleviation.

Experiment 3 further tested the robustness of the findings by manipulating poverty information for regions of similar size and population and including measures of willingness to donate to poverty alleviation. The results showed that regional poverty information increased individuals’ willingness to engage in poverty alleviation, and this effect was mediated by external attribution of poverty.

Finally, Experiment 4 used a between-subjects design to manipulate external attribution of poverty, examining whether this external attribution is the mechanism that leads people exposed to regional poverty information to engage in poverty alleviation. The findings of Experiment 4 showed that the differences in poverty alleviation behavior were eliminated when external attribution of poverty was manipulated, thus revealing the mechanism of external attribution of poverty.

In summary, our research shows that: (1) regional poverty information leads to greater willingness to engage in poverty alleviation and more actual poverty alleviation behaviors, and (2) external attribution of poverty mediates the effect of regional poverty information on poverty alleviation. Specifically, regional poverty information increases external attribution of poverty, which in turn leads to greater willingness and behaviors related to poverty alleviation. The results contribute to the literature on poverty attribution and poverty alleviation by highlighting how regional framing of poverty influences public willingness to engage in poverty alleviation.

Keywords: poverty, regional poverty information, external attribution of poverty, poverty alleviation

Poverty is a global challenge, and encouraging public participation in poverty

alleviation is crucial for narrowing income gaps between residents and between urban and rural areas, as well as for achieving common prosperity. However, existing research indicates that despite growing economic inequality and the resulting poverty problems, public attention to poverty alleviation remains insufficient (Cozzarelli et al., 2001; Van Heerde & Hudson, 2010; Ding & Ji, 2021; Wang et al., 2021). For example, studies show that the vast majority of poverty reduction funds needed worldwide depend on government investment and assistance from social organizations, while individual donations are clearly inadequate (VanSandt & Sud, 2012; Zuo, 2021). Meanwhile, although the total amount of donations from individuals and enterprises has been increasing year by year in most countries and regions, these donations are mostly concentrated in health, education, and environmental protection, with a relatively low proportion directly used for poverty reduction (NP Source, 2024). Evidently, promoting public action to help the poor still faces significant challenges. This study aims to explore how the presentation of poverty geographic information—specifically, whether poverty is presented as regional (“poor regions”) or non-regional (“poor people”)—affects poverty alleviation efforts and the underlying psychological mechanisms.

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1.1 Poverty Alleviation and Poverty Attribution

Poverty alleviation generally refers to all measures and actions that help solve poverty problems, with the goal of helping the poor escape poverty and improve their quality of life (Miller et al., 2022). In psychology, researchers mainly focus on individual-level poverty alleviation, that is, individuals’ willingness and behavior to improve the economic interests and well-being of the poor, such as charitable donations and wealth redistribution aimed at the poor (Wang et al., 2021). Research shows that poverty alleviation not only effectively improves the economic interests and psychological well-being of the poor but also increases the social adaptation of helpers, which is of great significance for improving overall social welfare (Aknin et al., 2011; Asadi et al., 2008; Kemmelmeier et al., 2006; Liu et al., 2018).

However, overall, people’s willingness to engage in poverty alleviation is not high. For example, studies have found that people lack consensus on wealth redistribution policies aimed at reducing poverty (Brown-Iannuzzi et al., 2015; Kuziemko et al., 2015; Bai et al., 2021; Zeng et al., 2022), and they also hold indifferent attitudes toward actions that directly improve the economic well-being of the poor (Luccasen et al., 2017; Ding & Ji, 2024; Wang et al., 2021). According to the “2020 China Charitable Donation Report,” China received a total of 225.313

billion yuan in charitable donations in 2020, of which only over 30 billion yuan was used for poverty alleviation, and most of these donations came from enterprises rather than individuals (China Charity Federation, 2021). Evidently, ordinary people's long-term support for poor groups remains relatively limited. Psychology researchers believe that one of the root causes of this problem lies in the public's cognitive misconceptions about poverty, namely poverty attribution (Cozzarelli et al., 2001; Wu & Zhang, 2007). Poverty attribution refers to individuals' judgments about the causes of poverty (Cozzarelli et al., 2001; Wu & Zhang, 2007). Currently, most researchers mainly study how people attribute poverty from internal and external attribution dimensions; that is, individuals who attribute poverty to internal factors usually believe that poverty is caused by the poor's lack of ability, ambition, diligence, and skills, while those who attribute poverty to external factors usually believe that poverty is caused by luck, opportunity, environment, or region (Kluegel & Smith, 1986; Weiner et al., 2011; Whyte, 2009; Yang et al., 2016).

In recent decades, poverty attribution and alleviation research has received widespread attention. A large number of studies have revealed that people generally show a high tendency for internal attribution of poverty or a low tendency for external attribution of poverty, that is, they attribute the plight of the poor more to their personal internal factors and less to external factors (Cozzarelli et al., 2001; Wu & Zhang, 2007), and this attribution tendency is a key variable leading to people's lack of willingness and behavior to help the poor (Cozzarelli et al., 2001; Weiner et al., 2011; Bai et al., 2021; Li, J., 2012). For example, in studies on the poorest 20% of society or homeless people, ordinary people, and even the poor themselves, tend to attribute poverty or their current plight more to internal factors and less to external factors. At the same time, this attribution tendency triggers less sympathy, more blame, and lower helping actions toward the poor (Mickelson & Hazlett, 2014; Vázquez et al., 2017; Ji et al., 2025). The above research shows that for the poor, people tend to believe that they should be responsible for their own poverty situation, which in turn reduces people's willingness and behavior to help the poor.

1.2 Interventions for Poverty Attribution Tendencies

Since poverty attribution is a key variable affecting poverty alleviation, can we change people's poverty attribution tendencies and thus enhance their willingness and behavior to help the poor? Some researchers have tried to intervene in poverty attribution tendencies from both group and individual levels. At the group level, research shows that increasing intergroup contact, especially direct contact with poor groups, is an effective way to change people's poverty attribution tendencies and promote intergroup help (Wiwad, 2019; Vargas Salfate & Stern, 2024). For example, Rao (2019) used a field experiment to examine the effect of a government subsidy policy for private schools in a region of India to accept students from poor families, and the results found that discrimination against poor students by students in these schools was significantly reduced,

and their willingness to help them was significantly improved. Similarly, Wiwad's (2019) research directly allowed participants from different socioeconomic statuses to communicate face-to-face (such as sharing living conditions). The results found that this communication based on living conditions helped break participants' negative stereotypes about low socioeconomic status groups and prompted them to be more inclined to attribute poverty to external factors. Evidently, encouraging cross-class group contact is an effective way to change people's poverty attribution tendencies and enhance poverty alleviation, but this intervention method usually requires a long time and high economic costs (Dixon et al., 2005; Piff et al., 2020).

