#### Subjective well-being and elections in Europe

Luise Koeppen\*† (<u>m.l.c.koeppen@rug.nl</u>); Dimitris Ballas\* (<u>d.ballas@rug.nl</u>); Arjen Edzes\* (<u>a.j.e.edzes@rug.nl</u>); Sierdjan Koster\* (<u>sierdjan.koster@rug.nl</u>)

\*Faculty of Spatial Sciences, University of Groningen, the Netherlands

<sup>†</sup>Corresponding author. (<u>m.l.c.koeppen@rug.nl</u>). Faculty of Spatial Sciences, Department of Economic Geography, University of Groningen, P.O. Box 800, 9700 Groningen

Over the past decade, populism has expanded, especially <u>radical right and left parties</u> and their respective voter bases. Oftentimes, voting patterns are unevenly distributed over space, which makes it very relevant to explore, along with other relevant factors. This will increase our understanding of the rise of populist parties, its spatial pattern and policy implications accordingly. While previous research on populism is traditionally focusing on developments of socio-economic conditions and value-change as the main explanation, we link these determinants in contemporary European democracies to lower levels of subjective well-being (SWB), and ultimately, to higher likelihood of voting for the <u>radical right and left parties</u> by exploring how socio-economic insecurities and tensions caused by changing societal value structures within society are likely to provide a fertile ground for part of the electorate to indicate a lower level of subjective well-being.

The empirical evidence for our research is supported by using comparative survey data, such as the European Social Survey (ESS) data collected between 2010-2018. In addition to examining the link between subjective well-being and political preferences, contextual factors at the regional level across Europe are considered as well. Methodologically, we adopt a multilevel modelling approach to analyse voting behaviour and to also examine subjective happiness indicators in relation to factors of political geography.

Keywords: Europe, geography of discontent, subjective well-being, regional differences, voting behaviour

**JEL:** C55; D72; N44; R23

# Introduction

The past decade has seen a considerable rise of various types of radical parties, both left and right or populist, from the likes of Syriza in Greece, Podemos in Spain, to the Alternative for Germany (AfD), or the United Kingdom Independence Party (UKIP). Across Europe the support of these radical parties is increasingly driven by geographical cleavages, for example between urban and rural places (Harteveld, van der Brug, de Lange and van der Meer, 2021). A growing number of studies show that these distinctive spatial patterns may best be explained by factors pointing to the increasing salience of attitudinal and cultural cleavages as well as socio-economic divides generated by the processes of economic globalization (Piketty, 2018; Norris and Inglehart, 2019; Ford and Jennings, 2020). Most prominently it is claimed that radical parties are particularly successful among those individuals who experience individual socioeconomic difficulties (Gomez et al., 2016; Kriesi et al., 2008, Kriesi et al., 2006; Lubbers et al., 2002; Ramiro, 2016; Rydgren, 2013). For example, the literature emphasizes the individual economic hardship in "places left behind" (Ford and Goodwin, 2017) and the "losers of globalization" (Essletzbichler, Disslbacher, & Moser, 2018), while other approaches have interpreted the movement as a reaction against the political elite (Goodhart, 2017). Hence, all of this points to an emerging 'geography of discontent' (Los, McCann, Springford, & Thissen, 2017; McCann, 2018; Dijkstra, Poelman, & Rodríguez-Pose, 2019), reflecting the unhappiness of people living in places which are stagnating or facing comparative economic decline (Rodríguez-Pose, 2018). However, our understanding of this relationship is thin and the nature of these geographical cleavages of political divides remains contested among scholars and cannot fully explain the rise of radical parties (Inglehart and Norris, 2016).

By adding a regional perspective, this paper contributes to the literatures in geography and political science providing an interpretation of the increase in the geographical cleavages of voters characterized as the "revenge of the places that do not matter" (Rodríguez-Pose, 2018). To date, most work in the field of regional science studies tend to focus on aggregate socio-economic and socio-cultural conditions (e.g., national or regional) in relation to voting behavior, suggesting that regions characterized by similar local economic conditions, tended to exhibit similar voting behaviour (Hooghe and Marks, 2018; Lee et al., 2018; Los et al., 2017; McCann, 2018; Rodríguez-Pose, 2018). The current study, therefore, contributes to this work by specifically considering both individual and contextual (regional) level determinants of voting for radical parties. More importantly, this empirical study aims to shed light whether and how the tendency of one's individual subjective well-being to affect one's vote for a radical party depends on socio-economic and socio-cultural conditions. To that end, we particularly argue that the relationship between subjective well-being and radical voting is likely to be moderated by socio-economic insecurities and tensions caused by changing societal value structures. Despite the long tradition in political science to analyse how socio-economic inequality moderates the link between income and radical right voting (e.g., Autor et al., 2020; Colantone and Stanig, 2018), only little is known about the link between regional and individual perspectives that may explain voting behaviour, and virtually nothing is known about such moderation for radical left voting.

