Uncertainty Intolerance, Anxiety, emotion regulation and Populist Attitudes Among British Voters in the 2024 UK Election

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Abstract. This paper is set in the context of the UK general election held on 4 July 2024[1]. By conducting stepwise regression and mediation analyses using SPSS 27.0 and PROCESS 4.3 on 450 samples of British adult eligible voters on Qualtrics, it explores the relationships and pathways between intolerance of uncertainty, anxiety, emotion regulation, and populist attitudes. The research aims to reveal the psychological mechanisms underlying populist attitudes among British voters.

Keywords: Populist Attitudes; Uncertainty Intolerance; Anxiety; Emotion Regulation; SPSS.

1. Introduction

2024 is the 'ultimate' election year[2]; more than 60 countries and regions around the world held national elections[3], meaning that global politics will witness dramatic changes; such a turbulent political situation is often accompanied by uncertainty [4], which provides an opportunity to capture voters' uncertainty intolerance, anxiety and emotion regulation capacity, thus providing excellent ground for studying the causes of populism.

This paper discloses the relationship between uncertainty intolerance, anxiety, emotion regulation, and populist attitudes among British voters in the context of the July 2024 UK general election. The research method of this paper is quantitative research. This paper adopted questionnaire survey to systematically explore the specific relationship and functional path between the above-mentioned psychological factors and populist attitudes.

2. Literature Review

2.1 Populism

This paper uses the discursive definition of populism[5]. This definition regards populism as a folkloric political style[6] and a thin ideology, whose core feature is to highlight the opposition between "the people" and "the elites" through political communication and media strategies[7].

The gap in populism research is mainly on the demand side. Demand side research focuses on the psychological motivations of the public's support for populism, Numerous studies have shown that emotions have a direct impact on political psychology and behaviour[8]; for example, uncertainty intensifies people's emotional responses, and emotion regulation disorders can intensify negative emotions and lead to extreme violent behaviours [9], and emotions (anxiety, fear) can influence political decisions as political motives[10]. The political mobilization of anxiety and disgust in voter behaviour [11], the impact of UKIP and Labour's political narrative on voter attitudes[12], etc. The above conclusions provide clues for the paper to identify the explanatory variables of populist attitudes. However, none of the existing research studies attempted to look purely at the psychological factors of the voters themselves, in particular by integrating the effects of the three variables of uncertainty intolerance, anxiety, and emotion regulation on populist attitudes.

2.2 Populism in the UK

2.2.1 Forms and Representative of the Left-Wing Populism

The academic community generally believes that populism in Britain is mainly divided into two forms: right-wing and left-wing.

Regarding right-wing populism in the UK, the representative political parties are the Conservative Party, the Reform Britain Party, the United Kingdom Independence Party (UKIP), etc[13]. Its main features include nationalism, anti-immigration policies, and an emphasis on national sovereignty. For example, the 2016 Brexit referendum became a typical event of right-wing populism by criticizing the bureaucracy and immigration policies of the European Union, mobilizing a large number of supporters. Another typical case is the 2019 election, where the Conservative Party consolidated its right-wing populist position by promising to "get Brexit done".

As for left-wing populism in the UK, the representative political parties include the Labour Party, the Green Party and the Scottish National Party [14]. Its main characteristics include opposition to social inequality, to global capitalism, and support for climate justice. For example, Labour's radical social policies in the 2024 election, such as raising the minimum wage, taxing the rich, and expanding public health services, are typical examples of left-wing populism, appealing to a large number of voters who are dissatisfied with the current economic system.

2.2.2 Populist Phenomenon in 2024 UK Election

(1) At present, the mainstream political spectrum in the UK has shifted.

Despite the dominance of right-wing populism in the UK over the past decade, research shows that left-wing populism in the UK is resurgent and on the rise. Take the British general election held in July 2024 as example, where the Labour Party won a majority again, displacing the Conservatives who had ruled the country for 14 years. The political landscape in the UK is undergoing a remarkable shift, particularly with Labour's return to power reflecting voters' greater demand for social justice and economic equality.

(2) In addition, the political narrative of left-wing populism in the UK has also been widely seen in political activities before and after the general election.

The Labour Party, for instance, has won the majority of voting through its populist narrative of social inequality and class polarization, which calls for tax increases and redistribution to narrow the gap between rich and poor.In addition, the Labor Party mobilized public support for radical environmental policies through the narrative of the climate crisis and the loss of interests of vulnerable groups, which once again gained popular support.

2.3 Psychological Factors of Populism

2.3.1 Theoretical Basis

2.3.1.1 Social Identity Theory (SIT)

Social identity theory indicates that individuals define themselves and gain a sense of belonging through group identity and enhance self-esteem by maintaining or enhancing group status [15]. In the context of populism, the theory explains how individuals cope with feelings of uncertainty and anxiety under social pressure by externalising the dichotomy between ‘the people’ and ‘the elite’. Populists, on the other hand, tend to utilise this dichotomy in order to attract individuals with lower social identities to change their position by supporting populism[16].

In summary, the theory provides inspiration and a process of affective reasoning for selecting uncertainty intolerance and anxiety as predictor variables for the causes of populism in this paper.

2.3.1.2 Relative Deprivation Theory (RDT)

Relative deprivation theory is the theory that individuals perceive injustice and consequently become dissatisfied by comparing themselves to others[17]. That is, when people find out through comparison that others get what they do not have and attribute it to others' predation, they develop emotions of anger and resentment.

2.3.2 Uncertainty Intolerance and Populist Attitudes

Uncertainty intolerance, derived from Hoftsted's theory of uncertainty avoidance, refers to "the psychological tendency of an individual to feel stress and anxiety when confronted with uncertainty or ambiguous information and to attempt to avoid or eliminate such uncertainty"[18].

Populist parties first take advantage of voters' uncertainty avoidance psychology and create narratives such as "external threat" and "social injustice" to arouse anxiety; In this context, uncertain identity theory creates a strong need for regular or predictable outcomes, further strengthening people's social identity and membership preference for radical, xenophobic extremist groups. At this point, populists gain popular support through simple promises such as "politics is the highest expression of the will of the people"[19].

H1: Uncertainty intolerance positively affects populist attitudes

2.3.3 Anxiety and Populist Attitudes

Capelos (2013) merged the definition of anxiety in the field of politics and management as "a vague, unpleasant and aimless emotional state that arises from uncertainty and often takes the form of restlessness, anxiety and fear"[12].

Anxiety is a direct and widespread cause of populism based on theories of social identity and relative deprivation. The Brexit vote in the United Kingdom (Guma and Dafydd Jones, 2018) and the policy implementation process of the COVID-19 pandemic also show that anxiety can contribute to populism.

