Psychological Factors Influencing the Endogenous Motivation of Poverty Alleviated Population to Block Poverty Return: Social Trust and Basic Psychological Needs, Data from Guangxi Province, China

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Abstract

The phenomenon of relapsing into poverty is a crucial factor in determining the success of poverty alleviation efforts, and the lack of intrinsic motivation among individuals to escape poverty is a primary cause of poverty's recurrence. This study is grounded in the theory of self-determination and constructs a research model to elucidate the psychological mechanisms by which intrinsic motivation prevents individuals from falling back into destitution. An examination of relevant data collected from economically disadvantaged individuals in Guangxi, China reveals that social trust has a significant and positive effect on the satisfaction of autonomy needs, competence needs, relatedness needs, and endogenous motivation. The relationship between social trust and endogenous motivation is simultaneously mediated by autonomy needs, competence needs, and relatedness needs. It is evident that psychological factors such as social trust, autonomy needs, competence needs, and relatedness needs have a significant impact on the intrinsic motivation of individuals to combat poverty.

Keywords: *Blocking the return to poverty, Endogenous motivation, Social trust, Self-determination theory.*

Introduction

Since China's internal reform and foreign openness policy was implemented in 1978, poverty levels there have dropped dramatically. The number of poor people in China has decreased significantly, as reported by the National Bureau of Statistics of China (2019) and the Department of Health Statistics of the National Bureau of Statistics of China (2020). To be more precise, the number of poor people worldwide has dropped from 250 million in 1978 to just 5.51 million now. It's also worth noting that the poverty rate has dropped from 30.7% in 1978 to 0.6% this year. According to a government report from the People's Republic of China's Ministry of Agriculture and Rural Affairs in 2022, the country's whole population has risen beyond poverty, and extreme poverty was eradicated by 2021. Despite China's apparent success in reducing poverty, some academics have used the Monte Carlo simulation method to calculate that the country has a 1.01% chance of falling into poverty again. This estimation assumes that the poverty alleviation policy and the corresponding social resources allocated to impoverished households remain unchanged. In the absence of supportive policies, Wu, Xiao, and Ma (2021) found that there is a notable increase in the likelihood of individuals experiencing a relapse into poverty, with the probability reaching 9.29%. It can be observed that the probability of returning to poverty after the discontinuation of supportive policies is significantly higher when compared to the situation where the supportive policies remain unchanged. Yuan and Shi (2019) argue that the issue of relapsing into poverty is a pivotal factor in achieving success in the fight against poverty. According to Hu and Cao (2021), a

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significant factor contributing to the persistent nature of poverty is the absence of intrinsic motivation to eradicate it. Conversely, the presence of sufficient internal motivation can empower individuals to effectively prevent the reemergence of poverty.

According to Guo, Liao, Wang, Liu, and Li (2021), developing one's own intrinsic drive is crucial in combating and eradicating poverty in the modern world. Improving low-income families' intrinsic drive and breaking the cycle of chronic poverty are essential to reducing poverty effectively. Research by J. G. Zhang, Yang, and Wu (2022), Q. Zhang, Li, and Zhuang (2022), and Y. T. Zhang, Su, and Yan (2018) supports this assertion.

Therefore, the overarching goals of this study are to 1) examine the psychological factors that impact the development of intrinsic desire towards the elimination of poverty. (2) The role that mutual trust and basic psychological requirements play in inspiring people to take action to end poverty on their own will.

Theory and the Hypotheses of Study

The Relationship and Theoretical Hypothesis between Social Trust, Basic Psychological Needs, and Endogenous Motivation

Li (2018) defines endogenous motivation as an intrinsic drive that impacts an individual's behavior. According to Woodworth's (1918) definition, the concept of internal driving force refers to the innate motivation that compels an individual to pursue a specific goal.The concept of social trust pertains to the extent of trust that is present among individuals and the organization, and is widely recognized as a fundamental element of social capital (Lu & Wang, 2012). Social capital is a term used to describe the accumulation of social connections, trust, and established patterns of behavior that emerge from individuals' engagement in various activities. Li, Wang, and Liu (2016) argue that the channel in question possesses considerable importance for individuals who are facing poverty, as it grants them access to vital resources and opportunities. Furthermore, it exerts a direct influence on the effectiveness and longevity of poverty governance. According to existing literature, it has been posited that social trust possesses the capacity to augment the sentiments of community affiliation and contentment among individuals residing in a particular locality (Vemuri, Morgan Grove, Wilson, & Burch, 2009; X. Y. Wang & Liu, 2020). According to Ruiz-Robledillo et al. (2014), having a strong social support network may have a major influence on a person's positive emotional experiences and help them meet their own needs. Individuals who get greater social support are more likely to demonstrate more self-assurance in their ability to manage adversities, overcome hurdles, and nurture a better view of personal efficacy, as proposed by Ragini, Anand, and Bhaskar (2018). It's also more likely that their skill requirements will be met effectively. According to proponents of the self-determination hypothesis, people have an innate desire to develop their personalities and reach their full potential by satisfying their demands for independence, mastery, and social connection. Scholars Tian, Tian, and Huebner (2016) found a significant positive correlation between these demands and social trust.Social trust has been shown to have a positive effect on the motivation behind an individual's actions, according to prior studies (Wang, 2019). Individuals' perceptions of their own abilities to succeed in a given situation are also known to be profoundly influenced by their level of social trust (Jing, Chu, Song, & Yuan, 2015; Zhu, Wang, Cui, Jiang, & An, 2014).The current study makes the following hypothesis based on the aforementioned data:

1. Social trust and the desire for individual freedom are positively related, as hypothesized by H1.
2. Social trust and the desire to excel in one's field are strongly correlated (H2).
3. Hypothesis 3: There is a strong positive relationship between social trust and the need for social connection.
4. Social trust is positively correlated with endogenous motivation (H4).