Conceptually, the question remains how to interpret the geographical variation of radical voting behaviour. Therefore, it is crucial to understand whether voting for radical parties can be explained by individual and context-specific manifestations (e.g., national or regional) of an overarching narrative referring to as a *'sense of powerlessness and hopelessness'* (see for example Deppisch, 2021). As a result, it is interesting to understand whether the significant shifts in the political landscape can be explained by rising levels of dissatisfaction at the individual level induced by economic insecurity and socio-cultural factors or rather by remnants of resentments and anxieties over territorial inequalities. Emotional appeals are often used in political rhetoric and circulated among their electorate. Thus, in order to understand the rise of radical parties it is critical to examine individual emotional dynamics entailing anger, anxiety, sadness, and related feelings. Given the gap in the literature, this study hereby provides important insights by introducing the measurement of subjective well-being (SWB), in order to examine how SWB may affect individuals' inclination to vote for radical parties, induced by socio-economic and cultural insecurities, by including relevant contextual variables.

Despite the fact that existing scholarship demonstrates that decision makers start to consider the importance of psychological factors when it comes to policy decisions (i.e., incorporating aspects of subjective happiness or life satisfaction) its relative performance remains debatable when contrasted with more conservative measures such as GDP (see for example Ward, 2015). This prompts the importance of studying the role of politics and leads this paper to consider the relation between voting for radical parties and individuals' subjective well-being. Hereafter, we use the concept of subjective well-being to capture the individuals' appreciation and evaluation from life under its present state, and aim to show that individual feelings are predictors of voting for radical parties.

Given that previous literature has associated subjective well-being as a potential determinant with political participation (i.e., voting), there has yet to be individual and contextual level empirical research connecting SWB, measured through dimensions of general life satisfaction, subjective happiness and individuals' subjective health, with voting for radical parties. Of interest and relevance here is the existing scholarship on the geography of happiness and well-being in Europe (Aslam and Corrado, 2012; Ballas, 2021, 2022) in order to study contextual determinants of the 'geography of discontent'. Addressing the relevance of work reveals the possibility to explore the method for the analysis of individual and contextual level determinants in order to account for the different levels of geographical aggregation in the data set.

Therefore, this paper builds on these studies and follows a similar approach by examining the underlying determinants of interest and to revisit the efforts of economic geographers and regional scientists briefly discussed above to address the following question:

To what extent is voting for radical right and left parties a result of lower levels of subjective well-being moderated by socio-economic and cultural insecurities, explaining the new emerging political geographies?

This paper employs individual and contextual level, pooled, cross-sectional data from all of the 8 European Social Survey (ESS) waves available at the time of writing, covering a total of 196.291 individuals. Of particular interest here is Europe as in the recent years there has been an unprecedented wave of radical parties and voters in various shapes and forms. The remainder of this paper is structured as follows. First the relevant literature and the conceptual framework is presented that underpins the research in this study, while the third section describes the data sources, the variables of interest and the empirical design. The next section includes the main findings, which are discussed in the subsequent section and directly followed by the conclusion.

# Literature Review and Conceptual Framework

This paper builds on the recent scholarship on rising support of populist, anti-establishment and/ or extremist voting in Europe, such as Van Kessel (2015); Inglehart and Norris (2016); Goodwin and Heath (2016); Guiso et al. (2017); Algan et al. (2017) or Rodrik (2018), which highlights the crucial role of economic insecurity and socio-cultural characteristics. While the common denominator of these studies seems to be related to 'discontent', scholars have only recently started to study the general indicators of lower levels of *subjective happiness, life satisfaction and subjective perception of individual's health* (Ward, de Neve and Ungar, 2021; Kavanagh, Menon and Heinze, 2021). Hence, in this article we argue that the surge and the success for radical right and radical left parties is rooted into two distinct types of (1) socio-structural conflicts and (2) economical insecurities, yet, their translation into the electoral choice is conditioned on individual discontent originating from low levels of subjective well-being. Before outlining the literature review of the given context, a brief overview of what is meant by radical parties, specifically radical right and radical left parties, given.