H2: Anxiety positively affects populist attitude

2.3.4 Emotion regulation and Populist Attitudes

Emotion regulation is defined as an individual's capacity to achieve specific goals or cope with situations by monitoring, evaluating and adjusting emotions [20].Haidt (2001) underlines how strongly felt emotions might aggravate social conflict and back populist ideas[21].

H3: emotion regulation negatively affects populist attitudes.

2.4 Possible Pathways of Impact: Mediation Effect

2.4.1 Uncertainty Intolerance and Anxiety

Numerous studies have shown that anxiety is the result of uncertainty. Carleton (2016) found that high levels of anxiety are often triggered when individuals are unable to cope with uncertainty in life, which further explains the causal relationship between uncertainty intolerance and anxiety[22].

In addition, anxiety caused by uncertainty can also be translated into the perception of external threats through psychological defence mechanisms, which influence populist attitudes.For instance, the uncertainty brought about by economic instability, globalisation, migration, etc., often creates public anxiety that provides a basis for the emotional mobilisation of populist leaders.

H4: Uncertainty intolerance positively affects anxiety

H6: Anxiety mediates between uncertainty intolerance and populist

2.4.2 Uncertainty Intolerance and Emotion Regulation

Studies have shown that uncertainty intolerance is significantly correlated with emotion regulation, and the link is mainly based on the uncertainty avoidance theory. The limited literature further suggests that uncertainty exacerbates negative emotions and suppresses positive emotions[23].

H5: Uncertainty intolerance negatively affects emotion regulation

H7: emotion regulation mediates between uncertainty intolerance and populist attitudes

2.5 Hypothesis and Models

To sum up, the research hypothesis and model of this paper are as follows: see Figure 1

H1: Uncertainty intolerance positively affects populist attitudes

H2: Anxiety positively affects populist attitude

H3: emotion regulation negatively affects populist attitudes
H4: Uncertainty intolerance positively affects anxiety
H5: Uncertainty intolerance negatively affects emotion regulation
H6: Anxiety mediates between uncertainty intolerance and populist
H7: emotion regulation mediates between uncertainty intolerance and populist attitudes

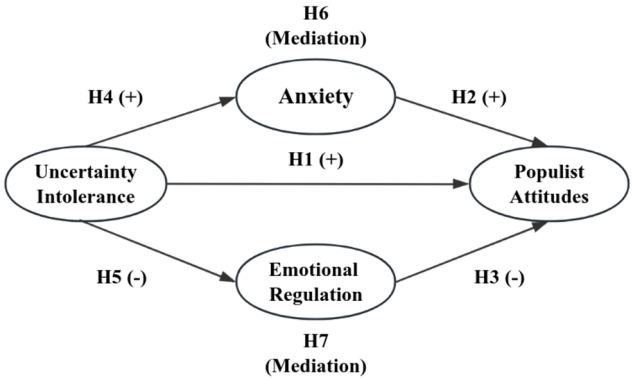


Figure 1. Hypothesis Model

3. Methodology

3.1 Research Paradigm

Adopting a positivist (Positivism) paradigm and based on Creswell's (2014) research framework, this paper explores the effects of uncertainty intolerance, anxiety and emotion regulation on voters' populist attitudes in the 2024 UK general election. This paper distributed a questionnaire via Prolific and conducted a regression mediation analysis via SPSS 27.0 and PROCESS 4.3 to test the hypotheses. In particular, considering the robustness and reliability of the Bootstrap method.

3.2 Measurement Instruments

3.2.1 Uncertainty Intolerance: IUS-12

Table 1. Measure the study participants' tolerance for uncertainty

Original Scale of Uncertainty Intolerance (IUS-12)

Items	Question wording	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Prospective Anxiety						
IUS_1	Unforeseen events upset me greatly.	1	2	3	4	5
IUS_2	It frustrates me not having all the information I need.	1	2	3	4	5
IUS_3	One should always look ahead so as to avoid surprises.	1	2	3	4	5
IUS_4	A small, unforeseen event can spoil everything, even with the best of planning.	1	2	3	4	5
IUS_5	I always want to know what the future has in store for me.	1	2	3	4	5
IUS_6	I can't stand being taken by surprise.	1	2	3	4	5
IUS_7	I should be able to organize everything in advance.	1	2	3	4	5
Inhibitory Anxiety						
IUS_8	Uncertainty keeps me from living a full life.	1	2	3	4	5
IUS_9	When it's time to act, uncertainty paralyses	1	2	3	4	5
IUS_10	When I am uncertain I can't function very well.	1	2	3	4	5
IUS_11	The smallest doubt can stop me from	1	2	3	4	5
IUS_12	I must get away from all uncertain situations	1	2	3	4	5

Reference: *Carleton, R.N., Norton, M.A.P.J., & Asmundson, G.J.G. (2007). Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. Journal of Anxiety Disorders, 21(1), pp.105–117. doi:https://doi.org/10.1016/j.janxdis.2006.03.014.*

This paper uses the Intolerance of Uncertainty Scale (IUS-12) by Carleton, Norton and Asmundson (2007) to measure the degree of tolerance of uncertainty in research participants. The IUS-12's scale consists of two main dimensions:(1) Prospective Anxiety, which is the fear of future uncertainty and anticipatory behaviours, and (2) Inhibitory Anxiety, i.e. behavioural inhibition and avoidance related to uncertainty triggered by uncertainty [24]. The scale is a 5-point Likert scale containing 12 statements ranging from '1' (not at all) to '5' (very much). See Table 1.

3.2.2 Anxiety: GAD-7

This paper uses the General Anxiety Disorder Scale (GAD-7) of Spitzer et al.(2006) to measure the anxiety level of British voters. The scale, a 4-point Likert scale with only one dimension of anxiety, contains a total of seven statements, ranging from "0" (none at all) to "3" (almost daily), measuring the frequency of anxiety symptoms over the past two weeks. See Table 2.

Table 2. Measuring the anxiety levels of British voters

Original Scale of General Anxiety (GAD-7)

Items	Question wording	Not at all	Several days	More than half the days	Nearly everyday
(Instruction)"Over the last 2 weeks, how often have you been bothered by the following problems?"					
GAD_1	Feeling nervous, anxious or on edge	0	1	2	3
GAD_2	Not being able to stop or control worrying	0	1	2	3
GAD_3	Worrying too much about different things	0	1	2	3
GAD_4	Trouble relaxing	0	1	2	3
GAD_5	Being so restless that it is hard to sit still	0	1	2	3
GAD_6	Becoming easily annoyed or irritable	0	1	2	3
GAD_7	Feeling afraid as if something awful might happen	0	1	2	3

Reference: *Spitzer, R.L., Kroenke, K., Williams, J.B.W. and Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. Archives of Internal Medicine, 166(10), pp.1092–1097. doi:https://doi.org/10.1001/archinte.166.10.1092.*

