Shifts in Residential Mobility Predict Shifts in Culture

Abstract

Does residential mobility change cultures, or is it merely a downstream indicator for other forces? Using large-scale surveys of citizens of 18 industrialized nations, we find that increased rates of residential mobility predicts living in a more dynamic society at least ten years in the future: one in which residents are more satisfied with their lives, have greater optimism, endorse more individualistic concepts, are more open to new ideas, have a greater sense of freedom of action, feel able to make friends more easily, express a more cosmopolitan identity, believe that their society rewards merit, and hold their community to a higher standard for treatment of minorities. These findings are echoed in the experience of Americans who have themselves recently moved, where we find that having successfully moved predicts a future sense of personal thriving, optimism, and a belief that merit is rewarded.

Shifts in Residential Mobility Predict Shifts in Culture

Moving one's residence is among the most consequential ways that a person can reshape their social world. Trading familiar people, places, and things for an unknown environment is an act that powerfully affects how people think about themselves, relate to others, and choose to live their lives (Choi & Oishi, 2020; Clark, 2005; Haynie, South, & Bose, 2006; Magdol & Bessel, 2003; Oishi, Rothman et al., 2007). Writ large, residential mobility is a demographic factor that can theoretically shape the values of an entire culture (Buttrick & Oishi, 2021; Gillespie, 2016; Long, 1988; Oishi, 2010; Oishi & Tsang, 2022). Converging lines of research from psychology, sociology, economics, and computer-simulations all suggest that residential mobility affects key aspects of the ways in which individuals think about their selves, think about the ways they relate to other people, and think about the rules of the society in which they are enmeshed. Figure 1 (see also Oishi & Tsang, 2022 for a similar model) lays out this framework, summarizing and integrating a literature that finds evidence that residential mobility is associated, at the individual level, with increases in individualism, sense of freedom, optimism, and well-being; at the relational level, with desire for wider, shallower friendship groups, increased relational mobility and therefore greater investment in relationships; and at the group level with a weaker distinction between ingroups and outgroups and more trust in strangers, with more tolerance for norm-deviations and less investment in the local community. This framework then predicts that individuals living in more residentially-mobile societies, shaped by the affordances created by being around strangers, should believe that their societies are more entrepreneurial, less reliant on traditional ways of doing things, more cosmopolitan, and therefore more meritocratic - an overall pattern that we label *dynamic*.

Residential mobility alters the playing field upon which people interact with each other: in a residentially-stable society, you can know a person by their personal history, their family history, and their reputation (Oishi, 2010). A new resident, by contrast, has none of those markers; as a stranger, people can know nothing about them except what they disclose themselves (Joshi, Wakslak, Raj, & Trope, 2016). Residential mobility, in other words, biases a person towards thinking of themselves and communicating to others in terms of a decontextualized individualism (Oishi, Lun, & Sherman, 2007), and a society made up of movers is one that is likely to be more individualist than a society made up of those who stay rooted (Baumeister, 1987; Taylor, 1989; Goldschmidt, 1971; Spencer, 1965).

An increase in individualism should predict an increased emphasis on the importance of abstract universal human rights as opposed to a more particularist, situational, good-of the-whole-society approach to legal judgment (see Hunt, 2008 for a historical and philosophical overview). For example, places with historically more reliance on impersonal trade, and therefore more contact with strangers, were more likely to propose universalist, as opposed to particularist moral rules (Enke et al. 2022). Those living in mobile spaces, shaped by individualists and the institutions they create, should therefore be more concerned with protecting individual rights.

This reputational blank slate can come with both advantages and disadvantages. Residential stability is associated with greater suspicion of outsiders, while residential mobility is associated with greater trust across the board (Li, 2017; Lun, Oishi, & Tenney, 2012; Thomson et al., 2018; Yamagishi, 1998). In a world of strangers, one has to be more willing to extend the benefit of the doubt more easily, since one will have limited access to social memory that can inform about who has and has not proven trustworthy over time (Macy & Sato, 2002). As new

residents generally want to make friends in their new environments (Oishi & Kesebir, 2012), they will be especially likely to seek out potential friends (Oishi et al., 2013), and having just arrived, will likely feel that they have a wide range of potential partners to choose from (i.e., *relational mobility*, Yuki & Schug, 2020).

Similarly, reputations are harder to shake in a residentially-stable world, since there's more limited turnover of observers (Hruschka & Henrich, 2006; Wu, Balliet, & van Lange, 2016). Residential stability has been argued to be a key piece in the evolution of norm-based social control (Roos et al., 2014): residential and relational mobility is associated with feeling less shame (Sznycer et al., 2012); with feeling less daily stress (Oishi, Saeki, & Axt, 2015); with decreased sensitivity to social rejection (Sato, Yuki, & Norasakkunkit, 2014); with reduced worry about terminating relationships (Thomson et al., 2018); and with less care taken about social monitoring (Su et al., 2016).

