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Good governance and subjective well-being in Europe: the mediating role of trust in other people and institutions

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Abstract

This paper investigates the determinants of subjective well-being in Europe during the Covid-19 pandemic using the European Living, Working and COVID-19 Survey carried out by Eurofound (2021). Particular attention is paid to how the quality of governance influences individual well-being through the mediation of trust in other people (interpersonal trust) and in the public institutions (institutional trust). To this end, we outline an index of quality of governance that considers the dimensions that characterize good governance and promote institutional and interpersonal trust. In particular, this index assesses both the competencies of the state, such as responsiveness and reliability, as well as the values of fairness and integrity. The findings show that the quality of governance has a positive impact on individual well-being, and that institutional and interpersonal trust play a primary role in enhancing the positive influence of public interventions. Finally, we examine the evidence in support of the claim that young people (18-34 year age group) tend to react differently to public interventions dealing with socio-economic distress by means of different channels of trust with respect to individuals over 34 years of age.

Keywords: subjective well-being, good governance, institutional trust, interpersonal trust

JEL CODES: H12, I18, C10

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Tzu-kung asked about government. The Master said, 'Give them enough food, give them enough arms, and the common people will have trust in you.' Tzu-kung said, 'If one had to give up one of these three, which should one give up first?' 'Give up arms.' Tzu-kung said, 'If one had to give up one of the remaining two, which should one give up first' 'Give up food. Death has always been with us since the beginning of time, but when there is no trust, the common people will have nothing to stand on.' THE ANALECTS OF CONFUCIUS, *The Master discusses with his disciples and unveils his preoccupations with society*, Lunyu XII. 7. (300)

1. Introduction

The spread of SARS-CoV-2 has resulted in an impact on multiple aspects of life, from employment and financial insecurity, to an increasing need for work-life balance, and concerns about mental well-being. In response to the Covid-19 pandemic, the European Union and the member states have introduced a range of measures to tackle the social and economic consequences. The role of public action is of particular interest in the context of generalized restrictions in which individuals have little chance of finding their own solutions and thus depend on government action.

In response to a major health and socio-economic crisis, public intervention is crucial for supporting economic recovery and providing guidance for behavioural responses to uncertainty, when financial insecurity is a major source of negative feelings and mental distress. The responses by European governments can contribute to restoring subjective well-being among the public, in addition to taking care of their economic interests during the Covid-19 pandemic. In this connection, the warning of the Sen/Stiglitz/Fitoussi Commission (Stiglitz *et al.*, 2009) about the importance of subjective measures of well-being in improving policies supporting the quality of life becomes increasingly significant.

In order to reduce uncertainty in times of crisis, governments increase well-being when they promote accessible and efficient support that effectively addresses the needs and expectations of society as a whole. Fairness and openness in the process and outcomes of public policies also play a role in ensuring that supportive action is successful.

In this connection, a growing body of literature shows that individual well-being is influenced by many aspects of governance (for a summary of the main aspects, see OECD, 2017), often synthesized in indices of Quality of Governance (QoG).

The aim of this paper is to examine the relationship between public interventions and mental well-being in Europe in terms of the quality of governance in response to the need for income support measures during the Covid-19 pandemic.

It is necessary to examine the connection between public action and individual mental well-being, and whether it acts directly or through other determinants of well-being.

Trust plays a key role in the effectiveness of public interventions considering that it influences the relationship between the general public and government and, in turn, it may make public interventions more or less successful. Economic recession and rising inequality tend to have a negative impact on trust (D'Amato *et al.*, 2022), as shown by the rise of anti-democratic and populist movements after the 2008 financial crisis (Algan *et al.*, 2017). As a result, trust is a key political concern in times of crisis. Previous contributions highlight the fact that institutional trust has an important role in promoting democratic stability (Inglehart and Norris, 2016) and economic growth (Algan and Cahuc, 2014). At the same time, interpersonal trust, associated with the notion of social capital (Fukuyama, 1995; Putnam, 2000; Guiso *et al.*, 2011), is related to cohesion and a sense of community (Costa and Kahn, 2003; Alesina and La Ferrero, 2002).

Given the significance of this dimension, we explore the direct and indirect factors influencing the impact of government policies on individual well-being, investigating the mediating role of institutional and interpersonal trust. In the literature, the role of trust as a mediator has been analyzed in the relationship between individual economic situations and subjective well-being before and during the Covid-19 pandemic. According to Clench-Aas and Holte (2021), interpersonal and institutional trust act as a buffer against the effects of variations in personal income on individual satisfaction. According to Lee (2022) institutional trust has tended to mediate the relationship between financial distress and mental health during the SARS-CoV-2 pandemic.

However, to the best of our knowledge, no studies have examined trust as a means to achieving subjective well-being, examining the mediating and supportive effects of the perception of government measures on subjective well-being. It follows that another focus of this study is to evaluate the mediating role of institutional and social trust in the impact of public action on subjective well-being.

As many reports and surveys find (Eurofound, 2021; Lambovska *et al.* 2021; Rossi *et al.*, 2020), young people are one of the most vulnerable categories, suffering to a significant extent from mental and economic distress caused by the pandemic. Moreover, in line with the view that a particular moment in history may affect trust across age groups and generations to a different extent, Eichengreen *et al.* (2020) highlight a decline in the level of trust in political institutions among individuals who were dealing with the pandemic in their "impressionable years", particularly under "weak governments".

For this reason, we complete the analysis by focusing on the impact of public support and channels of trust on age-related social groups. Using a database from the European Living, Working and COVID-19 Survey carried out by Eurofound (2021), we find support for the hypothesis that the increase in negative feelings across the population during Covid-19 is linked to the perception of the ability of the government to address uncertainty by means of income support measures. Moreover, mental well-being is mitigated by trust in institutions and in other individuals. Finally, young Europeans react differently to government intervention intended to respond to socioeconomic distress through different channels of trust with respect to older demographic groups.

