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ABSTRACT

Are Happier People More Compliant? Global Evidence From Three Large-Scale Surveys During Covid-19 Lockdowns*

Around the world, governments have been asking their citizens to practice physical distancing and stay at home to contain the spread of Covid-19. Are happier people more willing to comply with these measures? Using three independent surveys covering over 119,000 adult respondents across 35 countries, including longitudinal data from the UK, we test competing psychological theories, and find that past and present happiness predicts compliance during lockdown. The relationship is stronger for those with higher levels of happiness. A negative mood, or loss in happiness, predicts lower compliance. We explore risk-avoidance and pro-social motivations for compliance, and find that these are not uniform but dependent on personal characteristics and context: people who are older or have certain medical preconditions seem to be predominantly motivated by risk-avoidance, whereas motivations of people who are less at risk of Covid-19 seem more mixed. Our findings have implications for policy design, targeting, and communication.

JEL Classification: I31, D91, I12

Keywords: COVID-19, lockdown compliance, happiness, mood maintenance, risk-avoidance, pro-sociality

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Introduction

There is growing evidence on the predictive power of wellbeing, hereafter referred to as *happiness,* for behaviour. People who are happier have been shown to be more productive (De Neve and Oswald, 2012; Oswald et al., 2015), live longer (Danner et al., 2001; Diener and Chan, 2011; Steptoe and Wardle, 2011; Graham and Pinto, 2019), and be more likely to vote for an incumbent (Liberini et al., 2017; Ward, 2019; Ward et al., 2020).

We contribute to this literature by studying whether happiness predicts civic compliance, defined as sustained change in the behaviour of individuals choosing to adhere to recommendations of authorities. In particular, we looked at the unique setting of Covid-19 lockdowns, in which governments around the world have been asking their citizens to substantially change their behaviour for a prolonged period of time, by practising physical distancing and staying at home, to contain the pandemic. Are happier people more willing to comply with these measures?

The answer to this question is not *ex-ante* clear, for two reasons. First, it is not entirely clear what, in the current situation, motivates compliance. Motivations could range from risk-avoidance (avoiding health risk to oneself or one's family and friends, or avoiding legal risk from non-compliance) to pro-social behaviour (helping unknown others or the system as a whole), amongst others. Although non-compliance entails personal risks, many governments appealed to pro-sociality. For example, during most of the UK lockdown, the government's appeal was "Stay at Home, Protect the NHS [National Health Service], Save Lives" – a pro-social appeal in a loss aversion framing. What is more, motivations may vary, even within the same individual over time.

Second, psychological theories make contradictory predictions about the effect of happiness on compliance, regardless of whether the motivation is risk-avoidance or pro-social behaviour. The *affect infusion model* (Forgas, 1995) predicts that happier people show less compliance, because positive affect makes people perceive risky prospects more favourably

(in case of risk-avoidance) or because it creates more internally oriented mental processing that promotes selfishness (in case of pro-sociality) (Tan and Forgas, 2010; Forgas and Tan, 2013). On the contrary, the *mood maintenance model* (Isen and Patrick, 1983) predicts that happier people show more compliance in case of risk-avoidance, as positive affect makes people more loss averse (Johnston and Tversky, 1983). This is in line with expected utility theory: people with a higher marginal utility of life (who enjoy life more) have more to lose, cf. Goudie et al., 2014). In case of pro-sociality, predictions can go either way: happier people may show more compliance if it promotes their self-image, makes them appear more favourable in social comparisons, or promotes positive feelings more generally. However, they may show less compliance if complying becomes too unpleasant (Carlson et al., 1988). Table 1 summarises these predictions.

[Table 1 here]

We exploited Covid-19 lockdowns as large-scale, quasi-natural experiments to test these contradictory predictions, studying whether past and present happiness predicts compliance, observed and self-reported, between and within countries. Covid-19 lockdowns yield ideal experimental conditions: they require a homogeneous set of behaviours for a limited amount of time from almost everybody in the population, with few exceptions. However, people differ in terms of health consequences when catching the virus: the case-fatality ratio increases exponentially from age 60 onwards (Levin et al., 2020; Verity et al., 2020) and with certain medical preconditions, i.e. high blood pressure, diabetes, heart and lung disease (Chen et al., 2020; Fang et al., 2020). We exploited these age and health gradients to study motivations for behaviour.

Using nationally representative cross-section data on about 50,000 respondents from 892 regions in 49 countries from the Gallup World Poll, in Study 1, we ran a cross-country

analysis, studying whether regions that reported higher levels of happiness in 2019 showed higher levels of compliance during subsequent lockdowns in 2020. We measured compliance objectively, using changes in geographical mobility, measured by Google smartphone recorded time spent in various areas such as retail, parks, and residential.

In Study 2, we looked at whether present individual happiness predicts self-reported individual compliance during lockdowns. Here, we used cross-section data on about 39,000 respondents from 330 regions in 20 countries from the Imperial College London-YouGov Covid-19 Behavioural Tracker.

In Study 3, we focused on lockdown in a single country – the UK – exploiting a novel panel of more than 30,000 individuals – the University College London Covid-19 Social Survey – which started just before lockdown began (March 23) and includes weekly data on participants across the entire 'strict' lockdown period (March 23 to May 10, 2020). We applied individual fixed effects and dynamic panel data models to study how present individual happiness predicts self-reported individual compliance longitudinally.

Methods and Results

Study 1: Cross-Sectional Evidence on Regional Happiness and Observed Regional Compliance

Throughout the world, in the winter and spring months of 2020, different countries (and different regions within countries) introduced lockdowns to contain the spread of Covid-19. They were introduced in different places at different points in time, and they varied regarding their severity, depending on local and regional characteristics as well as number of confirmed cases and deaths. It is estimated that, by late March 2020, more than 100 countries had introduced either full or partial lockdowns (BBC, 2020).

Data and Methods. To study whether past regional happiness predicts observed regional compliance during lockdowns, we used cross-sectional data from the Gallup World

Poll, a nationally representative survey which is conducted annually in more than 160 countries worldwide and which includes data on about 1,000 respondents' happiness alongside a wide range of individual, household, and regional characteristics in each country. We merged these data with two other datasets at the regional level: the Oxford COVID-19 Government Response Tracker (Hale et al., 2020), which includes daily data on the stringency of lockdown measures (at the country level) as well as confirmed cases and deaths (at the regional level); and the Google COVID-19 Community Mobility Reports, which include daily, regional data on smartphone recorded geographical movement to various areas, which we took as objective measures of compliance behaviour (ActiveConclusion, 2020; Google, 2020).

Our outcomes were daily percentage changes in smartphone recorded geographical time spent in in residential, retail or recreation, grocery or pharmacy, parks, transit, and workplace areas. These daily changes were compared to an average baseline day between January 3 and February 6, 2020. Our variable of interest was life evaluation (also known as the *Cantril ladder*). We regressed regional-level geographical mobility during Covid-19 lockdowns in 2020 on regional-level happiness in 2019, controlling for individual, household, and regional characteristics; the regional number of confirmed cases and deaths; and week, weekday, and country fixed effects. We restricted our analysis to periods where the stringency of lockdown measures was (at least) as high as that observed during the 'strict' lockdown period in the UK. We imposed this restriction to maximise comparability between Studies 1 to 3 (our results continue to hold when lifting it). Our sample included data on between 48,520 and 50,966 adult respondents (depending on outcome) within 892 regions in 49 countries. See the Supplementary Materials on Study 1 for model specifications and summary statistics.

Results. We found that higher regional-level happiness in 2019 is associated with higher regional-level compliance during Covid-19 lockdowns in 2020. In particular, we found that a one-point increase in life evaluation (measured on a zero-to-ten scale) in 2019 is

associated with decreases between ten and 22 percent in time spent in retail or recreation, grocery or pharmacy, parks, transit, and workplaces (Supplementary Materials Table S.1.1). Mobility in residential areas, on the contrary, increases by about six percent. Tables S.1.2 and S.1.3 show findings for positive and negative affect: while positive affect mirrors life evaluation, albeit with smaller effect sizes, we found the opposite for negative affect. Higher levels of negative affect in 2019 are associated with less regional-level compliance behaviour in 2020, as manifested in more time spent in grocery or pharmacy, transit, and workplaces, as well as less in residential areas.

Study 2: Cross-Sectional Evidence on Individual Happiness and Self-Reported Individual Compliance

We next studied whether present individual happiness predicts individual compliance during lockdowns. In contrast to before, we now looked at self-reported compliance behaviour, rather than observed geographical mobility.

Data and Methods. We used cross-sectional data from the Imperial College London-YouGov Covid-19 Behavioural Tracker, an international survey which has been running in 29 countries since April 2020 and which includes data on about 21,000 respondents' happiness alongside individual and household characteristics in each week, with a particular focus on behaviour in response to Covid-19 and lockdown (Jones and YouGov Plc., 2020). We again merged these data with the Oxford COVID-19 Government Response Tracker to include the stringency of lockdown measures (at the country level) as well as confirmed cases and deaths (at the regional level).