In worrying less about the opinions of others, and in striving to maximize the breadth of their social networks, the residentially mobile are likely to care less about the distinctions between ingroups and outgroups (Li, Li, & Li, 2019; Wang et al., 2018) and to act with reduced hostility towards outgroups (De, Gelfand, Nau, & Roos, 2016). In blurring these lines, and in moving from community to community, the residentially-mobile are likely to identify not with particular places, which they have just left from and arrived to, but with broader levels of organization, such as their nationality (Buttrick & Oishi, 2021).

At the same time, however, this more casual approach to friendship and community may make it harder for a residentially-mobile area to form the deep connections that bind one to a community - having just arrived they may not have the time to develop the social capital needed to act forcefully on social issues (Sampson, Raudenbush, & Earls, 1997) or to spend time in

groups that require major investments of time (Oishi et al., 2015; Oishi, Rothman, et al., 2007). Unsurprisingly, perhaps, areas with greater residential mobility find it harder to come together to solve their problems and show generally reduced pro-community behavior (Kang & Kwak, 2003; Oishi et al., 2007), and vote at lower rates than more residentially-stable areas (Squire, Wolfinger, & Glass, 1987).

A more residentially-mobile area should also be more likely to buy into meritocratic ideas about society (Buttrick & Oishi, 2021). A belief that society is structured in such a way that people are able to succeed due to their own hard work requires a belief that individuals in the society have the ability to freely act, unassisted or unencumbered by societal strictures (Feldman, 1988); a belief that it is possible for the future to be better than the present (McNamee & Miller, 2009); and a trust in the broader social system to be fair in its rewards (Lind & Tyler, 1988). As movers are generally more individualistic than the general population, willing to leave communities behind in order to start somewhere new (Kitayama et al., 2006); more optimistic, willing to believe that their future can be better than their past (Koikkalainen & Kyle, 2016); and more trusting (Li, 2017), we would therefore expect that residential mobility should bolster a cultural belief in meritocracy and a belief that one's life is uniquely one's own to write, free of the influence of others or of the past.

Movers are also more likely to be able to actively select their new place of residence, choosing neighborhoods that they expect will increase their sense of flourishing, leaving behind situations that make them unhappy (e.g., Bishop 2008; Jokela, 2020). Accordingly, places with greater rates of residential mobility have residents that report greater levels of happiness and well-being (Oishi, Talhelm et al., 2015; Talhelm & Oishi, 2014)

What happens, then, when levels of mobility shift in a culture over time? Cultures are responsive to their underlying socio-demographic facts (Greenfield, 2013; Oishi, 2014; Sng et al. 2018)), and often adapt when those facts change (Buttrick, Moulder, & Oishi, 2020; Varnum & Grossmann, 2017). For example, research has shown that as societies get wealthier, they tend towards increased individualism (e.g., Santos et al., 2017); or that an increase in college education predicts more self-expressive and secular-rational values (e.g., Inglehart & Weltzel, 2010). Drawing on the existing literature on cultural change (e.g., Varnum & Grossmann, 2017), we argue that residential mobility is a socioecological factor that is, in a sense, a more complex driver of culture - unlike variables such as education, it impacts both people's internal lives and their ability to make social connections. By affecting intra- and inter-psychic phenomena and at the same time directly enabling or restricting the flow of ideas through a society, residential mobility may be an especially-interesting phenomenon to study.

Over longer expanses of historical time, researchers have demonstrated that mobility may have helped to shape the tenor of societies (Knudsen, 2019; Bazzi, Fiszbein, & Gebresilasse, 2020). As migrants move from place to place, they bring with them the cultural adaptations that assisted and influenced their move (Obschonka et al., 2018; Knudsen, 2019), such as individualism (Kitayama et al., 2006; Bazzi et al., 2020), optimism (Koikkalainen & Kyle, 2016), openness to experience (Jokela, 2009; Zimmerman & Neyer, 2013), and risk-taking (Clark & Lisowski, 2017). A concentration of these traits in a place can start to draw in new migrants, eager to find a place where they psychologically fit, which can then start to affect the psychology of residents already present (Jokela, 2020); and can serve as a model for the rest of a broader culture to follow: as unsuccessful migrants are likelier to return to their original communities (Bazzi et al., 2020; Long & Hansen, 1977), the differential attrition is likely to lead

to remaining migrants being unusually successful (Abramitzky, Boustan, Jacome, & Perez, 2021) which may lead to a culture associating the traits of the successful migrants that remain with success more broadly, further bringing these traits into the cultural mainstream (Kitayama et al., 2010).