3.2.3 Emotion Regulation: ERQ

Table 3. To assess the emotional regulation of British voters

Descriptive Statistics for the ERQ (N=450)

Items	Question wording	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
Cognitive Reappraisal								
ERQ_1	I control my emotions by changing the way I think about the situation I'm in.	1	2	3	4	5	6	7
ERQ_2	When I want to feel less negative emotion, I change the way I'm thinking about the situation.	1	2	3	4	5	6	7
ERQ_3	When I want to feel more positive emotion, I change the way I'm thinking about the situation.	1	2	3	4	5	6	7
ERQ_4	When I want to feel more positive emotion, I change what I'm thinking about.	1	2	3	4	5	6	7
ERQ_5	When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.	1	2	3	4	5	6	7
ERQ_6	When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	1	2	3	4	5	6	7
Expressive Suppression								
ERQ_7	I control my emotions by not expressing them.	1	2	3	4	5	6	7
ERQ_8	When I am feeling negative emotions, I make sure not to express them.	1	2	3	4	5	6	7
ERQ_9	I keep my emotions to myself.	1	2	3	4	5	6	7
ERQ_10	When I am feeling positive emotions, I am careful not to express them.	1	2	3	4	5	6	7

Reference: *Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. Journal of Personality and Social Psychology, 85(2), pp.348–362.*

This paper uses the emotion regulation Scale (ERQ) of Gross and John (2003) to assess the emotion regulation capacity of British voters. The scale is a 7-point Likert scale ranging from '1' (strongly disagree) to '7' (strongly agree) and contains 10 statements on 2 dimensions: cognitive reappraisal and affective inhibition. See Table 3.

3.2.4 Populist Attitudes: PAS

This paper uses Hauwaert et al.'s (2020) Populist Attitude Scale (PAS) to measure the populist attitudes of eligible British voters. The scale includes three core dimensions: popular sovereignty, anti-elitism, and a dualistic worldview. The dimension of popular sovereignty reflects individuals' support for people's direct control over political decision-making. The anti-elitism dimension evaluates perceptions of political differences between elites and the general public. A dualistic worldview captures an individual's tendency to see politics in "black and white" terms [25]. The scale is a 5-point Likert scale, ranging from "1" (strongly disagree) to "5" (strongly agree), and contains a total of eight statements that measure an individual's populist attitudes. See Table 4.

Table 4. Measures the populist attitudes of eligible British voters

Descriptive Statistics for the Populist Attitude Scale (N=450)

Items	Question wording	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Popular sovereignty						
PAS_1	The politicians in Congress need to follow the will of the people.	1	2	3	4	5
PAS_2	The people, not the politicians, should make our most important policy decisions.	1	2	3	4	5
PAS_4	I would rather be represented by an ordinary citizen than an experienced politician.	1	2	3	4	5
Anti-elitism						
PAS_3	The political differences between the people and the elite are larger than the differences among the people.	1	2	3	4	5
PAS_5	Politicians (elected officials) talk too much and take too little action.	1	2	3	4	5
PAS_7	The particular interests of the political class negatively affect the welfare of the people.	1	2	3	4	5
PAS_8	Politicians always end up agreeing when it comes to protecting their privileges.	1	2	3	4	5
Manichean worldview						
PAS_6	What people call 'compromise' in politics is really just selling out on one's principles.	1	2	3	4	5

Reference: *Hauwaert, V., Azevedo, F., Hauwaert, S., & Gutenberg, J. (2020). The measurement of populist attitudes: Testing cross-national scales using item response theory Christian H Schimpf. Politics, 2020(1), pp.3–21.*

3.3 Research Design

3.3.1 Questionnaire Design

The platforms for designing and distributing the questionnaire in this paper are Qualtrics and Prolific. The content of the questionnaire includes four parts:

(1) Demographic information, i.e., gender, age, region, education, occupation, social class, etc., is used to reflect the representativeness and characteristics of the sample.

(2) Political orientation, i.e., voting in general elections, reasons for voting, and political spectrum, used to reflect the political preferences of the sample.

(3) Research questions, i.e., four scales, IUS-12, GAD-7, ERQ, and PAS, were used to empirically analyse whether and how the three independent variables of uncertainty intolerance, anxiety, and emotion regulation affect populist attitudes among British voters.

(4) Attention review questions (IMC): in this paper, three IMC questions were set according to the Prolific platform guidelines and placed in the gaps of different sections of the questionnaire, requiring subjects to screen for explicit responses based on the guidelines, which was used as the primary basis for reviewing the validity of the questionnaire.

3.3.2 Statistical Software

This article uses the SPSS27.0 and PROCESS4.3 for the main data analysis.

3.3.3 Pilot Survey

In this paper, a pre-survey with a sample size of 100 was conducted on the Prolific platform based on a questionnaire created by Qualtrics, which was used to test the questionnaire's design and the reasonableness of using the scale.

In the end, 95 questionnaires were validly collected for this paper (excluding those with incorrect attention review questions and those with less than 1 minute response time). The frequency and reliability analyses continued to be conducted using SPSS and the Cornabach's a > 0.9 for each scale, indicating good internal consistency and high quality of the questionnaires, as shown in the table below, which lays the foundation for further large-scale questionnaire distribution. See Table5.

Table 5. 95 questionnaires were effectively recovered

Internal Consistency Reliability of the Scale in Pilot Survey (N=95)

Scale	Number of Items	Standardized Cronbach's Alpha
IUS-12	12	.958
GAD-7	7	.929
ERQ	10	.931
PAS	8	.951

Note: The Cronbach's Alpha reflects the reliability of the scale based on this study's sample (N=95).

3.3.4 Formal Survey

In the formal survey, 500 questionnaires were distributed on the Prolific platform by random sampling, and the screening conditions for the samples were the same as in the pre-survey, with no quota ratios set for demographic characteristics such as gender and region. Finally, after the data cleaning, such as the review of IMC questions, response time (not less than 2 minutes), and the deletion of incomplete questionnaires, 450 valid questionnaires were obtained, with a validity rate of 90%. The reliability of the IUS-12, GAD-7, ERQ and PAS scales in the questionnaire was verified, and it was found that the Cornabach's a > 0.9, which indicated that the data were of good quality and could be subjected to subsequent statistical analyses, as shown in the table below. See Table 6.

Table 6. 500 questionnaires were randomly distributed on the prolific platform

Internal Consistency Reliability of the Scale in Formal Survey (N=450)

Scale	Number of Items	Standardized Cronbach's Alpha
IUS-12	12	.930
GAD-7	7	.938
ERQ	10	.916
PAS	8	.939

Note: *The Cronbach's Alpha reflects the reliability of the scale based on this study's sample (N=450).*

4. Findings and Discussion

4.1 Description of the Sample

4.1.1 Demographic Characteristic

The frequency analysis of 450 valid questionnaires collected on the Prolific platform was performed via SPSS27.0, and the following table shows the demographic characteristics of the sample obtained. See Table 7.