## Radical Parties - Right and Left

There is considerable evidence within a wide-ranging body of literature that radicalism has been gaining ground in advanced democracies, of both the right and left (Algan et al., 2017, Inglehart and Norris, 2016, Mudde, 2007). However, most of the studies focus on radical right parties although radical left parties have experienced a similar surge in success. Thus, there is only limited scholarly debate and discussion on radical left parties, while there is evidence that both types of parties share commonalities. For example, existing literature contend that radical right and left parties can be considered as populist (e.g., Rooduijn and Akkerman, 2017), nationalist (e.g., Halikiopoulou et al., 2012), and eurosceptic (e.g., Hooghe et al., 2002). Yet, it is important to closely consider the distinction of these two types of parties, aiming to better explain an emerging phenomenon – 'geography of discontent' – which denotes the unhappiness and dissatisfaction of individuals.

Extensive studies on radical right parties have delineated key explanatory characteristics (Mudde, 2007; Rooduijn, 2014; Rydgren, 2007). More specifically, radical right parties can be considered as nationalist parties, which implies that those parties emphasize "states should be inhabited exclusively by members of the native group ("the nation") and that non-native elements (persons and ideas) are fundamentally threatening to the homogeneous nation-state" (p. 19). As such, radical right parties tend to endorse a xenophobic form of nationalism since the "good people" are portrayed as exploited, betrayed and neglected by a morally decadent and corrupt "elite" (see for example Hawkins, 2010). As such, what unites radical right parties is the desire to create an authoritarian system that is ordered according to the "natural" and existing differences in society, as well as a law-and-order system where deviant behaviour is punished (Mudde, 2007).

In contrast to radical right parties, radical left parties are rooted in a common communist tradition, criticize the capital system and are united by the aspiration to transform society while rejecting neo-liberal and market-oriented policies (March, 2011). The parties' main concerns are to promote socio-economic equality and rights, social welfare reforms, and strive to adopt an egalitarian and universalist agenda (March, 2008). This is in line with their criticism on the 'neo-liberal' character of globalization and specifically European economic integration (ibid.). In other words, the radical left supports cultural liberalism and diversity (i.e. pro-migrants), yet, following a contradictory position by advocating inclusion and integrations while at the same time also favoring egalitarian internationalism (see Kriesi and Schulte-Cloos, 2020).

In sum, although both parties share some similarities, they essentially differ in their political ideologies. Central to the radical left is the general rejection of contemporary capitalism and its consequent socio-economic structure, while

aiming to pursue an alternative economic welfare structure that includes major redistribution of resources (March, 2012, 8). Contrary to this, the radical right mainly focuses on the reshaping of the cultural dimensions which are linked to issues on the restructuring of the integration-demarcation conflict. Also, of relevance is, both, the radical right and left, share parts of Euroscepticism, where economic anxieties and anti-austerity measures against the European integration are mobilized by the radical left, while the radical right's central focus of Euroscepticism is driven by securing national identity and stimulating feelings of cultural threats (De Vries and Edwards, 2009). Very few studies have offered insights on both, insights into what key determinants drive radical right *and* radical left voters.

## Studies on voting behaviour for Radical Parties (Right and Left) - determinants

More general speaking, support for radical parties is in most cases associated with broad societal conflicts that can be translated into two distinct sets of factors which shape the vote with regards to the literature. First, a number of scholars argue that economic conditions, such as levels of unemployment, import shock linked to globalization, and perception of economic deprivation influence the vote choice for radical parties (Colantone and Stanig, 2018, 2019). Other authors, such as Inglehart and Norris (2016), point to the effect of cultural grievances and that an individual's social status is under threat or to nostalgic attitudes fueled by resentful affectivity toward the status quo, political elite, and other groups (see further Sniderman and Hagendoorn, 2007).

Various studies have now established that individuals that are more inclined to vote for radical right parties come from lower socioeconomic positions. Particularly, those individuals are likely to be less educated, of lower income, lower social class, and are more likely to be unemployed (Lubbers et al., 2002; Werts et al., 2013). For example, Han (2016) finds that rising income inequalities in society increase the likelihood of lower-income groups to vote for radical right parties, while the opposite is true for high-income groups. However, several studies suggest that similar development might be expected to take place with radical left voting. For example, Blekesaune and Quadagno (2003) demonstrated that support for social welfare reforms is high when levels of unemployment increase. Further, this is in line with the argument that a poorly performing economy fuels support for radical left attitudes (Blekesaune, 2007). As explained further, Dallinger (2008; 2010) and Jaeger (2013) demonstrated that the higher the level of economic inequality, the stronger the demand for welfare redistribution. Specifically, individuals that experience more inequality within a country tend to be more in favor of supportive welfare reforms. Thus, it is likely that threatening socio-economic conditions are not only related to radical right but also radical left voting.