Theoretical Hypothesis and Correlation Between Fundamental Psychological Needs and Internal Drive

According to the theories of Deci and Ryan (2000), Filak and Sheldon (2008), and Qu (2019), an individual's level of intrinsic motivation is greatly affected by how well their basic psychological needs are met. In addition, A. Q. Zhang postulated in 1996 that the psychological requirements of the target audience are the driving force behind the primary influence on the audience's behavior. Poverty governance initiatives, according to Liu and Li (2020) and Xie (2018), should be tailored to the unique situations of low-income households, with a primary emphasis on meeting the needs of those in poverty. Deci and Ryan (2000) found that when people's deepest emotional and psychological needs are met, they perform better. Bandura (1986) also discovered that this type of success might aid in the growth of an improved belief in one's own abilities.Recognizing that self-determination theory is not the only theory in demand and motivation research is crucial since people's psychological needs extend beyond autonomy, competence, and relatedness. All the same, it's vital to recognize that these three basic psychological requirements have great significance in and of themselves, are applicable everywhere, and are of the biggest importance to people (Sheldon, Elliot, Kim, & Kasser, 2001). Ryan and Grolnick (1986) conducted research which suggests that the satisfaction of autonomy needs allows individuals to freely express their own choices, thereby aligning with their authentic internal desires. Stroet, Opdenakker, and Minnaert (2013) posit that the satisfaction of competence needs engenders a sense of achievement, independence, and expertise. The satisfaction obtained from fulfilling competence-related needs acts as a motivating factor for individual behavior. Furthermore, the satisfaction of needs for connection with others can promote a perception of social backing and concern within individuals, prompting them to embrace a purpose-driven mindset that is consistent with societal standards and fostering motivational attitudes such as optimism, perseverance, and active involvement (Furrer & Skinner, 2003). Additionally, research conducted by Du and Li (2021) has demonstrated that the presence of individual autonomy in behavior is associated with positive and significant effects on job performance. Cai and Wu (2014), Deci and Ryan (2002), and Reinboth, Duda, and Ntoumanis (2004) all argue that satisfying one's requirements for autonomy, competence, and relatedness is crucial for transforming extrinsic motivation into intrinsic motivation. Carreira (2012) has also shown an important link between meeting basic psychological requirements and being intrinsically motivated. The current study makes the following hypothesis based on the existing situation:

Three hypotheses are tested: (H5) autonomy requirements positively correlate with endogenous motivation; (H6) competence needs positively correlate with endogenous motivation; and (H7) relatedness needs positively correlate with endogenous motivation.

Relationship and Hypothesis Concerning Fundamental Psychological Needs, Trust in Others, and Intrinsic Motivation

According to Reinboth et al. (2004), people's ability to trust others may be used as a predictor of whether or not their basic psychological needs would be met. These requirements include autonomy, competence, and relatedness. According to the research, trust in others helps people feel more in control of their lives, more confident in their abilities, and more connected to others. Benton (2013) and Tian et al. (2016) conducted empirical studies that corroborated the aforementioned occurrence. According to several studies (Cai & Wu, 2014; Deci & Ryan, 2002; Reinboth et al., 2004), a person's motivation shifts from extrinsic to intrinsic when their requirements for autonomy, competence, and relatedness are met.

The study conducted by Carreira (2012) has established a significant correlation between fundamental psychological needs and intrinsic motivation. In addition, it has been found by researchers that the self-system's autonomy, competence, and relatedness needs play a role as a mediator in the relationship between

social support and the endogenous motivation of individual behavior (Skinner, Furrer, Marchand, & Kindermann, 2008). It is reasonable to suggest that the needs of personal autonomy, competence, and relatedness could potentially act as mediators in the relationship between social trust and intrinsic motivation, drawing on the stepwise methodology proposed by Baron and Kenny (1986) for assessing the mesomeric effect. The following hypotheses are proposed for further study based on the data presented above:

The hypotheses that autonomy requirements mediate the relationship between social trust and endogenous motivation are true (H8), as are the hypotheses that competence needs mediate the relationship between social trust and endogenous motivation (H9), and that relatedness needs mediate the relationship between social trust and endogenous motivation (H10).
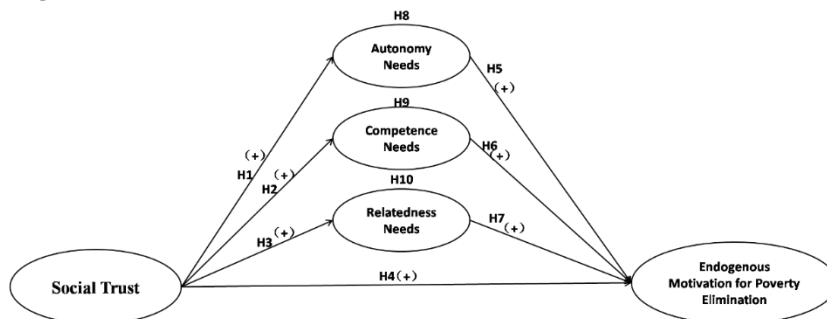
The Research Design

Several theoretical frameworks, including as drive theory, self-determination theory, and social capital theory, need to be taken into account when analyzing the mechanism of endogenous motivation used by poverty alleviation groups to prevent a relapse into poverty. Endogenous motivation, or the incentive that comes from within an individual, is central to the drive hypothesis (Li, 2018; Woodworth, 1918). An individual's intrinsic motivation, which is affected by the fulfillment of basic psychological requirements, is crucial in preventing the recurrence of impoverished behavior. The claims are confirmed by studies by academics like Deci and Ryan (2000) and Filak and Sheldon (2008). Research by Huang (2011), Ragini et al. (2018), Tian et al. (2016), and X. J. Wang (2019) all point to a strong connection between social trust and the fulfillment of individuals' demands for autonomy, competence, and relatedness.

In a study conducted by Zhou, Liu, and Shi (2016), it was found that social trust has the potential to positively influence farmers' motivation to participate in poverty reduction initiatives and improve their ability to attain self-sufficiency and self-improvement. According to existing literature, there is evidence to support the notion that the satisfaction of autonomy, competence, and relatedness needs plays a role in mediating the relationship between social trust and intrinsic motivation, which in turn has an impact on individual behavior (Deci & Ryan, 1985; Skinner et al., 2008).

The present study has formulated a research conceptual framework, as illustrated in Figure 1, drawing upon drive theory, self-determination theory, and social capital theory, which is substantiated by prior scholarly works.