A decline in residential mobility, by contrast, may bring with it more than just a return to a residentially-stable ethos. Decreased residential mobility may also reflect an increased mismatch between moving intentions and moving ability (Carling & Schewel, 2018; Lu, 1999; Coulter, 2013). In the United States, for example, while residential mobility is at its lowest level on record, over 50% lower than during the 1970s (US Census), the desire to move has declined at a much slower rate (Foster, 2018), and people are more frequently finding themselves stuck in place: those Americans who wished to move over the past four decades were as likely to stay put as not (Mateyka, 2015), able to actually move at a rate 45% less lower than during the 1970s (Foster, 2017). Wishing to move but being unable to do so may lead to decreased well-being, as one feels that one no longer fits in one's environment (Bleidorn et al., 2016; Jokela et al., 2015); along with increases in a sense of thwarted goals and ensuing cynicism about society at large (Lee, Morris, & Kemeney, 2018; Buttrick & Oishi, 2021).

Moving, of course, is a function of socioeconomic factors, as movers need a reason to move, the resources to do so, and the ability to find housing in their new environment (Molloy, Smith, & Wozniak, 2014), not to mention a government that minimizes the barriers to relocation (Kleiner & Krueger, 2013; Sharkey, 2013; Rothstein, 2017). Any study that looks at the cultural effects of mobility, therefore, must work to disambiguate the role of residential mobility from the macroeconomic factors that may be driving mobility; and must also disentangle differences between immigration and residential mobility per se, two psychological experiences which,

while similar, may have different motivators and consequences (Coulter, van Ham, & Findlay, 2015; Kraley et al., 2023).

Studying the cultural effects of residential mobility, however, is a difficult prospect. Existing work has largely focused on the experience of a given set of individuals, whether by contrasting the lived experiences of people who have moved versus those who have remained where they are (e.g., Borschel et al., 2019; Oishi et al. 2007); or by conducting laboratory experiments that manipulate or simulate the experience of moving (e.g., Ito et al., 2019; Oishi et al., 2012). Studying individuals is vital, of course, but does not allow for questions about broader cultural effects. While there are a limited number of studies that investigate residential mobility at a level of aggregation that better matches questions about cultural change, such as the proportion of the residentially-mobile in an area (e.g., Oishi et al., 2007; Thomson et al., 2018), these studies are cross-sectional and largely limited to intra-country-comparisons. Analyses that look at a single time-point can provide only minimal evidence about the effects of a predictor - as with all correlational designs, questions about directionality and about third-variables are inherently unanswerable with these designs. These are especially-important questions to consider when it comes to residential mobility, a factor that is heavily interwoven with powerful forces such as wealth and country-level institutional policy-making (Coulter et al., 2015; Kleiner & Krueger, 2013; Sharkey, 2013; Rothstein, 2017), which complicate any simple intra-country analysis. Is residential mobility a force that legitimately shapes the ways that cultures understand themselves and others, or is it just a downstream indicator for other sociodemographic or cultural factors?

In this paper, we help answer this question through time-series analyses of the relationship between residential mobility and cultural values writ large. In showing that changes

in residential mobility predict changes in cultural values, we provide new evidence on the directionality of the relationship. Furthermore, by expanding our analysis to two decades of nationally-representative survey responses in 18 different industrialized nations (covering a diverse, if not comprehensive, set of institutional milieus), we can examine the generalizability of residential-mobility effects beyond the specifically-American context in which it is often studied (a context which may or may not well-represent the cultural and institutional settings of the rest of the world). Looking both across decades and across settings, we show that residential mobility has predictive power for understanding how cultures shift towards dynamism or stasis. We then anchor these shifts in the experience of a nationally-representative set of Americans, demonstrating that both mobility and wanting to move but being unable to (what we call 'stuckness') both predict future attitudes and beliefs, showcasing how the experience of mobility or its lack creates the microfoundations for the macro-changes that we document.

We first analyze a dataset covering the last half-century of American history to see whether changes in the rate of residential mobility meaningfully predict the happiness, feelings of trust, and sense of others as generally fair of a nationally-representative cross-sectional selection of Americans, even above and beyond changes in American macroeconomic conditions. We then broaden our investigation, looking at over two decades of nationally-representative responses from a wide range of industrialized countries. This allows us to isolate the effects of changing residential mobility on cultural beliefs, while still being able to partial out variance associated with between-country differences and control for changes in immigration and broader economic trends. We then zoom into a specifically American context, looking longitudinally at a representative sample of Americans to better understand the individual-level effects of both actually moving or wanting to move but finding oneself in the same place year

after year. These complementary approaches allow us to anchor changes within and across

cultures, at least in part, in the lived experience of actual movers over time.