Next to the determinants outlined above, attitudes and their mediating effect are crucial (see Zhirkov, 2014). More specifically, attitudes towards immigration are likely to impact voting for radical right parties, while attitudes towards welfare redistribution are significant drivers of voting for radical left parties. Political discontent is associated with the vote for parties of both the radical right and the radical left. It is to note that next to these mediating attitudes, there are other key determinants as well. For instance, recent research has shown that additional determinants for both radical right and left voting can be attributed to general left-right attitudes and towards perceptions of European integration (see Ivarsflaten, 2005; Ramiro, 2016; Van der Brug et al., 2000; Werts et al., 2013).

However, from the arguments illustrated above, it still remains unclear to what extent an individual's subjective wellbeing is conditioned by economic insecurity and socio-cultural change to vote for a radical party. Moreover, it is expected that this relation is not to be the same across different aggregated contexts within which individuals live. Therefore, by only focusing on economic and socio-cultural determinants in explaining radical right voting offers certain limitations, justifying the need to go beyond that scope by focusing on additional determinants driving the success of radical right voting. Building on this assumption, studies have demonstrated that next to individual socio-economic vulnerability, individual subjective perceptions and experiences of structural conditions are relevant as well (Gidron and Hall, 2017; Salmela and von Scheve, 2017). In other words, individuals might translate experiences of economic insecurities and aspects of post-modern values shifts into psychological factors, such as fear, anxiety or powerlessness, through that these individuals are likely to become receptive to radical right and left discourse. Conversely this means that economic insecurity and socio-cultural change cannot explain voting for radical parties. As such, economic insecurity and socio-cultural change are key in explaining the structural conditions that stimulate the rise of radical right votes, yet, only explain to a little extent the mechanisms that affect individuals voting behaviour under these conditions. Thus, this implies the importance to study subjective wellbeing (as in discontent) which is conditioned by these circumstances.

#### **Conceptual Framework**

In addition to the literature above, the paper also builds on another strand of literature within social sciences that specifically analyses the electoral support for both radical right and radical left parties, while at the same time linking it to subjective well-being. Moreover, instead of associating economic insecurity and cultural change with voting for radical right and/ or radical left parties, we specifically argue that it is crucial to focus on 'how economic and socio-cultural structural transitions create the conditions that might influence the subjective well-being, and translates into voting behaviour'. There is already some evidence in previous research on subjective well-being and political outcome

that particularly has focused on the left-right nexus. For example, relevant studies have demonstrated that happiness is high among individuals voting for left-wing parties when inequality is low (i.e., lower unemployment), or left-wing parties win elections. A similar effect on subjective well-being is found among individuals voting for right-wing parties with the distinction of low domestic inflation rates (Di Tella and MacCulloch, 2005; and for Europe Alesina et al., 2004). Some earlier work conducted by Radcliff (2001) examines various political aspects (i.e., party ideology) and its relationship with life satisfaction. In the study the author demonstrates that nations and individuals tend to be happier when a left-wing government is in power given the circumstances that social democratic welfare reforms aim to protect individuals from economic insecurity potentially caused by volatile market forces. More recently there has been a growing emphasis on external events with long-lasting impacts on electoral choices. For instance. Oswald and Powdthavee (2010) show that individuals (i.e., parents) with daughters are more likely to align themselves with leftwing parties, while those who have sons tend to vote for right-wing parties. In a similar study, Powdthavee and Oswald (2014) provide evidence that "money makes people right-wing and inegalitarian" (vox.eu). More specifically, Giuliano and Spilimbergo (2014) show that individuals tend to vote for left-wing parties and are more in line with income redistribution accordingly if they are born during a period of economic recession.

