Exogenous Surprises and Emotional Outcomes: An Analysis of Well-Being Dynamics. How has the happiness and optimism of Italians been affected by the US 2024 election result?

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Abstract

This paper investigates the emotional impact of exogenous political shocks on individual well-being by examining how Italian citizens' optimism and happiness responded to the unexpected outcome of the 2024 U.S. presidential election. Leveraging a unique two-wave panel dataset collected before and after the election, we implement a difference-in-differences design to estimate the causal effect of electoral surprise. Respondents who had confidently predicted a Kamala Harris victory and were subsequently surprised by Donald Trump's re-election exhibited a significant decline in self-reported happiness, controlling for individual characteristics. We interpret this as evidence of the emotional cost of unexpected geopolitical outcomes, even when such events occur abroad. Our findings underscore the conceptual distinction between optimism (a forward-looking cognitive disposition) and happiness (an affective state), showing that optimism may amplify both the emotional gains from positive outcomes and the emotional costs of negative surprises. The analysis contributes to the literature on subjective well-being by highlighting the role of global events in shaping personal affective responses and by emphasizing the need to account for exogenous shocks in models of life satisfaction. Finally, we discuss implications for future research on the causal relationship between optimism and happiness and suggest methodological strategies for disentangling endogeneity between the two constructs.

Keywords: exogenous emotional shocks, optimism, subjective wellbeing

JEL: D91, I31, C21

Introduction

Subjective well-being, encompassing dimensions such as optimism and happiness, is increasingly recognized as a key indicator of individual and societal health. To understand its determinants, it is essential to integrate insights from personality psychology, economics, and sociology, as both stable personal traits and dynamic external factors shape individuals' life evaluations and expectations about the future.

A large body of literature has examined how characteristics like extraversion, self-esteem, and various socio-demographic attributes predict well-being (Lauriola and Iani, 2017; Busseri and Erb, 2023; Caprara et al., 2009). However, much less is known about how optimism and happiness respond to exogenous shocks—sudden, unpredictable events that alter the external environment without directly targeting individuals. Such events provide a quasi-experimental context that is particularly useful for understanding the interplay between personal traits and external circumstances.

Personality traits provide important structural anchors for well-being. Extraversion, for example, predicts higher levels of happiness through mechanisms such as increased sociability, cheerfulness, and emotional resilience (Deneve and Cooper, 1998). Similarly, optimism and self-esteem bolster life satisfaction by enabling individuals to maintain a positive self-regard and favorable expectations about the future, even in challenging times (Quevedo and Abella, 2011; Caprara et al., 2009). In parallel, socio-demographic characteristics—including gender, age, education, and marital status—significantly shape both the experience and expression of well-being.

Gender differences in optimism and happiness are well documented, albeit with nuanced findings. Men tend to exhibit higher levels of optimism about economic prospects, although this optimism is sometimes less accurate than women's more cautious expectations (Bjuggren and Elert, 2019; Dawson, 2017). Conversely, women often report greater emotional well-being, a pattern attributed to both biological sensitivity and socialization processes that emphasize emotional connectivity (Wood, Rhodes, and Whelan, 1989). Notably, while younger women tend to report higher levels of happiness than their male peers, this gap diminishes or reverses in later life stages—possibly reflecting societal norms that devalue older women's contributions (Inglehart, 2002).

Similarly the relationship between age, optimism, and happiness exhibits a complex and multifaceted pattern, as evidenced by extant literature. Cross-sectional studies and longitudinal investigations have frequently indicated a U-shaped trajectory for happiness across the lifespan, characterized by a nadir in middle age followed by an increase in later life. Observed differences in this trajectory may be attributable to factors such as gender and health (Blanchflower et al., 2023; Beja, 2017; Galambos et al., 2020; Graham & Pozuelo, 2017). In contrast, research about optimism in older adults has suggested an inverted U-shaped pattern, with optimism increasing throughout later adulthood before experiencing a decline in the oldest age cohorts (Chopik et al., 2020). These observed patterns, however, are not universally consistent, with significant variations reported across diverse national contexts, gender groups, and methodological frameworks, and a subset of studies documenting alternative or more intricate lifespan trajectories (Bartram, 2024).

Education is another critical determinant of subjective well-being. Directly, education enhances self-esteem, personal agency, and a sense of competence (Oreopoulos and Salvanes, 2011; Araki, 2021). Indirectly, it contributes to better economic outcomes, such as higher income and greater employment stability, which in turn are linked to higher life satisfaction (Dolan, Peasgood, and White, 2008). However, this positive relationship is not universal; in contexts marked by significant income inequality or heightened social comparison, higher education may lead to increased dissatisfaction if economic or social success does not meet expectations (Clark and Oswald, 1996; Easterlin, 2001). Optimism, often seen as a mediator between education and well-being, further complicates this relationship by interacting with educational experiences to either amplify or mitigate outcomes.

Personal economic conditions—including income, wealth, and perceived financial status—also play a crucial role in determining individual happiness. Both absolute and relative economic factors, along with perceptions of financial security, have strong, positive effects on subjective well-being (D'Ambrosio et al., 2019; Powdthavee, 2010). Higher income and wealth are generally associated with greater optimism, reinforcing the idea that financial stability can foster positive expectations about the future (Boehm et al., 2015).

Marital status is another significant correlate of happiness. Many studies suggest that married individuals report higher levels of well-being compared to their unmarried counterparts. However, the benefits of marriage are far from uniform. Factors such as the quality of the marital relationship, individual personality traits, and the surrounding cultural environment determine whether marriage enhances or diminishes happiness (Lucas and Clark, 2006; Diener et al., 2000). A supportive and satisfying marriage is generally linked to higher subjective well-being and increased optimism, whereas conflict-ridden relationships may reduce well-being compared to remaining single (Khodarahimi, 2015; Hsu and Barrett, 2020).

While these individual-level predictors of happiness and optimism are well studied, there remains an understudied dimension: the effect of external shocks on subjective well-being. In contrast to endogenous life events such as divorce or job loss, exogenous shocks provide a unique opportunity to observe how changes in the external environment and perceived uncertainty influence individuals' life evaluations.

This paper addresses this gap by examining how optimism and happiness respond to a major international political event: the 2024 U.S. presidential election and the subsequent start of Donald Trump's second administration.

Our study leverages an original two-wave panel dataset collected in Italy—one wave in October 2024, before the election, and another during February–March 2025, early in the new administration. By focusing on this exogenous and highly salient political event, which does not directly affect Italians' immediate circumstances yet has the potential to influence global economic and geopolitical expectations, the study provides valuable insights into how external shocks shape subjective well-being.

Importantly, by eliciting respondents' expectations regarding the election outcome in the initial wave of the survey, we are able to quantify the degree of electoral surprise and thereby establish a link between theoretical predictions and empirical observations. Existing research has predominantly focused on voters, demonstrating that individuals who are happy are more likely to support the incumbent candidate (Liberini et al., 2017). Furthermore, election results have been shown to exert a significant impact on voters' short-term emotional states, particularly among those whose preferred party is defeated. These emotional responses, while often intense, are typically transient, tending to dissipate within a week following the election. Partisan identity plays a critical role in this process, with supporters of the losing party experiencing more pronounced declines in happiness than their counterparts on the winning side (Pierce et al., 2016; Patkós & Farkas, 2020).

Our dataset comprises 2,064 respondents, representative of the Italian adult population (ages 18–74). The panel structure allows us to control for time-invariant individual heterogeneity and to examine both average treatment effects and heterogeneous responses based on gender, age, education, and baseline optimism levels.

In doing so, we contribute to several strands of research. First, we add to the literature on the psychological foundations of well-being by demonstrating that optimism and happiness are sensitive not only to personal traits but also to perceived shifts in the external environment. Second, we enrich the growing body of work on the socio-economic determinants of expectations by providing evidence from a non-U.S., non-Anglophone setting. Finally, our findings have broader implications for understanding how global political events can reverberate across borders and shape individuals' economic and social outlooks.

The remainder of the paper is organized as follows. Section 2 provides an analysis of the relation between optimism and happiness. Section 3 presents the dataset and the descriptive statistics. Section 4 outlines the empirical strategy and the main results, including analyses of heterogeneous treatment effects. Section 5 concludes with a discussion of the broader implications of the findings for well-being research and public policy.