Table 7. The demographic characteristics of the sample obtained

(a)

Demographic Characteristics of the Sample (N=450)

Variables	Category	n	%
Below are the single response questions			
Gender	Male	197	43.8
	Female	247	54.9
	Non-binary / third gender	4	.9
	Prefer not to say	2	.4
Age	18-24 years old	38	8.4
	25-34 years old	163	36.2
	35-44 years old	100	22.2
	45-54 years old	76	16.9
	55-64 years old	50	11.1
	65+ years old	23	5.1
Region	England	395	87.8
	Scotland	26	5.8
	Wales	23	5.1
	Northern Ireland	6	1.3
Education	No formal education or Primary school	3	.6
	Secondary education (Technical/Vocational)	112	24.9
	Secondary education (University-preparatory)	48	10.7
	University-level education (Some/complete)	211	46.9
	Graduate or Professional degree (e.g., MA, PhD)	76	16.9
Employment	Working full-time	269	59.8
	Working part-time	82	18.2
	Unemployed before pandemic	21	4.7
	Unemployed due to pandemic	7	1.6
	A homemaker or stay-at-home parent	23	5.1
	Student	12	2.7
	Retired	36	8.0

Note: *Frequencies (n) represent the number of participants within each educational level category, while percentages (%) represent the proportion of the total sample (N=450) in each category.*

(b)

Demographic Characteristics of the Sample (N=450)(Continued)

Variables	Category	n	%
Below is a multiple response question			
Immigrant	I am an immigrant	15	3.3
	My parents are immigrants	45	10.0
	I was born in the UK	419	93.1
Below are the single response questions			
Social Class	Lower class	13	2.9
	Working class	211	46.9
	Lower middle class	192	42.7
	Upper middle class	32	7.1
	Upper class	2	.4
Income Status	Lowest Income	8	1.8
	Very Low Income	35	7.8
	Low Income	64	14.2
	Lower-Middle Income	90	20.0
	Near-Middle Income	86	19.1
	Above-Middle Income	90	20.0
	Higher-Middle Income Group	60	13.3
	High Income Group	14	3.1
	Very High Income Group	2	.4
	Highest Income Group	1	.2

Note: Frequencies (n) represent the number of participants within each educational level category, while percentages (%) represent the proportion of the total sample (N=450) in each category.

Among the 450 valid samples, the frequency n represents the number of sample cases, while the percentage illustrates the sample representativeness. The data interpretation are as follows:

(1) In terms of gender, there were 197 males (43.8%), 247 females (54.9%), and 6 others (1.3%). (2) Regarding age, all groups over 18 years old were included. Among them, those aged 25-44 years old made up the majority (a total of 263 people, or 58.4%), followed by those aged 45-64 years old (a total of 126 people, or 28%), and finally, those aged 18-24 and 65 or older, accounting for 8.4% and 5.1%, respectively. (3) As for region, England had 395 people, accounting for 87.8% of the total; Scotland, Wales, and Northern Ireland had 5.8%, 5.1%, and 1.3%, respectively. (4) When it comes to education, the majority of the sample possessed university-level education (some/complete) or secondary education (technical/vocational/university-preparatory), and accounting for 211 (46.9%), 160 (46.9%) people respectively; followed by Graduate or Professional degree (e.g., MA, PhD), with 76 students, accounting for 16.9%; and finally, No formal education or primary school, with 0.6%. (5) For employment, 269 respondents (59.8%) worked full-time, followed by 18.2% who worked part-time; the remaining respondents' employment statuses accounted for a lower proportion, all falling below 10%. (6) Regarding immigration, 93.1% of the sample were British natives, while 13.3% were immigrants or their parents. (7) In terms of social class, the working class and middle class (including the lower and upper middle class) account for 46.9 per cent and 46.8 per cent of the sample,

respectively, following a normal distribution. (8) Finally about the income, the lower, middle, and upper middle classes account for 23.8%, 72.4%, and 3.7% respectively.

In conclusion, the demographic characteristics of the 450 samples collected by the Prolific platform are in line with the UK context (Office for National Statistics (ONS), 2023; Office for National Statistics (ONS), 2024), and the overall representation lies on England's. As a result, this paper on the relationship between uncertainty intolerance, anxiety, emotion regulation, and populist attitudes will also focus on identifying the psychological triggers of populism in the population above.

4.1.2 Political Preferences

Frequency visualization of the 450 samples' political preferences is shown in Figure2 to Figure4.

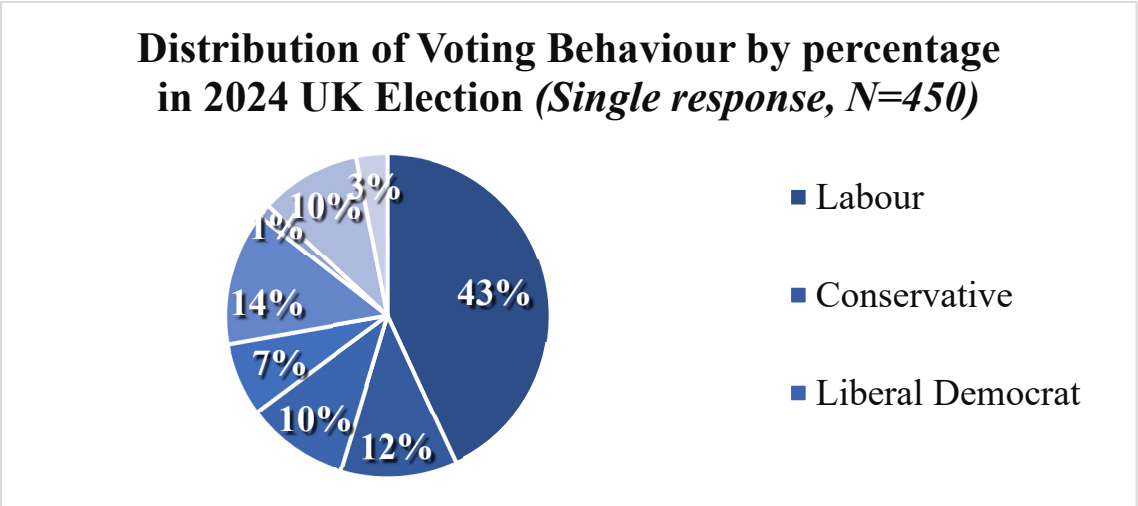


Figure 2. Distribution of Voting Behaviour by percentage in 2024 UK Election (Single response, N=450)

In terms of voting behaviour (see Figure 11), the main tendencies of the 450 British voters at the 2024 UK General Election were the left-wing Labour Party and the left-leaning Green Party, with 43% and 12%, respectively, followed by the right-wing Reform UK (13%), and the Conservative Party (7.3%); the centrist Liberal Democrats, 10%; and those who were eligible, but did not participate in the vote, 13%. This voting behaviour is broadly consistent with each party's total vote share in UK general elections (BBC News, 2024), demonstrating the sample's representativeness and reliability and the resurgence of Labour's influence in recent years.