While, all of this suggests that the broader understanding of subjective well-being is a key determinant that connects social change with political outcomes, our study goes beyond that nexus by aiming to study structural underpinnings that condition subjective well-being and translate into the electoral success of radical right and left parties. Thus, we argue that economic and socio-cultural change are likely to provide breeding ground for low levels of subjective wellbeing among the economically insecure and culturally and morally conservative electorate. A growing number of studies have demonstrated the enduring impact of economic insecurity on subjective well-being (De Cuype and De Witte, 2007; Grün et al., 2010; Lucas et al., 2004; Oesch and Lipps, 2012; Colantone and Stanig, 2018). For instance, this is arguable the case in sectors and occupations under higher threat from free trade, economic globalization and automation (Colantone and Stanig, 2018). Likewise, it is to note that socio-cultural value shifts within society is yielding constraints on individual subjective wellbeing. A recent study by Gidron and Hall (2019) stresses that the rise of in particular radical right parties can be understood as a problem of 'social integration'. It is argued that "feelings of social marginalization can follow either from the loss of a valued economic position or from the perception that cultural elites no longer attach value to one's views" (p. 1031), causing discontent and is underlying an alienation from mainstream politics. Moreover, previous research has provided evidence that alienation and lower levels of trust from mainstream politics, dominant social and cultural values is symptomatic of marginalization and social exclusion, fueling discontent and likely to erode individual subjective well-being (Zanin, 2017; Guven, 2011; Pellegrini et al., 2021).

## Data and Methods

#### Data sources

We analyse pooled, cross-sectional individual-level data from the European Social Survey an academically driven survey that has been conducted across Europe since its establishment in 2001. Every two years, face-to-face interviews are conducted with newly selected, cross-sectional samples (ESS Round 9: European Social Survey Round 9 Data, 2018). The survey covers questions and useful information related to social attitudes and values, beliefs and behaviour patterns next to the general demographic characteristics (i.e., age, gender ect.) of diverse populations in more than 30 nations. It allows to better examine changes in voting behaviour whilst controlling for numerous observable factors. Individuals are selected by strict random probability methods at every stage. In order to achieve the optimal comparability over time and across countries, all the countries adopt the same questionnaire and follow the same procedures during all the stages of the process (ibid.). Yet, in order to correct for unobserved bias in the data, the ESS recommends that by default to apply post-stratification weights to specifically correct for differences in the probability of selection, sampling errors and possible non-response errors, thereby making the sample more representative, and takes into account to adjust for differences in population size across countries (ESS: Guide Kaminska, 2020). We focus upon data from the EU27 Member States plus the United Kingdom from five consecutive waves, covering the period 2010 – 2018 (round five, round six, round seven, round eight and nine).

In order to explain radical voting, both for radical right and left parties, across European regions, we also include information on the spatial context. For this we consider as the appropriate scale at the European Nomenclature of Territorial Units for Statistics (NUTS) 2 level. It arguably captures best the contextual and individual level effects. The selected regional variables are based on the data provided by Eurostat, which have already been included with the ESS data. It is to note, that the contextual variables are updated every second year, meaning that the information provided in 2012 is merged with the ESS4 and ESS5 survey data. In addition, country dummy variables are included in order to control for unobserved country effects. The resulting model in our analysis consists of two levels, where individual responses are treated as a level-one, the regional information (NUTS 2) are combined into a level-two and the country dummy variables are treated as country fixed effects. In total, the dataset comprises data of 205 regions across 25 European countries (see Table A2, in the Appendix) over a period of eight years. The number of individual observations

available is 196. 291, although the final sample size for the analysis is 62.957 individuals at NUTS 1 and NUTS 2 level, due to item non response for some of the key variables of interest.

#### Method

The aim of the article is to assess the impact of both individual level characteristics and regional contextual effects on individual voting intentions. Thus, given our conceptualization and the structure of the data, the most suitable modelling strategy is reflected when analyzed with multilevel techniques (see Snijders and Bosker, 2012). Traditionally, multilevel modelling is used in order to address the hierarchical structure of the data, with individuals nested within neighbourhoods, districts or regions (ibid.). An advantage of applying multilevel models is that both between-individual and between-place variation is captured, allowing to improve the inference and interpretation of the coefficients in the model. Therefore, the dependency of individuals is accounted for.

### Dependent variables

We classify parties into party families developed by a consortium of populism scholars ('The PopuList Project', see Rooduijn et al., 2019). For an overview of the selected radical right and radical left parties, see **Table 000**. Our dependent variables are based on two relevant questions that allow to identify whether the respondent voted and further, conditional on voting, the political party that the selected respondents voted for in the last national election. Thus, the dependent variables in our analysis are two binary variables [1=voted for a radical right or a radical left party, 0=denotes those individuals voted for a mainstream party, conservative/ liberal/ Christian-democratic and/or social-democratic]. For each indicator we shall estimate a series of logit models with standard errors clustered by regions.