2. Optimism and self reported happiness: cognition vs emotions

Optimism is primarily a cognitive disposition characterized by forward-looking reasoning and generalized positive expectancies about the future (Carver et al., 2010). In contrast, self-reported happiness is more affective and reactive, reflecting an individual's current emotional state and subjective well-being, which can be heavily influenced by contextual factors and transient moods (Schwarz & Clore, 1983). Theoretically, optimism engages deliberative "slow" thinking (akin to System 2 processes; Kahneman, 2011) as individuals form expectations based on their outlook and available information, whereas happiness involves "fast" affective responses (System 1) to one's immediate experiences and environment. This divergence implies that the determinants of optimism versus happiness differ: dispositional optimism tends to be linked to stable personal traits (e.g., personality, generalized outlook) and is updated gradually in light of major life events or prospects (de Juan et al., 2014), while self-rated happiness fluctuates more readily with short-term circumstances, daily events, and even incidental cues. Empirical studies show that momentary stimuli or context changes can significantly sway reported happiness – for example, people report higher life satisfaction on sunny days and lower on rainy days due to mood effects (Schwarz & Clore, 1983), and partisan voters' happiness rises or falls immediately after an election depending on whether their preferred candidate won or lost (Pierce et al., 2016). These emotional reactions are often short-lived, underscoring happiness's susceptibility to external stimuli and "yesterday's emotions" (Kahneman & Deaton, 2010). In surveys, respondents' evaluations of their happiness often incorporate recent affective experiences highlighting that self-reported happiness captures an affective state influenced by very recent memories and context. Optimism, being more forward-looking, is typically less volatile in the face of immediate mood shifts, instead responding to

expectations about future circumstances (Senik, 2008). For instance, individuals' outlook on their economic future or societal conditions (such as expectations about employment or political change) has been found to influence current satisfaction with life (Frijters et al., 2012; Piper, 2023). At the same time, optimism and happiness are positively correlated, raising concerns of endogeneity: an inherently happier person may cultivate greater optimism, and optimistic beliefs can in turn enhance one's happiness (Carver et al., 2010; Piper, 2023). To disentangle this relationship, researchers employ instrumental variable and two-step estimation approaches to correct for reverse causality and omitted variable bias (de Juan et al., 2014; Piper, 2023). Piper (2023), analyzing longitudinal panel data with instrumental methods, finds that even after controlling for individual fixed effects and addressing simultaneity, optimism about the future still exerts a significant positive effect on current happiness. Similarly, using survey data from Spain and an instrumental variables strategy, de Juan et al. (2014) show that holding positive expectations causally contributes to higher life satisfaction. Such approaches validate that optimism (as a cognitive, expectation-based disposition) exerts an independent influence on happiness, while also confirming that the two constructs remain conceptually distinct – one rooted in reasoned outlooks and the other in emotional appraisals. This distinction aligns with broader evidence in behavioral economics and psychology that cognitive evaluations and affective experiences represent different dimensions of well-being with unique antecedents and dynamics (Kahneman & Krueger, 2006).

3 Data and descriptive statistics

The dataset used in this analysis is derived from a survey on optimism and happiness conducted on a representative sample of Italian individuals aged 18 to 74, collected in two separate waves. The first wave took place between 11 and 25 October 2024, prior to the U.S. presidential election, and the second between 28 February and 14 March 2025, during the early phase of the new Trump administration.

The questionnaire was designed by the Museum of Saving, an Italian cultural institution dedicated to promoting economic and financial literacy. Fieldwork was carried out by CSA Research, a company specializing in opinion polling. The sample was drawn from the well-established Nielsen[1] Telepanel database, which is designed to represent the Italian population in accordance with ISTAT demographic benchmarks for age, gender, and geographical distribution (see Appendix 1). The final dataset includes responses from 2,064 households.

The questionnaire[2] consists of 42 items, organized into four sections. The first section collects sociodemographic information, including data on household income, lifestyle, and ownership of real estate and vehicles. The second and third sections focus on measures of optimism, hope, and happiness, based on the Life Orientation Test Revised (LOT-R) developed by Scheier et al., 1994.

[1] Nielsen is a global leader in audience insights, data, and analytics.

[2] The full questionnaire comprises 48 items; however, six of these are excluded from the present analysis as they are not relevant to the research question addressed in this study.

The LOT-R includes 10 items: three assessing optimism, three assessing pessimism, and four serving as filler or control items.

The items related to happiness assess subjective well-being, with particular attention to satisfaction in the domains of work and social relationships, as well as overall feelings of serenity and joy in personal life. They are inspired by the World Happiness Report[3] methodology, where respondents are asked to imagine a ladder with steps numbered 0 to 10 and rate their current life satisfaction on that scale. The report also collects data on positive and negative emotions, such as laughter, enjoyment, interest, worry, sadness, and anger, since these factors provide additional insights into people's experiences of happiness. Regarding the latter, in our questionnaire, six additional questions assess the respondents' emotional experiences the previous day: "*Did you laugh a lot yesterday*?" "*Did you experience joy yesterday*?" "*Did you learn something new or interesting yesterday*?" "*Did you feel worried yesterday*?" "*Were you sad yesterday*?" and "*Were you angry yesterday?*".

Following Deaton and Stone (2013), we account for the fact that the context in which survey questions are presented—particularly preceding political items—can significantly distort self-reported measures of life satisfaction. These effects, demonstrated through randomized experiments, are substantial, comparable in magnitude to the impact of major life events, and vary across demographic groups. To mitigate such context effects, political questions in our survey are placed at the end, within a fourth section that includes three items. The first asks respondents to predict the outcome of the 2024 U.S. presidential election: *Who do you think will win the United States presidential election—Kamala Harris or Donald Trump?* The second question assesses the respondent's level of concern regarding the current international geopolitical situation, measured on a scale from 0 (not at all concerned) to 10 (extremely concerned). The third is a contextual question that asks whether any personally significant events have occurred in recent months. If so, respondents are asked to indicate which among the listed events they consider the most significant [one response only]. The response options include: *Purchased a home; Got married/engaged; Found a new job/changed jobs; Had a child; Lost a job; Lost a loved one; Got divorced/separated/ended a romantic relationship; None of the above*.

The panel is perfectly balanced and the questionnaire was fully completed in both waves. The total observations used in the analysis are 4126[4]. The socio-demographic data provide insights into the respondents' characteristics (see Tables 1 and Table A.1).

The characteristics of the sample under investigation exhibit no substantive changes between the two waves, with differences confined to the second decimal place.

The responses to the question "*Compared to the average Italian population, how would you define your lifestyle?*" allow for a segmentation of the sample based on perceived economic status.

[3] https://worldhappiness.report/

[4] The sole observation identified as non-binary has been dropped from the analysis.

Respondents classified as "rich" are those who answer either "*Very high – I am aware that I can afford many things beyond the average*" or "*High – I realize that some of the things I can afford are privileges not accessible to everyone.*" Those identified as "middle class" respond with "*Average – while I can afford some things, I also have to make sacrifices like most people.*" Finally, respondents are classified as "poor" if they answer either "*Low – there are many things that others can usually afford but I currently cannot*" or "*Very low – compared to the rest of the population, I face objective difficulties that limit my choices.*"

Actual Financial Situation is a variable based on responses to the following question: "*Would you say that your income allows you to live...*" Respondents were given five response options: comfortably, with ease, with some difficulty, with considerable difficulty in making ends meet, and in poverty, corresponding respectively to values ranging from 5 to 1. This variable will be employed, in Appendix 2, for robustness checks, as an alternative to the question on lifestyle, in order to represent the respondent's economic condition.

The responses to the question "*Imagine your life in 12 months. Do you think your financial situation will be...*" are categorized into two binary variables: those who believe their financial situation in 12 months will be much better than today or better than today, and those who think it will be worse than today or much worse than today.

Personal satisfaction is measured based on responses to the question: "*Overall, how satisfied are you with your social relationships?*" Responses are recorded on a five-point scale, where very satisfied is coded as 5, fairly satisfied as 4, neither satisfied nor dissatisfied as 3, slightly dissatisfied as 2, and not at all satisfied as 1.

Similarly, satisfaction with leisure activities is measured based on responses to the question: "*How fulfilled do you feel by the activities you engage in during your free time?*" Answers are recorded on the same five-point scale as above, with response options ranging from very satisfied (coded as 5) to not at all satisfied (coded as 1).

The responses related to the respondents' emotional experiences on the day preceding the interview were aggregated by subtracting the average score of the three negative emotion items from the average score of the three positive emotion items using the appropriate coding. This procedure yields the variable *Net Emotion*.

Regarding the level of education, the classification is straightforward, although it is worth noting that primary education includes individuals with educational attainment equivalent to or lower than middle school.

Financial knowledge is assessed through the question: "*In general, would you describe yourself as knowledgeable in managing personal finances?*" Responses are recorded on a four-point scale, with very knowledgeable coded as 5, fairly knowledgeable as 2, slightly knowledgeable as 3, and not at all knowledgeable as 1. As for marital status, the category single also includes widowed individuals.

The descriptions of the endogenous variables under examination are provided in Table 2.

In this study, the Optimism indicator was constructed in accordance with the revised Life Orientation Test (LOT-R) methodology. Specifically, it was calculated as the sum of the scores assigned to responses for selected items, each rated on a Likert scale ranging from 0 ("strongly disagree") to 4 ("strongly agree"), with intermediate values representing "disagree," "neutral," and "agree." The relevant items included[5]: [1] "*In uncertain times, I usually expect the best*"; [3] "*If something can go wrong for me, it will*"; [4] *"I am always optimistic about my future*"; [7] "*I hardly expect things to go my way*"; and [9] "*Overall, I expect more good things to happen to me than bad.*" To ensure consistency in the direction of scoring, items [3] and [7] were reverse-coded, such that higher scores uniformly reflected greater optimism.