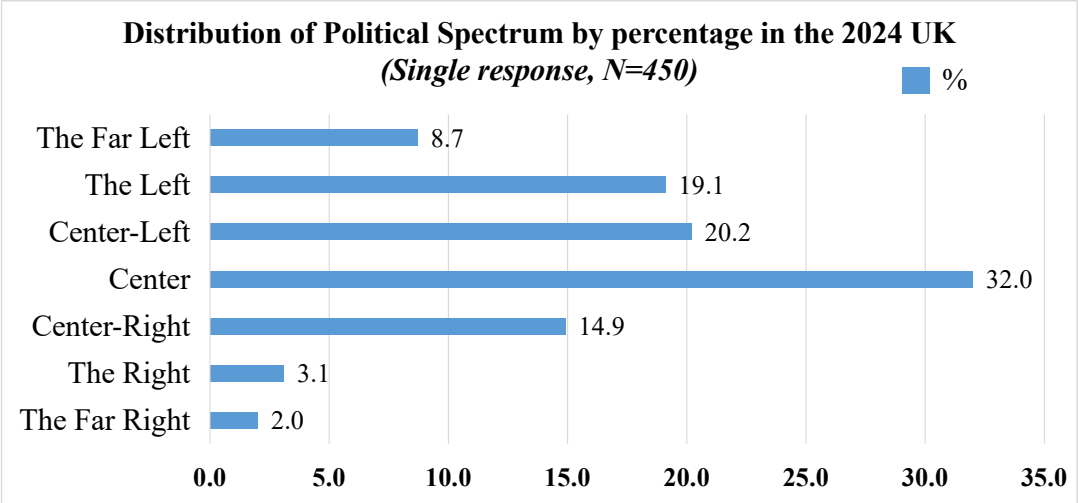


Figure 3. Distribution of political Spectrum by percentage in the 2024 UK

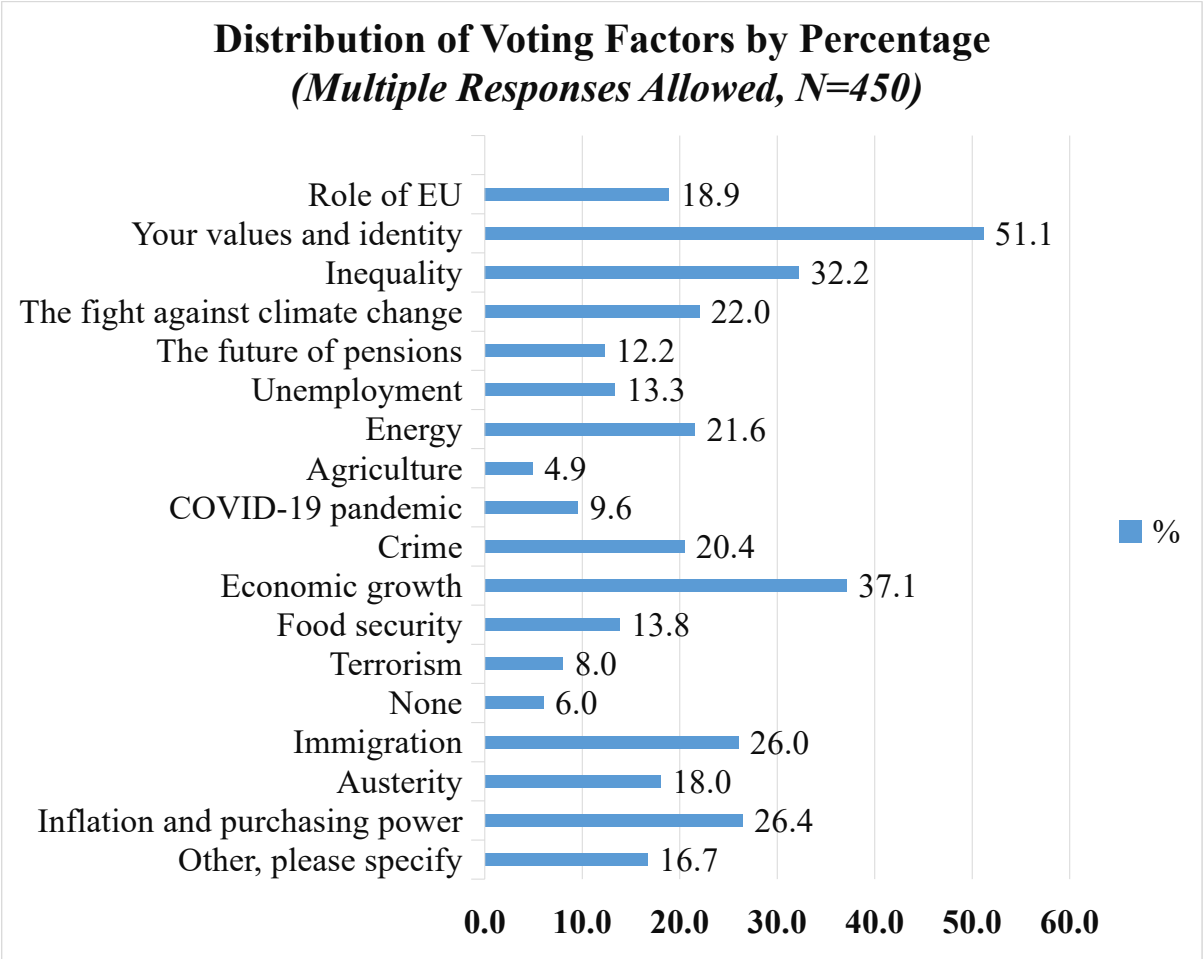


Figure 4. Distribution of Voting Factors by percentage

As can be seen from the Figure 12 and Figure 13, the overall tendency of the 450 samples on the political spectrum was neutral (32%) and left of centre (39.3%); the far-right and far-left were 8.7% and 2.0%, respectively, which overall coincided with the tendency of the vote in the general election (BBC News, 2024). According to the graph, the top five core reasons influencing voters to vote are 'Your values and identity', 'Economic growth', 'Inequality', "Inflation and purchasing power", and "Immigration", with 51.1%, 37.1%, 'Inequality', 'Inflation and purchasing power' and 'Immigration', accounting for 51.1%, 37.1%, 32.2%, 26.4% and 26.0% respectively, which may explain the voting tendency and political spectrum of this year's General Election where the left wing has prevailed - i.e., the left-wing emphasis on the campaigning of 'Kickstart economic growth The left's campaign emphasis on 'Kickstart economic growth' and 'Make Britain a clean energy superpower', compared with the right's 'Halve Inflation' and 'Stop the economic downturn', may explain why the left has prevailed in this year's election and the political spectrum. 'Halve Inflation' and "Stop the Boats" , which are more in line with people's core needs and more representative of their aspirations than the right-wing promises such as "Halve Inflation" and "Stop the Boats" (Institute for Government, 2024).