To our knowledge, no studies have considered both party dimensions simultaneously when analysing individual level characteristics and regional contextual effects on individual voting intentions.

It is to note, that only included individuals who indicate having voted in the country's last national elections, excluding individuals not entitled to vote (i.e. below the age of 18). Individuals who chose not to have voted, or refused to answer and/ or absentees from the polling station have been coded as missing values and have thus been excluded from the analysis as well.

#### Independent variables

As explained before, the key independent variable to analyze individual voting intentions is subjective well-being. We use two different proxies for it: *subjective happiness, life satisfaction, and subjective general health.* Those variables are measured by a 10-point Likert scale (0-10) and recoded with (0) indicating 'Extremely unhappy/dissatisfied/ non good health' and (10) referring to being 'Extremely happy/satisfied'. The variable *subjective general health* is measured by a 5-point scale, where (1) indicates "very good" and (5) indicates "very bad". It is to note, that the variable was coded in reverse order to subjective happiness and life satisfaction, thus, the order was reversed for the other key variables of interest. All three variables are included in the analysis separately. Subjective happiness and life satisfaction are a widely-used measures of the related constructs quality of life and/or general discontent, and it has been found to be associated with political engagement, when controlling for other factors such as age or income (Diener, Lucas, and Oishi, 2002; Veenhoven, 2015; Di Tella and MacCulloch, 2005; Liberini et al., 2017; Ward, 2015). Subjective health is another measure of subjective well-being, yet hardly used when studying objective measures of life quality, more specifically life dissatisfaction/ discontent.

Since it is expected that economic and cultural conditions, as expressed by socio-economic insecurity and change in personal value structures, could potentially mitigate discontent, we control for it by employing the following explanatory variables: Socio-economic insecurity is measured by constructing a scale that consists of three variables: 'if individuals are likely to be unemployed, likely not have enough money, feeling about the economic situation'. The newly created variable has been recoded and transformed, with (0) indicating that it is 'difficult' and (10) indicating that it is 'comfortable'. An additional control for socio-economic insecurity is defined by utilizing on the Oesch's five-class scheme (2006), which assigns individuals to classes based on the occupation and intents to proxy individuals' socioeconomic background (i.e. blue-collar workers). To proxy the change in personal value structures, we control for several attitudinal variables capturing the individuals' importance to selected value statements. The 'anti-immigration' attitude of individuals has been assessed by constructing an exploratory factor analysis of six variables that were measured by the following questions: "Allow immigrants of the same race." "Allow immigrants of a different race." "Allow immigrants from poor countries." "Immigration is bad for the economy." "Immigrants undermine our culture." "Immigrants make the country a worse place to live." We hence retrieved the factor of anti-immigrant sentiment. Further, we assessed for 'traditionalist' attitudes of individuals by using the following set of items measuring attitudes regarding equality, traditions and customs, as well as anti-LGBT attitudes: "Gay men and lesbians should be free to live their own life as they wish." "Important to follow traditions and customs." "Important that people are treated equally and have equal opportunities." We used an exploratory factor analysis where we retrieved the factor for capturing individuals' attitudes in terms of traditional values.

## Control variables

In the analysis we also control for socio-demographic factors. In the literature it has long been established that typically "male, young voters, with lower or middle educational level and certain social classes, are more likely to vote for radical right parties" (Arzheimer and Carter, 2009: 985). We therefore include these variables by means of controls for individuals' gender, age, level of education, income as well as social class. Gender is operationalized as a dummy (1 female, 0 male). Educational level is measured by the seven-point ISCED classification, grouped into lower secondary education or less (low), upper secondary education or advanced sub-degree (midlevel) and tertiary education (high). We also assessed whether an individual is either in paid work [=1] or not [=0] in order to proxy the employment status. The income variable refers to the country-specific net income decile of the individuals' household. Its values range from 1 (first decile) to 10 (10th decile) and is grouped into different categories, such as 1-3<sup>rd</sup> decile (low), 4-6<sup>th</sup> decile (middle), and 7<sup>th</sup> decile and above (high income). We also control for marital status, by means of distinguishing if someone is living together with a husband, partner, or cohabitant [=1] and those who live alone [=0]. It further includes if someone is meeting socially with friends, neighbours and co-workers, with a newly recoded dummy variable [0= not social and 1=social]. We also control for 'level of religiosity' which is operationalized by applying a composite index of the following indicators: church attendance and subjective religiosity. Church attendance is measured on a 7-point scale, where the original order of the codes was reversed [1=never; 2=less often; 3=only on special holidays; 4=at least once a month; 5=once a week, 6=more than once a week, and 7=every day]. Subjective religiosity is measured on a 10-point scale where (0) denotes 'secular' and (10) 'very religious. The new variable was recoded and transformed into a composite index where (0) indicates that 'secular' and (10) 'very religious'. In addition, we also include specific contextual level data that are considered as important to measure the regional characteristics that are expected to be moderating the effects of individual-level characteristics. The unemployment rate is measured by assessing the percentage of the civilian labor force unemployed (compared to the total labor force; Eurostat). We also include regional GDP per inhabitant in PPS (in % of the EU 28 – average) in our models. In order to measure socio-economic inequality, the countries' Gini coefficient is used.