In addition, an alternative optimism index was developed by incorporating the filler items: [2] "*It's easy for me to relax*"; [5] "*I enjoy my friends a lot*"; [6] "*It is important for me to keep busy*"; and [8] "*I do not get upset too easily.*" This index was derived as the average score across all nine items (Optimism_av).[6]

Happiness is measured through self-assessment in response to the following question: "*Considering all aspects of your life, if there were a 10-step ladder where the first step (0) represents the lowest level of happiness and the top step (10) the highest level of happiness, on which step would you place yourself?*"

Finally, Table 3 presents descriptive statistics for electoral expectations, concern about geopolitical situations, and the occurrence of relevant personal events (i.e., the three questions in the questionnaire's Section 4). Figure 1 and 2 show the statistical distribution of the endogenous variables under exam.

4. Empirical strategy and main results

To assess the effects of an unexpected policy shock on perceived happiness, we conducted an econometric analysis using the difference-in-differences (DiD) method. The method compares the change in outcome averages between two groups (one treated and one control) before and after a given event or intervention. We applied the DiD methodology to our sample, a balanced panel of more than 2,000 observations taken in two waves: one before the November 2024 US presidential election (Trump-Harris) and one after the election event. We identified the "treated" group (63.4 percent of the sample) as those who had incorrectly predicted Kamala Harris's victory and therefore experienced a displacement/surprise effect after her defeat, coding this condition with a binary variable (0 for not surprised, 1 for surprised). The causal effect of electoral surprise is thus estimated through the interaction between this treatment variable and the time variable of the two waves, isolating the net impact of surprise from the overall change observed over time.

Within our sample, the average pre-treatment happiness level was 6.58 for the "surprised" group

[5] In our questionnaire, the item "I rarely count on good things happening to me", which is included in the original Life Orientation Test-Revised (LOT-R), was not used.

[6] This alternative index is not reported in the empirical results, as it yields outcomes like those of the primary optimism measure and exhibit higher correlations with the happiness index.

(those who predicted a Kamala Harris victory) and 6.44 for the "unsurprised".
In the second wave, the happiness level of the former group drops by 3 percent to 6.37 (a 5% statistically significant difference) while the happiness of the latter drops by 0.7 percent to 6.39 (a non-statistically significant difference)[7](see Figure 3).
We also conducted a test on the variable that measures propensity toward optimism.
In particular, by isolating highly optimistic individuals, super - optimist (scores of the variable optimist above 14) among those who predicted Harris' victory, we found that they reported being happier than pessimists (7.62 vs. 6.39). However, although we observe a decline in the happiness variable between the first and second waves for both very optimistic and pessimistic or moderately pessimistic people, the decline for the so-called super-optimist is 3.8%, while for non-optimist it is 2.97%. The difference is statistically significant in both cases[8] but indicates that optimism may act as an amplifier of disappointment in the face of unexpected shocks and is consistent with our description of optimism as a behavior more related to cognition than emotion.

In empirical analyses examining the relationship between optimism and happiness, a key methodological concern arises from potential endogeneity. Specifically, optimism and happiness may be simultaneously determined or jointly influenced by unobserved factors, leading to biased and inconsistent estimates if not properly addressed. To mitigate this issue, we adopt a two-step approach designed to isolate the exogenous component of optimism before including it as a determinant in the happiness equation.

In the first step, we model individual optimism as a function of a set of demographic and medium-term characteristics, such as age, gender, education level, employment status, and economic expectations and knowledge. These variables are chosen based on their theoretical and empirical relevance in shaping individuals' general outlook toward the future, and they are plausibly exogenous to momentary fluctuations in happiness. This initial regression allows us to extract the portion of optimism that can be systematically explained by observable, predetermined factors.

We then compute the residuals from this first-stage regression, which capture the variation in optimism not accounted for by the included covariates. Assuming that the included demographic and medium-term variables sufficiently control for the shared determinants of optimism and happiness, these residuals can be interpreted as the orthogonal, and hence exogenous, component of optimism with respect to happiness.

In the second step, we incorporate these residuals into the happiness equation as an explanatory variable. By doing so, we aim to purge the endogenous component of optimism that might otherwise

[7] The t-test to verify the statistical significance of the difference between the averages of the happiness variable for the Trump Surprisevariable shows t = 3.28 and significance at 1% when Trump Surprise=1. The t-value is equal to 0.6381 when Trump Surprise=0 and the difference is not statistically significant.
[8] The t-test, when the variable for super optimists has a value of 1, returns t=1.989 and significance at 5%. The t-test for non-optimists or moderately optimistic people has a value of t=2.7264 and significance at 1%.

confound the estimation of its effect on happiness. This procedure ensures that our estimate of the impact of optimism on happiness is not driven by reverse causality or omitted variable bias, thereby improving the validity of our inferences.

This two-step strategy is particularly well-suited for addressing concerns of simultaneity and unobserved heterogeneity, and it reflects a broader commitment to causal rigor in the analysis of subjective well-being.

This two-step "control-function" approach rests on well-established econometric principles: by purging the first-stage residuals of their predictable component, we isolate variation in optimism that is plausibly exogenous to momentary happiness, thus emulating the logic of an instrumental-variables estimator without requiring an external instrument. Moreover, although our outcomes are recorded as ordered categories, linear regression remains a defensible and widely used approximation—often referred to as the "linear probability" or "ordinal least squares" model—because with a sufficient number of discrete levels it yields unbiased and consistent estimates of average marginal effects, is robust to heteroskedasticity with appropriate standard errors, and facilitates straightforward interpretation and comparison across models (Hayo and Siefert (2003) ; Ferrer-i-Carbonell et Frijters, 2004). In practice, the loss of efficiency relative to a full maximum-likelihood ordered-logit or probit specification is typically small when categories are many and well-spaced, and the linear specification allows us to easily incorporate the residual-based control function and to compare coefficients across equations on the same scale.

Equation (1) represents the expected dynamics of Optimism

$$OptimismL = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \cdots \beta_n X_n + \varepsilon \quad (1)$$

The explanatory variables X include demographic characteristics such as age, gender, geographic location, economic status, educational attainment, and marital status. In addition, two further variables are included: one, more commonly found in the literature, is the respondent's expected financial situation in 12 months; the other, less frequently used, aims to capture the respondent's interpretative capacity regarding the evolution of the economic context. (See Table 4.)

Table 4 reports the ordinary-least-squares estimates for the 0–20 optimism scale variable. Overall model fit is satisfactory for a subjective outcome (overall $R2$ = 0.164), and several covariates emerge as substantively and statistically important. Random effect were chosen according to the Breusch and Pagan Lagrangian multiplier test for random effects (chi2(1) = 895.61 Prob > chi2 = 0.0000) First, the coefficients on age and age-squared reveal a pronounced U-shape: optimism declines at younger ages, reaches a minimum around the early forties and rises thereafter. This pattern mirrors the "mid-life dip" documented in the well-being literature. Women are, ceteris paribus, less optimistic than men by roughly 0.38 points—or about 2 % of the 20-point scale. Regional effects are limited, but respondents from the South and Islands score 0.45 points higher than their

counterparts in the Centre (the omitted category), suggesting that macroeconomic disparities do not translate mechanically into lower individual optimism. Living standards matter strongly: self-identified rich and middle-class individuals are, respectively, 1.41 and 0.79 points more optimistic than the poor, highlighting the role of material resources for future outlooks.

Contrary to expectations, higher educational attainment is associated with slightly lower optimism (–0.43 for college graduates; –0.35 for high-school graduates). A plausible interpretation is that education raises risk awareness and hence tempers overly rosy expectations. Marital status differentials are negligible once other factors are controlled.
Forward-looking economic assessments dominate the model. Expecting one's financial situation to improve within a year boosts optimism by 1.09 points, whereas anticipating deterioration reduces it by 1.23 points—effect sizes that dwarf most sociodemographic influences. Finally, each additional unit of financial knowledge raises optimism by about 0.36 points, consistent with the idea that understanding economic concepts equips individuals with a more confident outlook about the future.
Taken together, these findings indicate that while basic demographics and geography shape optimism, perceived economic prospects and financial capability are the primary drivers, accounting for the largest point shifts on the optimism scale.

The total residual from this regression is subsequently employed in the estimation of the regression model related to happiness.