Unlike group-level interventions, some researchers have used individual-level methods, that is, by directly manipulating and changing individuals' poverty attribution tendencies to examine their impact on poverty alleviation. For example, Nancy et al. (2014) used a situational simulation game to allow participants to experience how the lives of poor people in the game were easily affected by external factors such as disease, economic downturns, and sudden accidents. The results found that compared with the control group, the experimental group participants showed a greater tendency for external attribution of poverty and were more willing to support social policies to help the poor. On this basis, Piff et al. (2020) used a more direct explicit attribution method, that is, requiring experimental group participants to directly write down three non-personal causes of poverty to activate the tendency for external attribution of poverty, while control group participants were asked to write down all possible causes of poverty. The results found that experimental group participants showed a greater tendency for external attribution of poverty than control group participants and were more willing to donate their experimental remuneration to poverty alleviation welfare institutions. Compared with the method of group contact, directly changing people's poverty attribution tendencies has stronger operability and lower costs. However, in most existing studies, this method of directly manipulating attribution tendencies is usually too straightforward, with obvious manipulation intentions, which can easily trigger experimenter effects (Gocłowska et al., 2013). Therefore, adopting more natural and implicit intervention methods is one of the important directions to improve and optimize the effect of poverty attribution interventions. Since poverty descriptions can include background information, this study attempts to cleverly highlight geographic information in the poverty background, that is, whether poverty is regional or non-regional, to examine the impact of this regional poverty information on poverty attribution tendencies and poverty alleviation willingness and behavior.

1.3 Regional Poverty Information as an Intervention Method

Regional poverty refers to the high concentration of poor populations in specific areas due to harsh natural conditions or low levels of social development (Zuo,

2017). Globally, extreme poverty is mainly concentrated in sub-Saharan Africa and South Asia; in China, a major manifestation of poverty (or relative poverty) is also regional poverty (Liu, J., 2021; Xiang & Xiang, 2020). For example, the economic development level and residents' income level gaps between China's eastern, central, and western regions highlight the regionalization of (relative) poverty (National Bureau of Statistics of China, 2024). Therefore, the concentration of poor populations in specific areas (i.e., regional poverty) is one of the important characteristics of the poverty problem.

Research shows that regional poverty is usually caused by geographic or policy factors and has little association with individual internal factors (Xiang & Xiang, 2020). The field of geography has proposed the "spatial poverty trap" to explain regional poverty. The so-called spatial poverty trap means that poverty is usually concentrated in areas that are geographically remote, have harsh ecological environments, insufficient infrastructure and public service supply, and are politically disadvantaged, that is, it manifests as regional poverty (Bird & Shepherd, 2003; Daimon, 2001). Chinese agricultural economist Wu Guobao (1996) also believes that regional poverty is mainly caused by shortages in capital, land, and infrastructure. Zhao Chunyu et al. (2020) took the western Anhui region in the Dabie Mountain contiguous destitute area as an example, used the township poverty incidence rate as the poverty indicator, and used 20 factors such as geography, economy, and social environment as independent variables to examine the impact of these factors on regional poverty. The results found that terrain, infrastructure, and social security factors are the main variables predicting regional poverty. The above research shows that regional poverty is mainly formed by the joint action of a series of external factors (such as social policy, natural geographic factors, etc.), which are usually unchangeable by individuals and belong to external factors causing poverty.

Poverty attribution theory believes that external factors (especially structural factors) are difficult for the public to perceive intuitively due to their complexity and abstractness, thus forming certain cognitive barriers in reality. These barriers make people more inclined to attribute poverty problems to individual internal factors rather than external factors, which may ultimately weaken public support for poverty alleviation (Amemiya et al., 2023; Cimpian & Steinberg, 2014). However, in current poverty research, few studies have directly changed and intervened in this cognitive barrier in attribution. In view of this, this study will examine the impact of presenting poverty geographic background information (i.e., whether poverty is regional or non-regional) on poverty attribution tendencies and poverty alleviation willingness and behavior. Unlike non-regional poverty groups (who usually encounter internal attribution), regional poverty is often closely related to external factors such as geographic conditions and policy environments, and is a phenomenon of concentrated group poverty caused by structural reasons (Xiang & Xiang, 2020; Daimon, 2001). Therefore, theoretically, it is reasonable to believe that highlighting the geographic information of regional poverty when describing poor groups may guide people to attribute poverty to external factors rather than individual responsibility, thereby enhanc-

ing the public' s poverty alleviation willingness and behavior. Some indirect evidence from the fields of race and gender supports the above view to a certain extent. For example, although women or ethnic minorities usually face prejudice and discrimination, their poverty problems are usually considered to involve not only their own reasons but also their identity and belonging groups. Therefore, when information involving identity or intergroup differences is involved, people usually have more external attribution tendencies, thereby enhancing the corresponding help willingness (Amemiya et al., 2023; Cozzarelli et al., 2002). Similarly, since regional poverty information involves not only the poor individuals but also the entire regional factors, the presentation of this information may change people' s views on poverty attribution and stimulate corresponding poverty alleviation actions. Based on this, this study proposes the following hypotheses: Regional poverty information will lead to more external attribution tendencies of poverty and poverty alleviation willingness (Hypothesis 1). External attribution tendency of poverty plays a mediating role in the impact of regional poverty information on poverty alleviation willingness (Hypothesis 2).

1.4 Overview of Studies

To test the research hypotheses, this study conducted a total of 4 experiments. Experiment 1 preliminarily examined the impact of regional poverty information on poverty alleviation willingness by presenting a map of 14 contiguous destitute areas divided during China' s poverty alleviation period (vs. a political-administrative map of China). Experiment 2 manipulated regional poverty information by creating an anonymous area to verify again the impact of regional poverty information (vs. non-regional poverty information) on poverty alleviation willingness and the mediating role of external attribution tendency of poverty. Experiment 3 further verified the robustness of the research results by using different regional poverty information manipulations. Experiment 4 further examined the psychological mechanism of external attribution tendency of poverty in the impact of regional poverty information on poverty alleviation willingness and behavior by directly manipulating external attribution tendency of poverty. Considering that China' s current poverty problem is mainly manifested as relative poverty, this study mainly focuses on relative poverty and defines the group in the lowest 20% of the national or a certain region' s five-quintile grouping as the poor population (see Norton & Ariely, 2011; National Bureau of Statistics of China, 2024). Therefore, in this study, regional poverty information refers to the lowest 20% of the poor population being concentrated in specific geographic areas, while non-regional poverty information refers to the lowest 20% of the poor population being dispersed in various geographic areas.