Our main outcome was the extent to which a respondent reported to be willing to self-isolate for seven days if asked by a healthcare professional or public health authority. Other outcomes included the frequency of complying with 20 common preventive behaviours, for example wearing a face mask, for which we created an index of compliance. We regressed

self-reported compliance behaviour on respondents' happiness during lockdowns, controlling for individual and household characteristics; the regional number of confirmed cases and deaths; and week, weekday, and country fixed effects. We restricted our analysis to respondents who (and whose cohabitants) had never been tested for Covid-19 and who had never had any symptoms. As before, we restricted our analysis to periods where the stringency of lockdown measures was (at least) as high as that observed during the 'strict' lockdown period in the UK for comparability between Studies 1 to 3 (our results continue to hold when lifting it). Our sample included data on between 12,520 and 38,910 adult respondents (depending on outcome) in 20 countries. See the Supplementary Materials on Study 2 for model specifications and summary statistics.

Results. We found that higher happiness of respondents is associated with more self-reported compliance behaviour during lockdowns. Associations are highly significant at the one percent level, but effect sizes are smaller than with observed mobility: a one point increase in life evaluation (measured on a zero-to-ten scale) increases respondents' willingness to comply with authorities' recommendations by about one percentage point. Their index of compliance behaviour increases by about one percent of a standard deviation (Supplementary Materials Table S.2.1). Table S.2.2 shows that life evaluation has consistent, significant positive associations with self-reported compliance with various preventive behaviours, including washing hands or using sanitisers, avoiding shopping, or avoiding transit and crowded areas.

Study 3: Longitudinal Evidence on Individual Happiness and Self-Reported Individual Compliance

We finally studied how present individual happiness predicts self-reported individual compliance longitudinally within individuals, using the example of a single country: the UK. The full UK lockdown officially started on Monday, March 23, 2020, after a prime-time

television broadcast by Prime Minister Boris Johnson appealing to the general public to stay at home. This came after the Prime Minister had already ordered all pubs, cafés, restaurants, bars, and gyms to close, and after the Chancellor of the Exchequer had announced that the taxpayer would meet 80 percent of the wages of employees who could not do their work under lockdown. At this point, many people were already voluntarily staying at home. As elsewhere, the nationwide lockdown was essentially a curfew under which people should leave their homes only for several reasonable excuses, including essential shopping or one outdoor exercise per day. It effectively ended on Sunday, May 10, 2020, when the Prime Minister announced a three-step plan for going back to normality. As of the next day, certain non-essential workers in England were encouraged to go back to work and unlimited outdoor exercise was allowed (still subject to physical distancing).

Data and Methods. We used longitudinal data from the University College London Covid-19 Social Survey, a novel weekly online panel of more than 70,000 individuals in England, Wales, Scotland, and Northern Ireland, which started on March 21, 2020, and is still ongoing. We limited our analyses to the "hard" lockdown period, covering the time from March 20 to May 10, 2020. We further restricted it to respondents who identify as non-key workers (leading to the exclusion of essential workers, for example in health or social care, who were not in lockdown); respondents who report to have never had Covid-19 themselves; and respondents who report to have never had contact with people who had contracted the virus. Our analyses were robust to lifting these restrictions.

We looked at a range of self-reported outcomes of compliance. These included *(i)* the number of days during the past seven days the respondent reported to have stayed at home and not left the house; *(ii)* whether the respondent reported to be either fully, partially, or not at all self-isolating at present; and *(iii)* the degree to which the respondent reported to be complying with government recommendations. Fully self-isolating means not leaving home at all, partially self-isolating means complying with stay-at-home recommendations and leaving

home only for necessary activities, and not at all self-isolating means complying with stay-at-home recommendations and living life as normally as possible. Our primary variable of interest was life satisfaction. Throughout our analyses, we controlled for a wide range of observables, including demographics, socio-economic characteristics, preference for socialisation, Covid-19 knowledge, confidence in government and the public health service, the Big-5 personality traits, mental health (PHQ-9 for depression and GAD-7 for anxiety), and the average daily new number of both Covid-19 cases and Covid-19 deaths at the level of the constituent countries of the UK (England, Wales, Scotland, and Northern Ireland), obtained from the Oxford COVID-19 Government Response Tracker.

We started with simple pooled OLS regressions which do not account for the panel dimension of the data, and then made our models successively more restrictive: first, we accounted for individual fixed effects (time-invariant unobservables and observables at the individual level) using both with-transformation and first-differences. Then, we allowed for lagged compliance (up to a second lag as compliance behaviour followed an AR(2) process) to influence current compliance behaviour, applying dynamic panel data models using Arellano-Bond estimators. In these models, past compliance is held constant to explain current compliance behaviour jointly with current happiness. We also included week-day, area (various degrees of urbanisation), and constituent country (England, Wales, Scotland, and Northern Ireland) fixed effects. Our sample included data on between 28,897 and 34,378 adult respondents (depending on outcome and model). See the Supplementary Materials on Study 3 for model specifications and summary statistics.

Results. Table 2 shows our central result. We found that individuals who report higher levels of life satisfaction are significantly more likely to report higher levels of compliance.

[Table 2 here]

This is especially true for the number of days during the past seven days the respondent reports to have stayed at home and not left the house. A one-unit increase in life satisfaction on a zero-to-ten scale increases the number of weekdays stayed at home by about 0.2 (about 1% of a standard deviation) in our most restrictive model (our Arellano-Bond dynamic panel data estimator). The size of the effect is about the same as anxiety (also about 1% of a standard deviation), but less than confidence in government or the public health service (both about 3%). Impacts on other self-reported measures of compliance depend somewhat on the model chosen, but broadly confirm that happier individuals are more likely to show more compliance.

Taking forward our main outcome, the number of weekdays stayed at home, we next used a categorical instead of a numerical measure of life satisfaction in our regressions. Our most restrictive model showed that the association between happiness and compliance is primarily driven by people with above average happiness (Supplementary Materials Table S.3.2). The size of the association is strongest for individuals who report a life satisfaction of seven or above on the zero-to-ten scale (the average life satisfaction is about six). Notably, the first-differences estimator showed that reductions in life satisfaction are associated with less days, while increases are associated with more weekdays stayed at home (discounting the outlier for individuals changing from zero to ten life satisfaction points).

Next, we regressed the number of weekdays stayed at home on respondents' life satisfaction in the current and in the previous week, at the same time, to look at temporal dynamics. While current life satisfaction has a significant positive association with the number of weekdays stayed at home, the association with past life satisfaction turns out mostly negative and less significant (Supplementary Materials Table S.3.4). This is especially true for the Arellano-Bond dynamic panel data estimator, which also controls for the past number of weekdays stayed at home.

Finally, we ran regressions for two groups of people separately, to study underlying motivations for compliance behaviour: people who are at high risk (defined as being above 60 years of age or having certain medical preconditions, including high blood pressure, diabetes, and heart and lung disease) *versus* people who are at low risk (being below 60 years and having no relevant preconditions). We first looked at the two groups of people during the entire lockdown period (Supplementary Materials Table S.3.6) and then partitioned the lockdown period into two parts of roughly equal duration, by interacting life satisfaction with a dummy for the pre-April 15 period (Supplementary Materials Table S.3.8).

Studying the entire lockdown period first, we found that associations between happiness and compliance are stronger for the high-risk group. For the low-risk group, associations are weaker and insignificant. Looking at the partitioned lockdown period, we found a positive association between happiness and compliance for the high-risk group throughout the lockdown period, as indicated by the significant, positive main effect of life satisfaction (except for the Arellano-Bond estimator, which also failed the Hansen test). For the low-risk group, however, we found an insignificant main effect of life satisfaction and a positive significant interaction between life satisfaction and the pre-April 15 dummy. This suggests that, while happiness is positively associated with compliance for the low-risk group in the first half of lockdown, this is not the case in the second half, with an indication for a slightly negative association (the main effect has a negative sign but fails to reach significance).

The Supplementary Materials on Study 3 include a full set of tables that replicated the previous results by additionally accounting for a linear time trend (week fixed effects), which confirmed our results. Our results also held when jointly inserting linear, quadratic, and cubic time trends; when using a balanced panel to account for out-of-sample selection; and when clustering standard errors at the daily date level. Table S.3.10 replaced life satisfaction with worthwhileness of things in life (as a eudemonic measure of subjective wellbeing), which

showed similar results. Finally, we confirmed our previous findings on changes in Google smartphone recorded geographical movement to various areas using this sample (Table S.3.11).

Discussion

Figure 1 summarises our findings, by showing the impact of a one-standard deviation change in happiness on all outcomes across Studies 1 to 3, measured in terms of standard deviations (tenth of a standard deviation in case of time spent in geographical areas).

[Figure 1 here]

We found that higher levels of past and present happiness predict higher levels of compliance during Covid-19 lockdowns, regardless of whether measured objectively using observed changes in Google smartphone recorded time spent in different areas or subjectively using self-reports. The relationship holds for different measures of happiness, including evaluations (life evaluation, satisfaction), experiences (positive, negative affect), and eudemonia (worthwhileness of things in life). Reductions in life satisfaction and negative affect are associated with less compliance, in line with Leith and Baumeister (1996). The relationship holds cross-sectionally between regions as well as longitudinally within a large number of survey participants in the UK. For this longitudinal analysis, we used individual fixed effects and dynamic panel data estimators, holding constant a wide range of time-varying observables, time-invariant unobservables and observables, and lagged compliance. Associations are modest (about a third in size compared to confidence in government). This is expected: our models yield associations for *residual* happiness after netting out observables and unobservables.