Figure-1: Research Model

Research Methods

Research Tools and Data Collection

The current study utilized a questionnaire with a scale design that had been previously developed by

other researchers. This questionnaire was appropriately referenced and cited. The distribution and collection of the questionnaire were conducted in order to acquire relevant data related to the research topic, resulting in successful outcomes. Questionnaires are a valuable tool for collecting data on various variables within a study, encompassing social trust, autonomy needs, competence needs, relatedness needs, and endogenous motivation of the participants, among others. The study focused on individuals in Guangxi who have previously experienced poverty and have subsequently been lifted out of it. The current study defines poverty alleviation beneficiaries as households that have been formally identified as living in poverty and have effectively overcome poverty after receiving assistance for poverty alleviation, without experiencing a return to poverty for at least one year. The researchers utilized a convenient sampling method to identify individuals residing in poverty in the Guangxi region. The researchers conducted a survey using a questionnaire, with the assistance of individuals who served as primary liaisons for each disadvantaged community in Guangxi. These liaisons were selected from the participants' peers, acquaintances, and associates. The determination of the sample size for research sampling is conducted following the recommendation of Wu Minglong (2009), which suggests that the sample size for each question item should be 10-15 times. The research investigation encompasses a total of 27 inquiries, thereby resulting in an estimated sample size that falls within the range of 270 to 405. The current investigation resulted in a total of 342 valid samples.

Measurement

Measurement of Endogenous Motivation

The assessment of Endogenous Motivation (EM) was carried out using the endogenous motivation scale, a tool developed by researchers such as Wu (N. Wu, Xie, & Fu, 2021). In a recent study conducted by Wu et al. (2021), it was found that individuals can effectively participate in poverty reduction efforts when they possess specific positive attributes, including values, self-awareness, and a propensity for engaging in behaviors aimed at alleviating poverty. It is imperative for individuals to effectively surmount poverty. The scale under consideration consists of a total of eleven items and is assessed using a Likert scale comprising five points. These points range from 1, indicating "completely disagree," to 5, signifying "completely agree." The scale is displayed in Table 1.

Table-1: Measurement of Endogenous Motivation

Variable	Label	Question
Endogenous Motivation	EM1	Success is achieved by individuals who exert diligent effort in their endeavors.
	EM2	Frequently, I derive knowledge from my experiences of failure.
	EM3	I am open to experimenting with novel production tools or techniques.
	EM4	Individuals must depend on their own abilities and resources as others may prove to be unreliable.
	EM5	I will not acknowledge or accept my defeat. I feel compelled to bridge the gap between my performance and that of individuals who exhibit superior productivity.
	EM6	I am capable of identifying and articulating my personal strengths and weaknesses.
	EM7	I am of the opinion that sacrificing minor comforts in the present can lead to substantial benefits in the future.
	EM8	I consistently endeavor to create additional sources of income for the family.
	EM9	Frequently, I employ a strategy of decomposing overarching objectives into smaller, manageable tasks, thereby facilitating a systematic and incremental approach towards their accomplishment.
	EM10	I acquired a vocational skill through independent learning, which proved instrumental in alleviating my socioeconomic disadvantage.
	EM11	I possess a reliable source of assistance that I consistently rely upon.

Measurement of Social Trust

The operationalization of the concept of Social Trust (ST) is achieved by employing a measurement scale that was developed by Wang Heng et al. H. Wang and Zhu (2021) posit that Social Trust can be defined as the degree to which individuals demonstrate trust in their acquaintances, encompassing family members, friends, and members of their immediate community. The construct of social trust is operationalized through a set of four items, specifically referred to as "ST1: Consultation by others on important matters," "ST2: Trust in relatives," "ST3: Trust in friends," and "ST4: Trust in fellow villagers residing in the same locality." For the purpose of rating, a Likert scale consisting of five points was employed. The scale ranged from 1, representing a high level of distrust, to 5, representing a high level of trust.

Measurement of Basic Psychological Needs

The measurement of essential psychological needs, specifically autonomous needs (AN), competence needs (CN), and relatedness needs (RN), is based on a metric developed by researchers such as Chen, Vansteenkiste, Beyers, Boone, and Deci (2014). The survey consists of a total of 12 inquiries, with four items assigned to each of the three primary psychological needs: autonomous needs (AN), competence needs (CN), and relatedness needs (RN). The author implemented essential modifications to the measurement items in order to ensure their congruence with the research scenario. The assessment of these questionnaire items will be carried out using Likert scales, ranging from 1 to 5, where 1 represents complete non-compliance and 5 represents complete compliance. The revised Basic Psychological Needs Scale is presented in Table-2.

Table-2: Measurement of Basic Psychological Needs

Variable	Label	Question
Autonomy Needs	AN1	Within the framework of targeted poverty alleviation, I perceive a discernible degree of agency and autonomy in my actions.
	AN2	In the context of targeted poverty alleviation, my decision is reflective of my genuine aspirations.
	AN3	Within the context of targeted poverty alleviation, I am able to express my truest self.
	AN4	In the pursuit of targeted poverty alleviation, I have found myself engaged in activities that align with my personal interests and passions.
Competence Needs	CN1	I am confident in my ability to contribute to poverty alleviation efforts.
	CN2	Regarding poverty alleviation, I believe I possess the capacity to address this issue.
	CN3	Within the framework of targeted poverty alleviation, I possess the capacity to attain my objectives.
	CN4	I am confident in my ability to effectively address the challenge of poverty alleviation.
Relatedness Needs	RN1	Within the framework of targeted poverty alleviation, it is my contention that there exists a reciprocal sentiment of concern between the individuals whom I hold dear and myself.
	RN2	Within the framework of targeted poverty alleviation, I experience a profound sense of interconnectedness with individuals who exhibit concern for my well-being, as well as those whom I hold in high regard.
	RN3	During the implementation of targeted poverty alleviation, I establish a strong emotional connection with individuals who hold significant importance in my life.
	RN4	During the implementation of targeted poverty alleviation, a sense of emotional warmth is experienced when engaging in social interactions with individuals.

Results Analysis

Reliability Analysis

Cronbach's Alpha is a reliability coefficient used in reliability analysis to quantify how well one survey variable translates to other measurement items. The majority opinion in this field holds that a Cronbach's Alpha coefficient of 0.7 or above is required for variables to show strong dependability. Cronbach's Alpha coefficients for all variables in Table 3 are more than 0.7, suggesting that the variables are reliable and consistent within themselves.