In the second step we estimate happiness, a subjective perception measured through the Cantril Ladder, which assigns a value between 0 (no happiness) and 10 (maximum happiness). Specifically, we analyzed the impact of Donald Trump's election in 2024 on subjects who where surprised by the election outcome, having previously predicted a Kamala Harris victory. The main explanatory variable, named "Surprise Trump," takes value 1 for individuals who had predicted a Harris victory. We then constructed the variable "Diff-in-Diff," which captures the interaction between "Surprise Trump" and the time variable "Post" identifying the two waves of detection (before and after the event).

$$Happiness = \alpha + \beta_1 Post + \beta_2 TrumpSurprise + \beta_3 Did + \beta_i X_i + \varepsilon_{optimism} X_{\varepsilon opt} + \theta \quad (2)$$

Equation (2) represents the second step, in which the dependent variable is Happiness. The regressors include the X variables described above, plus some more contingent and volatile independent variables, such as the emotions (positive and negative) experienced by respondents in the 24 hours prior to the interview; a variable indicating whether the person had to deal with unexpected events (positive and negative) such as: the birth of a child; divorce or separation; the purchase of a home; the loss of a loved one. Among the variables of interest to us are the difference-in-difference coefficients, with the variable capturing the surprise (Trump Surprise) for having made the wrong prediction about the US elections and the related interaction terms. An additional

variable captures the level of satisfaction within personal relationships.. The equation also includes the term $\varepsilon_{optimism}$, which represents the residuals saved from the regression estimate of eq. (1).

The first column of Table 5 presents the baseline estimates, excluding the residuals from the optimism regression (1). Regression results with random effects (random effects), enriched by demographic and socioeconomic controls and regional dummies, with clustered standard errors at the individual level, confirm that the political shock had a statistically significant and negative effect on the happiness of surprised subjects. In detail, the coefficient of the DiD interaction term is found to be -0.176 (p=0.014), indicating that, following Trump's election, subjects in the treatment group experienced, on average, a decrease in happiness of about 0.18 points on the Cantril Ladder scale compared to the control group. This result represents solid evidence of the negative effect of unexpected shock on individual happiness.

The "Post" variable, which captures the average time effect (from the pre to post-event period) for the control group, is not statistically significant (-0.0378, p=0.502), suggesting that for this group there was no systematic change in happiness between the two periods analyzed. In contrast, the variable "Trump Surprise" shows a positive and significant coefficient (0.1564, p=0.032), indicating that before the shock, subjects who would later be surprised by Trump's victory had a higher average level of happiness than the control group.

Among the demographic controls included in the model, age shows a quadratic relationship with perceived happiness: the negative coefficient for age (-0.0551, p=0.000) and the positive coefficient for the square of age (0.000473, p=0.000) suggest a U-shaped impact, with minimum levels of perceived happiness around 40 years old. This result is consistent with existing literature showing that happiness tends to decrease up to a certain point in the life cycle, then increase in later years.

The socioeconomic variables included in the analysis show strong predictive ability with respect to individual happiness. In particular, the coefficient associated with the socioeconomic category "rich" is strongly positive and statistically significant (1.359, p=0.000), indicating that high economic status is strongly correlated with higher levels of perceived happiness. The category "middle class" also has a significant coefficient (0.913, p=0.000), although smaller in magnitude than "rich," confirming a positive but decreasing relationship of happiness with socioeconomic level. Among the variables related to educational level, both "college graduates or more" (-0.179, p=0.086) and "high school graduates" (-0.217, p=0.023) show negative and statistically significant coefficients, unexpectedly suggesting that higher levels of education are associated with lower self-reported happiness, a relationship that could be further explored in subsequent analyses.

Regarding the relational status of respondents, being "in a couple" is found to be associated with a significant increase in the level of happiness (0.753, p=0.001), as is being "divorced or separated" (0.541, p=0.031), while being "single" is not found to be statistically significant (0.268, p=0.247).

Finally, controlling for regional differences by spatial dummies shows that these differences have a statistically significant impact on happiness, for respondents living in the North of the country (Northwest 0.264, p=0.004; Northeast 0.225, p=0.017). This result suggests that, when controlling for individual demographic and socioeconomic characteristics, regional specificities do indeed lead

to systematic variations in perceived happiness—likely attributable to differences in income distribution across the country. It is worth noting, however, that in the case of optimism, the positive effect is instead associated with residing in the South and the Islands.

Columns 2-5 in table 5 presents the results of the second-step regression in which happiness is regressed on a set of individual characteristics and life events, controlling for unobserved optimism via the inclusion of residuals from the first-step regression (ResOPT). The difference-in-differences coefficient is negative and statistically significant at the 5% level, indicating that individuals who were surprised by the U.S. election outcome (i.e., those who incorrectly predicted a Harris victory) experienced a decrease in happiness post-election relative to those who correctly anticipated the result. This suggests a measurable psychological cost associated with miscalibrated political expectations. Among controls, standard predictors of well-being such as income level, satisfaction with personal relationships, net emotional balance, and leisure time satisfaction show strong and positive associations with happiness. Interestingly, the residual measure of optimism (ResOPT) remains positively and significantly associated with happiness (coefs. from 0.159 to 0.0887 , $p < 0.01$), reinforcing the interpretation that dispositional optimism, net of demographic and socio-economic factors, independently contributes to well-being. Regional differences also emerge, with individuals in the Northwest and Northeast reporting higher levels of happiness than those in the Center (reference category). Overall, these findings underscore the emotional relevance of political events and highlight the importance of subjective expectations and optimism in shaping individual well-being.

Finally, Table 6 presents the results of Equation (2), where the set of regressors includes dummy variables capturing the occurrence of specific individual shocks. Interestingly, although most coefficients exhibit the expected signs, only one is statistically significant—namely, the dummy variable indicating the purchase of a house during the period between the two survey waves.

5. Concluding Remarks

Our analysis provides clear evidence that an unexpected political event can measurably undermine individual well-being. In particular, the surprise outcome of the 2024 U.S. presidential election – Donald Trump's victory – had a significant negative impact on the self-reported happiness of Italian respondents who did not anticipate this result. Those in our sample who had confidently predicted a different outcome (Kamala Harris's win) experienced a notable drop in life satisfaction following the election, relative to their counterparts whose expectations aligned with the actual outcome. Quantitatively, the *"surprised"* group's average happiness declined by roughly 0.153 points on a 0–10 scale after the shock (controlling for baseline differences), a modest yet statistically significant decrease. This result constitutes robust evidence of an emotional cost to exogenous shocks: even a distant geopolitical event, one beyond individuals' direct control, can ripple through and dampen the subjective well-being of those caught off guard by its occurrence. Such findings underscore the profound reach that global surprises may have on personal emotions.

Beyond the specific case of this electoral upset, our study contributes to the broader literature on subjective well-being in several important ways. First, we foreground the role of exogenous surprises

– sudden, unanticipated events external to the individual – as a determinant of happiness. Whereas much prior research on well-being has centered on relatively stable personal factors or predictable life transitions, our focus on a quasi-experimental shock demonstrates that unexpected macro-level events can also sway how people feel. Notably, we show that a political development abroad can reverberate across national borders and influence citizens' outlooks elsewhere, highlighting a cross-cultural psychological spillover that is often overlooked. Second, by leveraging longitudinal data in a two-wave panel survey, we were able to track changes in the same individuals before and after the surprise event. This panel design strengthens the case for causality by controlling for time-invariant individual traits and observing actual within-person shifts in happiness in response to the shock. In doing so, our analysis isolates the dynamic impact of the election outcome more cleanly than a cross-sectional approach could. The use of a difference-in-differences framework, combined with a representative sample of the Italian population, adds a methodological contribution to well-being research: it illustrates how tracking subjective well-being over time around an exogenous event can yield insights into the temporal processes and causal mechanisms underlying happiness. Together, these features of our study expand the understanding of well-being dynamics by integrating an external shock perspective with rigorous longitudinal evidence.

A key insight from our investigation is the distinction and interplay between optimism and happiness – the former a cognitive disposition, the latter an affective state. Our findings reinforce that optimism and happiness, while positively related, remain conceptually distinct constructs with different determinants. Optimism, as a forward-looking belief system, appeared to shape how participants braced for and reacted to the election outcome, thereby influencing their emotional trajectory. Indeed, individuals who exhibited high optimism or hopeful expectations prior to the election (for example, those who confidently expected a favorable outcome that did not materialize) tended to report higher happiness levels at baseline, yet they also suffered a sharper decline in happiness after the surprise. This pattern suggests that optimism can amplify emotional responses to shocks: on one hand, a generally optimistic outlook is associated with greater happiness in normal times, consistent with the idea that positive expectations about the future bolster current well-being. On the other hand, when an optimist's expectations are abruptly contradicted by reality, the disappointment can be especially acute, leading to a more pronounced drop in affective well-being. In contrast, those with more cautious or pessimistic expectations might experience less of a swing, having been mentally prepared for a negative scenario. These observations underscore how the *cognitive* dimension of well-being (optimism) can modulate the *emotional* dimension (happiness) in meaningful ways. Put simply, optimism influences happiness, but its effect is context-dependent – generally uplifting mood and life satisfaction, yet potentially exacerbating the emotional toll of adverse surprises. Recognizing this nuanced relationship is important for well-being research: it affirms that optimism and happiness, though interrelated, should be analyzed as separate channels of influence, with optimism serving as an antecedent to happiness rather than a mere facet of it. This distinction aligns with evidence in behavioral economics and psychology that cognitive evaluations (expectations, beliefs) and affective experiences (mood, joy, distress) represent different

dimensions of well-being, each with unique dynamics and policy implications.