Our findings are in line with the mood maintenance model (Isen and Patrick, 1983; Johnston and Tversky, 1983; Carlson et al., 1988). Motivations for compliance, however, do not seem to be uniformly distributed. We found associations to be stronger for high-risk individuals, who are older or have certain medical preconditions, suggesting that, when stakes are high, risk-avoidance is likely to be the predominant motivation (see Table 1). Our analysis of the UK lockdown suggests that, for younger and healthier individuals, happiness increased compliance in the first half of lockdown but not in the second (or even decreased it). This suggests that, while younger and healthier individuals may have been motivated by risk-avoidance or pro-sociality at the beginning of lockdown, their motivation may have changed as it went on. In fact, a negative association in the second half of lockdown suggests a decrease in pro-sociality.

The predominant motivation underlying compliance is probably context-dependent: the same person may be motivated by risk-avoidance at one point and pro-socially at another. It is difficult to disentangle these empirically: the mood maintenance model makes the same predictions about an increase in happiness for both risk-avoidance and pro-social motivations (only a decrease, as was the case for younger and healthier individuals, points towards a change in pro-sociality). Deeper mechanisms behind pro-sociality may be diverse, ranging from sympathy and compassion (Eisenberg, 2000) to reciprocity or self-image. Our data are not granular enough to disentangle these. Likewise, they cannot disentangle deeper mechanisms behind risk-avoidance: for example, risk-avoidance may be self-regarding or other-regarding, which is more pro-social. It is likely that legal risk (from non-compliance) is more uniformly distributed across the age and health gradient.

An alternative motivation may be social norms, whereby risk-avoidance or pro-sociality may become a norm. A positive association between happiness and compliance may then result from adherence to a norm, and *vice versa* (Tan and Forgas, 2010; Carlson et al., 1988; Hertel et al., 2000). Although we cannot rule out this possibility, we note that social

norms typically take some time to emerge and the seven weeks of UK lockdown were rather short.

Our paper contributes to the literature on emotions, mood, risk-taking, and pro-social behaviour (see Lerner and Keltner (2001) and Aknin et al. (2013), for example). It also contributes to a growing literature on the determinants of compliance during Covid-19 lockdowns, including socio-demographic factors (Brown and Ravallion, 2020), beliefs and expectations (Akesson et al., 2020; Briscese et al., 2020; Kozlowski et al., 2020), social capital (Bargain and Aminjonov, 2020), and partisanship (Goldstein and Wiedemann, 2020; Simonov et al., 2020). By pointing towards the potentially mediating role of happiness for risk-taking and compliance, our paper may help reconcile contradictory evidence on risk-avoidance and compliance, in particular that perceived personal health risks associated with Covid-19 are found to decrease with age (Bordalo et al., 2020) yet that regions with less risk-takers and higher shares of older populations are found to be more compliant (Chan et al., 2020).

Sheth and Wright (2020), using a student sample, found that neither risk nor social preferences or pre-existing health conditions are predictive of compliance. The motivations of younger and healthier people, therefore, remain an important area for research. We found that negative affect is associated with less compliance, which may help explain reactance bias, rebelliousness, and protests against lockdown measures in many countries.

There are several limitations to this paper. Although we employed three large-scale, cross-sectional and longitudinal surveys covering several countries, each of them is likely to underrepresent the most reluctant non-compliers. Besides issues of external validity, we were unable to establish causality. Finally, our data are not detailed enough to clearly identify mechanisms. Future data collection should include measures of happiness and compliance alongside mechanisms.

Our findings matter at a practical level: for individuals, they highlight the importance of being aware of the role that one's own mood plays for one's behaviour. Policy-makers could directly device interventions aimed at raising wellbeing during lockdowns, targeting groups at risk of low wellbeing. Indirectly, policy-makers could target policies and policy communication more precisely to match motivations for compliance, be they risk-avoidance or pro-social. More generally, our findings suggest that a stronger focus on wellbeing in policy-making could help increase compliance with some of the toughest measures of our time.

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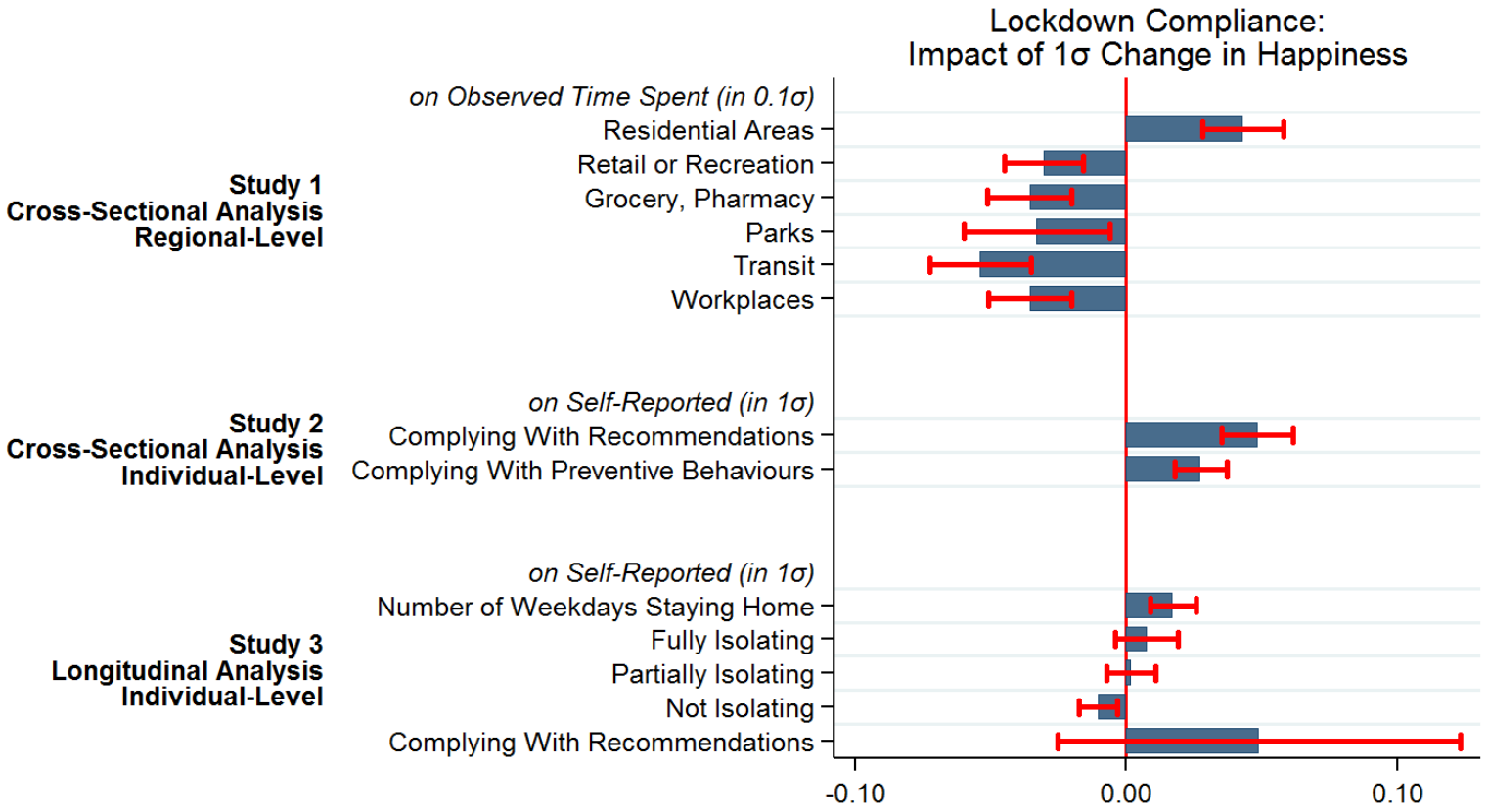
Appendix

Figure 1: Summary of Main Findings



Notes: See Supplementary Materials Table S.1.1 for table to findings of Study 1, Supplementary Materials Table S.2.1 for Study 2, and Table 3.1 Column 4 for Study 3. See Supplementary Materials for model descriptions. Shown coefficients for Study 3 come from Arellano-Bond estimator. All coefficients covariate-adjusted. All variables standardised with mean zero and standard deviation one. Confidence bands 95%.