The paper is structured as follows. Section 2 outlines the key concepts and the existing research into the links between good governance, trust and subjective well-being. In Section 3, we present the database and the empirical strategy used. The results are discussed in Section 4. Section 5 concludes by examining the implications of political interest for institutional action.

2. Theoretical background

Responding to individual needs in time of crisis: public support and subjective well-being

In recent years, many scholars have focused on whether and how subjective well-being is influenced by welfare supports and public services and, more generally, by measures of quality of governance (QoG). As highlighted by the OECD (2017), good governance captures factors such as responsiveness, reliability, fairness, openness and integrity of public interventions.

The empirical literature has found that states that are characterised by low levels of transparency in the public sphere and low levels of perceived fairness in public policy are associated with lower levels of happiness (Veenhoven, 2010) and diminished overall subjective well-being (Helliwell and Huang, 2008).

Using data from the Gallup World Poll on labour market and health policy regimes in the OECD countries, Boarini (2012) estimates the direct impact of policy regimes on subjective well-being in specific areas of public intervention. The analysis shows strong and robust positive effects for higher unemployment replacement rates and stronger employment protection legislation. Helliwell (2003) compares different aspects of subjective well-being to a set of government measures using the World Bank Worldwide Governance Indicators (WGI). The author finds that government effectiveness, a functioning regulatory framework, a guaranteed rule of law and robust action against corruption are closely associated with higher levels of subjective well-being.

Two common elements in these studies are the use of measures of the *perceived* quality of public support, more than the quality of public support based on experience, and the analysis of several aspects of public action, partially considered or summarised in Quality of Governance indices.

Building on measures provided by leading international institutions, such as the World Governance Indicators (WGU; Kaufmann *et al.* 2009), the vast majority of studies focusing on Quality of Governance rely on subjective measures, consisting mainly of perceptions from self-reported data. The main insight obtained from these studies is that well-being depends more on the *perceived* quality of the services provided than on the funding allocated to their provision.

In this connection, Kaufmann *et al.* (2011: 17) claim that "first, perceptions matter because agents base their actions on their perceptions, impression, and views [...] Second, in many areas of governance, there are few alternatives to relying on perceptions data. For instance, this has been particularly the case for corruption, which almost by definition leaves no 'paper trail' that can be captured by purely objective measures. Third, we note that even when objective or fact-based data are available, often such data may capture the *de jure* notion of laws 'on the books', which often differs substantially from the *de facto* reality that exists on the ground".

Since these arguments appear to be convincing, in the empirical part of our paper we propose a Quality of Governance index based on perceptions of public sector interventions by which we seek to capture how individuals judge the responsiveness, reliability, fairness and integrity of public intervention.

Leveraging trust for well-being: trust as a key mediator

Good governance can improve the evaluation of quality of life either directly, in the sense that individuals feel better living in a context of high quality of public support, or indirectly, in the sense that good governance enables individuals to achieve higher levels of other determinants of subjective well-being, including trust in institutions and other people.

To address this issue, we take the study one step further by integrating Quality of Governance, trust and subjective well-being for the purpose of examining the processes by which public policy can have a bearing on individual mental well-being.

The Covid-19 pandemic gives rise to a greater need for trust as the public authorities rely on individual compliance to make anti-contagion measures and behavioural guidelines effective. In turn, individuals need to feel that the authorities have the power can do something to protect them.

Pagliaro *et al.* (2021), in assessing individual experience of trust, associated with the willingness to coordinate efforts with others and cooperate with requests from the authorities, find that psychological differences in terms of trust in government, people and science are a good predictor of individual behavioural responses and cooperation with government needs for compliance across

countries. Using data on human mobility and institutional trust at regional level in Europe, Bargain and Aminjonov (2020) show that compliance with containment policies depends on the level of trust in policy-makers prior to the crisis: high-trust regions of Europe were characterised by a decrease in personal mobility for unnecessary activities that was significantly greater than in low-trust regions.

Trust in other people also affects the behaviour of the general public during a pandemic. Alfano (2022) finds that European countries with higher social capital stocks have fewer Covid-19 cases, *ceteris paribus* as a result of government recommendations and restrictions. It follows that different channels and levels of trust may amplify or reduce the effect of decisions made by policy-makers.

According to the OECD guidelines for measuring trust (2017), the multidimensional concept of trust may be defined as follows: interpersonal trust is a general definition for trust in people, including individuals with whom no direct relationship exists but who belong to the same community and those personally known; institutional trust concerns well-identified political and non-political institutions.

The process of transmission by which public policies may affect trust in the public institutions has been referred to in the literature as the *micro-performance hypothesis*: better quality of governance can result in people being more satisfied, which in turn can generate increased institutional trust (Van de Walle and Bouckaert, 2003; Yang and Holzer, 2006).

It is not surprising that responsive and effective public governance have an impact on trust in institutions (Van Ryzin, 2007; Vigoda-Gadot, 2007). However at the same time, there is a branch of empirical research which shows that when a society is not governed in a way that fosters equity among all its members, interpersonal trust declines. The traditional institution-centered argument (Rothstein and Stolle, 2008), claims that when institutions are universally oriented and act effectively and fairly, individuals tend to think that the state will successfully intervene to avoid opportunism and to safeguard individual rights. In turn, this will encourage cooperation and lower the risk perception in trusting others.

Using subjective-based measures of institutional quality, past empirical research has corroborated such claims by showing that in countries with lower levels of perceived corruption and policies inspired by principles of fairness, trust in people in the same community who are not personally known to us is more likely to be achieved.