Finally, while our study capitalized on an exogenous event to draw inferences, we acknowledge that fully untangling the causal link between optimism and happiness remains a challenge. There is a potential endogeneity concern in our findings: are people happier *because* they are more optimistic, or more optimistic *because* they are happier? It is plausible that an inherently happier person may cultivate a more optimistic outlook, or that some unobserved third factors (such as personality traits or life circumstances) drive both higher optimism and higher happiness. Although our longitudinal approach and controls help mitigate some of these issues, establishing a one-directional causality was beyond the scope of our analysis. To strengthen the causal interpretation of how optimism affects happiness, future research should employ more powerful identification strategies. One promising avenue would be the use of instrumental variables or natural experiments that provide exogenous variation in optimism. By finding an external factor that shifts individuals' optimism without directly altering their happiness, researchers could isolate the pure impact of optimism on subsequent well-being, free from reverse causality bias. Recent studies have begun to pursue this strategy: for instance, de Juan et al. (2014) and Piper (2023) use longitudinal data with instrumental variable techniques to demonstrate that optimism exerts an independent positive effect on life satisfaction, even after accounting for individual fixed effects and other confounders. Building on such approaches, future work in our context could, for example, exploit variation in optimism induced by informational treatments or early-life experiences as instruments. Implementing these methods would allow for more rigorous confirmation that the cognitive disposition of optimism *truly causes* improvements in happiness (and not merely correlates with it), thus reinforcing the theoretical claims with firmer empirical evidence. In addition, further studies might extend our framework by examining whether interventions that encourage realistic optimism can buffer the emotional fallout of negative surprises, thereby offering practical strategies to enhance resilience.

In conclusion, this paper underscores the profound impact that unexpected external events can have on subjective well-being and highlights the critical role of cognitive outlook in shaping emotional outcomes. We have shown that even a shock as remote as a foreign election result can dent the happiness of individuals an ocean away, especially when it clashes with their optimistic expectations. At the same time, by disentangling optimism from happiness, we contribute to a more nuanced understanding of well-being dynamics, one that appreciates how what people expect influences how they feel. Our findings invite researchers and policymakers alike to pay closer attention to the power of surprises and expectations in driving emotional health. Strengthening causal inquiry into the optimism–happiness link will be a fruitful next step for this line of research. Ultimately, appreciating the distinction between cognition and emotion in well-being – and how exogenous surprises bridge the two – can enrich both scientific theory and practical interventions aimed at improving life satisfaction in an uncertain world.

Table 1 Descriptive statistics for main covariates

	Mean	Std.dev	Min	Max
Age	48.34	14.87	18	74
Gender	0.50	0.50	0	1
Rich	0.11	0.31	0	1
Middle class	0.62	0.48	0	1
Poor	0.27	0.44	0	1
Single	0.33	0.47	0	1
In a couple	0.60	0.49	0	1
Divorced -Separated	0.05	0.21	0	1
Actual Financial Situation	3.32	0.91	1	5
Financial situation in 12 months =better	0.20	0.40	0	1
Financial Situation in 12 months = worse	0.18	0.39	0	1
Leisure Time Satisfaction	3.57	0.91	1	5
Personal Relationship Satisfaction	3.57	0.86	1	5
College Graduates or more	0.31	0.46	0	1
High School Graduates	0.55	0.50	0	1
Primary Education	0.13	0.34	0	1
Financial Knowledge	2.83	0.66	1	4
Net Emotion	0.13	0.57	-1	1

Table 2 Descriptive statistics for dependent variables

		Mean	Std.dev	Min	Max
Optimism		11.35	3.30	0	20
Optimism_av		2.34	0.54	0.1	4
Happiness		6.53	1.70	0	10
Correlation between Optimism and Happiness	0.47***				
Correlation between Optimism_av and Happiness	0.50***				

Table 3 Descriptive statistics for electoral results, geopolitical worries and occurrence of personal events

	Mean	Std.dev	Min	Max
Trump as a Surprise	0.63	0.48	0	1
Geopolitical Worries	6.99	1.90	0	10
Personal events in the time lapse	Freq	% on total event occurance (435)		% total sample
I bought a house	58	13.33		2,81
I got married or became engaged	24	5.52		1.16
I started a new job or changed jobs	85	19.54		4.12
I had a baby	28	6.44		1.35
I lost my job	31	7.13		1.50
I lost a loved one	191	43.91		9.26
I got divorced/separated/ended a romantic relationship	18	4.14		0.87
None of the above	1628	na		78.91

Table 4 Optimism with Random Effects and Cluster at the individual level

	(1)
Age	-0.0724***
	(0.0280)
Age squared	0.000888***
	(0.000286)
Gender	0.379***
	(0.123)
South and Islands	0.453**
	(0.180)
Northwest	0.153
	(0.187)
Northeast	-0.0962
	(0.204)
Rich	1.413***
	(0.186)
Middleclass	0.794***
	(0.119)
College Graduates or more	-0.431**
	(0.205)
High School Graduates	-0.353*
	(0.185)
Single	0.0917
	(0.393)
In a Couple	0.541
	(0.370)
Divorced-Separated	0.165
	(0.434)
Financial Situation in 12 Months Better	1.094***
	(0.121)
Financial Situation in 12 Months Worse	-1.230***
	(0.132)
Financial Knowledge	0.364***
	(0.105)
Constant	10.50***
	(0.801)
Observations	4126
R2 overall	0.164
R2 between	0.191
Wald chi2 (14)	434.245
Prob> chi2	0.000

Standard errors in parentheses
Cluster robust standard errors per IDW2
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Center, Poor, Primary education have been dropped for collinearity
Vertex for age around 46 years with this equation

Table 5 Happiness with Random Effects and Cluster at the individual level

	(1)	(2)	(3)	(4)	(5)
Post	-0.0378	-0.0492	-0.0320	-0.0373	-0.0491
	(0.0562)	(0.0563)	(0.0562)	(0.0566)	(0.0565)
Trump Surprise	0.156**	0.139*	0.0858	0.0494	0.0471
	(0.0730)	(0.0714)	(0.0655)	(0.0636)	(0.0626)
Diff in Diff	-0.176**	-0.160**	-0.150**	-0.142**	-0.141**
	(0.0711)	(0.0714)	(0.0712)	(0.0711)	(0.0706)
Age	-0.0551***	-0.0551***	-0.0375***	-0.0299***	-0.0239**
	(0.0135)	(0.0131)	(0.0118)	(0.0113)	(0.0111)
Age Squared	0.000474***	0.000472***	0.000303**	0.000241**	0.000164
	(0.000142)	(0.000138)	(0.000123)	(0.000118)	(0.000116)
Gender	0.0733	0.0684	0.0725	0.0431	0.0305
	(0.0609)	(0.0592)	(0.0535)	(0.0513)	(0.0502)
South & Islands	0.0524	0.0521	0.0560	0.0684	0.0853
	(0.0885)	(0.0862)	(0.0765)	(0.0730)	(0.0706)
Northwest	0.264***	0.263***	0.210***	0.205***	0.187**
	(0.0903)	(0.0878)	(0.0782)	(0.0744)	(0.0730)
Northeast	0.225**	0.225**	0.219***	0.213***	0.194**
	(0.0941)	(0.0915)	(0.0836)	(0.0784)	(0.0764)
Rich	1.359***	1.467***	1.082***	0.989***	0.913***
	(0.0991)	(0.0971)	(0.0905)	(0.0887)	(0.0877)
Middleclass	0.913***	0.977***	0.758***	0.702***	0.667***
	(0.0679)	(0.0666)	(0.0634)	(0.0612)	(0.0601)
College Graduates or more	-0.179*	-0.203**	-0.148	-0.126	-0.123
	(0.104)	(0.101)	(0.0921)	(0.0894)	(0.0879)
High School Graduates	-0.217**	-0.228**	-0.176**	-0.170**	-0.168**
	(0.0952)	(0.0925)	(0.0851)	(0.0826)	(0.0816)
Single	0.268	0.261	0.320	0.296	0.265
	(0.232)	(0.226)	(0.211)	(0.209)	(0.209)
In a Couple	0.753***	0.758***	0.728***	0.682***	0.663***
	(0.225)	(0.220)	(0.204)	(0.202)	(0.202)
Divorced-Separated	0.542**	0.551**	0.523**	0.452**	0.440**
	(0.251)	(0.244)	(0.228)	(0.224)	(0.223)
Personal Relation Satisfaction			0.632***	0.485***	0.359***
			(0.0361)	(0.0375)	(0.0386)
Net Emotion				0.626***	0.533***
				(0.0467)	(0.0465)
Leisure Time Satisfaction					0.312***
					(0.0324)
ResOPT		0.159***	0.124***	0.0984***	0.0887***
		(0.0200)	(0.0208)	(0.0206)	(0.0201)
Constant	6.610***	6.591***	4.076***	4.428***	3.740***
	(0.395)	(0.385)	(0.382)	(0.372)	(0.372)
Observations	4126	4126	4126	4126	4126
R2 Overall	0.153	0.190	0.302	0.343	0.364
R2 Between	0.206	0.262	0.396	0.444	0.463
Wald Chi2	388.00	475.543	857.472	1129.403	1263.484
Prob chi2	0.000	0.000	0.000	0.000	0.000

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01, Cluster robust standard errors per IDW2, Variables Center, Poor, Primary education have been dropped due to collinearity.