Experiment 1

Experiment 1 aimed to preliminarily test whether regional poverty information affects individuals' poverty alleviation willingness. This experiment used the manipulation method of presenting China' s regional poverty map (vs. China'

s political-administrative map) to examine the impact of regional poverty information on poverty alleviation willingness.

2.1.1 Participants

Since no previous research has examined the impact of regional poverty information on poverty alleviation willingness, this experiment referred to the average effect size in the field of social psychology ($d = 0.4$, one-tailed test, Richard et al., 2003) and used G*Power 3.1 software to estimate the minimum sample size required for this experiment in advance. The results showed that at least 78 participants per group were needed to achieve statistical power above 0.8 (Faul et al., 2009). Therefore, 179 non-student adult participants with fixed income (78 males, 101 females) were recruited through the online platform Credamo. Among them, 89 participants were in the regional poverty information group, and 90 were in the control group. The average age of participants was 29.32 years ($SD = 6.38$).

2.1.2 Procedure

Experiment 1 used a single-factor between-subjects design, with the between-subjects independent variable being group, including two conditions: regional poverty information group and control group. The dependent variable was poverty alleviation willingness.

Manipulation of regional poverty information. Experiment 1 manipulated regional poverty information by presenting the aggregation of poor populations in specific regions to participants. In the regional poverty information group, participants saw a map of the distribution of 14 contiguous destitute areas during China's poverty alleviation period, with colored areas on the map representing poor population areas, among which a large number of poor populations were concentrated in the central and western regions. In the control group, participants saw a political-administrative map of China's provinces, with all provinces drawn in yellow. To prevent participants from guessing the experimental purpose, the experimental instructions told participants that the task was a memory task and they needed to remember the information in the map. After the map presentation, participants needed to complete some false memory tasks. To check participants' attention and preliminarily test the effectiveness of the regional poverty information manipulation, participants in the regional poverty information group needed to answer which regions poor populations in China were mainly concentrated in.

Measurement of poverty alleviation willingness. The fiscal allocation task used by Tagler and Cozzarelli (2013) was adopted to measure participants' poverty alleviation willingness. In this task, participants needed to participate in a simulated budget allocation task, allocating a total budget of 10 billion yuan to 3 social policy projects. Each project had a project name and a simple project description. One of the projects was: Poverty Alleviation Project, which

aims to provide medical, education, and housing subsidies for the lowest-income 20% of the population nationwide. This experiment used the amount allocated by participants to the poverty alleviation project as an indicator of poverty alleviation willingness, with a larger amount indicating stronger poverty alleviation willingness.

Control variables. Previous studies have shown that gender, age, income, and subjective social class all affect people's poverty alleviation willingness to a certain extent (Bai et al., 2021; Ding & Ji, 2024; Piff et al., 2010). Therefore, this experiment required participants to report their gender, age, personal monthly income, and subjective social class to control for the potential impact of these variables on the research results. Personal monthly income was measured using a 9-point scale (1 = less than 1000 yuan, 2 = 1001~2000 yuan, 3 = 2001~3000 yuan, 4 = 3001~5000 yuan, 5 = 5001~8000 yuan, 6 = 8001~12000 yuan, 7 = 12001~15000 yuan, 8 = 15001~20000 yuan, 9 = above 20000 yuan). Subjective social class was measured using the MacArthur Ladder Scale, where participants selected their position on a 10-level social ladder reflecting income, education, and occupational differences.

2.2 Results and Analysis

Participants in the regional poverty information group correctly answered that poor populations in China were concentrated in the central and western regions, which can preliminarily be considered that the manipulation in Experiment 1 had certain effectiveness.

An independent samples t-test was conducted with group (1 = regional poverty information group, 0 = control group) as the independent variable and poverty alleviation willingness as the dependent variable. The results showed that participants in the regional poverty information group ($M = 41.62$, $SD = 11.22$) had stronger poverty alleviation willingness than those in the control group ($M = 36.54$, $SD = 11.37$), $t(177) = 3.01$, $p = 0.003$, Cohen's $d = 0.45$. To further test the robustness of the results, participants' age, gender (1 = female, 0 = male), income, and subjective social class were used as control variables for ANOVA, and the results still found that participants in the regional poverty information group had stronger poverty alleviation willingness than those in the control group ($p = 0.005$).

2.3 Summary and Discussion

Experiment 1 preliminarily verified that regional poverty information led to stronger poverty alleviation willingness among participants. Although this experiment used the distribution information of China's 14 contiguous destitute areas as the experimental manipulation material for regional poverty information, which has certain ecological validity, the internal validity of this manipulation method may have limitations, especially the lack of manipulation check for the control group (considering that manipulation check for the control group

might remind participants of the objective fact of China's regional poverty distribution, thus triggering experimental manipulation effects, so no manipulation check was conducted for the control group). Based on the above shortcomings, Experiment 2 will construct an anonymous area to manipulate regional poverty information and non-regional poverty information to improve the internal validity of the experiment and test the robustness of Experiment 1's results. In addition, Experiment 2 will further examine the psychological mechanism of regional poverty information affecting poverty alleviation willingness, that is, the mediating role of external attribution tendency of poverty.

Experiment 2

Based on Experiment 1, Experiment 2 manipulated regional poverty information by creating an anonymous area and required participants to report external attribution tendency of poverty and poverty alleviation willingness, thereby further verifying the impact of regional poverty information on poverty alleviation willingness and the mediating role of external attribution tendency of poverty.

3.1.1 Participants

Based on the effect size obtained from Experiment 1 ($d = 0.45$, one-tailed test), G*Power 3.1 software was used to estimate the minimum sample size required for Experiment 2 in advance. The results showed that at least 62 participants per group were needed to achieve statistical power above 0.8 (Faul et al., 2009). Considering the need to test potential mediating effects, 235 non-student adult participants with fixed income (108 males, 127 females) were ultimately recruited through the online platform Credamo. Among them, 105 participants were in the regional poverty information group, and 130 were in the non-regional poverty information group. The average age of participants was 31.91 years ($SD = 6.77$).