In summary, the frequency analysis of the demographic characteristics and political preferences of the 450 samples shows that the data characteristics are highly compatible with the UK context, reflecting the advantages of higher quality, better internal consistency, and better representativeness, and are suitable for further analyses.

4.2 Descriptive Statistical Analysis

The following table yielded the Pearson correlation analyses of the IUS-12, GAD-7, ERQ, PAS scales, and demographic variables. As can be seen from the table, the independent variables uncertainty intolerance, anxiety, and emotion regulation were all correlated with the dependent

variable populist attitudes at the level of P<0.001, and the correlation coefficients were 0.433, 0.313, and -0.415, respectively. This provided the basis for further subsequent regression analyses and mediation effect tests. It is worth mentioning that the demographic coefficients were not correlated at the P<0.05 level for the independent variables of uncertainty intolerance, emotion regulation, and the dependent variable of populist attitudes, and therefore, the linear regressions did not include irrelevant demographic variables as control variables when exploring the direct and indirect effects of the three variables mentioned above; however, because age, income status, and political spectrum are all correlated with anxiety, as detailed in the Appendix, it is essential to note that the demographic coefficients of the three variables were not correlated with each other. Therefore, when exploring the role of uncertainty intolerance on anxiety, these three demographic variables will be included as control variables to ensure the accuracy of the data. See Table 8.

Table 8. Yielded the Pearson correlation analyses of the IUS-12, GAD-7, ERQ, PAS scales, and demographic variables

Pearson Correlation Matrix of Target Variables (N=450)

	Z(PAS_Mean)	Z(IUS_Mean)	Z(GAD_Mean)	Z(ERQ_Mean)
Z(PAS_Mean)	1			
Z(IUS_Mean)	.433***	1		
Z(GAD_Mean)	.313***	.470***	1	
Z(ERQ_Mean)	-.415***	-.339***	-.267***	1

***Note** : 1.Variables were standardized prior to analysis;*
*2.p < 0.05 *; p < 0.01**;p < 0.001 ****

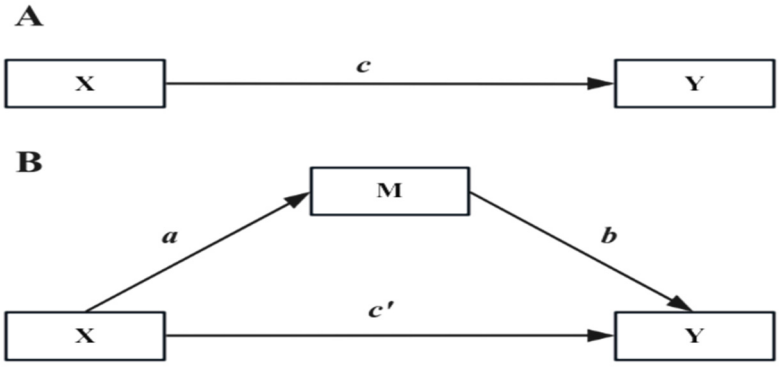
4.3 Predictive Statistical Analysis

4.3.1 Theoretical Basis of Mediation Effect

Based on the correlation among uncertainty intolerance, anxiety, emotion regulation and populism verified above, this paper continues to conduct regression analysis and mediation effect test:

(1) In terms of Regression analysis, SPSS27.0 is used in this paper for Stepwise Regression, establishing an optimal regression model by introducing or excluding independent variables step by step. (2) In terms of mediation test, this paper uses PROCESS4.3 to carry out the Bootstrap (5000 times) sampling method, which can ensure that samples realize the normality hypothesis in estimating indirect effects. Thus, the representation problem of large population proportion in England during random sampling in this paper is solved, and the robustness of the model is enhanced .(3) In terms of mediation theory, the classical mediation model proposed by Baron and Kenny (1986) provides a basis for the stepwise regression path of this paper, that is, by calculating whether the intermediary variable (M) has an impact on the relationship between the independent variable (X) and the dependent variable (Y). To determine the specific influence path of the independent variable (X) on the dependent variable (Y) [26].

Where the c path represents the total effect, including the direct effect c' of the independent variable (X) on the dependent variable (Y) and the indirect effect a*b through the intermediary variable (M), a and b represent the impact of the independent variable (X) on mediating variable (M) and mediating variable (M) on the dependent variable (Y) respectively [27]. See Figure 5.



Reference: *Baron, R.M. and 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), pp.1173–1182. doi:https://doi.org/10.1037/0022-3514.51.6.1173.*

Figure 5. Regression analysis and mediation effect test

4.3.2 Anxiety as a Mediator

The stepwise regression between uncertainty intolerance, anxiety, and populist attitudes is as follows.

Table 9. The stepwise regression between uncertainty intolerance, anxiety, and populist attitudes
Stepwise Regression (N=450, based on SPSS27.0 and Process4.3)

	Z(PAS_Mean)		**Z(GAD_Mean)**	**Z(PAS_Mean)**
	Path c'	*Path b*	*Path a*	*Indirect Effect*
	Model 1 (H1)	Model 2 (H2)	Model 4 (H4)	Model 6 (H6)
Age			-.078*	
Income Status			-.075*	
Political Spectrum			-.073*	
Z(IUS_Mean)	.433***		.455***	.367***
Z(GAD_Mean)		.313***		.140**
F	103.293***	48.553***	123.576***	103.293***
Adjusted R^2	.186	.096	.254	.199
$\triangle R^2$	.187	.098	.255	.015
Durbin-Watson	1.746	1.800	1.749	1.698
VIF	1.000	1.000	1.000	1.284

Note: **p<.05; **p<.01; ***p<.001; Path a and Path a' represent the effect from (X) to (M); Path b and Path b' represent the effect from (M) to (Y); Path c and Path c' represent the indirect effect from (X) to (Y) via (M).*

As can be seen from the Table 9, in model 1, the unstandardised path coefficient of uncertainty intolerance on populist attitudes is 0.433, p<0.001, indicating that uncertainty intolerance has a positive effect on populist attitudes. Hypothesis 1 is supported. And the R2 is 0.187, indicating that Model 1 explains 18.7% of the variance in populist attitudes. In model 2, the unstandardised path coefficient of anxiety on populist attitudes is 0.313, p<0.001, indicating that anxiety positively affects populist attitudes. Hypothesis 2 is supported. And the R2 was 0.098, indicating that Model 2 explained 9.8% of the variance in populist attitudes.