Given prior work, then, we expected that residential mobility would be associated with

greater dynamism: more individualism, greater well-being and optimism, a greater belief that

hard work should lead to success, a greater sense of freedom of action; as well as a greater sense

that friendship is widely available, more tolerance for outgroups, and a greater sense of national,

as opposed to regional, identity.

Repository

Materials related to this manuscript, including analysis scripts and links to the various data

sources can be found at https://osf.io/wyckr/?view_only=acea5f1fda314f5d829d8dc97c0203b4

Study 1: United States Longitudinal Cross-Sectional Findings

We start by looking at the recent American past, using data, aggregated by year, from the

General Social Survey (GSS) - a long-running project that interviews a nationally-representative

sample of Americans yearly. We use this dataset to investigate the relationship between changing

rates of mobility within the United States, and Americans' self-reported happiness, trust in

others, and sense that people are generally fair - the three variables within the GSS that both

capture part of our theoretical model and also have good enough coverage over the many waves

of the dataset to allow for proper time-series modeling.

Method

Participants and Stimuli

We used year-averaged responses from the General Social Survey to measure

psychological outcomes. Our data cover 1972 (the first year of the GSS) to 2018, with missing

data spline-interpolated. Measures of GDP come from the St. Louis Federal Reserve; measures of immigration rates come from the US Department of Homeland Security, and our measure of mobility (here operationalized as any move from one residence to another) comes from the American Community Survey of the United States Census.

Analytic Approach

To investigate whether changes in mobility explain future changes in our three psychological variables of interest, we use a Granger-predictive framework - a key element of time-series analysis that helps to disambiguate the directionality of a relationship over time (Granger, 1969). A variable can be said to Granger-predict an outcome if it can predict that outcome in the future above and beyond past values of the outcome. Granger-causality allows researchers to address autocorrelation in time-series approaches. Two time series may be statistically-related to each other simply because both are changing at the same rate - an occurrence that may be common in culture research (e.g. Vigen, 2015). By controlling for past values of the variable to be predicted, researchers can control for these parallel trends, demonstrating that the statistical relationship between two time series holds above and beyond autocorrelation in the dependent variable, thereby strengthening confidence that the observed relationships between the two variables are meaningful and not spurious (see Varnum & Grossmann, 2017 for a discussion of the autocorrelation issue in culture-change research, and see e.g., Buttrick et al., 2020; Chan et al., 2021; and Jackson et al., 2021 for contemporary papers using a Granger-causal approach to studying changes in culture over time).

We initially ran linear models predicting the outcome of interest from the previous year's rate of interstate residential mobility and the previous year's value for the outcome of interest. We then ran more complex models that added to the base models by additionally controlling for

that year's median income level (log-transformed), that year's unemployment rate, and that year's immigration rate. In the more complex models, we additionally controlled for the linear trend of year.

Results & Discussion

In simple models, we find that the rate of American residential mobility Granger-predicts the next year's reported level of national happiness (above and beyond contemporaneous levels of happiness), $b = 0.0076$ [0.0038, 0.011], $se = 0.0019$, $t(43) = 4.01$, $p < .001$, partial $R^2 = .27$; but we cannot show that the rate of American mobility Granger-predicts the next year's sense that others are generally fair, $b = 0.0064$ [-0.0015, 0.014], $se = 0.0039$, $t(43) = 1.63$, $p = .11$, partial $R^2 = .058$; nor the next year's level of trust in others, $b = 0.085$ [-0.00086, 0.018], $se = 0.0046$, $t(43) = 1.83$, $p = .074$, partial $R^2 = .072$.

We then included macroeconomic covariates in the models - national gross domestic product and the rate of immigration to the United States - as well as controlling for the linear trend of year. We find that rates of American mobility still Granger-predict future levels of American happiness above all covariates, $b = 0.010$ [0.00084, 0.020], $se = 0.0046$, $t(40) = 2.21$, $p = .033$, partial $R^2 = .11$. We still do not find evidence that American rates of mobility Granger-predict future sense that others are generally fair, $b = -0.0047$ [-0.022, 0.013], $se = 0.0085$, $t(40) = -0.58$, $p = .58$, partial $R^2 = .0076$; nor the next year's level of trust in others, $b = -0.012$ [-0.030, 0.0061], $se = 0.0089$, $t(40) = -1.34$, $p = .19$, partial $R^2 = .043$. See Figure 2 for a graphical representation.

For all variables, we tested for the inverse relationship, where the cultural value Granger-predicts changes in mobility (including our full set of controls). Only one of the 3 cultural values

shows evidence for Granger-prediction: generalized trust, $t = 2.42$, $p = .020$. For the full set of

models for all variables, see the SI.