Adopting the political-institutional perspective Freitag and Buhulmann (2009) and Wang and Gordon (2011) find a positive association between the quality of governance and interpersonal trust. Freitag and Buhulmann test simultaneously for differences among respondents in 58 countries and for variations in levels of trust between countries with different institutional configurations. They find that in countries in which the authorities are seen as incorruptible and where the welfare state configuration reduces income disparities, individuals are more likely to trust each other. Wang and Gordon, in addition to analysing the micro-level factors that affect trust in people, take into account the influence of macro-level factors such as the quality of the legal system and administrative structures.

Delhey and Newton (2005), in a comparative analysis in 60 countries, find that trust is high in countries with good governance and low levels of perceived corruption. This context creates a framework where people act with a high level of trust and expect others to do the same.

At the European regional level, Lombardo and Ricotta (2021) report that living in a region with high-quality local government positively influences trust in other individuals. Among the empirical

studies focusing on just one country, Camussi and Mancini (2018) find that the quality of local public services in Italy can have a positive impact on interpersonal trust.

Considering that good governance can have a positive impact on both interpersonal and institutional trust, we should bear in mind that a society characterised by high levels of trust has an impact on mental well-being.

A path analysis by Roccato *et al.* (2021) shows that increased trust in political, *super partes* and international institutions fosters well-being, reducing anxiety, collective angst and anger, compensating for weakened perceived control over the individual's life due to the exogenous effect of the coronavirus. In the same way, Barrafrem *et al.* (2021) report that trust in government to deal with healthcare challenges arising from the Covid-19 pandemic had a significant direct impact on an index of individual well-being (Diener, 1984), consisting of the affective component, measured by the Subjective Happiness Scale (Lyubomirsky and Lepper, 1999) and the cognitive component, synthesised by means of the Satisfaction with Life Scale (Diener *et al.*, 1985). These results reinforce other studies, such as Clench-Aas and Holte's (2021) research into the multilevel "rainbow model" by Göran Dahlgren and Margaret Whitehead (1991), which found that individual life satisfaction is directly associated not only with trust in other people, but also with trust in institutions, and Helliwell and Wang's (2010) findings on the strong linkages between subjective well-being and different measures of interpersonal trust or trust in specific institutions, such as trust in the police.

Young Europeans' conditions during Covid-19: testing for the moderating role of age

During lockdown, young people were undergoing a critical period of personal development, education, and career building. Although most studies have not examined changes between conditions before and during the pandemic, the decline in subjective well-being is especially evident among the youngest demographic groups: in the Italian population, being young during the lockdown was closely associated with post-traumatic stress symptoms (PTSS), depression, anxiety and perceived stress (Rossi *et al.*, 2020). Findings in Austria indicate the most significant mental health problems in younger adults up to the age of 35, in addition to women, unemployed people, and low income groups (Pieh *et al.*, 2020).

At the same time, young people, looking for their first job after graduation or a few years later, constitute one of the most vulnerable groups in the labour market. Lack of accrued assets and minimal social security entitlements for welfare benefits can exacerbate young adults' mental and economic distress, increasing the need for stronger support by the public authorities during Covid-19.

This specific profile of the younger demographic groups makes it an interesting case for examining how institutional and interpersonal trust can play a role in coping strategies in relation to government measures and mental well-being. Institutional trust may differ across age groups according to the perceived levels of "structural legitimacy", in the sense of long-term experience with the structure and working of institutions (Christensen and Laegreid, 2005). In this connection, adults and older individuals, who have more experience with public services and greater familiarity with institutions, are also more integrated into the political system, determining higher levels of structural legitimacy that, in turn, tend to increase institutional trust. Trust may also depend on the perceived "power distance" between the youngest demographic groups and the institutions: the

limited influence exerted by young people on political decisions make them less interested in public life and lead to lower levels of institutional trust that reduce the positive effects of good governance on mental well-being (Kaasa and Andriani, 2022). However, the younger age groups seem to pay more attention to egalitarian objectives and issues, as reflected in recent youth movements characterised by rising concerns about equity challenges such as environmental destruction or democratization in underdeveloped countries (Smelser *et al.*, 2001). This greater awareness of issues of fairness is also reflected in the evaluation of public governance, as demonstrated by Bottasso *et al.* (2022), finding that young people assign greater importance towards impartiality and integrity values of governance. Greater attention to ethical values affects interpersonal trust (You, 2005; 2012). In turn, the relationship between good governance and subjective well-being may be more sensitive to the mediating factor of trust in people for the youngest demographic groups.

Taking as a starting point the main findings from the literature, the current study examines whether (i) the policy actions and the perceived quality of public benefits are successful in promoting mental well-being, (ii) the quality of government has an impact on interpersonal and institutional trust, (iii) trust in public institutions and in other people influence subjective well-being, (iv) institutional and interpersonal trust played a mediating role in the relationship between the perceived quality of public interventions during the Covid-19 pandemic and subjective well-being, (v) this process of mediation was different for the various age groups of population, in particular for the 18-to-34 age group.

3.Data, measures and methodology

Data and sources

To explore the hypotheses arising from the theoretical framework above, we employ a database drawn from the European Living, Working and Covid-19 Survey carried out by Eurofound (2021) developed during the Covid-19 pandemic (hereinafter the ELWC). The survey was conducted in three different rounds: the first one was launched in April 2020, the second one in July 2020 and the third one was implemented in February and March 2021. The three rounds reached almost 190,000 European citizens. The aim of the ELWC is to examine changes taking place during the pandemic in terms of trust in the public institutions, working conditions, financial and economic instability and other dimensions which capture individual well-being, such as life satisfaction, positive and negative attitudes and the measurement of mental well-being. The ELWC also measured the assessment of the survey respondents with respect to income support and social and financial assistance provided during the pandemic by national governments and the European Union. We selected the third round of the ELWC involving 46,800 respondents (Eurofound, 2021). This round comprises variables of interest for our study, not sampled in the previous rounds, for example, interpersonal trust.