Table 1: Theoretical Predictions About the Effect of Happiness on Compliance

Compliance Behaviour	Affect Infusion Model	Mood Maintenance Model
Risk-Avoidance Motivation	Happiness decreases compliance Mechanism: change in shape of probability-weighting function (less weight attached to risky prospects) (Forgas, 1995; Forgas and Tan, 2013)	Happiness increases compliance Mechanism: loss aversion (people want to retain positive affect) (Isen and Patrick, 1983; Johnston and Tversky, 1983)
Pro-Social Motivation	Happiness decreases compliance Mechanism: change in internally *versus* externally oriented mental processing (which promotes selfishness) (Tan and Forgas, 2010)	Happiness increases/decreases compliance Mechanism: increase in compliance if promotion of self-image, favourable appearance in social comparisons, good feelings more generally; decrease in compliance if compliance becomes too unpleasant (Carlson et al., 1988)

Table 2: Life Satisfaction and Self-Reported Compliance (University College London Covid-19 Social Study, UK, Year 2020)

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: Number of Weekdays Staying Home				
Satisfaction With Life	0.0623***	0.0184***	0.0211***	0.0202***
	(0.0064)	(0.0056)	(0.0059)	(0.0051)
Hansen Test P-Value	-	-	-	0.744
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.110
Observations	131,088	131,088	99,403	100,850
Individuals	34,136	34,136	28,897	29,753
R^2 (GMM: F)	0.086	0.006	0.005	F(77, 29752) = 256.99
Panel B: Fully Isolating				
Satisfaction With Life	-0.0001	-0.0045***	-0.0009	0.0009
	(0.0007)	(0.0007)	(0.0006)	(0.0007)
Hansen Test P-Value	-	-	-	0.540
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.004, 0.987
Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM: F)	0.078	0.036	0.001	F(77, 29966) = 105.55
Panel C: Partially Isolating				
Satisfaction With Life	0.0012	0.0039***	0.0017**	0.0003
	(0.0007)	(0.0010)	(0.0008)	(0.0008)
Hansen Test P-Value	-	-	-	0.793
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.618

Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM: F)	0.057	0.026	0.016	F(77, 29966) = 113.72
Panel D: Not Isolating				
Satisfaction With Life	-0.0011**	0.0006	-0.0008	-0.0013***
	(0.0004)	(0.0007)	(0.0006)	(0.0004)
Hansen Test P-Value	-	-	-	0.950
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.929
Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM: F)	0.121	0.132	0.032	F(77, 29966) = 37.19
Panel E: Complying With Recommendations				
Satisfaction With Life	0.0154***	0.0036***	0.0018	0.0160
	(0.0015)	(0.0014)	(0.0015)	(0.0124)
Hansen Test P-Value	-	-	-	0.677
AR(1), AR(2), AR(3) P-Values	-	-	-	0.823, 0.791, 0.601
Observations	136,385	136,385	107,278	108,298
Individuals	34,378	34,378	29,548	29,713
R^2 (GMM: F)	0.105	0.013	0.013	F(77, 29712) = 32.26
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.

Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Supplementary Materials

Study 1: Cross-Sectional Evidence on Regional Happiness and Observed Regional Compliance

We estimated the following regression model:

$$compliance_{rt} = a + \beta_1 happiness_{r2019} + X_{rt}\beta_2' + \eta_{wd} + \eta_w + \mu_c + \varepsilon_{rt} \quad \text{(E.1.1)}$$

where $compliance_{rt}$ was compliance behaviour in region *r* on date *d*, $happiness_{r2019}$ was the predicted happiness in region *r* in year *2019*, *X* was a vector of controls, η_{wd} were weekday fixed effects, η_w were calendar week fixed effects, and μ_c were country fixed effects. The controls included indices of local economic confidence, unemployment, law and order, and social life, as well as the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths. Predicted happiness was obtained from an auxiliary model that regressed a respondent's happiness on age, gender, marital status, education, employment status, log household income, the number of adults and children in the household, and the degree of urbanisation.

Compliance behaviour was the percentage change in smartphone recorded geographical mobility in various areas, originating from Google COVID-19 Community Mobility Reports (ActiveConclusion, 2020; Google, 2020). Happiness was either life evaluation or indices of positive or negative affect, originating from the Gallup World Poll. Life evaluation was obtained from a single-item eleven-point Likert scale which asked respondents to imagine themselves on a ladder with steps numbered from zero at the bottom to ten at the top, whereby zero represents the worst possible and ten the best possible life (the so-called *Cantril ladder*, cf. Cantril, 1965). The indices of positive or negative affect, which are bounded between zero and 100, were constructed by averaging across a set

of yes-no questions that asked respondents about their emotional experiences during the previous day. For positive affect, these include whether respondents experienced feelings of happiness and enjoyment, and whether they smiled and laughed a lot. For negative affect, these include whether respondents experienced feelings of sadness, worry, and anger. The stringency of lockdown measures and the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths were obtained from the Oxford COVID-19 Government Response Tracker.

We restricted our sample to observations where the stringency of lockdown measures was equal to or greater than 72.48 to ensure comparability between Studies 1 to 3. A stringency of 72.48 corresponds to the stringency observed during the "hard" UK lockdown period.

The model was estimated using ordinary least squares. Robust standard errors were clustered at the regional level (alternatively, robust standard errors clustered at the date level yielded the same results).

Table S.1.1: Life Evaluation and Observed Civic Compliance (Gallup World Poll, 892 Regions, 49 Countries, Years 2019 to 2020)

	Percentage Change in Mobility During Lockdown in					
	Residential Areas	Retail or Recreation	Grocery, Pharmacy	Parks	Transit	Workplaces
	(1)	(2)	(3)	(4)	(5)	(6)
Life Evaluation in 2019	5.7800***	-12.3900***	-10.0100***	-19.9400**	-22.2500***	-10.7800***
	(1.0110)	(3.0390)	(2.2020)	(8.2450)	(3.9180)	(2.3480)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	83,278	119,672	114,756	63,868	84,139	166,435
R^2	0.605	0.657	0.539	0.401	0.534	0.535

See the Supplementary Materials on Study 1 for model specifications and summary statistics.
Robust standard errors clustered at regional level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.1.2: Positive Affect and Observed Civic Compliance (Gallup World Poll, 892 Regions, 49 Countries, Years 2019 to 2020)

	Percentage Change in Mobility During Lockdown in					
	Residential Areas	Retail or Recreation	Grocery, Pharmacy	Parks	Transit	Workplaces
	(1)	(2)	(3)	(4)	(5)	(6)
Positive Affect in 2019	0.71100***	-1.7250***	-1.4360***	-3.0560***	-2.5400***	-1.3070***
	(0.1520)	(0.4700)	(0.3530)	(1.1430)	(0.5980)	(0.3770)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	83,278	119,672	114,756	63,868	84,139	166,435
R^2	0.599	0.657	0.539	0.403	0.526	0.530

See the Supplementary Materials on Study 1 for model specifications and summary statistics.
Robust standard errors clustered at regional level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.1.3: Negative Affect and Observed Civic Compliance (Gallup World Poll, 892 Regions, 49 Countries, Years 2019 to 2020)

	Percentage Change in Mobility During Lockdown in					
	Residential Areas	Retail or Recreation	Grocery, Pharmacy	Parks	Transit	Workplaces
	(1)	(2)	(3)	(4)	(5)	(6)
Negative Affect in 2019	-0.4600***	0.7210	0.6420*	0.7680	1.3460**	0.7780**
	(0.1550)	(0.4690)	(0.3550)	(1.0350)	(0.5400)	(0.3380)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	83,278	119,672	114,756	63,868	84,139	166,435
R^2	0.589	0.648	0.532	0.396	0.513	0.520

See the Supplementary Materials on Study 1 for model specifications and summary statistics.
Robust standard errors clustered at regional level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.1.4: Summary Statistics (Gallup World Poll, 892 Regions, 49 Countries, Years 2019 to 2020)

Variable	Mean	Standard Deviation	Minimum	Maximum	Number of Observations
Observed Outcomes					
Percentage Change in Mobility During Lockdown in…					
…Residential Areas	17.4990	6.6816	-11	54	83,278
…Retail or Recreation	-43.1058	21.1181	-98	35	81,485
…Grocery, Pharmacy	-15.3415	18.7978	-97	124	80,299
…Parks	-9.2830	49.1642	-97	413	55,658
…Transit	-43.1671	24.2223	-100	77	64,564
…Workplaces					
Variables of Interest					
Life Evaluation in 2019	6.5590	0.5210	2.7121	7.4439	83,278
Positive Affect in 2019	73.1720	2.4279	57.4111	80.3228	83,278
Negative Affect in 2019	24.4618	3.4885	17.8183	46.7882	83,278
Controls					
Index of Local Economic Confidence	99.2657	7.0997	-50	100	83,278
Index of Unemployment	0.5705	0.4950	0	1	83,278
Index of Social Life	99.8667	2.5781	50	100	83,278
Index of Law and Order	99.8247	2.0862	75	100	83,278
Number of New Covid-19 Cases	430,472.6	426,939.2	31	1,283,929	83,278
Number of New Covid-19 Deaths	23,003.8	25,274.1	1	77,180	83,278

Study 2: Cross-Sectional Evidence on Individual Happiness and Self-Reported Individual Compliance

We estimated the following model:

$$compliance_i = a + \beta_1 happiness_i + X_i\beta_1' + \eta_{wd} + \eta_w + \mu_c + \varepsilon_i \quad \text{(E.2)}$$

where $compliance_i$ was the compliance behaviour of individual i, $happiness_i$ was the happiness of individual i, X was a vector of controls, η_{wd} were weekday fixed effects, η_w were calendar week fixed effects, and μ_c were country fixed effects. The controls included age, gender, employment status, and the number of adults and children in the household at the individual as well as the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths at the country level.