We additionally investigated whether the effects of mobility unfold over longer time-

periods, running models that lagged our predictors by between two and ten years. Results from

these lagged models are inconsistent, but suggest that there is no definite pattern of lagged

prediction. See the SI for all regression tables, and for models that use a rate of residential

mobility restricted to moves across state lines - moves that might be expected to have especially-

large impacts, due to their dislocation. Our findings are essentially unchanged regardless of

which mobility measure is used.

Surprisingly, we do not find evidence for a Granger-causal relationship between mobility

and either trust or fairness, contrary to what our theory predicts. Interpreting nulls can be

difficult, especially when considering the power one has to detect effects, but we speculate that

these results may reflect a particularly-American context, in which generalized trust and a sense

of fairness more generally have been declining for a myriad of other reasons, including

disinvestment in public goods (McGhee, 2021); the political weaponization of fear and threat

(May, 2017) and the ensuing rise of antigovernment ideologies (Hemmer, 2022; Perelstein,

2020) and political polarization (Klein, 2021); the loss of community spaces (Putnam, 2020) and

the breakup of the intellectual consensus (Rodgers, 2012). Nevertheless, these findings do

suggest that we may want to be more careful in interpreting the cultural effects of mobility in

American spaces.

In sum, Study 1 demonstrates that changes in American interstate residential mobility

predict future changes in American happiness, even when taking into account changes in the

immigration rate and macroeconomic environment. Americans were generally happier when they were more residentially mobile.

Post-Hoc Multiverse Analyses

While the wide range of measures in the GSS allows for great freedom in selection of variables of interest, that same breadth of possible variables and operationalizations raises the specter of cherry-picking: testing multiple relationships but reporting only a subset of significant and hypothesis-supportive effects. We address this concern with a novel analytic approach that demonstrates the unlikeliness of such cherry-picking in our findings. Specifically, we take a post-hoc multiverse approach (e.g. Steegen et al., 2016), recreating the same structure of analysis, using *every* variable in the GSS, in parallel, as a dependent variable.

This approach allows for two sets of comparisons. First, by comparing our reported results against the entire distribution of possible relationships, we can show whether our reported results had stronger relationships than would be expected by chance. While informative, this may be a somewhat biased test - we have initial hypotheses based on theory and prior research, of course, and so one might reasonably predict that we might be better at selecting important relationships than by chance alone. We therefore also compare our focal results directly to results arising from analyses of closely-related variables; an altogether more stringent test that provides evidence on whether our reported relationships are significantly stronger than unselected variables drawn from the pool of conceptually-similar possibilities. Failure to reject the null, in these cases, provides evidence that we did not selectively-report only those analyses that came out significant, either from among all possible variables in the set or from variables that might be reasonably seen to have been plausible candidates for analysis.

Methods. To test this idea, we first selected all the variables in the GSS comparable to our focal variables of interest (i.e., continuous variables which had been measured for more than 5 years).

We then modeled the network of relationships between all 143 selected variables, identifying networks of variables that were closely-related to our focal variables and variables that were more distally-related. We conducted an Exploratory Graph Analysis (EGA; Golino & Epskamp, 2017) using the triangulated maximally filtered graph (TMFG) method (Massara et al., 2016). This method, known for automatically uncovering item-clusters within data, was employed to obtain the taxonomic structure of all items, relying more on empirical determinism and less on researchers' decisions. In Figure 3, green nodes illustrate the three variables of theoretical interest (HAPP–happiness; TRU–trust; FAI–fairness), which are themselves relatively strongly correlated with seven other red-node variables including HEA–health and SAT–work satisfaction. These seven variables were categorized as the *proximal-other* group of variables. In contrast, our focal variables of interest are relatively weakly correlated with three other clusters of variables (blue nodes), such as CONE–confidence in education; ATT–attendance in religious services; and NATF–view on governmental welfare spending. These variables were categorized as the *distal-other* group of variables.

We then conducted the same Granger-causal models, as above. Figure 4 depicts the effect sizes for Granger-causal analysis of each variable in the dataset. Green bars illustrate the strength of effect of our focal variables of interest (i.e., absolute *t*-value), ranging from 1.63 to 4.01. Proximal-other variables (red bars), which were relatively highly correlated with our variables of interest, showed a range of effects, ranging from 0.14 to 2.25. Distal-other variables (blue bars),

which were relatively lowly correlated with the focal variables of interest, also showed a similar range of effects, ranging from 0.06 to 4.41.