3.1.2 Procedure

Experiment 2 used a single-factor between-subjects design, with the between-subjects independent variable being group, including two conditions: regional poverty information group and non-regional poverty information group. The dependent variable was poverty alleviation willingness, and the mediating variable was external attribution tendency of poverty.

Manipulation of regional poverty information. Experiment 2 manipulated regional poverty information by presenting the aggregation distribution of poor populations in a specific area of an anonymous Area A (see Figure 1 [Figure 1: see original paper]). First, participants were presented with a map of an anonymous area in China, which included distribution information for the lowest-income 20% of the population. In the regional poverty information group, the lowest-income 20% of poor populations were mainly concentrated in a specific area; in the non-regional poverty information group, the lowest-income

20% of poor populations were dispersed in various directions on the map. To test the effectiveness of the regional poverty information manipulation, participants needed to answer how the poor populations in this area were distributed (concentrated in certain areas or dispersed in various areas).

Measurement of external attribution tendency of poverty. Chow and Galak's (2012) poverty attribution scale (e.g., Davidai, 2018; Li, J., 2012) was used to measure participants' external attribution tendency of poverty for the poor populations in anonymous Area A. This measurement included 7 items, using a 7-point scale (1 = strongly disagree, 7 = strongly agree). Among them, 3 items measured internal attribution of poverty (e.g., "lack of ability and talent" ; $\alpha = 0.87$), and 4 items measured external attribution of poverty (e.g., "regional factors" ; $\alpha = 0.72$). Following the practices of previous researchers (Davidai, 2018; Li, J., 2012), the average score of participants on the 4 external attribution items minus the average score on the 3 internal attribution items was used as the score for external attribution tendency of poverty, with higher scores indicating a higher external attribution tendency of poverty among participants.

Measurement of poverty alleviation willingness. Similar to Experiment 1, the fiscal allocation task for anonymous Area A was used to measure participants' poverty alleviation willingness.

Control variables. Same as Experiment 1.

3.2.1 Manipulation Check

Participants in the regional poverty information group all answered that the poor populations in the anonymous area were concentrated in certain areas, and participants in the non-regional poverty information group all answered that the poor populations in the anonymous area were dispersed in various areas. Therefore, the manipulation of regional poverty information in Experiment 2 was effective.

3.2.2 Difference Analysis

Independent samples t-tests were conducted with group (1 = regional poverty information group, 0 = non-regional poverty information group) as the independent variable and external attribution tendency of poverty and poverty alleviation willingness as dependent variables, respectively. The results showed that participants in the regional poverty information group ($M = 1.00$, $SD = 1.82$) had a higher external attribution tendency of poverty than those in the non-regional poverty information group ($M = -0.35$, $SD = 2.02$), $t(233) = 5.29$, $p < 0.001$, Cohen's $d = 0.69$. At the same time, compared with participants in the non-regional poverty information group ($M = 33.86$, $SD = 11.08$), those in the regional poverty information group ($M = 37.24$, $SD = 11.16$) also had stronger poverty alleviation willingness, $t(233) = 2.32$, $p = 0.021$, Cohen's $d = 0.30$.

To further test the robustness of the above results, participants' age, gender (1 = female, 0 = male), income, and subjective social class were used as control variables for ANOVA. The results found that participants in the regional poverty information group still had a higher external attribution tendency of poverty ($p < 0.001$) and stronger poverty alleviation willingness ($p = 0.017$) than those in the non-regional poverty information group.

3.2.3 Mediation Effect Analysis

To further examine whether the stronger poverty alleviation willingness caused by regional poverty information was due to external attribution tendency of poverty, group (1 = regional poverty information group, 0 = non-regional poverty information group) was used as the independent variable, external attribution tendency of poverty as the mediating variable, and poverty alleviation willingness as the dependent variable. Hayes' (2013) PROCESS syntax was used for Bootstrap test of mediation effects (5000 resamples). The results (see Figure 2 [Figure 2: see original paper]) showed that when external attribution tendency of poverty was added to the mediation model, the significant effect of regional poverty information on poverty alleviation willingness (total effect = 3.38, 95% CI [0.50, 6.25]) became non-significant (direct effect = 2.34, 95% CI [-0.68, 5.36]). At the same time, the indirect effect of external attribution tendency of poverty was significant, $B = 1.04$, 95% CI [0.12, 2.13]. To further test the robustness of the above results, participants' age, gender (1 = female, 0 = male), income, and subjective social class were used as control variables for Bootstrap test of mediation effects (5000 resamples), and similar results were still found (the indirect effect of external attribution tendency of poverty was significant, $B = 1.03$, 95% CI [0.01, 2.23]). The above results indicate that compared with the non-regional poverty information group, the stronger poverty alleviation willingness of participants in the regional poverty information group was due to their higher external attribution tendency of poverty toward the poor population.

3.3 Summary and Discussion

Consistent with the results of Experiment 1, Experiment 2 again verified that participants in the regional poverty information group had stronger poverty alleviation willingness than those in the non-regional poverty information group by manipulating regional poverty information in an anonymous area. At the same time, Experiment 2 also further revealed that external attribution tendency of poverty plays a mediating role. However, Experiment 2 still has some limitations: First, Experiment 2 used the concentration of poor populations in specific areas to manipulate regional poverty information, but the scope of the poverty area and population size lacked strict control, which might cause participants to perceive the poverty area scope and population size as larger in the regional poverty information group, thereby enhancing their poverty alleviation willingness. Second, the measurement of poverty alleviation willingness in

Experiment 2 mainly reflected support willingness for poverty alleviation policies at the macro level and did not involve individual-level helping willingness (such as donation willingness to poor groups). In view of the above limitations, Experiment 3 will use a regional poverty information manipulation task that strictly controls the poverty area scope and population size to further verify the impact of regional poverty information on poverty alleviation willingness (including support willingness for poverty alleviation policies and individual donation willingness) and the mediating role of external attribution tendency of poverty.

Experiment 3

Based on Experiment 2, Experiment 3 manipulated regional poverty information by creating an anonymous area with equivalent region size and population scale and added a measurement of individual donation willingness, thereby again verifying the impact of regional poverty information on poverty alleviation willingness and the mediating role of external attribution tendency of poverty.

4.1.1 Participants

Same as Experiment 2, at least 62 participants per group were needed to achieve statistical power above 0.8 (Faul et al., 2009). Considering the need to test potential mediating effects, 360 non-student adult participants with fixed income (135 males, 225 females) were ultimately recruited through the online platform Credamo. Among them, 179 participants were in the regional poverty information group, and 181 were in the non-regional poverty information group. The average age of participants was 31.04 years ($SD = 7.72$).