Most of the variables we analysed are perceptions, such as the perception of how fair the measures are, how much individuals trust institutions and others, and the perception of the individual financial situation. Subjective perceptions and impressions appear to influence agents' choices and evaluations of public measures even more than direct and personal experiences. In fact, individuals make their overall assessment on the base of past experiences or evaluations shared by other individuals in their social networks, as well as on the basis of public information and media reporting. We analyse the role of perceptions in Section 2.

Preliminary analysis and variable definitions

Our sample consists of individuals from the European Union, mainly women (63%), in the age range from 18 to 98 years. The majority of the sample is characterized by individuals over 50 years of age (61%), followed by individuals from 36 to 49 years (25%), while individuals from 18 to 34 represent a minority of the sample (14%). Most of the interviewees were employees (49%), a significant share consisted of retired people (24%), followed by the unemployed (9%), selfemployed (8%), homemakers (4%), individuals unable to work due to disabilities or long-term illness (3%) and students (3%). Moreover, the majority of our sample had a high level of educational qualifications: 51% had a bachelor's degree, a master's or a doctorate. With regard to household composition, 61% of the sample reported having a spouse or partner and 45% had, at least, one child up to 11 years old. A total of 79% live in a household consisting of one to three individuals. In terms of work-life balance, from the first wave in April 2020 to the second wave in July 2020 there was a general worsening that was particularly significant for women working from home with children. However, statistics relating to the third wave, in March 2021, show a partial improvement in work-life balance conditions (Eurofound, 2021). In fact, in the sample as a whole, 60% of the respondents stated that they worried about work when not working at least sometimes, 73% felt too tired after work to do some of the household jobs that needed to be done, 55% reported that their job prevented them from dedicating the time needed for their family.

With respect to mental well-being, the European Living, Working and Covid-19 Report provides evidence of a significant deterioration between the first and the third e-survey, in which the lowest levels of mental and psychological health were measured. This worsening of mental health is particularly evident in the 18-to-34 age group and for the unemployed (see Eurofound, 2021). In our sample, our calculations show that the average levels of mental well-being are relatively low: the mean score on the mental well-being index,² ranging from 0 to 100, was equal to 47. Moreover, low levels of mental well-being were reported by 56% of the total sample, placed in the first and second percentile of the mental well-being index. In addition, 29% of respondents stated that they were downhearted and depressed more than half of the time, and 36% of respondents suffered from frequent feelings of tension, while 28% reported persistent feelings of loneliness and isolation. These average levels were lower for young people aged from 18 to 34 years, with an average mental well-being index of 44, while the share of young individuals who reported feeling frequently depressed or downhearted rose to 35%, and those reporting frequent feelings of tension amounted to 46% of the sample. Similarly, the perception of loneliness and isolation was higher among young people, 35% of whom report habitually suffering from these emotional states. In terms of financial and economic difficulties, we find that almost one-quarter of the total sample reported struggling to make ends meet, and a worsening of their financial situation.

Another important dimension is institutional trust, which significantly declined between the first to the third round of the Eurofound survey. In particular, institutional trust increased between the first round in April 2020 and the second round in July 2020, while it significantly declined between the

¹ The European countries included are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

² The mental well-being index (WHO-5) as proposed by the World Health Organization ranges from 0 (representing the least favourable level of well-being) to 100 (which is the most favourable level of well-being).

second and the third round in March 2021, falling to average levels below those of April 2020 (Eurofound 2021). In our sample, from the data analysis, we found that the police and the healthcare system were the institutions that individuals trusted more: 47% of the sample reported higher levels of trust in the healthcare system and 44% in the police. High levels of trust in the European Union (34%) and in the government (26%) were reported by a minority of individuals. The higher levels of trust reported by a significant part of the sample to the police and the healthcare system may be linked to the type of public service offered by these institutions during the pandemic: the proximity of the service and direct contact with the public are elements that can play an important role in determining levels of trust. Moreover, the police and the healthcare system are institutions with a primary role in containing the pandemic during the state of emergency. We also analysed the levels of trust in other people, finding that only 34% of individuals reported high levels of interpersonal trust: Europeans seem to trust institutions, particularly the police and healthcare system, more than they trust other people. Only trust in government seems to be lower than trust in other people in general. Lower levels of interpersonal trust may reflect growing inequalities among the most vulnerable groups of the population and the characteristics of fairness and equity of the social support measures adopted during the emergency (Eurofound, 2021).

With regard to access to income support measures, the findings show that the percentage of individuals who effectively accessed them was low: 87% of respondents reported that they did not make use of income support measures such as state aid for businesses, unemployment benefits, wage support, paid sick or care leave and other forms of assistance. This provides evidence that the majority of the sample consists of individuals who evaluate the efficacy of support services without any direct experience of them. Thus, the opinions expressed about income support measures, which we consider in our analysis, reflect the general perception of the ability of the institutions to respond to social needs. With respect to those making use of income support measures, the findings show that the most significant category was state aid for businesses, requested by 34% of the total sample, unemployment benefit, requested by 9% of the sample, paid leave or sick leave (8%), other types of social support (8%) and wage support (7%). For detailed information on individual well-being, levels of trust, economic conditions and access to social benefits, see Table C in the Appendix.

Variables derived from Non Linear CATPCA

We include in our analysis both original variables directly adopted from the dataset provided by the Eurofound, than additional composite variables computed through Non Linear CATPCA.³ The CATPCA provides continuous factors derived from categorical variables detailed in the Appendix. In the following, we present the variables used.

Quality of Governance (QoG): this factor comprises four items from the survey relating different dimensions of welfare policies adopted by the national government. As suggested by OECD (2017) we consider state competencies in terms of responsiveness and reliability, as well as the values of fairness and equity, representing important dimensions influencing institutional and interpersonal trust. Specifically, this factor comprises the following variables: clarity and transparency of support

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³ This scaling method enables us to quantify categorical data and to extract latent factors summarizing the variance expressed by the quantified variables

measures (integrity), fairness, the ability to reach those most in need (reliability), efficiency in terms of obtaining benefits (responsiveness). The Cronbach's α of this factor is equal to 0.902.