We further tested whether the mean effect-size distribution relating to our focal variables is different from the mean effect-size distribution relating to other dependent dependent variables (Figure 5). We employed permutation tests (10,000 permutations) utilizing the *coin* package version 1.4.3 for R version 4.3.3 (Hothorn et al., 2008; R Core Team, 2024). Permutation-based comparison of the effect sizes revealed no significant difference between focal and all-other groups of effects ($Z = 1.31$, $p = .097$). Splitting up the set of unchosen variables into proximal and distal groups did not change our conclusions: Permutation-based comparison of the effect sizes revealed no significant difference between focal and proximal-other groups of effects ($Z = 1.38$, $p = .160$), nor did we find evidence for a significant difference between focal and distal-other groups of effects ($Z = 1.21$, $p = .117$).These results suggest that the effect sizes of our focal variables of interest are not significantly different from the ranges of effects available in the dataset, thus reducing concerns about potential cherry-picking.

Study 2: Cross-National Relationships

We next use cross-national data in order to better understand the broader context of the psychological correlates of residential mobility. Using data from two large-scale multinational surveys, we find converging evidence that residential mobility predicts residents of that country feeling better about their lives, more optimism about their futures, more confident in the dynamism of their country, and are more likely to identify with their broader country and to extend their sense of the membership of their communities more broadly.

Method

Participants and Stimuli

We used data from the World Values Survey (WVS), *n*'s range from 17,576 to 62,696

depending on the model, covering responses from 18 industrialized nations (Australia, Austria,

Canada, the Czech Republic, Finland, Germany, Hungary, Italy, Japan, the Netherlands, Norway,

Poland, Slovakia, South Korea, Spain, Sweden, the United Kingdom, and the United States) over

the years 1981 to 2020; and data from the Gallup World Poll (GWP), *n*'s range from 60,232 to

250,843 depending on the model, covering responses from the same 18 nations over the years

2006 to 2019. Thanks to the wide range of variables available in both the WVS and the GSS, we

have an enhanced ability to investigate the broader impacts of mobility on cultural values. Going

through the codebooks of the WVS and GSS, we selected variables that matched our theoretical

model above, looking at ways of operationalizing a culture's sense of oneself as an individual:

individualism, individual rights, sense of freedom (including an ability to think new ideas),

optimism, and general well-being; a sense of how to relate to others: the broadness of one's

social world, level of ingroupishness, and trust, and perceptions of how well society is treating

outgroups; and a sense of the opportunities, rights, and responsibilities of one's environment:

beliefs about the rules and fairness of society and people's time spent volunteering in their

communities.

Thanks to the work of Alvarez et al. (2021), we have data on recent trends in

interregional residential mobility for these 18 nations (i.e., mobility that crosses internal

administrative borders - in the US context, this would be equivalent to the interstate mobility

rate). These 18 countries have very different patterns of mobility across this timespan, with some

generally increasing rates of residential mobility (e.g., Austria, Finland, & Slovakia); some

decreasing mobility (e.g., Australia, Japan, Korea, the US); some with a U-shaped pattern (e.g.,

the Netherlands, Norway, Sweden, and the UK); some with an invert-U (e.g., Spain and the

Czech Republic); and some staying relatively constant (e.g., Germany and Poland). Measures of

immigration and GDP-per-capita come from the OECD. See

https://osf.io/gzxk3/?view_only=acea5f1fda314f5d829d8dc97c0203b4 for descriptives for all

variables, including variability by country.

Analytic Strategy

In these analyses, we take two complementary approaches to modeling the relationship

between residential mobility and cultural outcomes of interest, based on the nature of the

underlying datasets. As the coverage of countries across years in the WVS are too sparse to

allow for a time-series-based analysis (a given country will often only have data for three or four

years across the dataset, and the gap between waves is not consistent across countries), we turn

to an alternate multilevel comparative longitudinal panel model approach (Fairbrother, 2014)

which allows us to understand what a country looks like during relatively high and low levels of

residential mobility. In all models, we conduct multilevel analyses, decomposing residential

mobility into both a stable between-country component and a component that tracks rates of

mobility in a country relative to country mean-levels, nesting participants within country and

year, controlling for changes in immigration flow and changes in the state of the economy, as

well as controlling for year to rule out simple linear trends. This approach allows us to use

counties as their own controls, providing the opportunity to isolate the effects of changes in

residential mobility within a nation over time, while at the same time allowing us to compare the

effects of mean-level mobility across countries. While we would have ideally also liked to have

included country-mean levels of immigration and GDP-per-capita into the models, to control for

other background differences between nations, the models with the full complement of controls

were rank-deficient in the fixed effects, and so we therefore chose to prioritize controls that addressed changes within a country over time, matching our research hypothesis, as opposed to those that addressed underlying national differences.

In these models, we are also able to simultaneously look at stable (i.e. country-mean-level) between-country differences in mobility as a predictor. While within-country differences in mobility are largely related to our outcomes of interest, we generally fail to find evidence for any between-country differences in mobility in the prediction of cultural values. See the SI for the full models.