Compliance behaviour was the degree to which a respondent reported to be willing to self-isolate for seven days if asked by a healthcare professional or public health authority. It was obtained from a single-item five-point Likert scale ranging from one ("very willing") to five ("very unwilling"). We dichotomised this item such that it equals one if a respondent was "very willing" or "somewhat willing" to comply, and zero else. Moreover, compliance behaviour was captured by the frequency with which a respondent reported to be complying with 20 common preventive behaviours. These were obtained from single-item five-point Likert scales ranging from one ("always") to five ("not at all"). We again dichotomised this item such that it equals one if a respondent was "always" or "frequently" complying, and zero else. We created an index of compliance, by standardising each item and then calculating a weighted sum, whereby we used the inverse of the variance-covariance matrix of the standardised items as weights. This ensured that highly correlated items (which contain little new information) received less weight. Happiness was life evaluation. It was obtained from a single-item eleven-point Likert scale which asked respondents to imagine themselves

on a ladder with steps numbered from zero at the bottom to ten at the top, whereby zero represents the worst possible and ten the best possible life (the so-called *Cantril ladder*, cf. Cantril, 1965). All data originated from the Imperial College London-YouGov Covid-19 Behavioral Tracker, except for the stringency of lockdown measures and the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths, which were obtained from the Oxford COVID-19 Government Response Tracker.

We restricted our sample to observations where the stringency of lockdown measures was equal to or greater than 72.48 to ensure comparability between Studies 1 to 3. A stringency of 72.48 corresponds to the stringency observed during the "hard" UK lockdown period. We also restricted our sample to individuals who (and whose household cohabitants) reported to have never been tested for Covid-19 and who reported to have never had any symptoms.

The model was estimated using ordinary least squares. Robust standard errors were clustered at the date level.

Table S.2.1: Life Evaluation and Self-Reported Civic Compliance (Imperial College London-YouGov Covid-19 Behaviour Tracker, 20 Countries, Year 2020)

	Complying With Recommendations (1)	Complying With Preventive Behaviours (2)
Life Evaluation	0.0083***	0.0133***
	(0.0011)	(0.0023)
Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Week-Day Fixed Effects	Yes	Yes
Week Fixed Effects	Yes	Yes
Observations	38,910	12,520
R^2	0.025	0.148

See the Supplementary Materials on Study 2 for model specifications and summary statistics.
Robust standard errors clustered at daily date level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.2.2: Life Evaluation and Self-Reported Civic Compliance, All Preventive Behaviours (Imperial College London-YouGov Covid-19 Behaviour Tracker, 20 Countries, Year 2020)

	Wearing Face Mask	Washing Hands	Using Sanitiser	Covering Mouth, Nose	Avoiding Contact
	(1)	(2)	(3)	(4)	(5)
Life Evaluation	0.0016	0.0037***	0.0097***	0.0043***	0.0049***
	(0.0010)	(0.0007	(0.0014)	(0.0007)	(0.0012)
Observations	39,837	39,837	39,837	39,837	39,837
R^2	0.352	0.021	0.088	0.031	0.038
	Staying In	Avoiding Healthcare	Avoiding Transit	Doing Home Office	Avoiding Schooling
	(6)	(7)	(8)	(9)	(10)
Life Evaluation	-0.0012	-0.0004	0.0040***	0.0084***	0.0017
	(0.0016	(0.0014)	(0.0012)	(0.0019)	(0.0011)
Observations	39,837	39,837	39,837	23,216	18,911
R^2	0.077	0.045	0.065	0.065	0.094
	Avoiding Guests	Avoiding Small Gatherings	Avoiding Medium Gatherings	Avoiding Large Gatherings	Avoiding Crowded Areas
	(11)	(12)	(13)	(14)	(15)
Life Evaluation	-0.0004	0.0001	0.0001	0.0006	0.0028**
	(0.0010)	(0.0014)	(0.0009)	(0.0009)	(0.0011)
Observations	39,837	39,837	39,837	39,837	39,837
R^2	0.079	0.060	0.050	0.039	0.034
	Avoiding Shopping	Sleeping Separately	Eating Separately	Cleaning More Often	Avoiding Touching Objects
	(16)	(17)	(18)	(19)	(20)
Life Evaluation	0.0037**	-0.0046**	-0.0020	0.0092***	0.0085***
	(0.0014)	(0.0022)	(0.0015)	(0.0018)	(0.0013)

Observations	39,837	39,837	39,837	39,837	39,837
R^2	0.080	0.073	0.062	0.080	0.049
Controls	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes	Yes

See the Supplementary Materials on Study 2 for model specifications and summary statistics.
Robust standard errors clustered at daily date level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.2.3: Summary Statistics (Imperial College London-YouGov Covid-19 Behaviour Tracker, 20 Countries, Year 2020)

Variable	Mean	Standard Deviation	Minimum	Maximum	Number of Observations
Self-Reported Outcomes					
Complying With Recommendations	0.8680	0.3385	0	1	38,910
Complying With Preventive Behaviours	0.1797	0.4372	-1.6253	0.7752	12,244
Wearing Face Mask	0.7737	0.4185	0	1	38,910
Washing Hands	0.9541	0.2093	0	1	38,910
Using Sanitiser	0.7685	0.4218	0	1	38,910
Covering Mouth, Nose	0.9291	0.2567	0	1	38,910
Avoiding Contact	0.8878	0.3156	0	1	38,910
Staying In	0.7685	0.4218	0	1	38,910
Avoiding Healthcare	0.8120	0.3907	0	1	38,910
Avoiding Transit	0.8529	0.3542	0	1	38,910
Doing Home Office	0.6564	0.4749	0	1	22,760
Avoiding Schooling	0.8338	0.3722	0	1	18,393
Avoiding Guests	0.8539	0.3532	0	1	38,910
Avoiding Small Gatherings	0.8170	0.3867	0	1	38,910
Avoiding Medium Gatherings	0.8790	0.3262	0	1	38,910
Avoiding Large Gatherings	0.9203	0.2708	0	1	38,910
Avoiding Crowded Areas	0.9116	0.2839	0	1	38,910
Avoiding Shopping	0.6750	0.4684	0	1	38,910
Sleeping Separately	0.3425	0.4745	0	1	38,910
Eating Separately	0.3442	0.4751	0	1	38,910
Cleaning More Often	0.6894	0.4628	0	1	38,910
Avoiding Touching Objects	0.8095	0.3927	0	1	38,910
Variables of Interest					
Life Evaluation	6.3340	1.9230	0	10	38,910

Controls					
Age	44.0376	15.7984	18	91	38,910
Female	0.5178	0.4997	0	1	38,910
Full-Time Employed	0.4580	0.4982	0	1	38,910
Part-Time Employed	0.1315	0.3379	0	1	38,910
Unemployed	0.0969	0.2959	0	1	38,910
Not Working	0.0807	0.2724	0	1	38,910
Retired	0.1391	0.3460	0	1	38,910
Other Employment	0.0244	0.1542	0	1	38,910
Number of Children in Household	3.1893	1.4869	1	8	38,910
Number of Individuals in Household	0.9158	1.2307	0	5	38,910
Number of New Covid-19 Cases	240,086.6	421,218.6	1,112	2,074,526	38,910
Number of New Covid-19 Deaths	19,008.5	25,650.34	4	115,436	38,910

Study 3: Longitudinal Evidence on Individual Happiness and Self-Reported Individual Compliance

We estimated the following regression models:

$$compliance_{it} = a + \beta_1 happiness_{it} + X_{it}\beta_2' + \eta_{wd} + \mu_c + \varepsilon_{it} \quad \text{(E.3.1)}$$

$$compliance_{it} = a + \beta_1 happiness_{it} + X_{it}\beta_2' + \eta_{wd} + \mu_c + \mu_i + \varepsilon_{it} \quad \text{(E.3.2)}$$

$$compliance_{it} = a + \beta_1 happiness_{it} + X_{it}\beta_2' + \beta_3 compliance_{it-1} + \eta_{wd} + \mu_c + \mu_i + \varepsilon_{it} \quad \text{(E.3.3)}$$

where $compliance_{it}$ was the compliance behaviour of individual i in week t, $happiness_{it}$ was the happiness of individual i in week t, X_{it} was a vector of controls, η_{wd} were weekday fixed effects, μ_c were country fixed effects, and μ_i were individual fixed effects. The controls included age, gender, marital status, ethnicity, education, employment status, income, dwelling type, the number of rooms in the dwelling, the number of children and adults in the household, the residential area (city, large town, small town, village, hamlet, or isolated dwelling), the number of close friends, the frequency of socialising (in normal times), self-assessed knowledge about Covid-19, confidence in government, confidence in the public health system, the Big-5 personality traits, measures of depression (PHQ-9) and anxiety (GAD-7), as well as the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths at the country level.

Compliance behaviour was measured as *(i)* the number of days during the past seven days the respondent reported to have stayed at home and not left the house (zero-to-seven scale); *(ii)* whether the respondent reported to be either fully, partially, or not at all self-isolating at present (binary indicators); and *(iii)* the

degree to which the respondent reported to comply with government recommendations (one-to-seven Likert scale). Fully self-isolating means not leaving home at all, partially self-isolating means complying with stay-at-home recommendations and leaving home only for necessary activities, and not at all self-isolating means complying with stay-at-home recommendations and living life as normally as possible. Happiness was measured as life satisfaction, which was obtained from a single-item eleven-point Likert scale asking respondents: "Overall, in the past week, how satisfied have you been with your life?" Answers ranged from zero ("not at all") to ten ("completely"). As an alternative measure, we also looked at how worthwhile things in life feel, which was obtained from a single-item eleven-point Likert scale asking respondents: "In the past week, to what extent have you felt the things you are doing in your life are worthwhile?" Answers ranged from zero ("not at all") to ten ("completely").We adjusted both variables to account for their retrospective nature. The stringency of lockdown measures and the log numbers of both daily confirmed Covid-19 cases and daily confirmed Covid-19 deaths were obtained from the Oxford COVID-19 Government Response Tracker.