Institutional Trust: this is a factor computed by considering local, national and multinational dimensions. In particular, we include in this factor the level of trust by individuals in national governments, healthcare systems, the police and the European Union. The Cronbach's α relating to this factor is equal to 0.843

Economic distress (ECO-STRESS): this factor combines economic and financial variables linked to past performance and expectations concerning the future financial condition of respondents. In addition, it comprises a variable that measures the degree of poverty individuals face in the present moment. The factor has a Cronbach's α equal to 0.737.

Work-Life balance (WLB): this factor is related to work-life balance, including five items concerning the ability to balance work and life spheres. The Cronbach's α is equal to 0.784.

We then consider additional variables already included in the original database provided by Eurofound (2020):

WHO-5: this is the mental well-being index developed by the World Health Organization for screening depression and measuring individual well-being. The index ranges from 0 to 100, with higher scores denoting higher levels of well-being. The index is derived from five statements indicating the frequency with which individuals felt, in the last two weeks, cheerful and in good spirits, calm and relaxed, active and vigorous, fresh and rested and interested in daily activities of their life. This index has been validated in studies on both younger and older persons, confirming that this scale has good construct validity (Topp *et al.*, 2015; WHO, 1998).

Interpersonal Trust: this variable expresses how much individuals trust other people, in a range from 0 to 10, with higher scores indicating higher levels of trust in other people.

Young: this dichotomous variable is based on the threshold adopted by the Eurofound Report (2021) considering young Europeans aged 18-to-34 years.

Control variables: under this heading socio-demographics characteristics are considered. They are identified by the following dummies: FEM (female=1), EDUC (high level of education, i.e bachelor's degree, master's, doctorate=1), SPOUSE (having a spouse or a partner =1), CHILD (having children up to the age of 11 =1), URB (medium/large town and city suburb =1). Dummies relating to the employment status are also analysed, with the excluded characteristic for students (student= 0): EMPL (employee =1), SELF-EMPL (self-employed =1), UNEMP (unemployed =1), RETIRED (retired =1), HOME (homemaker =1). Finally, the perception of inequality INEQ (Likert scale 1-5) and the two factors ECO-STRESS and WLB are included as controls.

Empirical strategy:

We estimate a moderated mediation model with Hayes' PROCESS Macro (Version 4.0, released in August 2022) (Model 58) for analysing our hypotheses relating the indirect role of QoG on WHO-5 through Institutional Trust and Interpersonal Trust. The indirect paths are estimated with the moderator Young for assessing the presence of significant differences between the 18-34 age group

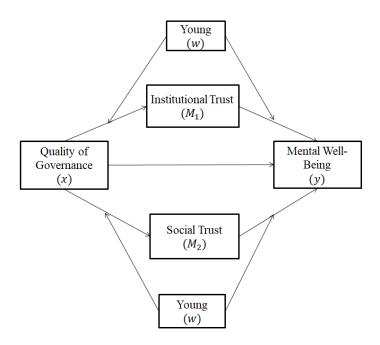
and those over the age of 34. The moderated mediation and the path diagram (Figure 1) are represented by the following equation models:

(1)
$$M_{1i} = \beta_1 x_i + \beta_2 w_i + \beta_3 (x \times w)_i + Control \ variables_i$$

(2) $M_{2i} = \beta_1 x_i + \beta_2 w_i + \beta_3 (x \times w)_i + Control \ variables_i$
(3) $Y_i = \beta_1 x_i + \beta_2 w_i + \beta_4 M_{1i} + \beta_5 M_{2i} + \beta_6 (M_1 \times w)_i + \beta_7 (M_2 \times w)_i + Control \ variables_i$

Whereas x_i is represented by the variable QoG, M_{1i} and M_{2i} indicate, respectively, the mediators of Institutional Trust and Interpersonal Trust, adopted as dependent variables in the equation (1) and (2) and then, as regressors in equation (3). The dependent variable Y_i in the equation (3) is identified by WHO-5; w is the moderator identified by the dummy Young. To estimate the moderation effect, we consider the interaction term $(x \times w)_i$ in the equation (1) and (2), and the interaction terms $(M_1 \times w)_i$ and $(M_2 \times w)_i$ in the equation (3). We also include controls represented by sociodemographic characteristics, variables concerning employment status, work-life balance conditions, economic distress and the perception of inequality.

Figure 1. Path Diagram of the effect of the Quality of Governance on Well-Being through Interpersonal and Institutional Trust



4. Results

The results of our moderated mediation analysis may be outlined as follows. First, we show the impact of QoG on Interpersonal and Institutional trust (Model 1, 2), and, second, we present the results relating to the impact of QoG, through Interpersonal Trust and Institutional Trust (mediators) on WHO-5 (Model 3). Coefficients between the mentioned variables are differentiated by the

moderator Young. For reasons of brevity, we outline the control variables only in Table 1, without carrying out an in-depth analysis with further comments.

Analysis of the Quality of Governance on Institutional (Model 1) and Interpersonal Trust (Model 2) and age-related differences.

First, QoG was found to be a significant and positive determinant of both Institutional and Interpersonal Trust (Model 1, 2). The ability of the authorities in terms of responsiveness and reliability, and respect for fairness and integrity values are attributes with a significant impact on trust in the institutions. With respect to interpersonal trust, the effect of QoG may be mainly due to the integrity and fairness values that represent the two most important components of our indicator of QoG (see the component loadings in Table A, in the Appendix). This supports previous research on interpersonal trust, suggesting that it is influenced by ethical and fairness aspects of social measures (Alfano, 2022; You 2005, 2012).