We use this same analytic approach for the GWP, for the sake of consistency, but due to the design of the GWP, which generally includes data for each country in each year, we are also able to treat variables that come from this dataset in a more time-series appropriate manner. For variables in this dataset, we additionally use the same Granger-causal approach as in Study 1, investigating whether mobility (country-mean centered) predicts the next year's cultural outcomes above the present year's rate of that outcome. In the models presented in-text, we include controls for the stable country-level mean levels of mobility, as well as changes in immigration flow, changes in the state of the economy, and we control for year to rule out simple linear trends as well as including a random intercept for country.

Our results are largely consistent with and without controls for immigration and GDP. Regression tables for all outcomes, both with and without controls are available at https://osf.io/wyckr/?view_only=acea5f1fda314f5d829d8dc97c0203b4.

Results

Comparative Longitudinal Panel Models

Individuals: Individualism, freedom, optimism, and well-being. As expected, we find that in years where there is more residential mobility in a country, residents of that country are more likely to be individualist: they are more likely to express individualist values (WVS, using the Individualism Index constructed by Santos, Varnum, & Grossmann, 2017), $b = 0.011$, $se = 0.001$, $t(26,617.60) = 9.58$, $p < .001$, partial $R^2 = .003$; more likely to endorse competition (WVS, from 1 = "Competition is good" to 10 = "Competition is harmful"), $b = -0.014$, $se = 0.005$, $t(5,568.95) = -2.98$, $p = .003$, partial $R^2 = .002$; and more likely to agree that individual rights are protected in their country (WVS, from 1 = "There is a lot of respect for individual human rights" to 4 = "There is no respect at all"), $b = -0.013$, $se = 0.002$, $t(939.88) = -6.34$, $p < .001$, partial $R^2 = .041$.

Similarly we find higher intensity of residential mobility in a year is associated with citizens of that country feeling like they have more freedom in their lives (WVS, on a scale from 1 = "none at all" to 10 = "a great deal"), $b = 0.016$, $se = 0.004$, $t(1,805.222) = 3.89$, $p < .001$, partial $R^2 = .008$; (GWP, "Are you satisfied with the freedom in your life?"), Estimate = 0.019, $se = 0.002$, $z = 8.08$, $p < .001$, $n = 217,900$, $OR = 1.019$.

When more people are moving, we additionally find, as expected, that residents of that nation are more likely to feel that they are thriving, are less stressed in their everyday lives, and feel better about their futures: they are more likely to say that they are currently thriving (GWP Life Evaluation Index, from 1 = suffering to 3 = thriving), $b = 0.008$, $se = 0.001$, $t(153,367.30) = 13.57$, $p < .001$, partial $R^2 = .001$; are likelier to report that their previous day was less stressful (GWP, "Did you feel any stress in your last day?"), Estimate = -0.007, $se = 0.002$, $z = -2.94$, $p = .003$, $n = 250,843$, $OR = 0.993$; are more optimistic about the future (GWP Optimism Index, measuring whether aspects of life are getting better or getting worse) $b = 0.29$, $se = 0.30$,

$t(228,661.19) = 9.67$, $p < .001$, partial $R^2 < .001$; and are more interested in new ideas (WVS,

from 1 = "Ideas that stood the test of time are generally best" to 10 = "New ideas are better than

old ones"), $b = 0.085$, $se = 0.017$, $t(39.74) = 5.08$, $p < .001$, partial $R^2 = .39$.

Relationships: Social partners, ingroups & outgroups, trust, and perceptions of how society treats outgroups. As expected, higher rates of mobility were associated with a greater

sense that people in that country have more access to a broader range of social partners (GWP

Social Life Index, measuring social support and opportunities to make new friends), $b = 0.214$,

$se = 0.038$, $t(65,790.81) = 5.63$, $p < .001$, partial $R^2 < .001$. A greater degree of residential

mobility within a country is also associated with a more cosmopolitan outlook, where people are

likely to identify with their nation than with their community (WVS, subtracting how strongly

respondents are to see themselves as part of their nation from how strongly they see themselves

as part of their community), $b = 0.011$, $se = 0.001$, $t(26,617.60) = 9.58$, $p < .001$, partial $R^2 =$

.051. Accordingly, increased mobility is associated with increased trust in national institutions

(GWP Institutional Trust Index, measuring trust in the military, the judicial system, the national

government, and the honesty of elections), $b = 0.071$, $se = 0.033$, $t(196,421.72) = 2.15$, $p = .032$,

partial $R^2 < .001$; and with increased trust in societal outgroups more generally (WVS, averaging

across trust in people you meet for the first time, people of another religion, and people of

another nationality), $b = 0.069$, $se = 0.012$, $t(104.65) = 5.86$, $p < .001$, partial $R^2 = .25$.