Table 6 Happiness and individual shocks with Random Effects and Cluster at the individual level

	(1)
Post	-0.0663
	(0.0573)
Trump surprise	0.0458
	(0.0626)
Diff in Diff	-0.141**
	(0.0711)
Age	-0.0235**
	(0.0111)
Age Squared	0.000166
	(0.000116)
Gender	0.0282
	(0.0501)
South & Islands	0.0887
	(0.0704)
Northwest	0.189***
	(0.0728)
Northeast	0.194**
	(0.0761)
Rich	0.904***
	(0.0881)
Middleclass	0.663***
	(0.0600)
College Graduates or more	-0.129
	(0.0878)
High School Graduates	-0.169**
	(0.0816)
Single	0.263
	(0.208)
In a Couple	0.659***
	(0.202)
Divorced -Separated	0.420*
	(0.223)
Personal Relations Satisfaction	0.356***
	(0.0385)
Net Emotion	0.538***
	(0.0467)
Leisure time satisfaction	0.313***
	(0.0324)
Bought a House	0.349**
	(0.140)
Get married or engaged	0.0336
	(0.251)
Had a Baby	0.0821
	(0.198)
Lost a loved one	-0.0573
	(0.106)
Got divorced/separated	0.271

	(0.200)
Changed job	0.137
	(0.158)
ResOPT	0.0890***
	(0.0203)
constant	3.737***
	(0.371)
Observations	4126
R2 Between	0.366
R2 Overall	0.467
Wald Chi2	1288.197
Prob Chi2	0.000

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01, Cluster robust standard errors per IDW2, Variables Center, Poor, Primary education have been dropped due to collinearity.

Figure 1

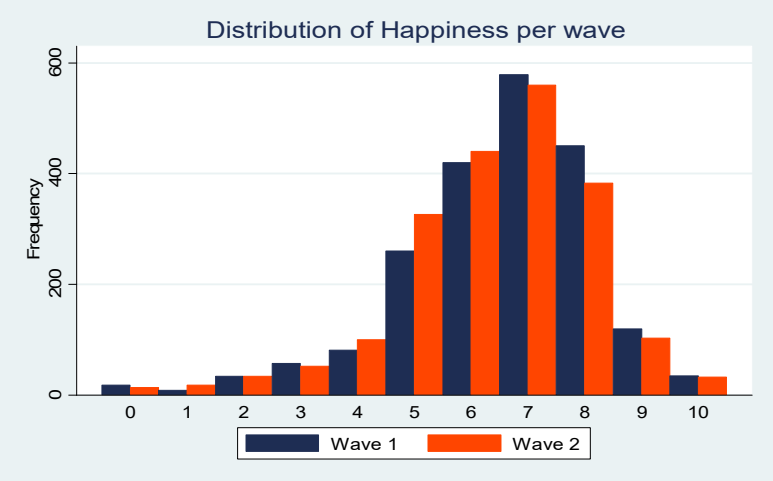


Figure2

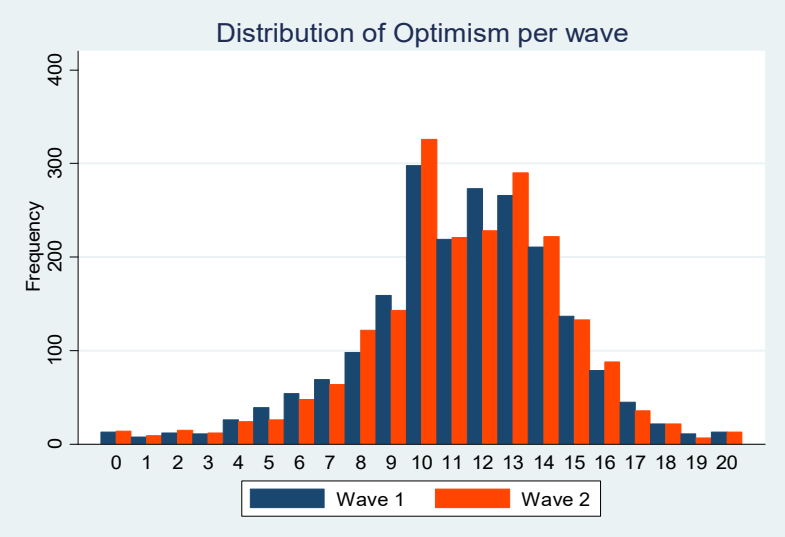
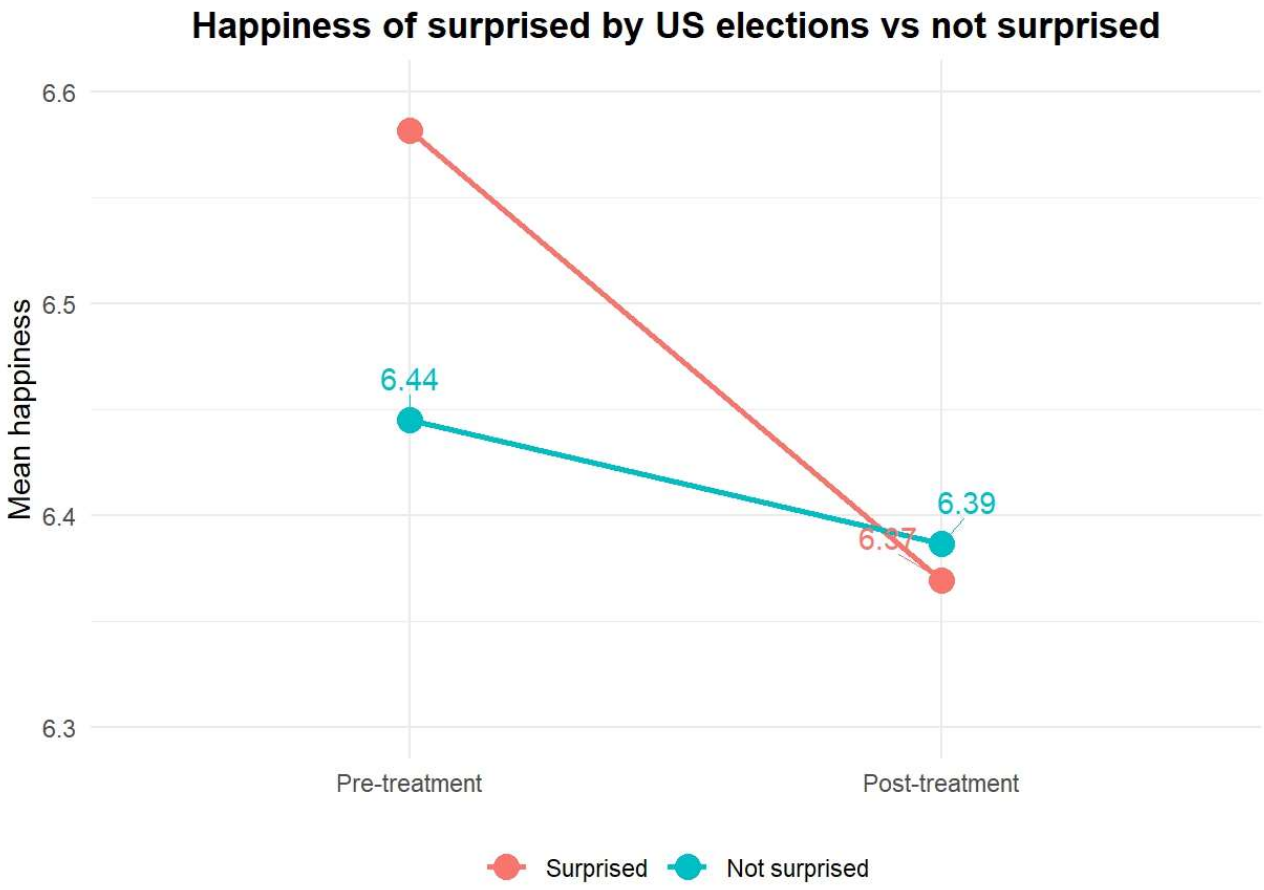


Figure 1


Happiness of surprised by US elections vs not surprised
Mean happiness
6.6
6.5
6.4
6.3
6.44
6.39
6.37
Pre-treatment
Post-treatment
Surprised
Not surprised

References

Araki, S., 2021. Does Education Make People Happy? Spotlighting the Overlooked Societal Condition. Journal of Happiness Studies, 23, pp. 587-629. https://doi.org/10.1007/S10902-021-00416-Y