Table-3: Summary of Reliability Analysis

Factor	Cronbach's Alpha	Item
Social Trust（ST）	0.870	4
Endogenous Motivation（EM）	0.934	11
Autonomy Needs（AN）	0.882	4
Competence Needs（CN）	0.852	4
Relatedness Needs（RN）	0.864	4

Exploratory Factor Analysis

Questionnaires' measuring characteristics are often evaluated using content validity and structural validity. The term "content validity" is used to describe how well the study's items reflect the variables in question. It's a fundamental part of research technique that guarantees the reliability and validity of the gauges used. The survey used in this study makes use of a comprehensive analysis of relevant literature to determine links or correlations between variables. In addition, the data from the pilot survey were used to improve the wording and structure of the survey's questionnaire items. As a result, it may be concluded that the scale has enough content validity. Examining whether or not items can reliably measure the specified dimensions is what this research is all about (structural validity). Exploratory factor analysis (EFA) is used in this study to evaluate the reliability and validity of the scale's underlying structure. The Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity tests, as well as other exploratory factor analysis procedures, were performed on the scale in SPSS 23.0. Table 4 displays the outcomes of these analyses.

Table-4: KMO and Bartlett's

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0.940**
Bartlett's Test of	Approx. Chi-Square	5456.487
	df	351
	Sig.	.000

Table 4 shows that the Kaiser-Meyer-Olkin (KMO) sample adequacy index is 0.940, much above the minimum acceptable value of 0.7. The data generated from the questionnaire also passes the statistically significant Bartlett's test of sphericity (p 0.001), therefore factor analysis may be performed. Because of this, principal component analysis is used to isolate variables for a more thorough investigation. Eigenvalues greater than 1 are used as a cutoff for selecting common factors. Within the context of factor analysis, the factor rotation procedure makes use of maximum variance orthogonal rotation. Tabulated below are the findings of the analysis.

Table-5: Summary of Factor Analys

	Component				
	Endogenous Motivation	**Autonomy Needs**	**Relatedness Needs**	**Social Trust**	**Competence Needs**
EM10	0.812	0.078	0.117	0.072	0.147
EM11	0.794	0.165	0.096	0.130	0.086
EM9	0.763	0.151	0.121	0.126	0.154
EM8	0.751	0.153	0.069	0.217	0.120
EM6	0.734	0.170	0.038	0.134	0.151
EM2	0.709	0.168	0.215	0.130	0.120
EM5	0.693	0.203	0.137	0.110	0.154
EM1	0.682	0.159	0.214	0.088	0.108
EM4	0.668	0.164	0.172	0.197	0.176
EM7	0.658	0.170	0.180	0.130	0.246
EM3	0.649	0.055	0.152	0.236	0.219
AN1	0.243	0.842	0.100	0.178	0.112
AN3	0.184	0.827	0.095	0.119	0.111
AN2	0.237	0.803	0.090	0.082	0.061
AN4	0.260	0.745	0.071	0.200	0.101
RN3	0.168	0.117	0.824	0.121	0.144
RN2	0.206	0.034	0.818	0.082	0.113
RN1	0.186	0.018	0.807	0.176	0.018
RN4	0.207	0.179	0.759	0.089	0.076
ST1	0.240	0.130	0.154	0.807	0.142
ST4	0.190	0.140	0.079	0.794	0.138
ST2	0.178	0.179	0.134	0.780	0.179
ST3	0.241	0.130	0.145	0.745	0.175
CN4	0.239	0.031	0.107	0.137	0.823
CN3	0.232	0.160	0.098	0.130	0.803
CN2	0.257	0.094	0.162	0.155	0.745
CN1	0.178	0.096	0.009	0.181	0.723
Eigenvalue	6.479	3.031	2.963	2.942	2.859
% of Variance	23.996	11.226	10.976	10.895	10.590
Cumulative %	23.996	35.223	46.198	57.093	67.682

Table 5 displays the findings of the factor analysis, which shows that five unique factors were identified. Together, these factors may explain 67.682% of the variation, which is much more than the criterion of 50%. That the five factors picked have strong representational properties is shown here. The factor loadings are displayed in the table up above. The factor load is more than 0.5 for every metric, whereas the cross load stays below 0.4. There is strong structural validity in the scale since the items have been correctly categorized into the appropriate components.

Analysis of Corroborating Factors

Convergence validity of items within each variable is tested using Confirmatory Factor Analysis (CFA) in the present investigation. The primary goal is to check for agreement between the actual measurement results and the theoretical framework. There are a total of 27 questions in the test, and each one is a measurement tool for one of five criteria. The results of a confirmatory factor analysis performed in AMOS 23.0 are displayed in Tables 6 and 7.

Table 6 shows that the CMIN/DF ratio is 1.146, which is less than the minimum acceptable value of 3. All of the indices (GFI, AGFI, NFI, TLI, IFI, and CFI) are more than 0.9, the minimum required for full health. The RMSE of 0.021 and the RMR of 0.045 are both under the minimum acceptable value of 0.08. All of the fitting indicators meet the predetermined standards for research validity, hence it can be concluded that this model provides a good match.

Table-6: Summary of Model Fit

Model fit	Recommended values	Measurement model
CMIN	——	359.775
DF	——	314
CMIN/DF	<3	1.146
RMR	<0.08	0.045
GFI	>0.9	0.932
AGFI	>0.9	0.918
NFI	>0.9	0.936
IFI	>0.9	0.991
TLI	>0.9	0.990
CFI	>0.9	0.991
RMSEA	<0.08	0.021

The findings illustrated in Table 7 indicate that the standardized factor load for each measurement indicator surpasses the threshold of 0.6 for each variable. Furthermore, the reliability of the composition (CR) exceeds the threshold of 0.7, and the average amount of variation extracted (AVE) is found to be higher than 0.5. The results of this study indicate that each variable demonstrates a high level of convergence validity.