We also find that young people benefit less from government policies in terms of increased institutional trust: in fact, the interaction (QoG × Young) on Institutional Trust is significant and negative, indicating that QoG was found to be a weaker determinant of institutional trust for individuals aged 18-to-34 years. This result suggests that the young people may be less involved in welfare policies and thus perceive a greater distance from the institutions, with important consequences in terms of trust in the institutions.

The 18-34 age group is also characterized by lower levels of trust in other people, i.e. Interpersonal Trust, indicating that they tend to trust each other less, as supported by the coefficient of the dichotomous variable Young (in Model 2). However, interaction (QoG × Young), shows a positive and significant impact on Interpersonal Trust Model 2). Although young people tend to trust other people less, QoG has a higher positive impact on Interpersonal Trust in this age group than for the over 34 age group. This result may suggest that young Europeans assign more importance to issues of fairness, transparency and integrity,⁴ that have a significant impact on interpersonal trust.

Implications of Interpersonal and Institutional Trust on individual Well-Being, mediation effects and age-related differences (Model 3).

With regard to the mental well-being model, the findings show that QoG has a positive and significant impact on WHO-5: individuals who positively evaluate the overall quality of governance show higher levels of WHO-5 (Model 3). However, institutional and interpersonal trust are also dimensions that enhance individual well-being. Institutional Trust, which has a positive and significant coefficient, helps individuals to deal with economic and financial risks, while increasing the individuals' perception of control over their lives (Roccato *et al.*, 2021; Barrafrem *et al.*, 2021). Similarly, Interpersonal Trust is another positive and significant determinant of WHO-5: trust in others contributes to fostering a trustworthy environment promoting individual resilience.

The interaction term (Institutional Trust \times Young), in Model 3, is negative and significantly correlated with WHO-5. This suggests that the positive impact of Institutional Trust on mental well-being is lower for young people, while interaction (Interpersonal Trust \times Young) is negative but

⁴ T-tests in Appendix (Table B) support the view that evaluations of integrity and fairness characteristics of income support measures differ statistically between the younger group and the other group, as the younger age group attributes higher positive evaluations to these dimensions.

non-significant. The index of moderated mediation, provided by PROCESS, confirms that the indirect effects of Interpersonal and Institutional Trust are significantly different between the two age groups. Specifically, the index of Institutional Trust is equal to -0.523, CDI = [-0.812; -0.229], indicating that the indirect positive effect on WHO-5 produced through trust in institutions is less significant for the young population. On the other hand, the index of moderated mediation of Interpersonal Trust is equal to 0.149, CDI = [0.015; 0.293], suggesting that the indirect positive effect generated by trust in others is higher for young individuals. We examine these different paths in greater depth below.

Table 1. Regression models and Moderated Mediation on Well-Being through Interpersonal and Institutional Trust

	Institutional Trust (Path a1)	Interpersonal Trust (Path a2)	WHO-5 (Path b)		
	β (SE)	β (SE)	β (SE)	LLCI	ULCI
Independent Variable:	0.428***	0.205***	1.151***		
QoG	(0.005)	(0.015)	(0.130)		
Mediator 1: Institutional			3.185***		
trust			(0.146)		
Mediator 2: Interpersonal trust			1.354*** (0.049)		
	0.020	-0.275***	-1.788**		
Moderator: Young	(0.014)	(0.043)	(0.770)		
	-0.034***	0.143***	,		
$QoG \times Young$	(0.013)	(0.040)			
¥			-1.068***		
Institutional trust \times Young			(0.353)		
1			-0.137		
Interpersonal Trust \times Young			(0.138)		
Control variables:					
EDUC	0.076***	0.376***	-0.297		
EDUC	(0.010)	(0.029)	(0.241)		
EEM	0.130***	0.058**	-3.669***		
FEM	(0.009)	(0.028)	(0.227)		
CIIII D	-0.007	-0.005	0.466*		
CHILD	(0.010)	(0.032)	(0.263)		
SPOUSE	0.042***	0.120***	1.385***		
SFOOSE	(0.011)	(0.034)	(0.282)		
WLB	0.011*	0.261***	7.601***		
WLD	(0.005)	(0.017)	(0.142)		
URB	-0.02***	0.016	-0.729***		
CKB	(0.005)	(0.028)	(0.227)		
INEQ	-0.04***	0.040**	-0.150		
INEQ	(0.007)	(0.020)	(0.168)		
ECO-STRESS	-0.305***	-0.516***	-4.901***		
ECO-STRESS	(0.007)	(0.022)	(0.183)		
EMPL	-0.181***	-0.338***	2.060***		
LIVII L	(0.028)	(0.085)	(0.695)		

CEL EEMDI	-0.278***	-0.385***	5.731***		
SELFEMPL	(0.032)	(0.093)	(0.780)		
UNEMPL	-0.244***	-0.727***	-1.147		
ONEMIFE	(0.031)	(0.122)	(0.764)		
RETIRED	-0.256***	-0.378***	4.732***		
RETIRED	(0.030)	(0.092)	(0.750)		
HOME	-0.287***	-0.862***	0.419		
HOME	(0.036)	(0.108)	(0.880)		
R-squared	0.346	0.098	0.282		
Index of moderated			0.520		
mediation on Institutional			-0.529	-0.832	-0.237
Trust			(0.147)		
Index of moderated			0.146		
mediation on Interpersonal			0.146	0.016	0.282
Trust			(0.069)		

Note. We included all the employment status while the excluded dummy is the Student. Standard errors are in parenthesis. *** ≤ 0.01 ; ** ≤ 0.05 ; *p ≤ 0.1

Direct and indirect paths of Interpersonal and Institutional Trust

In the sections above, we analysed the regression models estimated on WHO-5, Interpersonal Trust, Institutional Trust and QoG, finding that the quality of governance significantly influences mental well-being, interpersonal and institutional trust and that these two dimensions positively influence well-being.