4.1.2 Procedure

Experiment 3 used a single-factor between-subjects design, with the between-subjects independent variable being group, including two conditions: regional poverty information group and non-regional poverty information group. The dependent variable was poverty alleviation willingness (including support willingness for poverty alleviation policies and donation willingness), and the mediating variable was external attribution tendency of poverty.

Manipulation of regional poverty information. Similar to Experiment 2, Experiment 3 manipulated regional poverty information by presenting the aggregation distribution of poor populations in a specific area of an anonymous Area A (see Figure 3 [Figure 3: see original paper]). The difference was that Experiment 3 used a relatively abstract approach, that is, informing participants that the area map was simplified and presented with squares, and using human-shaped icons to represent the area's population and region size (where 1 human-shaped icon represented a portion of the population and region scope of the same scale), with purple human-shaped icons representing the lowest-income 20% of poor populations (accounting for 20% of the total population). In the

regional poverty information group, poor populations were mainly concentrated in the northwest region; in the non-regional poverty information group, poor populations were dispersed in various directions on the map. To test the effectiveness of the regional poverty information manipulation, participants in both groups needed to answer how the lowest-income 20% of poor populations were distributed in Area A (1 = very dispersed, 7 = very concentrated).

Measurement of external attribution tendency of poverty. Same as Experiment 2, participants needed to rate the external attribution of poverty for the poor populations in anonymous Area A.

Measurement of poverty alleviation willingness. Experiment 3 measured poverty alleviation willingness with two indicators: (1) Support willingness for poverty alleviation policies, which was the same as Experiment 2; (2) Individual donation willingness: In this measurement, participants were told that they would receive certain remuneration for participating in this experiment and were asked what percentage of the remuneration (0~100) they were willing to donate to the poor populations in anonymous Area A to help them improve their living standards.

Control variables. Same as Experiment 2.

4.2.1 Manipulation Check

Independent samples t-test results showed that participants in the regional poverty information group ($M = 6.59$, $SD = 0.77$) were more inclined to believe that poor populations were regionally concentrated than those in the non-regional poverty information group ($M = 1.96$, $SD = 1.21$), $t(358) = 43.45$, $p < .001$, Cohen's $d = 4.58$. Therefore, the manipulation of regional poverty information can be considered effective.

4.2.2 Difference Analysis

Independent samples t-tests were conducted with group (1 = regional poverty information group, 0 = non-regional poverty information group) as the independent variable and external attribution tendency of poverty and poverty alleviation willingness (including support willingness for poverty alleviation policies and donation willingness) as dependent variables, respectively. The results showed that participants in the regional poverty information group ($M = 1.12$, $SD = 1.91$) had a higher external attribution tendency of poverty than those in the non-regional poverty information group ($M = -0.43$, $SD = 2.13$), $t(358) = 7.27$, $p < 0.001$, Cohen's $d = 0.77$. At the same time, compared with participants in the non-regional poverty information group (M support willingness for poverty alleviation policies = 35.79, $SD = 9.82$; M donation willingness = 49.20%, $SD = 26.33\%$), those in the regional poverty information group (M support willingness for poverty alleviation policies = 40.98, $SD = 12.45$; M donation willingness = 56.01%, $SD = 26.10\%$) also had stronger support willingness for

poverty alleviation policies ($t(358) = 4.39, p < 0.001, \text{Cohen's } d = 0.46$) and donation willingness ($t(358) = 2.46, p = 0.014, \text{Cohen's } d = 0.26$).

To further test the robustness of the above results, participants' age, gender (1 = female, 0 = male), income, and subjective social class were used as control variables for ANOVA. The results found that participants in the regional poverty information group still had a higher external attribution tendency of poverty ($p < 0.001$) and stronger support willingness for poverty alleviation policies ($p < 0.001$) and donation willingness ($p = 0.006$) than those in the non-regional poverty information group.

4.2.3 Mediation Effect Analysis

To further test whether the stronger support willingness for poverty alleviation policies caused by regional poverty information was due to external attribution tendency of poverty, group (1 = regional poverty information group, 0 = non-regional poverty information group) was used as the independent variable, external attribution tendency of poverty as the mediating variable, support willingness for poverty alleviation policies as the dependent variable, and participants' age, gender (1 = female, 0 = male), income, and subjective social class as control variables. Hayes' (2013) PROCESS syntax was used for Bootstrap test of mediation effects (5000 resamples). The results (see Figure 4 [Figure 4: see original paper]) showed that when external attribution tendency of poverty was added to the mediation model, the significant effect of regional poverty information on support willingness for poverty alleviation policies (total effect = 4.94, 95% CI [2.62, 7.26]) became smaller (direct effect = 3.81, 95% CI [1.33, 6.29]). At the same time, the indirect effect of external attribution tendency of poverty was significant, $B = 1.13, 95\% \text{ CI } [0.20, 2.15]$. This result indicates that compared with the non-regional poverty information group, the stronger support willingness for poverty alleviation policies among participants in the regional poverty information group was due to their higher external attribution tendency of poverty toward the poor population.

Similarly, with donation willingness as the dependent variable, Hayes' (2013) PROCESS syntax was used for Bootstrap test of mediation effects (5000 resamples). The results (see Figure 5 [Figure 5: see original paper]) showed that when external attribution tendency of poverty was added to the mediation model, the significant effect of regional poverty information on donation willingness (total effect = 6.92, 95% CI [1.97, 11.87]) became non-significant (direct effect = 4.58, 95% CI [-0.72, 9.88]). At the same time, the indirect effect of external attribution tendency of poverty was significant, $B = 2.34, 95\% \text{ CI } [0.16, 4.75]$. The above results indicate that compared with the non-regional poverty information group, the stronger donation willingness among participants in the regional poverty information group was due to their higher external attribution tendency of poverty toward the poor population.

4.3 Summary and Discussion

Consistent with the results of Experiments 1 and 2, Experiment 3 again verified that participants in the regional poverty information group had stronger support willingness for poverty alleviation policies and donation willingness than those in the non-regional poverty information group, and external attribution tendency of poverty could explain this effect. That is, regional poverty information triggered participants to have more external attribution tendency of poverty toward the poor masses, which in turn led to stronger poverty alleviation willingness. To further verify the psychological mechanism of external attribution tendency of poverty, Experiment 4 was conducted.