In model 4, the unstandardised path coefficient of age on anxiety is -0.075, p<0.05, indicating that age has a negative effect on anxiety. The unstandardised path coefficient of income on anxiety is -0.078, p<0.05, indicating that income has a negative effect on anxiety. The unstandardised path coefficient of political affiliation on anxiety is -0.073, p<0.05, indicating that political affiliation has

a negative effect on anxiety. The unstandardised path coefficient of uncertainty intolerance on anxiety is 0.455, p<0.001, indicating that uncertainty intolerance has a positive effect on anxiety. Hypothesis 4 was supported. And the R2 was 0.255, indicating that Model 4 explained 25.5% of the variance in anxiety.

In model 6, the unstandardised path coefficient of uncertainty intolerance on populist attitudes is 0.367, p<0.001, indicating that uncertainty intolerance positively affects populist attitudes. The unstandardised path coefficient of anxiety on populist attitude is 0.140, p<0.001, indicating that anxiety positively affects populist attitude. And the R2 of model 6 is 0.015, indicating that model 6 explains 1.5% of the variation in populist attitudes.

In addition, each of the above models' VIF value is less than 5, and the Durbin-Watson value is between 1.5 and 2, indicating that the models are less problematic in terms of covariance and autocorrelation and thus more robust and reasonable.

Table 10. Obtain Sobeltest results

Mediation Model Summary I (IUS→GAD→PAS)

Path	Model	Type	Effect	95% CI		SE	Z / T value	p value	conclusion
				Lower	Upper				
IUS→PAS	c'	Direct Effect	.367	.273	.461	.048	7.667	.000***	
IUS→GAD	a	X=>M	.470	.389	.552	.042	11.282	.000***	
GAD→PAS	b	M=>Y	.140	.046	.234	.048	2.927	.004**	intermediary
IUS→GAD→PAS	a*b	Indirect Effect	.066	.024	.109	.022	2.996	.003**	
Total Path	c	Total Effect	.433	.349	.516	.043	10.163	.000***	

Note： **p<.05; **p<.01; ***p<.001.*

To further explore the mediating role of emotion regulation in uncertainty intolerance and populist attitudes, the Boostrap 5000 sampling method was used to test and obtain Sobeltest results. As can be seen from the table, the value of the indirect effect of uncertainty intolerance on populist attitudes through anxiety is 0.066, SE=0.022, T=2.996, P=0.003, and the 95% confidence interval is [0.024, 0.109] excluding 0, indicating an indirect effect, which suggests a mediating effect of anxiety in uncertainty intolerance and populist attitudes, and Hypothesis 6 is supported. Also because the direct effect (B=0.367, SE=0.048, T=7.667, p<0.000), but 95% confidence interval excluding 0 ([0.273, 0.461]), suggests that anxiety does not fully explain the effect of uncertainty intolerance on populist attitudes, and therefore anxiety is a partial mediator.

4.3.3 Emotion Regulation as a Mediator

Table 11. The stepwise regression between uncertainty intolerance, emotion regulation, and populist attitudes

Stepwise Regression (N=450, based on SPSS27.0 and Process4.3)

	Z(PAS_Mean)		Z(ERQ_Mean)	Z(PAS_Mean)
	Path c'	*Path b*	*Path a*	*Indirect Effect*
	Model 1 (H1)	Model 3 (H3)	Model 5 (H5)	Model 7 (H7)
Z(IUS_Mean)	.433***		-.339***	.330***
Z(ERQ_Mean)		-.415***		-.303***
F	103.293***	93.304***	57.985***	82.193***
Adjusted R^2	.186	.171	.113	.266
$\triangle R^2$	.187	.172	.115	.082
Durbin-Watson	1.746	1.825	1.825	1.691
VIF	1.000	1.000	1.000	1.129

Note: **p<.05; **p<.01; ***p<.001; Path a and Path a' represent the effect from (X) to (M); Path b and Path b' represent the effect from (M) to (Y); Path c and Path c' represent the indirect effect from (X) to (Y) via (M).*

The stepwise regression between uncertainty intolerance, emotion regulation, and populist attitudes is as Table 11.

As shown in the Table11, in model 3, the unstandardised path coefficient of emotion regulation on populist attitudes is -0.415, p<0.001, indicating that emotion regulation has a negative effect on populist attitudes. Hypothesis 3 is supported. And the R2 is 0.172, indicating that Model 3 explains 17.2% of the variation in populist attitudes.

In Model 5, the unstandardised path coefficient of uncertainty intolerance on emotion regulation is -0.339, p<0.001, indicating that uncertainty intolerance has a negative effect on emotion regulation. Hypothesis 5 is supported. And the R2 is 0.115, indicating that Model 5 explains 11.5% of the variance in emotion regulation.

In model 7, the unstandardised path coefficient of uncertainty intolerance on populist attitudes is 0.330, p<0.001, indicating that uncertainty intolerance positively affects populist attitudes. The unstandardised path coefficient of emotion regulation on populist attitude is -0.303, P<0.001, indicating that emotion regulation has a negative effect on populist attitude. And the R2 of model 6 is 0.082, indicating that model 7 explains 8.2% of the variation in populist attitudes.

In addition, the VIF value of each of the above models is less than 5, and the Durbin-Watson value is between 1.5 and 2, indicating that the models are less problematic in terms of both covariance and autocorrelation. Thus, the models are more robust and reasonable.

Table 12. The Boostrap 5000 sampling method was used to test and obtain Sobeltest results

Mediation Model Summary I (IUS→ERQ→PAS)

Path	Model	Type	Effect	95% CI		SE	Z / T value	p value	conclusion
				Lower	Upper				
IUS→PAS	c'	Direct Effect	.316	.246	.414	.043	7.681	.000***	
IUS→ERQ	a	X=>M	.343	-.426	-.251	.044	-7.615	.000***	
ERQ→PAS	b	M=>Y	.302	-.388	-.219	.043	-7.059	.000***	intermediary
IUS→ERQ→PAS	a*b	Indirect Effect	.103	.065	.146	.021	5.004	.000***	
Total Path	c	Total Effect	.433	.349	.516	.043	10.163	.000***	

Note： **p<.05; **p<.01; ***p<.001.*

To further explore the mediating role of emotion regulation in uncertainty intolerance and populist attitudes, the Boostrap 5000 sampling method was used to test and obtain Sobeltest results. As can be seen from the table, the value of the indirect effect of uncertainty intolerance on populist attitudes through emotion regulation is 0.103, SE=0.021, T=5.004, p<0.001, and the 95% confidence interval is [0.065, 0.146] excluding 0, indicating an indirect effect, suggesting the mediating effect of emotion regulation in uncertainty intolerance and populist attitudes. Hypothesis 7 was supported. Also because the direct effect (B=0.316, SE=0.043, T=7.681, p<0.000), but 95% confidence interval excluding 0 ([0.246, 0.414]), suggests that emotion regulation does not fully account for the effect of uncertainty intolerance on populist attitudes. Therefore emotion regulation is a partial mediator. See Table12.