Bartram, D. (2024). To Evaluate the Age–Happiness Relationship, Look Beyond Statistical Significance. Journal of Happiness Studies. https://doi.org/10.1007/s10902-024-00728-9

Beja, E. (2017). The U-shaped relationship between happiness and age: evidence using world values survey data. Quality & Quantity, 52, 1817 - 1829. https://doi.org/10.1007/s11135-017-0570-z

Blanchflower, D., Graham, C., & Piper, A. (2023). Happiness and age – resolving the debate. National Institute Economic Review, 263, 76 - 93. https://doi.org/10.1017/nie.2023.1

Bjuggren, C., & Elert, N., 2019. Gender differences in optimism. Applied Economics, 51, pp. 5160 - 5173. https://doi.org/10.1080/00036846.2019.1610714

Boehm, J., Chen, Y., Williams, D., Ryff, C., & Kubzansky, L., 2015. Unequally Distributed Psychological Assets: Are There Social Disparities in Optimism, Life Satisfaction, and Positive Affect?. PLoS ONE, 10. https://doi.org/10.1371/journal.pone.0118066

Busseri, M., & Erb, E., 2023. The happy personality revisited: Re-examining associations between Big Five personality traits and subjective well-being using meta-analytic structural equation modeling. Journal of personality. https://doi.org/10.1111/jopy.12862

Caprara, G., Fagnani, C., Alessandri, G., Steca, P., Gigantesco, A., Sforza, L., & Stazi, M., 2009. Human Optimal Functioning: The Genetics of Positive Orientation Towards Self, Life, and the Future. Behavior Genetics, 39, pp. 277-284. https://doi.org/10.1007/s10519-009-9267-y

Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). *Optimism*. Clinical Psychology Review, 30(7), 879–889. https://doi.org/10.1016/j.cpr.2010.01.006

Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. Journal of Public Economics, 61(3), 359–381. https://doi.org/10.1016/0047-2727(95)01564-7

Chopik, W., Oh, J., Kim, E., Schwaba, T., Krämer, M., Richter, D., & Smith, J., 2020. Changes in optimism and pessimism in response to life events: Evidence from three large panel studies. Journal of research in personality, 88. https://doi.org/10.1016/j.jrp.2020.103985

D'Ambrosio, C., Jäntti, M., & Lepinteur, A., 2019. Money and Happiness: Income, Wealth and Subjective Well-Being. Social Indicators Research, 148, pp. 47 - 66. https://doi.org/10.1007/s11205-019-02186-w

De Juan, R., Seijas, M. N., & Góngora, M. (2014). *Optimism and life satisfaction: A multivariate analysis using Spanish panel data*. Social Indicators Research, 118(3), 1195–1214. https://doi.org/10.1007/s11205-013-0451-6

Deaton, Angus, and A. Stone. "Do context effects limit the usefulness of self-reported wellbeing measures." Research Program in Development Studies Working Paper 288 (2013).

Deneve, K., & Cooper, H., 1998. The happy personality: a meta-analysis of 137 personality traits and subjective well-being. Psychological bulletin, 124 2, pp. 197-229. https://doi.org/10.1037/0033-2909.124.2.197

Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. Journal of Cross-Cultural Psychology, 31(4), 419–436. https://doi.org/10.1177/0022022100031004001

Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. Journal of Economic Psychology, 29(1), 94–122. https://doi.org/10.1016/j.joep.2007.09.001

Dawson, C., 2017. The upside of pessimism − Biased beliefs and the paradox of the contented female worker. Journal of Economic Behavior and Organization, 135, pp. 215-228. https://doi.org/10.1016/J.JEBO.2017.02.004

Easterlin, R. A. (2001). Income and happiness: Towards a unified theory. The Economic Journal, 111(473), 465–484. https://doi.org/10.1111/1468-0297.00646

Ferrer-i-Carbonell, A., & Frijters, P. (2004). How important is methodology for the estimates of the determinants of happiness?. *The economic journal*, *114*(497), 641-659.

Frijters, P., Johnston, D. W., & Shields, M. A. (2012). *The effect of personality and job characteristics on subjective well-being: A longitudinal analysis of self-employed and employed individuals*. Journal of Economic Behavior & Organization, 84(1), 239–253. https://doi.org/10.1016/j.jebo.2012.04.001

Galambos, N., Krahn, H., Johnson, M., & Lachman, M. (2020). The U Shape of Happiness Across the Life Course: Expanding the Discussion. Perspectives on Psychological Science, 15, 898 - 912. https://doi.org/10.1177/1745691620902428

Graham, C., & Pozuelo, J. (2017). Happiness, stress, and age: how the U curve varies across people and places. Journal of Population Economics, 30, 225-264. https://doi.org/10.1007/S00148-016-0611-2

Hayo, Bernd & Seifert, Wolfgang. (2003). Subjective economic well-being in Eastern Europe. *Journal of Economic Psychology*, 24(3), 329–348. DOI:10.1016/S0167-4870(02)00173-3

Hsu, T.-L. and Barrett, A.E. (2020) The Association between Marital Status and Psychological Well-being: Variation across Negative and Positive Dimensions. Journal of Family Issues, 41, 2179-2202. https://doi.org/10.1177/0192513X20910184

Inglehart, R., 2002. Gender, Aging, and Subjective Well-Being. International Journal of Comparative Sociology, 43, pp. 391 - 408. https://doi.org/10.1177/002071520204300309

Kahneman, D., & Deaton, A. (2010). *High income improves evaluation of life but not emotional well-being*. Proceedings of the National Academy of Sciences, 107(38), 16489–16493. https://doi.org/10.1073/pnas.1011492107

Kahneman, D., & Krueger, A. B. (2006). *Developments in the measurement of subjective well-being*. Journal of Economic Perspectives, 20(1), 3–24. https://doi.org/10.1257/089533006776526030

Khodarahimi, S., 2015. The Role of Marital Status in Emotional Intelligence, Happiness, Optimism and Hope 1. Journal of Comparative Family Studies, 46, pp. 351-371. https://doi.org/10.3138/JCFS.46.3.351

Lauriola, M., & Iani, L., 2017. Personality, Positivity and Happiness: A Mediation Analysis Using a Bifactor Model. Journal of Happiness Studies, 18, pp. 1659-1682. https://doi.org/10.1007/S10902-016-9792-3

Liberini, F., Redoano, M., & Proto, E., 2017. Happy Voters. Journal of Public Economics, 146, pp. 41-57. https://doi.org/10.1016/j.jpubeco.2016.11.013.

Lucas, R. E., & Clark, A. E. (2006). Do people really adapt to marriage? Journal of Happiness Studies, 7(4), 405–426. https://doi.org/10.1007/s10902-006-9001-x

Oreopoulos, P., & Salvanes, K. G. (2011). Priceless: The nonpecuniary benefits of schooling. Journal of Economic Perspectives, 25(1), 159–184. https://doi.org/10.1257/jep.25.1.159

Pierce, L., Rogers, T., & Snyder, J., 2016. Losing Hurts: The Happiness Impact of Partisan Electoral Loss. Journal of Experimental Political Science, 3, pp. 44 – 59. https://doi.org/10.1017/XPS.2015.8

Patkós, V., & Farkas, E., 2020. Wearing rose-coloured glasses. The happiness effect of party attachments in Europe. Journal of Contemporary European Studies, 28, pp. 556 - 569. https://doi.org/10.1080/14782804.2020.1801395

Piper, A. (2023), What Does Dynamic Panel Analysis Tell Us About Life Satisfaction?. Review of Income and Wealth, 69: 376-394. https://doi.org/10.1111/roiw.12567

Powdthavee, N. How much does money really matter? Estimating the causal effects of income on happiness. Empir Econ 39, 77–92 (2010). https://doi.org/10.1007/s00181-009-0295-5

Quevedo, R., & Abella, M., 2011. Well-being and personality: Facet-level analyses. Personality and Individual Differences, 50, pp. 206-211. https://doi.org/10.1016/J.PAID.2010.09.030

Scheier, M. F., Carver, C. S., & Bridges, M. W.,1994. Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. Journal of Personality and Social Psychology, 67, pp. 1063–1078. https://doi.org/10.1037/0022-3514.67.6.1063

Schwarz, N., & Clore, G. L. (1983). *Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states*. Journal of Personality and Social Psychology, 45(3), 513–523. https://doi.org/10.1037/0022-3514.45.3.513

Wood, W., Rhodes, N., & Whelan, M., 1989. Sex Differences in Positive Well-Being: A Consideration of Emotional Style and Marital Status. Psychological Bulletin, 106, pp. 249-264. https://doi.org/10.1037/0033-2909.106.2.249

Appendix 1. Nielsen Telepanel features and comparison with the ISTAT (Italian Institute for Statistics) Universe

The Nielsen Telepanel for Italy, owned by CSA, comprises a representative sample of Italian households, with heads of household residing in approximately 450 municipalities. The sample is stratified based on the size of the municipality and geographical regions, and subsequently post-stratified to align with official data provided by ISTAT. The post-stratification criteria include gender and age of individuals, four macro geographical areas, educational attainment, and employment status. The panel includes approximately 1,500 families and can be disaggregated into sub-samples that retain representativeness. The panel experiences an annual turnover rate of approximately 20–25%, which is attributable to voluntary withdrawal and methodological adjustments aimed at countering structural changes and minimizing respondent habituation. Panelist retention is supported through sustained personal contact, which helps ensure diligent and complete questionnaire responses. Upon enrollment, panelists enter into a contractual agreement in which they commit to completing the questionnaires personally and not delegating any portion of this responsibility to others. Each participant is provided with unique login credentials, which are non-transferable, as stipulated in the signed agreement. This requirement is reinforced both at the survey's inception and throughout the study period. Additionally, at each instance of accessing the Telepanel platform, respondents are reminded via an introductory message to provide responses that are free, truthful, and uninfluenced by others.