Experiment 4

To further test the causal relationship between variables (Ge, 2023; Pirlott & MacKinnon, 2016), Experiment 4 planned to test the mediating role of external attribution tendency of poverty in the impact of regional poverty information on poverty alleviation again by manipulating the mediating variable. That is, Experiment 4 planned to use a 2 (group: regional poverty information group vs. non-regional poverty information group) \times 2 (external attribution tendency of poverty: high vs. control) between-subjects design to examine whether the difference in poverty alleviation between the two groups would be reduced or eliminated if both regional poverty information group and non-regional poverty information group participants were simultaneously manipulated to have high external attribution tendency of poverty (see Ge, 2023). In addition, Experiments 1~3 mainly measured poverty alleviation willingness rather than actual behavior, so Experiment 4 will add actual helping behavior to more accurately reflect participants' real poverty alleviation actions.

5.1.1 Participants

Since no research has examined the interactive effect of regional poverty information and external attribution tendency of poverty on poverty alleviation, this experiment referred to the average effect size in the field of social psychology ($f = 0.21$, two-tailed test, Richard et al., 2003) and used G*Power 3.1 software to estimate the minimum sample size required for this experiment in advance (Faul et al., 2009). The results showed that at least 45 participants per group were needed to achieve statistical power above 0.8. To improve statistical power and more sensitively detect the hypothesized effect, 407 valid participants (109 males, 298 females) were ultimately recruited through the Credamo platform. Among them, 100 participants were in the regional poverty information/high external attribution tendency group, 102 in the regional poverty information/control group, 104 in the non-regional poverty information/high external attribution tendency group, and 101 in the non-regional poverty information/control group.

5.1.2 Procedure

Experiment 4 used a 2 (group: regional poverty information group vs. non-regional poverty information group) \times 2 (external attribution tendency of poverty: high vs. control) between-subjects design, with the dependent variables being poverty alleviation willingness and behavior (including support willingness for poverty alleviation policies and individual donation behavior).

Experimental manipulation. Similar to Experiment 2, the aggregation distribution of poor populations in a specific area of an anonymous Area A was used to manipulate regional poverty information. To further manipulate external attribution tendency of poverty, referring to the methods of Piff et al. (2020) and Ji et al. (2025), participants in the high external attribution tendency group read a description of the causes of poverty among the poor populations in this area, emphasizing that poverty was mainly caused by external factors (harsh geographic conditions, resource scarcity, and unfavorable socioeconomic environment, etc.). In the external attribution tendency control group, participants did not read the above information. To test the effectiveness of the regional poverty information manipulation, participants needed to answer the distribution of poor populations in Area A (1 = not at all concentrated in certain areas, 7 = completely concentrated in certain areas). To test the effectiveness of the external attribution tendency manipulation, the 7 items measuring external attribution tendency of poverty used in Experiment 2 were used as manipulation check items (scoring method same as Experiment 2).

Measurement of poverty alleviation willingness and behavior. Experiment 4 measured participants' poverty alleviation willingness and behavior separately. The measurement of poverty alleviation willingness was the same as the support willingness for poverty alleviation policies in Experiment 2. The measurement of poverty alleviation behavior used real poverty donation behavior. Referring to previous research practices (Ding et al., 2022; Martin & Randal, 2008; Ji et al., 2025), participants needed to complete an unrelated survey task to obtain an additional 2 yuan remuneration and could choose to keep the additional remuneration for themselves or donate it to a poverty alleviation organization for Area A (1 = donate, 0 = keep) to help them solve their living difficulties. After completing the additional unrelated task, participants could receive 2 yuan remuneration or donation information (participants who chose to donate were told that their donation would be donated to a poverty alleviation public welfare project by the experimenter through an Alipay mini-program).

Control variables. Same as Experiment 3.

5.2.1 Manipulation Check

Independent samples t-test results showed that participants in the regional poverty information group ($M = 5.74$, $SD = 1.21$) were more inclined to believe that poor populations were regionally concentrated than those in the non-regional poverty information group ($M = 2.24$, $SD = 1.65$), $t(405) = 24.34$, p

< 0.001 , Cohen's $d = 2.41$. At the same time, participants in the high external attribution tendency group ($M = 2.59$, $SD = 1.45$) were more inclined to believe that the poverty of poor populations was caused by external reasons than those in the control group ($M = 0.94$, $SD = 1.77$), $t(405) = 10.29$, $p < 0.001$, Cohen's $d = 1.02$. The above results indicate that both the regional poverty information manipulation and the external attribution tendency manipulation in Experiment 4 were effective.

5.2.2 Difference Analysis

With support willingness for poverty alleviation policies as the dependent variable, a 2 (group: regional poverty information group vs. non-regional poverty information group) $\times 2$ (external attribution tendency of poverty: high vs. control) ANOVA was conducted. The results showed that the main effect of group was significant, $F(1, 403) = 28.12$, $p < 0.001$, $\eta^2 = 0.07$, indicating that participants in the regional poverty information group ($M = 36.36$) had stronger poverty alleviation willingness than those in the non-regional poverty information group ($M = 31.83$). The main effect of external attribution tendency of poverty was also significant, $F(1, 403) = 60.17$, $p < 0.001$, $\eta^2 = 0.13$, indicating that participants in the high external attribution tendency group ($M = 37.40$) had higher poverty alleviation willingness than those in the control group ($M = 30.78$). Importantly, the interaction between group and external attribution tendency of poverty was significant, $F(1, 403) = 12.28$, $p = 0.001$, $\eta^2 = 0.03$. Further simple effect tests (using Bonferroni correction; see Figure 6 [Figure 6: see original paper]) showed that in the external attribution tendency control condition, participants in the regional poverty information group ($M = 34.54$) had stronger poverty alleviation willingness than those in the non-regional poverty information group ($M = 27.02$, $p < 0.001$); while in the high external attribution tendency condition, there was no significant difference in poverty alleviation willingness between participants in the regional poverty information group ($M = 38.18$) and those in the non-regional poverty information group ($M = 36.63$, $p = 0.20$). To further test the robustness of the results, with age, gender (1 = female, 0 = male), subjective class, and income as control variables, the above results still held.