Table-7: Summary of Confirmatory Factor Analysis

Factor	Item	Factor loading	CR	AVE
Social Trust	ST1	0.847	0.871	0.629
	ST2	0.804		
	ST3	0.752		
	ST4	0.767		
Endogenous Motivation	EM1	0.708	0.935	0.565
	EM2	0.753		
	EM3	0.702		
	EM4	0.733		
	EM5	0.732		
	EM6	0.743		
	EM7	0.728		
	EM8	0.776		
	EM9	0.788		
	EM10	0.801		
	EM11	0.799		
Autonomy Needs	AN1	0.907	0.886	0.660
	AN2	0.772		
	AN3	0.806		
	AN4	0.757		
Competence Needs	CN1	0.663	0.855	0.597
	CN2	0.779		
	CN3	0.816		
	CN4	0.823		
Relatedness Needs	RN1	0.778	0.866	0.617
	RN2	0.796		
	RN3	0.823		
	RN4	0.743		

Discriminant Validity

The current study utilized a rigorous average variance extracted (AVE) approach to evaluate the distinct validity of the factors, following the recommendations of Fornell and Larcker (1981). In order to demonstrate the existence of differential validity among the factors, it was necessary for the AVE root sign of each factor to surpass the correlation coefficient of each paired variable. The present study demonstrates differential validity, as indicated by the higher average variance extracted (AVE) values for each factor compared to the standardized correlation coefficients outside the diagonal. The correlation coefficient in the lower triangle of the diagonal exhibits a relatively lower value. The precise data is presented in Table 8.

Table-8: Discriminant Validity of The Measurements

	ST	EM	AN	CN	RN
ST	**0.793**				
EM	.495**	**0.752**			
AN	.417**	.497**	**0.812**		
CN	.444**	.508**	.327**	**0.773**	
RN	.362**	.440**	.293**	.304**	**0.785**

Structural Model and Hypothesis Testing

The findings derived from the application of Structural Equation Modeling (SEM) analysis are presented in this section.

The present study utilizes structural equation modeling to examine the interaction among social trust, individual basic psychological needs, and endogenous motivation. The testing results suggest that the model demonstrates a significant level of physical aptitude. According to the data presented in Table 9, the CMIN/DF value is 1.194, which suggests that it is below the predetermined threshold of 3. The indices GFI, AGFI, NFI, TLI, IFI, and CFI have been determined to satisfy the established criterion of 0.9 or greater. The Root Mean Square Residual (RMR) value of 0.064 and the Root Mean Square Error of Approximation (RMSEA) value of 0.024 both fall below the established threshold of 0.08. All the indicators of fit meet the established criteria for research.

Table-9: Summary of Model Fit

Model fit	Recommended values	Measurement model
CMIN	——	378.350
DF	——	317
CMIN/DF	<3	1.194
RMR	<0.08	0.064
GFI	>0.9	0.928
AGFI	>0.9	0.914
NFI	>0.9	0.933
IFI	>0.9	0.988
TLI	>0.9	0.987
CFI	>0.9	0.988
RMSEA	<0.08	0.024

Perform calculations using AMOS23.0 and estimate using the maximum likelihood method, as shown in Figure 2.

Figure-2: Research Model Analysis
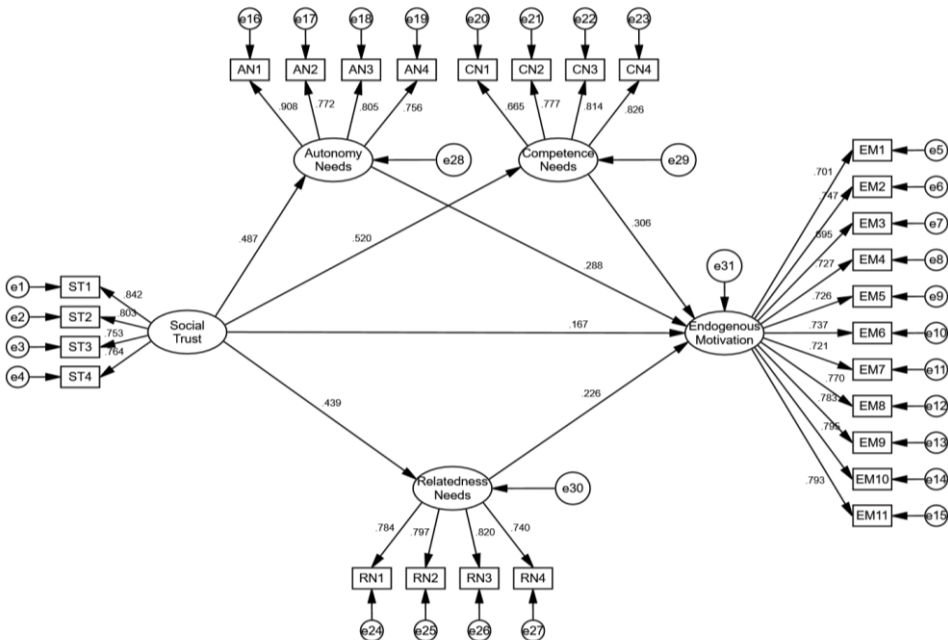
Path Analysis

Based on the data shown in Table-10, it seems that social trust (ST) and autonomy requirements (AN) are positively correlated. The beta value for this relationship is 0.487 (p0.05). This result lends credence to the first null hypothesis. There is a statistically significant association between social trust (ST) and competence requirements (CN), with a beta value of 0.520, reaching significance at the p0.05 level, suggesting that hypothesis H2 is supported by the data. A positive association (= 0.439, p0.05) was found between social trust (ST) and relatedness requirements (RN), lending empirical support to hypothesis H3 in the present study. A favorable association between social trust (ST) and endogenous motivation (EM) was found in this study (= 0.167, p0.05), lending credence to H4. The statistically significant coefficient of = 0.288 (p0.05) supports hypothesis (H5), showing that the impact of AN on EM is of major consequence. This study's findings support hypothesis (H6), which postulated that there would be a positive relationship between CN and EM. We find that H7 is supported by the data, with a beta value of 0.226 (p0.05) indicating that relatedness demands have a substantial effect on a person's endogenous motivation.

Table-10: Summary of Hypotheses Testing

Hypothesis	path			Standardized estimates	Unstandardized estimates	S.E.	C.R.	P	Result
H1	AN	<---	ST	0.487	0.590	0.070	8.372	***	Supported
H2	CN	<---	ST	0.520	0.465	0.060	7.808	***	Supported
H3	RN	<---	ST	0.439	0.432	0.061	7.077	***	Supported
H4	EM	<---	ST	0.167	0.137	0.057	2.408	0.016	Supported
H5	EM	<---	AN	0.288	0.194	0.038	5.170	***	Supported
H6	EM	<---	CN	0.306	0.281	0.056	4.986	***	Supported
H7	EM	<---	RN	0.226	0.188	0.045	4.145	***	Supported

Mediating Effect Testing

In this research, the Bootstrapping technique is used to confirm the mesomeric effect. When the bootstrap confidence interval does not contain zero, it may be deduced that the relevant indirect, direct, or total effects are present, as indicated by empirical study.Table-11 was generated by running the Bootstrap technique 5000 times in AMOS23.0 to find the horizontal values of Bias Corrected and Percentile at a 95% confidence level.