We restricted our sample to the "hard" UK lockdown period, which was from March 23 to May 10, 2020. We also restricted our sample to respondents who identified as non-essential workers (excluding, for example, people working in hospitals), who reported to have never had Covid-19 themselves and who reported to have never had any contact with people who had contracted the virus.

Equation E.3.1 was estimated using pooled ordinary least squares, Equation E.3.2 using ordinary least squares respectively after within-transforming and first-differencing, and Equation E.3.3 using the Arellano-Bond estimator (generalised-method-of-moments). Robust standard errors were clustered at the individual level (alternatively, robust standard errors clustered at the date level yielded the same results).

Table S.3.1: Life Satisfaction and Self-Reported Civic Compliance, With Week Fixed Effects (University College London Covid-19 Social Study, UK, Year 2020)

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: Number of Weekdays Staying Home				
Satisfaction With Life	0.0550***	0.0024	0.0154***	0.0157***
	(0.0064)	(0.0055)	(0.0059)	(0.0051)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.235
Observations	131,088	131,088	99,403	100,850
Individuals	34,136	34,136	28,897	29,753
R^2 (GMM = F)	0.094	0.025	0.014	F(86, 29752) = 5464.18
Panel B: Fully Isolating				
Satisfaction With Life	0.0012*	-0.0015**	-0.0002	0.0009*
	(0.0007)	(0.0007)	(0.0006)	(0.0005)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.010, 0.764
Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM = F)	0.100	0.084	0.033	F(86, 29966) = 178.88
Panel C: Partially Isolating				
Satisfaction With Life	0.0007	0.0026***	0.0007	-0.0007
	(0.0007)	(0.0010)	(0.0008)	(0.0008)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.223

Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM = F)	0.064	0.036	0.029	F(86, 29966) = 108.88
Panel D: Not Isolating				
Satisfaction With Life	-0.0018***	-0.0012*	-0.0005	-0.0007
	(0.0004)	(0.0007)	(0.0006)	(0.0011)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.503, 0.552, 0.703
Observations	132,703	132,703	102,327	104,020
Individuals	34,046	34,046	29,040	29,967
R^2 (GMM = F)	0.149	0.167	0.041	F(86, 29966) = 60.71
Panel E: Complying With Recommendations				
Satisfaction With Life	0.0143***	0.0010	0.0003	0.0080
	(0.0015)	(0.0013)	(0.0015)	(0.0078)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.306, 0.642, 0.733
Observations	136,385	136,385	107,278	108,298
Individuals	34,378	34,378	29,548	29,713
R^2 (GMM = F)	0.108	0.020	0.022	F(86, 29712) = 78.95
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.

Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.2: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Wellbeing

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Number of Weekdays Staying Home				
Satisfaction With Life = 0 (FD = +0)	*Reference Category*			
= 1 (FD: Δ = +1)	0.2210**	0.0514	0.0216	0.0939
	(0.0939)	(0.0722)	(0.0195)	(0.0836)
= 2 (FD: Δ = +2)	0.2990***	0.0059	0.0273	0.0248
	(0.0891)	(0.0732)	(0.0308)	(0.0722)
= 3 (FD: Δ = +3)	0.2910***	0.0410	0.1150**	0.1200*
	(0.0872)	(0.0729)	(0.0499)	(0.0684)
= 4 (FD: Δ = +4)	0.3860***	0.0667	-0.0753	0.1490**
	(0.0876)	(0.0743)	(0.0847)	(0.0687)
= 5 (FD: Δ = +5)	0.4560***	0.0904	0.1920	0.1240*
	(0.0868)	(0.0741)	(0.1400)	(0.0677)
= 6 (FD: Δ = +6)	0.4300***	0.0942	-0.1430	0.1310*
	(0.0875)	(0.0750)	(0.2790)	(0.0683)
= 7 (FD: Δ = +7)	0.5270***	0.1310*	0.5800	0.1990***
	(0.0879)	(0.0754)	(0.5530)	(0.0690)
= 8 (FD: Δ = +8)	0.5900***	0.1480*	-0.4900	0.2120***
	(0.0899)	(0.0767)	(0.9030)	(0.0708)
= 9 (FD: Δ = +9)	0.6960***	0.1420*	0.5850	0.1580**
	(0.0959)	(0.0814)	(4.5040)	(0.0760)
= 10 (FD: Δ = +10)	0.8440***	0.1500	-0.1830***	0.2790***
	-0.108	(0.0938)	(0.0263)	(0.0855)
= Δ = -1			-0.0259	
			(0.0194)	
= Δ = -2			-0.0279	

			(0.0295)	
= Δ = -3			-0.0486	
			(0.0461)	
= Δ = -4			-0.1440*	
			(0.0798)	
= Δ = -5			-0.3110**	
			(0.1390)	
= Δ = -6			0.1230	
			(0.2850)	
= Δ = -7			-0.8820	
			(0.7890)	
= Δ = -8			-1.1240	
			(0.8260)	
= Δ = -9			1.7710	
			(1.7090)	
= Δ = -10				
Hansen Test P-Value	-	-	-	0.759
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.109
Observations	131,088	131,088	99,403	100,850
Individuals	34,136	34,136	28,897	29,753
R^2 (GMM = F)	0.086	0.006	0.005	F(86, 29752) = 230.86
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.

Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.3: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Wellbeing

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Number of Weekdays Staying Home				
Satisfaction With Life = 0 (FD = +0)	*Reference Category*			
= 1 (FD: Δ = +1)	0.2210**	0.0437	0.0092	0.0903
	(0.0935)	(0.0714)	-0.0194	(0.0856)
= 2 (FD: Δ = +2)	0.2740***	-0.0446	-0.0047	0.0042
	(0.0888)	(0.0717)	(0.0307)	(0.0736)
= 3 (FD: Δ = +3)	0.2620***	-0.0255	0.0826*	0.1020
	(0.0870)	(0.0717)	(0.0495)	(0.0695)
= 4 (FD: Δ = +4)	0.3500***	-0.0218	-0.1290	0.1170*
	(0.0874)	(0.0729)	(0.0840)	(0.0697)
= 5 (FD: Δ = +5)	0.4020***	-0.0166	0.1370	0.0853
	(0.0866)	(0.0728)	(0.1370)	(0.0687)
= 6 (FD: Δ = +6)	0.3760***	-0.0244	-0.1800	0.0933
	(0.0873)	(0.0736)	(0.2770)	(0.0694)
= 7 (FD: Δ = +7)	0.4610***	-0.0080	0.5340	0.1560**
	(0.0878)	(0.0741)	(0.5420)	(0.0701)
= 8 (FD: Δ = +8)	0.5200***	0.0030	-0.5410	0.1710**
	(0.0897)	(0.0754)	(0.8960)	(0.0720)
= 9 (FD: Δ = +9)	0.6370***	-0.0028	0.5130	0.1110
	(0.0957)	(0.0800)	(4.4670)	(0.0772)
= 10 (FD: Δ = +10)	0.7580***	-0.0289	-0.2090***	0.2170**
	(0.1080	(0.0921)	(0.0327)	(0.0868)
= Δ = -1			-0.0241	
			(0.0193)	
= Δ = -2			-0.0302	

			(0.0293)	
= Δ = -3			-0.0543	
			(0.0460)	
= Δ = -4			-0.1530*	
			(0.0795)	
= Δ = -5			-0.3110**	
			(0.1390)	
= Δ = -6			0.0783	
			(0.2810)	
= Δ = -7			-0.9530	
			(0.7750)	
= Δ = -8			-1.1190	
			(0.8300)	
= Δ = -9			1.7660	
			(1.8090)	
= Δ = -10				
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.848
Observations	131,088	131,088	99,403	100,850
Individuals	34,136	34,136	28,897	29,753
R^2 (GMM = F)	0.095	0.025	0.015	F(95, 29752) = 4936.14
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.

Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.4: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), Temporal Dynamics

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Number of Weekdays Staying Home				
Satisfaction With Life (t-1)	0.0348***	-0.0130*	-0.0195***	-0.0124*
	(0.0069)	(0.0067)	(0.0071)	(0.0069)
Satisfaction With Life	0.0463***	0.0208***	0.0046	0.0239***
	(0.0062)	(0.0064)	(0.0068)	(0.0063)
Hansen Test P-Value	-	-	-	0.747
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.108
Observations	105,080	105,080	74,696	100,850
Individuals	30,261	30,261	25,460	29,753
R^2 (GMM = F)	0.089	0.011	0.002	F(78, 29752) = 254.38
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.5: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), Temporal Dynamics

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Number of Weekdays Staying Home				
Satisfaction With Life (t-1)	0.0396***	-0.0199***	-0.0188***	-0.0152**
	(0.0069)	(0.0066)	(0.0071)	(0.0071)
Satisfaction With Life	0.0363***	0.0056	0.0051	0.0203***
	(0.0062)	(0.0064)	(0.0068)	(0.0065)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.233
Observations	105,080	105,080	74,696	100,850
Individuals	30,261	30,261	25,460	29,753
R^2 (GMM = F)	0.097	0.026	0.002	F(87, 29752) = 304.82
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.6: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Risk

	Number of Weekdays Staying Home			
	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: High Risk (≥60 Years or Medical Preconditions)				
Satisfaction With Life	0.0634***	0.0291***	0.0339***	0.0302***
	(0.0090)	(0.0078)	(0.0084)	(0.00707)
Hansen Test P-Value	-	-	-	0.136
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.039
Observations	71,116	71,116	53,526	54,345
Individuals	17,795	17,795	15,391	15,848
R^2 (GMM = F)	0.092	0.010	0.006	F(77, 15847) = 145.66
Panel B: Low Risk (<60 Years and No Medical Preconditions)				
Satisfaction With Life	0.0613***	0.0053	0.0065	0.00853
	(0.0089)	(0.0079)	(0.0084)	(0.00730)
Hansen Test P-Value	-	-	-	0.172
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.919
Observations	59,972	59,972	45,877	46,505
Individuals	16,341	16,341	13,506	13,905
R^2 (GMM = F)	0.082	0.005	0.005	F(77, 13904) = 123.62
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No

Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.7: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Risk

	Number of Weekdays Staying Home			
	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: High Risk (≥60 Years or Medical Preconditions)				
Satisfaction With Life	0.0546***	0.0105	0.0289***	0.0261***
	(0.0090)	(0.0078)	(0.0084)	(0.0072)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.074
Observations	71,116	71,116	53,526	54,345
Individuals	17,795	17,795	15,391	15,848
R^2 (GMM = F)	0.103	0.033	0.014	F(86, 15847) = 3171.74
Panel B: Low Risk (<60 Years and No Medical Preconditions)				
Satisfaction With Life	0.0558***	-0.0076	-0.0001	0.0038
	(0.0089)	(0.0078)	(0.0083)	(0.0074)
Hansen Test P-Value	-	-	-	n.s.
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.950
Observations	59,972	59,972	45,877	46,505
Individuals	16,341	16,341	13,506	13,905
R^2 (GMM = F)	0.089	0.021	0.017	F(86, 13904) = 135.77
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes

Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.8: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Risk Over Time

	Number of Weekdays Staying Home			
	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: High Risk (≥60 Years or Medical Preconditions)				
Satisfaction With Life * Pre April 15	-0.0058	0.0008	-0.0089	0.2430
	(0.0089)	(0.0075)	(0.0168)	(0.2270)
Satisfaction With Life	0.0598***	0.0169**	0.0374***	-0.0328
	(0.0097)	(0.0085)	(0.0107)	(0.0745)
Pre April 15	0.5580***	0.4240***	-0.0105	-2.7880
	(0.0590)	(0.0495)	(0.0392)	(2.2760)
Hansen Test P-Value	-	-	-	0.011
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.001, 0.088
Observations	71,116	71,116	53,526	54,345
Individuals	17,795	17,795	15,391	15,848
R^2 (GMM = F)	0.099	0.021	0.006	F(79, 15847) = 78.37
Panel B: Low Risk (<60 Years and No Medical Preconditions)				
Satisfaction With Life * Pre April 15	-0.0089	0.0195**	0.0252	0.2510
	(0.0095)	(0.0083)	(0.0166)	(0.1980)
Satisfaction With Life	0.0621***	-0.0094	-0.0045	-0.0876
	(0.0100)	(0.0087)	(0.0099)	(0.0827)
Pre April 15	0.3650***	0.1150**	0.0480	-1.5250
	(0.0594)	(0.0519)	(0.0391)	(1.3870)
Hansen Test P-Value	-	-	-	0.551
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.930
Observations	59,972	59,972	45,877	46,505

Individuals	16,341	16,341	13,506	13,905
R^2 (GMM = F)	0.085	0.008	0.005	F(79, 13904) = 115.95
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.9: Life Satisfaction and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020), By Risk Over Time

	Number of Weekdays Staying Home			
	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: High Risk (≥60 Years or Medical Preconditions)				
Satisfaction With Life * Pre April 15	-0.0078	-0.0019	-0.0243	0.1970
	(0.0089)	(0.0075)	(0.0167)	(0.2440)
Satisfaction With Life	0.0580***	0.0113	0.0385***	-0.0415
	(0.0097)	(0.0084)	(0.0107)	(0.0839)
Pre April 15	0.1940**	0.0364	-0.2650***	-2.0240
	(0.0832)	(0.0664)	(0.0710)	(6.6230)
Hansen Test P-Value	-	-	-	0.002
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.077
Observations	71,116	71,116	53,526	54,345
Individuals	17,795	17,795	15,391	15,848
R^2 (GMM = F)	0.103	0.033	0.014	F(88, 15847) = 163.91
Panel B: Low Risk (<60 Years and No Medical Preconditions)				
Satisfaction With Life * Pre April 15	-0.0105	0.0164**	0.0104	0.3070
	(0.0095)	(0.0083)	(0.0164)	(0.2130)
Satisfaction With Life	0.0609***	-0.0151*	-0.0046	-0.1150
	(0.0100)	(0.0087)	(0.0100)	(0.0833)
Pre April 15	0.1090	-0.1010	-0.1620**	0.0855
	(0.0847)	(0.0694)	(0.0699)	(4.3390)
Hansen Test P-Value	-	-	-	0.449
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.970
Observations	59,972	59,972	45,877	46,505

Individuals	16,341	16,341	13,506	13,905
R^2 (GMM = F)	0.089	0.021	0.017	F(88, 13904) = 123.75
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	Yes	Yes	Yes	Yes
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.10: Worthwhileness of Things in Life and Self-Reported Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020)

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: Number of Weekdays Staying Home				
Worthwhileness of Things in Life	0.0368***	0.0134***	0.0086*	0.0108**
	(0.0056)	(0.0046)	(0.0049)	(0.0045)
Hansen Test P-Value	-	-	-	0.749
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.114
Observations	131,087	131,087	99,402	100,849
Individuals	34,137	34,137	28,898	29,754
R^2 (GMM = F)	0.085	0.006	0.005	F(77, 29753) = 256.78
Panel B: Fully Isolating				
Worthwhileness of Things in Life	-0.0007	-0.0025***	-0.0007	0.0004
	(0.0006)	(0.0006)	(0.0005)	(0.0006)
Hansen Test P-Value	-	-	-	0.540
AR(1) P-Value	-	-	-	0.000
AR(2) P-Value	-	-	-	0.004
AR(3) P-Value	-	-	-	0.995
Observations	132,702	132,702	102,326	104,019
Individuals	34,047	34,047	29,041	29,968
R^2 (GMM = F)	0.078	0.035	0.001	F(77, 29967) = 105.42
Panel C: Partially Isolating				
Worthwhileness of Things in Life	0.0008	0.0017**	0.0006	-0.0001
	(0.0007)	(0.0008)	(0.0007)	(0.0007)

Hansen Test P-Value	-	-	-	0.791
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.614
Observations	132,702	132,702	102,326	104,019
Individuals	34,047	34,047	29,041	29,968
R^2 (GMM = F)	0.057	0.026	0.016	F(77, 29967) = 113.57
Panel D: Not Isolating				
Worthwhileness of Things in Life	-0.0001	0.0008	0.0001	-0.0003
	(0.0004)	(0.0006)	(0.0005)	(0.0004)
Hansen Test P-Value	-	-	-	0.961
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.916
Observations	132,702	132,702	102,326	104,019
Individuals	34,047	34,047	29,041	29,968
R^2 (GMM = F)	0.121	0.132	0.032	F(77, 29967) = 37.26
Panel E: Complying With Recommendations				
Worthwhileness of Things in Life	0.0125***	0.0017	-0.0006	0.0126
	(0.0013)	(0.0011)	(0.0012)	(0.0105)
Hansen Test P-Value	-	-	-	0.688
AR(1), AR(2), AR(3) P-Values	-	-	-	0.852, 0.774, 0.571
Observations	136,384	136,384	107,277	108,297
Individuals	34,379	34,379	29,549	29,714
R^2 (GMM = F)	0.105	0.013	0.013	F(77, 29713) = 30.58
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No

Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at individual level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.11: Life Satisfaction and Observed Civic Compliance (University College London Covid-19 Social Study, UK, Year 2020)

	Static Panel Data Estimation			Dynamic Panel Data Estimation
	Pooled OLS	FE	FD	Arellano-Bond
	(1)	(2)	(3)	(4)
Panel A: Percentage Change in Mobility in Residential Areas				
Satisfaction With Life	0.0284***	0.0811***	0.0714***	0.0265**
	(0.0064)	(0.0131)	(0.0173)	(0.0109)
Hansen Test P-Value	-	-	-	0.809
AR(1), AR(2), AR(3) P-Values	-	-	-	0.059, 0.020, 0.091
Observations	136,385	136,385	107,278	108,093
Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.835	0.770	0.248	F(77, 171) = 114.31
Panel B: Percentage Change in Mobility in Retail or Recreation				
Satisfaction With Life	-0.0651***	-0.1820***	-0.1250***	-0.0417
	(0.0148)	(0.0323)	(0.0393)	(0.0270)
Hansen Test P-Value	-	-	-	0.578
AR(1), AR(2), AR(3) P-Values	-	-	-	0.029, 0.068, 0.901
Observations	136,385	136,385	107,278	108,093
Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.506	0.389	0.178	F(77, 171) = 9.35
Panel C: Percentage Change in Mobility in Grocery and Pharmacy				
Satisfaction With Life	-0.0688***	-0.1960***	-0.1310***	-0.0214
	(0.0215)	(0.0440)	(0.0467)	(0.0273)
Hansen Test P-Value	-	-	-	0.148
AR(1), AR(2), AR(3) P-Values	-	-	-	0.000, 0.000, 0.915