It is important to note that with this study the authors intend to intend to present a selection of interesting correlational patterns between variables which capture individuals' level of subjective well-being and radical voting, in addition to the previous work to the phenomenon with previous findings.

## Results

In this section the argument that has been drawn in the conceptual framework will be tested by using a multilevel logistic approach as demonstrated in the previous section. First, a presentation of summary descriptive values of the key variables of interest are going to be used. Subsequently we present a multilevel logistic approach to the analysis of radical voting, both right and left.

#### Summary statistics – key variables

[Table here – summary stats]

#### Model 1: null model

In previous sections we have provided the theoretical and methodological arguments for employing a multilevel approach. The first step of the analysis therefore will be to empirically test whether these theoretical expectations can be confirmed and if a multilevel approach is genuinely required. Therefore, we perform a multilevel (two-level) null model (see Table **number**) which includes a random intercept and where respondents are nested in NUTS2 level regions.

A key aim of our approach is to estimate the proportion of overall variation in voting for a radical right and left part that is attributable to individuals and the variation that is attributable to regions. The intra-class correlation coefficient (ICC) of both null models, which includes no covariates, supports the choice to employ a multilevel logistic model, as it shows that, 49% of the variance in the individuals' vote for radical right parties is located at the regional level, and 49% for radical left parties.

#### [Table here – empty model]

# Models 2 and 3: Subjective Wellbeing measures, socio-demographic, economic insecurities and socio-cultural variables

Model 2 includes individual level variables that may help us the extent to which it may be individual level discontent characteristics that may be key determinants of voting for radical right and left parties. It is interesting to note that

subjective happiness seems to have a slight (but statistically significant) association with radical right voting, indicating that less happy individuals are more likely to vote for radical right parties voting. When comparing with voting for radical left parties, individuals indicating higher levels of happiness are more likely to vote for those parties. Moreover, for individuals' level of life satisfaction, it seems that being 'extremely unsatisfied' is likely to predict voting for radical right parties, whereas this is different to radical left parties. Here, it seems that regardless of individuals' perception of life satisfaction, the likelihood of voting for radical left parties is significant. As for the subjective health variable, individuals reporting lower levels of health are more inclined to vote for radical right parties, whereas individuals reporting higher levels of health seem to be more inclined to vote for radical left parties.

[Table here – indivi\_SWB (measures)]

In Model 3 we add several social attitudinal variables. More specifically, we control for economic insecurities and sociocultural variables. For brevity, when controlling for the variables to proxy economic insecurities and socio-cultural values, it seems that the predictors confirm to some extent the argument outlined above. For example, the coefficients for life satisfaction and subjective health changed, now indicating that even individuals reporting higher levels of life satisfaction or subjective health seem to be inclined to vote for radical right and left parties.

Only when controlling for subjective happiness and the structural condition, such as economic insecurities and sociocultural value change, there seems to be hardly any pattern.

#### [Table here – swb\_attitude]

In Model 4 two regional variables were added: regional GDP (as a percentage of the EU average) and an indicator of regional long-term unemployment (total number of long-term unemployed -12 months or more - as a percentage of total unemployed in the region). It can be observed that a considerable amount of the predictors are significant regarding all the measures applied for subjective wellbeing. However, the effect is not always as expected and thus, our results only partially confirm what has been mentioned in the literature. The model for all measures of subjective wellbeing demonstrate that the relationship seems to be consistent that when controlling for variables pertaining to economic insecurities and socio-cultural values - in addition to regional level control variables - that it seems to appear individuals are more likely to vote for radical left parties is regardless of the order. For every unit increase in either positive or negative subjective wellbeing conditions, the odds of voting for a radical left party increase. For example, being extremely happy, extremely satisfied or indicating fair subjective health all together have a similar effect on the propensity to vote for radical left parties: for every unit increase on these variables, the odds for voting for a radical left party is higher by 1.3 times, 1.2 times or 1.4 times respectively. This could imply that individuals tend to support a party regardless of the reporting of subjective well-being measures and further implies that economic insecurities as well as socio-cultural attitudes tend to predict voting for radical right and radical left parties. In all three models, gender is negatively associated and significant with voting for APEP: women are less likely to vote for either radical right or radical left parties compared to men.