Table-11: Summary of Mediating Effect Testing

	Standardized Total Effects	Bias-Corrected 95%CI		Percentile 95%CI	
		Lower	Upper	Lower	Upper
Total Effects					
ST_EM	0.566	0.408	0.704	0.415	0.707
Indirect Effects					
ST_AN_EM	0.140	0.070	0.234	0.065	0.225
ST_CN_EM	0.159	0.090	0.262	0.081	0.246
ST_RN_EM	0.099	0.046	0.175	0.039	0.166
Direct Effects					
ST_EM	0.167	0.007	0.303	0.024	0.315

Table 11 shows that the estimated total impact size for the variable "Social Trust_Endogenous Motivation" is 0.566. The value 0 is not included in either the lower or upper 95% confidence intervals for the Bias Corrected and Percentile values. This finding suggests that the combined effect is substantial enough to be considered significant statistically. Indirect impact size of the variable "Social Trust_Autonomy Needs_Endogenous Motivation" was calculated as 0.140 based on the study's findings. It's worth noting that the bottom and upper boundaries of the 95% confidence range for the Bias Corrected and Percentile values did not contain 0, indicating the existence of indirect effects. Based on the findings, the value of the indirect effect size for the construct "Social Trust_Competence Needs_Endogenous Motivation" is 0.0159. Indirect effects may be at play here because the observed value is outside the confines of the bias-corrected and percentile 95% confidence interval. According to the data, the indirect impact size of the variable "Social Trust_ Relatedness Needs_Endogenous Motivation" is 0.099. Lower and Upper limits of the 95% Confidence Interval for the Bias Corrected and Percentile do not include 0, suggesting the existence of indirect effects. The data shows that the "Social Trust_Endogenous Motivation" variable has a direct impact size estimate of 0.167. This estimate has confidence intervals that do not include zero, indicating the presence of direct effects that are statistically significant. The Bias Corrected and Percentile 95% Confidence Intervals (CIs) indicate that the true effect size is most likely to fall within a certain range. The mediational role of autonomy requirements, competence needs, and relatedness needs in the relationship between social trust and endogenous motivation (H8, H9, and H10) is supported by the data.

Overall, the results of this investigation support the following five hypotheses.

Researching the psychological process through which internal motivation impacts those who have made it out of poverty, this study builds on the self-determination hypothesis. The objective is to ensure that poverty does not return. The findings from this data analysis point to the good impact that social trust has on several different types of psychological needs, including autonomy, competence, relatedness, and intrinsic drive. The connection between social trust and inward drive is mediated by the three fundamental human needs of autonomy, competence, and relatedness. Individuals' ability to cultivate intrinsic motivation depends on how well they are able to meet their own needs for autonomy,

competence, and relatedness, all of which are influenced by the degree to which they display social trust. Intrinsic motivation is a complex phenomena, and understanding the psychological factors that drive it requires a systematic approach to research. Social trust, autonomy requirements, competence needs, and relatedness needs were found to have significant effects on endogenous motivation, as predicted by the model used in the study. Therefore, it is recommended that the government move away from a government-centric approach and instead investigate poverty governance techniques that include the psychological factors impacting individuals. The current research also shows that social trust might be an independent variable that broadens the applicability of the self-determination theory. According to self-determination theory, helping someone out may help them feel good about themselves, which can help them internalize external motivation and develop their own drive (Deci & Ryan, 1985, 2000). Adie, Duda, and Ntoumanis (2008) and Zhao and Han (2016) are only two examples of studies that illustrate how the self-determination theory's stated external elements correlate with people's fundamental psychological demands. This research will build on the foundation of self-determination theory by first focusing inward, on the person level, to demonstrate that social trust significantly influences basic psychological needs and intrinsic drive.

As Alatas et al. (2012) point out, there is a feedback loop between poverty and its persistence, thus it's crucial to put people first if we want to end poverty for good. In line with previous research (Frazier et al., 2011; Qian & Ni, 2020; Ye & Ma, 2019), the current study lends empirical support to the idea that individual psychological factors have an effect on poverty governance. Including control factors in future research projects would be helpful in evaluating the influence of particular control variables on each individual variable and in developing precise and practical suggestions for addressing the recurrence of poverty. While it is important to examine the role that social trust plays in social capital's influence on individuals' intrinsic motivation, it is also important to investigate the ways in which other aspects of social capital may influence people's basic psychological requirements and their level of motivation. As a result, more study into breaking the cycle of poverty may be conducted.

References

Adie, J. W., Duda, J. L., & Ntoumanis, N. (2008). Autonomy support, basic need satisfaction and the optimal functioning of adult male and female sport participants: A test of basic needs theory. *Motivation and Emotion, 32*(3), 189–199.

Alatas, V., Banerjee, A., Hanna, R., Olken, B. A., & Tobias, J. (2012). Targeting the Poor: Evidence from a Field Experiment in Indonesia. *American Economic Review, 102*(4), 1206-1240.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*: Englewood Cliffs, NJ: Pearson Education.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Benton, R. A. (2013). Social Capital and Work Activity: Autonomy, Supervision, and Creativity in Interpersonal Retrieved from http://dx.doi.org/10.1108/S0277-2833(2013)0000024013. http://dx.doi.org/10.1108/S0277-2833(2013)0000024013

Cai, D. W., & Wu, Y. G. (2014). The Empirical Study of the Motivational Internalization Effects of Volleyball Coach Leadership:From the Perspective of Self-determination 排球教练员领导行为激励内化效应实证研究——基于自我决定理论视角. *Journal of Henan Normal University (Natural Science Edition), 42*(04), 159-164. doi:10.16366/j.cnki.1000-2367.2014.04.018

Carreira, J. M. (2012). Motivational orienations and psychological needs in EFL learning among elementary school students in Japan. *System, 40*(2), 191-202. doi:https://doi.org/10.1016/j.system.2012.02.001

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., & Deci, E. L. (2014). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion, 39*(2), 216–236.