4.4 Model Summary and Hypothesis Test

In summary, all of the research hypotheses in this paper are valid and both anxiety and emotion regulation can partially mediate the relationship between uncertainty intolerance and populist attitudes. The model diagram and summary table of the research hypotheses are shown in Figure6, Table13, respectively.

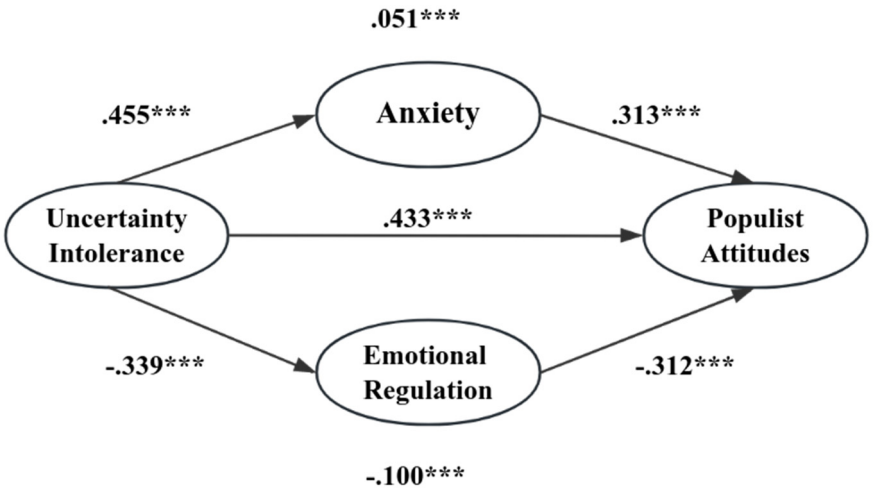


Figure 6. The model diagram

Table 13. Summary table of the research hypotheses

Summary of Hypothesis Test

	Hypothesis	Results
H1	Uncertainty intolerance positively affects populist attitudes	Support
H2	Anxiety positively affects populist attitudes	Support
H3	Emotional regulation negatively affects populist attitudes	Support
H4	Uncertainty intolerance positively affects anxiety	Support
H5	Uncertainty intolerance negatively affects emotional regulation	Support
H6	Anxiety mediates between uncertainty intolerance and populist	Support
H7	Emotional regulation mediates between uncertainty intolerance and populist attitudes	Support

5. Conclusion

5.1 Restatement of Research Questions and Objectives

The research questions of this paper are what is the relationship between the three variables of uncertainty intolerance, anxiety, and emotion regulation on populist attitudes? and what are the specific paths of influence of the above three independent variables on populist attitudes.

The research aim of this paper is to expose the factors and mechanisms influencing the populist attitudes of British voters in the context of the 2024 UK General Election. This is essentially a causal enquiry into the demand side of populism.

Finally, this paper conducts an online survey involving four variables of uncertainty intolerance, anxiety, emotion regulation, and populist attitudes based on the Prolific platform. It effectively recovers a sample of 450 British adult voters and performs stepwise regression and mediation effect tests via SPSS27.0 and PROCESS4.3 to verify that all seven hypotheses are valid.

5.2 Synthesis of Key Findings

5.2.1 Relationship between IUS, GAD, ERQ, and Populist Attitudes

(1) Uncertainty intolerance positively affects populist attitudes (B=0.433, P<0.001) and explains 18.7% of its variance. This suggests that the less tolerant voters are to uncertainty, the more likely they are to support populism.

(2) Anxiety positively affected populist attitudes (B=0.313, P<0.001) and explained 9.8% of the variance in populist attitudes. Meanwhile, uncertainty intolerance positively affected anxiety

(B=0.455, P<0.001) and explained 25.5% of its variance. This suggests that, on the one hand, the more anxious voters are, the more likely they are to support populism. Populists tend to stimulate anxiety through simple narratives, manufactured crises, and identity anxiety, which motivates people to support populist policies and positions[20]. On the other hand, uncertainty intolerance is an important trigger of anxiety, in line with the findings of existing studies. As a result, people's anxiety tends to be more intense than usual during times of uncertainty such as general election voting and economic reform.

(3) Emotion regulation negatively affects populist attitudes (B=-0.415, P<0.001) and explains 17.2% of the variance in populist attitudes. Meanwhile, uncertainty intolerance positively affected emotion regulation (B=-0.339, P<0.001) and explained 11.5% of its variance. This suggests that, on the one hand, emotion regulation, as a capacity to recognise and manage emotions, can adjust voters' receptivity to inflammatory rhetoric such as populism, manifesting itself as a moderation of populist attitudes by emotion regulation. On the other hand, uncertainty is generally perceived as an aversive presence, and thus uncertainty interferes with emotion regulation. That is, individuals with high levels of uncertainty intolerance are not only prone to negative emotions such as anxiety and fear in uncertainty-filled environments, but also suffer from cognitive dissonance and affective inhibition due to avoidance instincts towards uncertainty, thus weakening the ability to regulate emotions, in general agreement with existing findings .

5.2.2 Pathways of Influence: Uncertainty Intolerance on Populist Attitudes

(1) Mediating role of anxiety: Bootstrap analyses found an indirect effect of uncertainty intolerance on populist attitudes through anxiety (indirect effect = 0.066, p = 0.003). Anxiety partially mediated the relationship between uncertainty intolerance and populist attitudes, enhancing this effect. This finding is consistent with existing research that, on the one hand, uncertainty is often considered an essential predictor of anxiety, and on the other hand the reinforcement of anxiety makes it easier to support populist attitudes based on the social identity theory and the relative deprivation theories in favour of populist attitudes, which alleviates anxiety and removes uncertainty, e.g. preference for strong leaders.

(2) Mediating role of emotion regulation: bootstrap analyses found that emotion regulation partially mediated the relationship between uncertainty intolerance and populist attitudes (indirect effect = 0.103, P<0.001). Emotion regulation partially mediated the relationship between uncertainty intolerance and populist attitudes, attenuating this effect.

This paper discusses the relationship between uncertainty intolerance, anxiety, emotion regulation and voters' attitudes towards populism, paying more attention to the difference in sensitivity of individual psychological factors to populism to explain the root of the effect of populism from the perspective of the receiver's position from the perspective of communication studies. Therefore, based on the conclusion that uncertainty, anxiety, and emotion regulation all impact populist attitudes, as confirmed in this paper, policymakers should also listen to public opinion more purposefully and understand the root causes of people's feelings of uncertainty and anxiety when exporting populism to gain popular support to live up to people's expectations.

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