Observations	136,385	136,385	107,278	108,093
Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.480	0.326	0.184	F(77, 171) = 5.72
Panel D: Percentage Change in Mobility in Parks				
Satisfaction With Life	-0.2410***	-0.5980***	-0.4270***	-0.2960***
	(0.0575)	(0.1130)	(0.1210)	-0.0722
Hansen Test P-Value	-	-	-	0.052
AR(1), AR(2), AR(3) P-Values	-	-	-	0.445, 0.000, 0.759
Observations	136,385	136,385	107,278	108,093
Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.341	0.168	0.045	F(77, 171) = 15.39
Panel E: Percentage Change in Mobility in Transit				
Satisfaction With Life	-0.1020***	-0.2720***	-0.1720***	-0.1060***
	(0.0195)	(0.0374)	(0.0405)	(0.0265)
Hansen Test P-Value	-	-	-	0.005
AR(1), AR(2), AR(3) P-Values	-	-	-	0.148, 0.000, 0.756
Observations	136,385	136,385	107,278	108,093
Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.450	0.182	0.133	F(77, 171) = 9.16
Panel F: Percentage Change in Mobility in Workplaces				
Satisfaction With Life	-0.0872***	-0.2520***	-0.1810***	-0.0677
	(0.0159)	(0.0331)	(0.0438)	(0.0457)
Hansen Test P-Value	-	-	-	0.349
AR(1), AR(2), AR(3) P-Values	-	-	-	0.256, 0.048, 0.388
Observations	136,385	136,385	107,278	108,093

Individuals	34,378	34,378	29,548	30,313
R^2 (GMM: F)	0.643	0.572	0.217	F(77, 171) = 26.11
Controls	Yes	Yes	Yes	Yes
Area Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Week-Day Fixed Effects	Yes	Yes	Yes	Yes
Week Fixed Effects	No	No	No	No
Individual Fixed Effects	No	Yes	Yes	Yes

See the Supplementary Materials on Study 3 for model specifications and summary statistics.
Robust standard errors clustered at country time date level in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table S.3.10: Summary Statistics (University College London Covid-19 Social Study, UK, Year 2020)

Variable	Mean	Standard Deviation	Minimum	Maximum	Number of Observations
Self-Reported Outcomes					
Number of Weekdays Staying Home	3.1999	2.7353	0	7	131,088
Fully Isolating	0.0939	0.2917	0	1	127,538
Partially Isolating	0.8448	0.3621	0	1	127,538
Not Isolating	0.0613	0.2399	0	1	127,538
Complying With Recommendations	6.6250	0.6635	1	7	131,088
Observed Outcomes					
Percentage Change in Mobility in Residential Areas	23.9003	4.2060	13	31	131,088
Percentage Change in Mobility in Retail or Recreation	-72.3762	6.3819	-93	-36	131,088
Percentage Change in Mobility in Grocery and Pharmacy	-28.7901	7.3647	-69	-6	131,088
Percentage Change in Mobility in Parks	-13.2206	16.5106	-71	21	131,088
Percentage Change in Mobility in Transit	-61.7994	6.3808	-76	-36	131,088
Percentage Change in Mobility in Workplaces	-62.5649	8.2447	-83	-40	131,088
Variables of Interest					
Life Satisfaction	6.0283	2.2377	0	10	131,088
Worthwhileness of Things in Life	6.1641	2.4714	0	10	131,085
Controls					
Age	53.9694	14.9891	18	96	131,088
Is Female	0.7236	0.4472	0	1	131,088
Is Single, Never Married	0.1526	0.3596	0	1	131,088
Is Single, Divorced, or Widowed	0.1468	0.3539	0	1	131,088
Is in Relationship or Married but Living Apart	0.0542	0.2264	0	1	131,088
Is in Relationship or Married and Cohabitating	0.6464	0.4781	0	1	131,088
Is Asian	0.0106	0.1024	0	1	131,088

Is Black	0.0036	0.0603	0	1	131,088
Is Mixed Race, White	0.0031	0.0560	0	1	131,088
Is Mixed Race, Other	0.0100	0.0997	0	1	131,088
Is White	0.9608	0.1940	0	1	131,088
Is Chinese	0.0028	0.0524	0	1	131,088
Is Middle Eastern	0.0018	0.0419	0	1	131,088
Is Other Ethnic Group	0.0045	0.0669	0	1	131,088
Ethnicity: Prefer not to Say	0.0027	0.0520	0	1	131,088
Big-5: Openness	5.1122	1.0886	1	7	131,088
Big-5: Conscientiousness	5.2714	0.9912	1	7	131,088
Big-5: Extraversion	4.2437	1.4359	1	7	131,088
Big-5: Agreeableness	5.1685	1.0168	1	7	131,088
Big-5: Neuroticism	3.7191	1.4480	1	7	131,088
PHQ-9	5.7506	5.5191	0	27	131,088
GAD-7	4.5056	4.9601	0	21	131,088
Has no Qualification	0.0304	0.1717	0	1	131,088
Has O-Levels	0.1157	0.3198	0	1	131,088
Has Vocational Education	0.0566	0.2311	0	1	131,088
Has A-Levels	0.1197	0.3246	0	1	131,088
Has Undergraduate Degree	0.4090	0.4917	0	1	131,088
Has Postgraduate Degree	0.2686	0.4432	0	1	131,088
Is in School	0.0022	0.0466	0	1	131,088
Is in University	0.0310	0.1733	0	1	131,088
Is Self-Employed	0.1018	0.3024	0	1	131,088
Is Part-Time Employed	0.1154	0.3195	0	1	131,088
Is Full-Time Employed	0.2908	0.4541	0	1	131,088
Is Unable to Work Due to Disability	0.0612	0.2397	0	1	131,088
Is Home-Maker, Full-Time Parent	0.0447	0.2066	0	1	131,088
Is Unemployed	0.0236	0.1517	0	1	131,088
Is Retired	0.3294	0.4700	0	1	131,088
Annual Income < £16,000	0.1491	0.3562	0	1	131,088

Annual Income £16,000-£29,999	0.2292	0.4203	0	1	131,088
Annual Income £30,000-£59,999	0.3004	0.4585	0	1	131,088
Annual Income £60,000-£89,999	0.1271	0.3331	0	1	131,088
Annual Income £90,000-£119,999	0.0538	0.2256	0	1	131,088
Annual Income > £120,000	0.0380	0.1913	0	1	131,088
Income: Prefer not to Say	0.1023	0.3030	0	1	131,088
Lives in House	0.8008	0.3994	0	1	131,088
Lives in Shared House	0.0142	0.1184	0	1	131,088
Lives in Flat	0.1412	0.3482	0	1	131,088
Lives in Student Halls	0.0019	0.0434	0	1	131,088
Lives in Residential Home	0.0031	0.0560	0	1	131,088
Lives in Other	0.0388	0.1931	0	1	131,088
Has 1 Room	0.0115	0.1068	0	1	131,088
Has 2 Rooms	0.0428	0.2023	0	1	131,088
Has 3 Rooms	0.0999	0.2999	0	1	131,088
Has 4 Rooms	0.1493	0.3564	0	1	131,088
Has 5 Rooms	0.2005	0.4004	0	1	131,088
Has 6 Rooms	0.1893	0.3918	0	1	131,088
Has 7 Rooms	0.1384	0.3453	0	1	131,088
Has 8 Rooms	0.0888	0.2844	0	1	131,088
Has 9 Rooms	0.0441	0.2054	0	1	131,088
Has 10+ Rooms	0.0354	0.1848	0	1	131,088
Number of Adults in Household	1.0645	0.9035	0	10	131,088
Number of Children in Household	0.3524	0.7755	0	10	131,088
Number of Close Friends	4.8641	3.1205	0	10	131,088
Frequency of Socialising Face-to-Face	2.9021	1.1430	1	5	131,088
Knowledge About Covid-19	5.4450	1.0459	1	7	131,088
Confidence in Government	4.4423	1.6507	1	7	131,088
Confidence in National Health Service	5.1536	1.3643	1	7	131,088
Average Daily Number of New Covid-19 Cases	4,329.4	1,390.8	665	8,719	131,088
Average Daily Number of New Covid-19 Deaths	665.8	301.1	35	1,172	131,088

Lives in City	0.3220	0.4672	0	1	131,088
Lives in Large Town	0.1686	0.3744	0	1	131,088
Lives in Small Town	0.2535	0.4350	0	1	131,088
Lives in Village	0.2076	0.4056	0	1	131,088
Lives in Hamlet	0.0276	0.1638	0	1	131,088
Lives in Isolated Dwelling	0.0207	0.1423	0	1	131,088
England	0.8080	0.3939	0	1	131,088
Wales	0.1101	0.3131	0	1	131,088
Scotland	0.0713	0.2573	0	1	131,088
Northern Ireland	0.0106	0.1024	0	1	131,088