Similarly, with donation behavior (1 = yes, 0 = no) as the dependent variable, and group (1 = regional poverty information group, 0 = non-regional poverty information group), external attribution tendency of poverty (1 = high, 0 = control), and their interaction as predictor variables, a binary logistic regression analysis was conducted. The results showed that the main effect of group was significant, $B = 0.85$, Wald $\chi^2(1) = 7.95$, $p = 0.005$, odds ratio = 2.35, 95% CI [1.30, 4.25], indicating that participants in the regional poverty information group (73%) had more donation behavior than those in the non-regional poverty information group (65%). The main effect of external attribution tendency of poverty was also significant, $B = 0.83$, Wald $\chi^2(1) = 7.63$, $p = 0.006$, odds ratio = 2.29, 95% CI [1.27, 4.13], indicating that participants in the high ex-

ternal attribution tendency group (74%) had more poverty donation behavior than those in the control group (60%). Importantly, the interaction between group and external attribution tendency of poverty was significant, $B = -0.96$, $Wald^2(1) = 4.79$, $p = 0.029$, odds ratio = 0.38, 95% CI [0.16, 0.91]. Further analysis (see Figure 7 [Figure 7: see original paper]) showed that in the external attribution tendency control condition, participants in the regional poverty information group (75%) had more donation behavior than those in the non-regional poverty information group (55%, $p = 0.005$); while in the high external attribution tendency condition, there was no significant difference in donation behavior between participants in the regional poverty information group (72%) and those in the non-regional poverty information group (74%, $p = 0.74$). To further test the robustness of the results, with age, gender (1 = female, 0 = male), subjective class, and income as control variables, the above results still held.

5.3 Summary and Discussion

By manipulating participants' external attribution tendency of poverty, Experiment 4 revealed that only in the control condition did regional poverty information (vs. non-regional poverty information) trigger more poverty alleviation willingness and behavior; while in the high external attribution tendency condition, the impact of regional poverty information on poverty alleviation willingness and behavior was not significant. The above results further verified that external attribution tendency of poverty is the mediating mechanism through which regional poverty information affects poverty alleviation.

6 General Discussion

Through 4 experiments, this study examined the impact of regional poverty information on poverty alleviation willingness and behavior and its psychological mechanism. The results found that regional poverty information led to more external attribution tendency of poverty (Experiments 2~4), which in turn increased poverty alleviation willingness (Experiments 1~4) and behavior (Experiment 4). It is worth noting that this study verified the robustness of the above research results by using different experimental manipulation materials (China's contiguous destitute area distribution information or anonymous area poor population concentration distribution information), different research designs (measuring or manipulating mediating variables), and diverse dependent variable measurements (support willingness for poverty alleviation policies and individual donation willingness and behavior).

6.1 The Impact of Regional Poverty Information on Poverty Alleviation

First, this study innovatively manipulated the geographic information of poverty and revealed its causal impact path on poverty alleviation willingness and be-

havior through empirical evidence, which has important theoretical and practical value. In previous research and practice, scholars have generally revealed that the public's enthusiasm for participating in poverty alleviation is insufficient (Cozzarelli et al., 2001; Van Heerde & Hudson, 2010; Wang et al., 2021). Taking this problem as the entry point, this study robustly found that the presentation of this geographic information can significantly stimulate the public's poverty alleviation willingness and behavior by cleverly highlighting the geographic distribution information of poverty when presenting the poverty "map." This discovery not only enriches the research on antecedent variables of poverty alleviation but also provides a new, geography-information-based psychological intervention path for mobilizing public participation in poverty alleviation practice.

Second, the results of this study show that regional poverty information can improve the unidentifiable dilemma of group assistance and, to a certain extent, expand the research on group assistance. Early studies have shown that because groups are often more abstract and difficult to identify, people's willingness to help groups is lower (Kogut & Ritov, 2005; Zhang et al., 2016). For example, Kogut and Ritov (2005) found that compared with identifiable individual victims, group victims triggered less empathy and helping willingness. The main target of this study is the poor group in the lowest 20% of income, which has abstract characteristics due to the lack of specific identifiable individual information. However, this study provides spatial anchoring clues for poverty to a certain extent by distinguishing whether the poor group is regionally distributed or non-regionally distributed, thereby improving the unidentifiable dilemma in group assistance. This result provides a new perspective and ideas for research and intervention on group assistance.

Furthermore, the results of this study expand the social effects of regional poverty information and reveal its potential double-edged sword effect. Regional poverty information is usually considered an important source of negative stereotypes and prejudice. For example, regional prejudice, especially prejudice against areas with lower economic development levels, widely exists in different cultures and societies (Hehman et al., 2021; Jiang & Zhang, 2009). At the same time, regional poverty labels not only deepen the identity threat of residents in poor areas but also affect the public's cognition and attitudes toward these groups (Swab & Patel, 2024; Yang & Zou, 2007). Previous research has revealed the multiple negative effects of regional poverty labels on residents in poor areas: on the one hand, it may trigger stereotype threat, reducing individuals' self-esteem and mental health levels (Swab & Patel, 2024; Zhang et al., 2012); on the other hand, it may also aggravate the public's social prejudice, reducing the public's positive attitudes and behaviors toward residents in poor areas (Wang et al., 2023; Zhang et al., 2012). For example, Wang Hao et al. (2023) took residents of Nanjing, Jiangsu as participants and found that Nanjing residents had lower subjective class judgments and greater psychological distance perception toward residents of northern Jiangsu, which is relatively less economically developed, which further reduced their helping behavior toward residents

of that area. Different from the above negative effects, this study found that regional poverty information not only did not reduce people's prosociality but could also mobilize the public to participate more in poverty alleviation. This discovery indicates that regional poverty information may simultaneously have a double-edged sword effect of "stigma effect" (reducing helping actions by strengthening group boundaries) and "mobilization effect" (enhancing helping actions by highlighting structural dilemmas), which provides a more comprehensive explanation and understanding of the social effects of regional poverty information. It is worth noting that the above double-edged sword effect may stem from differences in information presentation methods, that is, regional poverty labels mainly highlight "people from poor places," which easily strengthens social categorization and group distinction (Zuo et al., 2019); while this study emphasizes "people from poor places," making people pay more attention to the unfavorable external environment of residents in poor areas. Of course, future research can further explore the moderating effect of the above information presentation contexts on the double-edged sword effect of regional poverty information.