In the following, we compare the positive indirect effects of institutional trust and trust in other people with the total effect of the quality of governance on WHO-5. Moreover, we differentiate the indirect effects of Interpersonal Trust and Institutional Trust on the 18-34 age group and those over 34.

By comparing the coefficients of the indirect effects of Institutional Trust and Interpersonal Trust with the total effect, the results show that these two indirect channels of trust account for more than 50% of the total effect produced by QoG, in both age groups. This supports the view that the positive effect of the quality of governance on well-being is in a large part determined by its effect of increasing interpersonal and institutional trust, which, in turn, improves mental well-being. Moreover, institutional trust is the major component of the indirect effect in both age groups, even if it has a greater effect on those over 34. Specifically, its indirect effect is equal to 35% of the total effect for young people and 49% for the others, with a differential of 14 percentage points. Adults over the age of 34 benefit more from the effect of institutional trust on mental well-being, induced by positive perceptions of the quality of the governance. Interpersonal Trust is another dimension of trust that significantly mediates the effect of QoG, by amplifying its positive impact on mental well-being. In contrast with Institutional Trust, this type of trust accounts for a major indirect effect for young people, mediating 18% of the total effect, while in the over 34 age group, it mediates only 10% of the overall effect of good governance.

Table 2. Indirect and direct paths of the Quality of Governance on Well-Being through Interpersonal and Institutional Trust

	Coefficient and Standard Error	LLCI	ULCI		
Direct effect for both groups	1.151	0.896	1.406		
Direct effect for both groups	(0.130)	0.890	1.400		
Young = 1					
Indicate affact through Institutional Treat	0.834	0.570	1.102		
Indirect effect through Institutional Trust	(0.136)	0.570	1.102		
Indirect effect through Interpersonal Trust	0.423	0.298	0.553		
muneet effect through interpersonal Trust	(0.065)	0.555			
	2.417				
Total	48% Direct effect of QoG				
Total	35% Mediated effect of Institutional Trust				
	18% Mediated effect of Interpersonal Trust				
Young = 0					
Indirect effect through Institutional trust	1.363	1.228	1.500		
munect effect unough institutional trust	(0.069)	1.228			
Indirect effect through Interpersonal trust	0.277	0.228	0.326		
	(0.024)	0.228			
	2.791				
Total	41% Direct effect of QoG				
	49% Mediated effect of Institutional Trust				
	10% Mediated effect of Interpersonal Trust				

4. Discussion

The results of this study go beyond the usual linkage between good governance and economic outcomes to confirm the validity of previous research examining how the quality of institutions influences individual well-being, especially in a period of emergency as in the case of the pandemic.

For this purpose, we construct a good governance index relating to the responsiveness and reliability of state capabilities, integrity and equity values, such as transparent and fair rules for access to income support measures, confirming that positive evaluations of the quality of government significantly increase both individual well-being and interpersonal and institutional trust.

Our findings go a step further than existing studies on the influence of macro-level factors on micro-level dimensions, casting light on the fact that most of the relationship between quality of governance and subjective well-being is due to the buffer effect of the multidimensional concept of trust. The results show the importance of the mediating role of trust in institutions and in other people: positive evaluations of the quality of governance promote interpersonal and institutional trust which, in turn, increases individual well-being. These indirect effects are significant, representing more than 50% of the total effect produced by the quality of governance. This is

evidence that the role of trust is fundamental for increasing levels of mental well-being in periods of crisis, in accordance with previous empirical research (Roccato *et al.*, 2021; Barrafrem *et al.*, 2021). The simultaneous estimation of the dual channel of interpersonal and institutional trust and its relationship with the population examined by age class (respectively, the 18-to-34 age group and those over 34) is another innovative aspect of this study: in the existing literature, in fact, most authors consider just one of the two aspects of trust, and do not consider in depth which one is the most relevant driver for subjective well-being in different age groups. This approach makes it possible to focus on younger people, considered one of the most fragile groups, subject to significant levels of psychological difficulties and financial and economic distress during the Covid-19 pandemic. Our results show that institutional trust has less of an indirect effect on well-being in the younger age group. This lower impact supports both the concept of *structural legitimacy* and *power distance*, with *structural legitimacy* relating to the accumulated knowledge of the functioning of government institutions, and *power distance* indicating an unequal distribution of power between the general public and the authorities.

With regard to structural legitimacy, individuals over the age of 34 are more likely to acquire higher levels of confidence in institutions through direct experience and frequent contact using a wider range of public services which make them feel more integrated into the political system, leading to higher levels of institutional trust and greater concern about the effectiveness of social policies with respect to young people (Tom and Laegreid, 2005). Moreover, young Europeans may perceive a lack of influence in the political decision-making process which increases the power distance from the institutions and leads to lower levels of institutional trust (Kaasa and Andriani, 2022). Lower levels of structural legitimacy and a more significant power distance reduce the positive effects of the quality of governance on the well-being of the 18-34 age group.

We also find that the 18-34 age group is more influenced by interpersonal trust, which accounts for a greater share of the indirect effect of the quality of governance on mental well-being with respect to the over 34 age group. This difference seems to be determined by greater attention on the part of the younger age group towards equity concerns, such as the concept of vertical and horizontal equity. This is also reflected in various social movements and manifestations mainly organized by young people, as in the case of Fridays for Future and other youth movements that are critical of the *status quo* and call for political and social change (Smelser *et al.* 2001). Further, young people evaluate more positively the issues of fairness and impartiality of public services, with respect to those over 34: higher values assigned to these issues may explain why the impact of the quality of governance on interpersonal trust is greater among young people. In short, the greater satisfaction that the 18-to-34 age group has with fairness and equity dimensions of the quality of government determines higher levels of trust in other people, and these higher levels of trust tend to enhance the mental well-being, significantly undermined by the pandemic.