China, D. o. H. S. N. B. o. S. o. (2020). *Poverty Monitoring Report of Rural China,2020 （2020年中国农村贫困检测报告）.*

China, M. o. A. a. R. A. o. t. P. s. R. o. (2022). Continuously Grasping, Consolidating, and Expanding the Achievements of Poverty Alleviation -- On Seriously Studying and Implementing the Spirit of the Central Rural Work Conference 持续抓紧抓好巩固拓展脱贫攻坚成果——四论认真学习贯彻中央农村工作会议精神. Available from http://www.moa.gov.cn/ztzl/zyncgzh2021/mtbd/202201/t20220111_6386643.htm, from Ministry of Agriculture and Rural Affairs of the People's Republic of China 中华人民共和国农业农村部

China, N. B. o. S. o. (2019). China Statistical Yearbook - 2019 中国统计年鉴--2019. Available from 国家统计局 http://www.stats.gov.cn/tjsj/ndsj/2019/indexch.htm Retrieved 2021/02/05

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*: New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry, 11*(4), 227-268.

Deci, E. L., & Ryan, R. M. (2002). *Handbook of Self-Determination Research*. NY: University of Rochester Press.

Du, Y. P., & Li, Z. W. (2021). Employee Characteristics, Subjective Norms and Work Performance: Integrating the Achievement Goal Orientation Theory and the Theory of Planned Behavior. *Humanities and Social Sciences Letters, 9*(2), 196-208.

Filak, V. F., & Sheldon, K. M. (2008). Teacher support, student motivation, student need satisfaction, and college teacher course evaluations: testing a sequential path model. *Educational Psychology, 28*(6), 711-724.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Frazier, P., Keenan, N., Anders, S., Perera, S., Shallcross, S., & Hintz, S. (2011). Perceived past, present, and future control and adjustment to stressful life events. *Journal of Personality & Social Psychology, 100*(4), 749.

Furrer, C., & Skinner, E. (2003). Sense of Relatedness as a Factor in Children's Academic Engagement and Performance. *Journal of Educational Psychology, 95*(1), 148-162.

Guo, Q., Liao, H. P., Wang, Z. Y., Liu, Y. L., & Li, T. (2021). Measurement of Rural Poverty Alleviation Sustainability and Return-to-poverty Risk Identification in Qinling-Bashan Mountains: A Case Study of Chengkou County, Chongqing Municipality 秦巴山区村域稳定脱贫测度及返贫防控风险识别——以重庆市城口县为例. *Progress in Geography, 40*(02), 232-244.

Hu, S. W., & Cao, Y. X. (2021). Monitoring the Risk of Farmers Returning to Poverty in the Post-poverty Era: Dimension Focus, Mechanism Setting and Realization Path 脱贫人口返贫风险监测:机制设置、维度聚焦与实现路径. *Journal of Northwest A&F University (Social Science Edition), 21*(01), 29-38. doi:10.13968/j.cnki.1009-9107.2021.01.04

Huang, Y. N. (2011). *Quantitative Analysis on Effect of Government's Anti-poverty Policy from Social Capital Perspective*

—A survey on Poor Households from Typical Areas 社会资本视角下政府反贫困政策绩效的定量分析————基于典型地区城乡贫困家庭的调研. (Master's Dissertation). Southwestern University of Finance and Economics (CHINA), Available from Cnki

Jing, H., Chu, X., Song, H., & Yuan, L. (2015). Social Capital, Socioeconomic Status and Self-efficacy. Retrieved from http://dx.doi.org/10.11114/aef.v2i1.607. http://dx.doi.org/10.11114/aef.v2i1.607

Li, X. H. (2018). *Endogenous Motivation and Professional Level of Professional and Technical Personnel 专业技术人员内生动力与职业水平* (1 ed.): China Yan Shi Press.

Li, Y. H., Wang, Y. F., & Liu, Y. S. (2016). Impact and Mechanism of Social Capital in Poverty Alleviation of China 我国扶贫开发中社会资本作用机理及效应. *Bulletin of Chinese Academy of Sciences, 31*(03), 302-308. doi:10.16418/j.issn.1000-3045.2016.03.005

Liu, X. W., & Li, Q. (2020). Analysis on subjectival endogenous power and motivation paths of the rural vitalization 乡村振兴主体性内生动力及其激发路径的研究. *Journal of Arid Land Resources and Environment, 34*(08), 27-34.

Lu, Q., & Wang, X. (2012). Reviews and Analysis Framework of Social Capital 社会资本综述及分析框架. *Commercial Research*(02), 141-145. doi:10.13902/j.cnki.syyj.2012.02.022

Qian, L., & Ni, X. F. (2020). STUDY ON THE EVALUATION AND PROMOTION PATH OF POVERTY ALLEVIATION POLICY: FROM THE PERSPECTIVE OF MASLOW'S HIERARCHY OF NEEDS THEORY 贫困人口扶贫政策获得感评价与提升路径研究——以马斯洛需求层次理论为视角. *Human Geography, 35*(06), 106-114.

Qu, H. Y. (2019). Realistic Dilemma and Realization Path to Stimulating

the Intrinsic Motivation of the Poor 激发贫困人口内生动力的现实困境与实现路径. *Journal of Agro-Forestry Economics and Management, 18*(02), 216-223.

Ragini, J. R., Anand, P. M. R., & Bhaskar, V. (2018). Big data analytics for disaster response and recovery through sentiment analysis. *International Journal of Information Management, 42*(OCT.), 13-24.

Reinboth, M., Duda, J. L., & Ntoumanis, N. (2004). Dimensions of Coaching Behavior, Need Satisfaction, and the Psychological and Physical Welfare of Young Athletes. *Motivation and Emotion, 28*(3), 297–313.

Ruiz-Robledillo, N., De Andrés-García, S., Pérez-Blasco, J., González-Bono, E., & Moya-Albiol, L. (2014). Highly resilient coping entails better perceived health, high social support and low morning cortisol levels in parents of children with autism spectrum disorder. *Res Dev Disabil, 35*(3), 686-695.

Ryan, R. M., & Grolnick, W. S. (1986). Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality & Social Psychology, 50*(3), 550-558.

Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology, 80*(2), 325–339.

Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and Disaffection in the Classroom: Part of aLarger Motivational Dynamic? . *Journal of Educational Psychology, 100*(4), 765–781.

Stroet, K., Opdenakker, M. C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature. *Educational Research Review, 9*(Complete), 65-87.

Tian, L., Tian, Q., & Huebner, E. S. (2016). School-Related Social Support and Adolescents' School-Related Subjective Well-Being: The Mediating Role of Basic Psychological Needs Satisfaction at School. *Social Indicators Research, 128*(1), 105-129.

Vemuri, A. W., Morgan Grove, J., Wilson, M. A., & Burch, W. R. (2009). A Tale of Two Scales: Evaluating the Relationship Among Life Satisfaction, Social Capital, Income, and the Natural Environment at Individual and Neighborhood Levels in Metropolitan Baltimore. *Environment and Behavior, 43*(1), 3–25.

Wang, H., & Zhu, Y. C. (2021). Impact of Social Capital on Multi-dimensional Poverty of Farmers: Analysis of Intermediary Effect Based on Labor Mobility 社会资本对农户多维贫困的影响——基于劳动力流动的中介效应分析. *Journal of China Agricultural University, 26*(04), 240-254.

Wang, X. J. (2019). *Study on the Influence Factors and Mechanism of Human Capital and Social Capital on Rural Poverty* 人力资本、社会资本对农户贫困的影响及作用机制研究. (Doctoral Dissertation). Northwest University(CHINA), Available from Cnki

Wang, X. Y., & Liu, L. P. (2020). Bonding Social Capital and Belongingness to the Host Society of the New Generation of Rural-Urban Migrants in China 黏合性社会资本与新生代农民工的城市归属感. *The Journal of Yunnan University Social Sciences Edition, 19*(03), 78-86. doi:10.19833/j.cnki.jyu.2020.03.009

Woodworth, R. S. (1918). *Dynamic Psychology* (G. Shenchun & G. Binglian, Trans.): China Renmin University Press（CRUP）.

Wu, B. J., Xiao, S. H., & Ma, Y. L. (2021). The Risk of Returning to Poverty for Ethnic Families with Small Population and Poverty Alleviation: Measurement Methods, Influencing Factors, and Policy Orientation 人口较少民族脱贫家庭的返贫风险：测量方法、影响因素与政策取向. *Journal of Northwestern Ethnic Studies*(02), 119-135. doi:10.16486/j.cnki.62-1035/d.20210511.001

Wu, M. L. (2009). *Structural equation model: Operation and application of AMOS* 结构方程模型——AMOS 的操作与应用. Chongqing: Chongqing University Press.

Wu, N., Xie, Z. Y., & Fu, A. G. (2021). Development of the Endogenous Power Scale for Poverty Elimination 脱贫内生动力量表的编制. *Psychology:Techniques and Applications, 9*(01), 20-29.

Xie, G. (2018). The Role of Endogenous Motivation of Poor People in Precision Poverty Alleviation and Its Stimulation Strategies 精准扶贫中贫困群众内生动力的作用及其激发对策. *Administration Reform (CHINA)*(07), 51-55.

Ye, H., & Ma, L. (2019). "Sense of Gain": A Tentative Interpretation of a New Poverty Reduction Effectiveness Evaluation Model -- Taking the Poverty Alleviation Practice in Diqing Prefecture as an Example "获得感":一种新的减贫成效评价模式的尝试性阐释——以迪庆州的扶贫实践为例. *The Journal of Yunnan Administration College, 000*(004), 28-34.

Yuan, F., & Shi, Q. H. (2019). Can Entrepreneurship Reduce Rural Return to Poverty—— Empirical Study Based on National Fixed Observation Point Data in Rural Areas 创业能减少农村返贫吗？——基于全国农村固定观察点数据的实证. *Rural Economy (CHINA)*(10), 62-69.

Zhang, A. Q. (1996). On the Motivation of Human Behavior: A New Theory of Motivation 论人类行为的动机——一种新的动机理论构理. *Journal of East China Normal University(Educational Sciences)*(01), 71-80.

Zhang, J. G., Yang, H. J., & Wu, J. X. (2022). Research on the Sustainable Livelihood Ability of Farmers in Ethnic Minority Areas from the Perspective of Anti - returning Poverty 防返贫视角下少数民族地区农户可持续生计能力研究. *Inquiry into Economic Issues (CHINA)*(05), 79-88.

Zhang, Q., Li, S. Q., & Zhuang, J. K. (2022). Research on Path Dependence and Influencing Factors of Poverty Alleviation Population Returning to Poverty: A Discrete Time Survival Analysis Based on CHNS Data 脱贫人口返贫的路径依赖与影响因素研究——基于CHNS数据的离散时间生存分析. *Study & Exploration (CHINA)*(05), 115-126.

Zhang, Y. T., Su, X. Y., & Yan, Z. W. (2018). Cultural Poverty Alleviation Stimulates Endogenous Motivation for Poverty Alleviation: Based on the Supply Side Reform Approach 文化扶贫激发脱贫内生动力——基于供给侧改革思路. *Review of Economic Research (CHINA)*(10), 57-61.

Zhao, B., & Han, P. P. (2016). The Effect of Person-Job Fit and Abusive Supervision on Employees' Innovation Behavior ——Mediated by Basic Psychological Needs 人—工作匹配、辱虐管理对创新行为的影响——基本心理需求的中介作用. *Soft Science (CHINA), 30*(04), 74-79. doi:10.13956/j.ss.1001-8409.2016.04.16

Zhou, C. C., Liu, J. F., & Shi, Z. J. (2016). Research on the Relationship between Poverty Rural Governance Involution and Participatory Poverty Reduction ————A Case Study in Yunnan Province 贫困县农村治理"内卷化"与参与式扶贫关系研究——来自云南扶贫调查的实证. *Journal of Public Management, 13*(01), 81-91+156-157. doi:10.16149/j.cnki.23-1523.2016.01.008

Zhu, G. X., Wang, Q., Cui, Z. F., Jiang, F. G., & An, T. (2014). The Role of Social Media in College Students' Graduate Self-efficacy through A Social Capital Lens 社交媒体对大学生读研自我效能感的影响研究——以社会资本为视角. *Modern Educational Technology (CHINA), 24*(11), 61-69.