To confirm the representativeness of the sample, Table A.1 presents a comparison between the primary socio-demographic characteristics of the Telepanel sample and those of the Italian resident population aged 18–74, as reported by ISTAT.

UNIVERSE (18-74 ANNI) 42.622.710

	ISTAT (N)	**ISTAT (%)**	**SAMPLE(%)**
Sex			
MALE	21190856	**49,7**	**49,7**
FEMALE	21431854	**50,3**	**50,2**
NON BINARY		**0,0**	**0,1**
TOTAL	42622710	**100,0**	**100,0**
AGES			
18-24	4135432	**9,7**	**10,0**
25-34	6253514	**14,7**	**14,3**
35-44	7039415	**16,5**	**16,3**
45-54	9143145	**21,5**	**21,7**
55-64	9131791	**21,4**	**21,5**
65-74	6919413	**16,2**	**16,2**
TOTAL	42622710	**100,0**	**100,0**
GEOGRAPHICAL AREAS			
NORTH-EAST	11417832	**26,8**	**26,6**
NORTH -WEST	8323586	**19,5**	**19,3**
CENTER	8450523	**19,8**	**19,9**
SOUTH AND ISLANDS	14430769	**33,9**	**34,3**
TOTAL	42622710	**100,0**	**100,0**

Appendix 2. Robustness check

Table 4. A2 Robustness Check. Optimism_av with Random Effects and Cluster at individual level

	Optimism as average of all items
Age	-0.0197***
	(0.00463)
Age squared	0.000226***
	(0.0000477)
Gender	0.0602***
	(0.0202)
South & Islands	0.0438
	(0.0301)
Northwest	0.0324
	(0.0311)
Northeast	-0.0174
	(0.0329)
Rich	0.252***
	(0.0302)
Middleclass	0.130***
	(0.0195)
College Graduates or more	-0.0321
	(0.0333)
High School Graduates	-0.0364
	(0.0301)
Single	0.0199
	(0.0576)
In a couple	0.0653
	(0.0541)
Divorced-Separated	0.0213
	(0.0648)
Financial Situation in 12 months better	0.166***
	(0.0197)
Financial Situation in 12 months worse	-0.195***
	(0.0204)
Financial Knowledge	0.0971***
	(0.0172)
Constant	2.269***
	(0.128)
Observation	4126
R2 overall	0.173
R2 between	0.200
Wald Chi2	430.228
Prob> Chi2	0.000

Standard errors in parentheses
Cluster robust standard errors per IDW2
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Center Poor and Primary education dropped for multicollinearity.

Table 5.A2 Robustness Check. Happiness regressions with Actual Financial Situation

	(1)	(2)	(3)	(4)	(5)
Post	-0.101*	-0.111*	-0.0820	-0.0844	-0.0933*
	(0.0569)	(0.0567)	(0.0562)	(0.0564)	(0.0562)
Trump Surprise	0.102	0.0839	0.0437	0.0116	0.0121
	(0.0723)	(0.0706)	(0.0646)	(0.0628)	(0.0619)
Diff in Diff	-0.138*	-0.124*	-0.123*	-0.117*	-0.117*
	(0.0711)	(0.0711)	(0.0707)	(0.0705)	(0.0700)
Age	-0.0513***	-0.0512***	-0.0334***	-0.0263**	-0.0205*
	(0.0131)	(0.0127)	(0.0113)	(0.0109)	(0.0107)
Age squared	0.000423***	0.000419***	0.000252**	0.000193*	0.000121
	(0.000138)	(0.000133)	(0.000118)	(0.000114)	(0.000112)
Gender	0.0856	0.0825	0.0797	0.0503	0.0368
	(0.0589)	(0.0570)	(0.0514)	(0.0493)	(0.0483)
South & Islands	0.106	0.108	0.103	0.112	0.126*
	(0.0854)	(0.0829)	(0.0737)	(0.0704)	(0.0680)
Northwest	0.258***	0.258***	0.199***	0.194***	0.176**
	(0.0869)	(0.0840)	(0.0752)	(0.0717)	(0.0701)
Northeast	0.202**	0.201**	0.198**	0.192**	0.175**
	(0.0913)	(0.0885)	(0.0810)	(0.0762)	(0.0742)
Actual Financial Situation	0.618***	0.658***	0.547***	0.513***	0.492***
	(0.0343)	(0.0337)	(0.0323)	(0.0315)	(0.0311)
College Graduates or more	-0.183*	-0.204**	-0.176**	-0.157*	-0.158*
	(0.101)	(0.0976)	(0.0890)	(0.0862)	(0.0846)
High School Graduates	-0.248***	-0.259***	-0.215***	-0.208***	-0.206***
	(0.0923)	(0.0894)	(0.0825)	(0.0799)	(0.0788)
Single	0.186	0.168	0.238	0.218	0.191
	(0.223)	(0.218)	(0.203)	(0.201)	(0.201)
In a Couple	0.681***	0.675***	0.649***	0.607***	0.591***
	(0.217)	(0.212)	(0.198)	(0.196)	(0.196)
Divorced-Separated	0.489**	0.490**	0.473**	0.407*	0.398*
	(0.241)	(0.235)	(0.219)	(0.215)	(0.215)
Personal Relation Satisfaction			0.614***	0.471***	0.349***
			(0.0345)	(0.0358)	(0.0375)
Net Emotion				0.602***	0.513***
				(0.0454)	(0.0452)
Leisure time Satisfaction					0.300***
					(0.0316)
ResOPT§		0.166***	0.129***	0.104***	0.0938***
		(0.0199)	(0.0205)	(0.0204)	(0.0199)
Constant	5.352***	5.259***	2.989***	3.399***	2.783***
	(0.407)	(0.397)	(0.382)	(0.374)	(0.370)
Observations	4126	4126	4126	4126	4126
R2 overall	0.198	0.236	0.340	0.377	0.396
R2 between	0.259	0.313	0.438	0.481	0.498
Wald Chi2	490.189	593.914	1010.995	1265.330	1396.740
Prob Chi2	0.000	0.000	0.000	0.000	0.000

Standard errors in parentheses. Cluster robust standard errors per IDW2 * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ Variable Center and primary education have been dropped for multicollinearity § residual of the regression optimism as in table 4 where income effect has been measured by the variable Actual Financial Situation

Table 6.A2 Robustness check. Happiness with individual personal occurrence using the variable Actual Financial Situation instead of income.

	(1) happiness
Post	-0.108*
	(0.0570)
Trump Surprise	0.0114
	(0.0619)
Diff-in-Diff	-0.116*
	(0.0704)
Age	-0.0201*
	(0.0107)
Age Squared	0.000122
	(0.000111)
Gender	0.0354
	(0.0483)
South& Islands	0.127*
	(0.0678)
Northwest	0.177**
	(0.0700)
Northeast	0.174**
	(0.0740)
Actual Financial Situation	0.488***
	(0.0312)
College Graduates or more	-0.163*
	(0.0847)
High School Graduates	-0.207***
	(0.0788)
Single	0.190
	(0.201)
In couple	0.588***
	(0.196)
Divorced-Separated	0.381*
	(0.215)
Personal Relation Satisfaction	0.346***
	(0.0375)
Net Emotion	0.518***
	(0.0455)
Leisure Time Satisfaction	0.300***
	(0.0316)
Bought a House	0.226*
	(0.134)
Got Married or Engaged	0.0155
	(0.238)
Had a Baby	0.0995
	(0.200)
Lost a Loved One	-0.0577
	(0.105)
Got divorced/separated	0.251
	(0.204)

Changed Job	0.163
	(0.150)
Resopt§	0.0940***
	(0.0201)
Constant	2.786***
	(0.370)
Observation	4126
R2 overall	0.398
R2 between	0.500
Wald Chi2	1417.129
Prob > Chi2	0.000

Standard errors in parentheses Cluster robust standard errors per IDW2

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Center and primary education have been dropped for multicollinearity. § residual of the regression optimism as in table 4 where income effect has been measured by the variable Actual Financial Situation