5. Conclusion

As Helliwell (2003: 355) argues, people with the highest well-being "are not those who live in the richest countries, but those who live where social and political institutions are effective, where mutual trust is high, and corruption is low". In this sense, we believe that our results highlight the importance of good governance, especially in times of crisis, for increasing institutional and interpersonal trust, and for promoting individual well-being. The characteristics of responsiveness

and reliability are important dimensions that influence the quality of the governance, but the policy-making process should not underestimate the role of fairness and integrity. In fact, institutions and states should foster investment and pay greater attention to the fairness and integrity of welfare programmes. These dimensions boost interpersonal trust with positive effects on social cohesion and sense of community, and they are also important for increasing institutional trust. It follows that states should consider more investment in equity issues, the outcomes of which go beyond the evaluation of the quality and performance of specific public services (Kaasa and Andriani, 2022; Tom and Laegreid, 2005).

One implication of our results is that governments should adopt policies and public interventions which consider more carefully the needs of the younger generation, and reduce the distance between institutions and the younger age groups, through appropriate communication channels and social programmes, such as the Youth Employment Support package implemented by the European Commission for supporting youth employment toward different forms of support (training schemes, apprenticeships, and other forms of social support).

Finally, governments and institutions should focus more on the determinants which increase institutional and interpersonal trust, especially with a view to promoting them among the younger generation. This is of particular interest considering that growing evidence suggests that trust attitudes, like other cultural traits, persist for long periods of time (Bjornskov, 2007).

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Appendix

Table A. Component Loadings and Cronbach's α

Items	QoG	Institutional Trust	WLB	ECO-STRESS
The support				
measures are	0.821			
fair				
The support				
measures reach	0.779			
those who	0.119			
need most				
Obtaining				
support from				
public services	0.747			
is easy and				
efficient				
The rules for				
obtaining				
support are	0.746			
clear and				
transparent				
Trust in your				
country's		0.872		
government				
Trust in the				
healthcare		0.843		
system				
Trust in the		0.835		
police		0.033		
Trust in the				
European		0.742		
Union				
Found it				
difficult to				
concentrate on				
your job			0.822	
because of				
your family				
responsibility				
Found that				
your job				
prevents you				
from giving			0.776	
the time you				
wanted to your				
family				

Found that				
your family				
responsibilities				
prevented you			0.766	
from giving			0.766	
the time you				
should for				
your work				
Felt too tired				
after work to				
do some of the			0.685	
household jobs			0.085	
which need to				
be done				
Kept worrying				
about work			0.592	
when you were				
not working				
Household				
financial				
situation since				0.843
three months				
ago				
Household				
ability to make				0.805
ends meet				
Household				
financial				
situation in				0.780
three months'				
time				
Cronbach's α	0.902	0.843	0.784	0.737

Component loadings in Table A show the specific variables comprise in each factor, their components loadings and Cronbach's α . The first factor, the QoG is represented by the fairness, reliability, responsiveness and integrity characteristics, mentioned by OECD (2017). Second, the Institutional Trust factor comprises trust in the country's government, the healthcare system, trust in the police, and trust in the European Union. The third factor is WLB is identified by five items on the ability to balance work and family life. The last factor ECO-STRESS concerns the financial situation of the household and the degree of poverty.

Table B. T-tests on specific dimensions of QoG between the youngest and the over 34 age group

	The rules for obtaining support are clear and transparent: Integrity dimension	The support measures are fair: Fairness dimension	Obtaining support from public services is easy and efficient: Reliability dimension	The support measures reach those who need most: responsiveness dimension
Young group	3.47	3.65	3.75	3.74
Over 34 age group	3.51	3.70	3.75	3.75
T-test	1.929	3.058	-0.038	0.235

Note. Original variables are expressed on a Likert scale from 1 (strongly agree) to 5 (strongly disagree). In contrast with the factor adopted in our analysis, in the original variables the highest scores indicate higher levels of dissatisfaction with each dimension of Quality of Governance.

Table B in the appendix shows that the there is a statistical significant difference between the 18-34 age group and those over 34 with regard to the evaluation of the integrity and fairness dimensions of our index of Quality of Governance (QoG). The 18-34 age group perceive these dimensions more positively, representing the values that should be respected in good governance policies. On the other hand, there is no statistical difference in terms of evaluation of the public policies performance and competencies, identified by the dimensions of reliability and responsiveness. Higher evaluations of fairness and integrity by the 18-to-34 age group may be the reason why the impact of QoG on Interpersonal Trust is higher for this group, as shown by the results in Section 4.

Table C. Descriptive statistics

	Total sample	18-34 age group	Over 34 age group	Variation (18-34 age group – Over 34)
		Well-being dimension	1	
Low levels of the mental well-being index (first and second percentile)	56%	53%	60%	-7%
Frequent feelings of depression	29%	35%	28%	+7%
Frequent feelings of isolation and loneliness	28%	35%	27%	+8%
Frequent feelings of tension	36%	46%	35%	+11%
	Econo	omic and financial con	ditions	
Difficulties in making ends meet	22%	19%	23%	-4%
Worsening of the financial situation in the past three months	27%	23%	28%	-5%
Worsening of the financial situation in next three months	25%	18%	25%	-7%
	Request	s for income support	measures	
Request for unemployment benefit	9%	15%	8%	+7%
Request for wage support	7%	9%	7%	+2%
Request for paid sick or care leave	8%	9%	7%	+2%
Request for state aids to business	34%	33%	34%	-1%

Request for other types of support	8%	10%	8%	+2%
		Trust		
High levels of trust in your country's government	26%	25%	27%	-2%
High levels of rust in the police	44%	45%	44%	+1%
Trust in the healthcare system	47%	52%	46%	+6%
Trust in the European Union	34%	45%	32%	+13%
Trust in other people	34%	32%	34%	-2%