[Table here – full\_model]

## Concluding comments

This study examined the role of the success for radical right and radical left parties arguing that it is rooted into two distinct types of (1) socio-structural conflicts and (2) economical insecurities, yet, their translation into the electoral choice is conditioned on individual discontent originating from low levels of subjective well-being. Furthermore, the research we presented also benefited from and built on relevant work in political and economic geography, as well as political sciences particularly for defining and analysing radical parties (Roduijn et al., 2019). It further builds on the extensive analysis conducted by Rooduijn and Burgoon (2018) on voting behaviour for radical parties in relation to subjective wellbeing. In this study, subjective wellbeing is considered as a key variable for analyzing voting behaviour and in particular relevant to the 'geographies of discontent', where we also build on previous work on political participation and measures of subjective wellbeing (Koeppen et al., 2021). In addition, we also argued for and presented a multilevel modelling approach to the analysis of the geographies of discontent and in order to address the question of whether voting for radical parties is the result of lower levels of subjective well-being moderated by distinct types of socio-economic and cultural insecurities. Thereby we are engaging with relevant concepts and scientific debates which have been introduced by regional scientists, economic and political geographers in recent years (Dijkstra et al., 2019; Los et al, 2017; McCann, 2016, 2018 and 2020; Rodriguez-Pose, 2019; Roduijn et al., 2019).

In respect to the multilevel modelling framework that we introduced, the aim is to take advantage of methodological and theoretical insights from all these studies to provide an estimate of the extent to which voting for radical parties is the result of contextual-level characteristics and processes (e.g. long-term unemployment) or conditioned by the individual level characteristics. In our analysis we took into account of both individual characteristics, which includes socio-economic and demographic characteristics as well as attitudes and the regions where individuals live in from selected and participating European countries (wave 2010 until wave 2018). As already mentioned in the previous section, the 'null' or 'empty' model demonstrates a considerable variation (almost 50 percent) of either radical right or radical left voting that is attributable to regional level characteristics. Yet, when considering contextual-level variables by including in the analysis, such as regional GDP (as a % of EU average) and a regional economic hardship variable relating to unemployment (long term unemployed as a proportion of total unemployed), the ICC variation drops to 32% (for radical right parties) and 42% (for radical left parties).

It is important to note that the analysis suggests that next to the probability to vote for radical parties, both right or left, can be attributed to a considerable amount of individual level characteristics, there seems to be some clear indication that also contextual-level characteristics matter to some extent, suggesting that there are interactions between individual-level characteristics and contextual-level variables. For instance, the analysis of the full model [**Table**] suggests that the measures for subjective well-being indicate to be a relevant component for voting for radical parties, next to the control of other relevant indicators such as demographic variables or economic insecurity and cultural insecurity. Nevertheless, it could be argued that the extent to which subjective well-being is conditioned by structural circumstances may be to some extent also related to contextual-level variables or shocks. For example, regions that experienced higher local long-term economic decline may have an impact on social and political attitudes of "left behind communities" (Abreu and Jones, 2021).

It is also to note that the analysis in this paper is limited and could become more comprehensive when also controlling for cross-level interactions or by taking into account additional contextual-level characteristics by considering other sources that provide more information that currently available in the ESS. Another possible methodological extension that could be explored and incorporated in future studies, would be to consider multilevel models that include 'random sloes', which underpins the assumption that the relationship between voting for radical parties and the explanatory variables can be different in each level.

In general, the analysis that we argue in favour can potentially be an innovative way to further explore and provide an answer to the puzzle of understanding individual voting preferences, particularly when it comes to voting for radical parties. The findings we present in this study are not only important in themselves but can also lead to further explore and open up discussions on the topic of the 'geography of discontent' and other avenues for future research in regional sciences. In particular, there is still ample of room for micro-level analysis to further specify more socio-economic and demographic circumstances under which certain social groups are stimulated to vote for radical parties. Similarly, more comprehensive analysis on the party-level provides room for more thorough elaboration on theoretical and empirical links between policies pertaining to socio-economic and cultural issues, helping to understand radical right discourse and political strategies.