6.2 The Explanatory Mechanism of External Attribution Tendency of Poverty

Importantly, this study reveals the explanatory mechanism of external attribution tendency of poverty in the impact of regional poverty information on poverty alleviation. Geographic factors (such as urban-rural gaps, regional development imbalances, etc.) are important external situational factors and social structural factors in the formation of poverty. Research in poverty geography shows that differences in resource endowments, natural disasters, infrastructure, and policy bias between urban and rural areas and different regions have kept some areas in long-term poverty (Ravallion & Wodon, 1999; Zhou & Li, 2021). People in remote or underdeveloped areas face long-term survival and development challenges. Although external factors including geographic factors are systematic key variables causing poverty (Amemiya et al., 2023; Haslanger, 2016), people generally tend to attribute poverty internally rather than externally (Wu & Zhang, 2007; Cozzarelli et al., 2001). As early as 2000, the American Psychological Association's "Resolution on Poverty and Socioeconomic Status" called on the public to pay attention to the social structural factors of poverty and believed that the scientific mission of psychologists is to eliminate public stereotypes about the causes of poverty and help society better understand and solve poverty problems (American Psychological Association, 2003). Some early studies tried to change the public's poverty attribution tendency and enhance poverty alleviation actions through methods such as group contact (Wiwad, 2019), situational simulation (Nancy et al., 2014), and explicit attribution (Piff et al., 2020). However, these methods often face problems such as high human and material investment or low ecological validity. Different from these methods, this study robustly enhanced the public's external attribution tendency of poverty and increased poverty alleviation willingness and behavior by cleverly adding geographic information (i.e., regional poverty information)

to poverty descriptions, in a way that is low-cost, high in ecological validity, and relatively natural in guidance. This discovery not only provides a new path for poverty attribution intervention but also enriches the research on the attribution-alleviation path mechanism.

The results of this study also support the attribution-empathy model of helping behavior to a certain extent. This model believes that when individuals attribute negative outcomes to the parties themselves, they show less empathy and reduce their helping willingness toward victims; when individuals attribute the occurrence of negative outcomes to external factors (such as situations, social structures, etc.), they believe that the parties should not be responsible for the dilemma, thus showing more empathy and higher helping willingness and behavior (Betancourt, 1990; Zhang & Liu, 2003). This study shows that highlighting regional poverty information can significantly reduce the attribution of self-responsibility for poverty, thereby enhancing people's helping willingness and behavior, which supports the above model to a certain extent. It is worth noting that although empathy responses to others' dilemmas are direct antecedent variables of helping behavior (Batson, 1987; Ding & Lu, 2016; Ji et al., 2025), this study did not directly focus on the role of empathy responses. Future research can further examine the differences in empathy responses toward regional and non-regional poverty groups and their role in poverty alleviation, thereby more clearly revealing the psychological path model of regional poverty information—external attribution tendency of poverty—empathy response—poverty alleviation action.

6.3 Practical Implications

Poverty governance is a huge social project that requires extensive mobilization of all sectors of society to participate and support in order to achieve sustainable results. Emphasizing the role of the third distribution and leveraging social forces to participate in poverty relief has become one of the important means to reduce wealth and income inequality among Chinese residents and achieve common prosperity. The findings of this study have important practical implications for promoting China's current poverty governance and common prosperity practice.

First, this study found that regional poverty information can significantly enhance the public's poverty alleviation willingness and behavior. This finding suggests that governments and related organizations can stimulate public attention and support for residents in underdeveloped areas by moderately highlighting regional poverty scenarios (such as using images, data, etc. to present the geographic spatial information of poverty) in policy communication and public welfare propaganda. Second, this study reveals the mediating mechanism of external attribution tendency of poverty, that is, regional poverty information can strengthen external attribution tendency of poverty, and this cognitive attribution pattern helps enhance poverty alleviation actions. This result further suggests that in poverty governance, governments and social organizations can

promote broader social mobilization and resource allocation efficiency by optimizing the narrative framework of poverty, such as enhancing the public's understanding and recognition of external causes like regional development inequality and weakening the emphasis on individual responsibility (e.g., Amemiya et al., 2023). Finally, the results of this study remind us that poverty governance and common prosperity are not only a matter of wealth redistribution but also a process of social cognition and cultural construction. By actively building a more comprehensive poverty cognition framework, we can enhance support from all sectors of society for poor groups, thereby promoting the harmonious development of society as a whole and the realization of common prosperity. It should be noted that we also need to be vigilant about the possible negative consequences of using regional poverty information in poverty alleviation policy propaganda, such as regional prejudice (Hehman et al., 2021; Jiang & Zhang, 2009). Therefore, regional poverty information guidance methods should be used moderately in policy advocacy, and the combination of regional poverty information and positive personal images can be considered to reduce potential stigmatization.

6.4 Research Limitations and Future Directions

This study still has some shortcomings and limitations that need to be addressed in future research. First, this study mainly focused on the impact of regional poverty information on the public's poverty alleviation. Future research can examine whether this information also affects the psychological and behavioral responses of regional poverty sufferers themselves. For example, poor people may feel socially labeled due to the spread of regional poverty information, which may affect their own motivation to escape poverty and expectations for the future (Fu et al., 2020), and threaten their self-concept and mental health (Peretz-Lange et al., 2024), which is not conducive to poverty alleviation in the true sense. Second, when examining the role of poverty attribution, this study mainly focused on the internal-external dimension. Although this approach is consistent with most current poverty attribution research, poverty attribution actually involves other important dimensions, such as stability (believing poverty is a long-term social structural problem) vs. instability (believing poverty is a temporary economic predicament), and controllability (believing poverty can be controlled through personal effort) vs. uncontrollability (believing poverty cannot be controlled and changed by individuals). Future research can further explore the explanatory role of these dimensions in the results of this study. Furthermore, the effect of this study on increasing external attribution tendency of poverty and poverty alleviation willingness and behavior through regional poverty information is immediate. However, whether this effect has long-term effects remains to be tested. Piff et al. (2020) found in their poverty attribution intervention research that the effect of explicit attribution intervention at the individual cognitive level was still effective 1 day and 5 months after the experiment, indicating that poverty attribution intervention may have durability. Therefore, future research can consider using a longitudinal research design to explore the

long-term impact effects of this study' s results. Finally, the sampling of this study was all from the Chinese social background, and whether this result can be generalized to other countries or regions remains to be verified. Cross-cultural psychology research shows that there are usually differences in attribution methods for negative events between Chinese and Western societies (Morris & Peng, 1994), that is, Eastern societies emphasize the influence of others and the environment, while Western societies focus more on the role of individuals. This difference suggests that individuals in different social and cultural backgrounds may have different degrees of emphasis on internal and external factors. Future research can verify the results of this study in Western social backgrounds.

Through 4 progressive experiments, this study draws the following conclusions: (1) Regional poverty information leads to greater poverty alleviation willingness and behavior; (2) External attribution tendency of poverty plays a mediating role in the impact of regional poverty information on poverty alleviation. That is, regional poverty information triggers more external attribution tendency of poverty, which in turn leads to more poverty alleviation willingness and behavior.

8 References

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

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