Interestingly, this increase in trust is not an across-the-board phenomenon, as increased mobility

is not associated with changes in trust towards ingroups (WVS, averaging across trust in family,

neighbors, and people you know personally), $b = 0.009$, $se = 0.008$, $t(74.373) = 1.07$, $p = .287$,

partial $R^2 = .015$; or towards people in general (WVS, "Generally speaking, would you say that

most people can be trusted or that you need to be very careful in dealing with people?"),

Estimate = −0.005, se = 0.005, z = −1.079, p = .281, n = 62,629, OR = 0.995. This increase in

trust in outgroups, with no change in general or ingroup trust, implies that people are expanding

their 'radius of trust' (Delhey, Newton, & Welzel, 2011), taking a broader view of who "most

people" encompasses in their society, and potentially extending bridging social capital to the

sorts of people who are not quite like themselves (e.g., Putnam, 2007).

Finally, we find that higher levels of mobility are associated with a decrease in

satisfaction with the ways that their society treats outgroups (implying that they are holding their

society to a higher standard) - whether respondents believe that their city is a good place for

immigrants or ethnic and sexual minorities to live (GWP Acceptance of Diversity Index), b = -

0.394, se = 0.036, t(198,495.58) = -10.87, p < .001, partial R^2 = .001. Higher mobility is

associated with a decreased likelihood of objecting to having an immigrant as one's neighbor

(WVS, Mentioning "an immigrant" as a person one wouldn't want as a neighbor), Estimate = -

0.027, se = 0.009, z = -3.16, p = .002, n = 60,814, OR = 0.973; though this pattern is somewhat

complicated, as higher mobility is also associated with an increased likelihood of objecting to

having someone from a different religion as a neighbor (WVS, Mentioning "someone from

another religion" as a person one wouldn't want as a neighbor), Estimate = 0.095, se = 0.021, z =

4.54, p < .001, n = 41,297, OR = 1.100.

Rights and responsibilities: Meritocracy & civic engagement. With greater optimism,

greater trust, and greater individualism, it is perhaps no surprise that when residential mobility is

higher within a country, more people see their society as meritocratic. They are more likely to

agree that in their country, hard work leads to success, (WVS, on a scale from 1 = "In the long

run, hard work usually brings a better life" to 10 = "Hard work doesn't generally bring success -

it's more a matter of luck and connections"), b = −0.078, se = 0.008, t(6,443.05) = −10.164, p <

.001, partial R^2 = .016; (GWP, "Can people in this country get ahead by working hard? Yes or No"), Estimate = 0.022, se = 0.002, z = 9.401, $p < .001$, n = 215,648, OR = 1.022; and accordingly are more likely to believe that the practical instantiation of this belief, entrepreneurship, is thriving in their areas (GWP, "Is the city where you live a good place for entrepreneurs?"), Estimate = 0.041, se = 0.006, z = 6.46, $p < .001$, n = 60,232, OR = 1.042.

Finally, and unexpectedly, given prior findings that more residentially-mobile areas are less civically-engaged than areas with greater residential stability, we find that increased mobility is associated with an increase in volunteering in the community (GWP, "Have you volunteered in the last month?"), Estimate = 0.019, se = 0.003, z = 6.07, $p < .001$, n = 210,463, OR = 1.019. However, this engagement seems to be primarily among people that residents already know, as we have no evidence for the relationship between residential mobility and helping out strangers (GWP, "Have you helped a stranger in the last month?"), Estimate = 0.003, se = 0.002, z = 1.44, p = .149, n = 208,048, OR = 1.003.

Granger-Causal Models

Findings from our Granger-causal models in the GWP datasets are largely consistent with the comparative longitudinal panel models presented above. In these models, we control for immigration, GDP, and the linear trend of year, as well as decomposing mobility into a within-country and between-country effect and including a random-intercept for country. We find that changes in within-country (country-mean-centered) mobility reliably predicts future cultural values.

Individualism. Changes in mobility predicts future changes in people in the country being more satisfied with the freedom in their lives, Estimate = 0.015, se = 0.002, z = 6.47, $p <$ .001, n = 205,132, OR = 1.02; predicts a future sense of thriving, b = 0.007, se = 0.001,

$t(237,000.86) = 12.103$, $p < .001$, partial $R^2 = 0.001$; predicts a future decrease in stress, Estimate = −0.005, $se = 0.002$, $z = -2.40$, $p = .016$, $n = 249,513$, $OR = 0.995$; and predicts a future increase in optimism, $b = 0.55$, $se = 0.029$, $t(210,207.19) = 18.87$, $p < .001$, partial $R^2 = 0.002$.

Relationships. Changes in mobility predict future increased satisfaction with social support and opportunities to make new friends, $b = 0.22$, $se = 0.038$, $t(46,133.009) = 5.86$, $p < .001$, partial $R^2 = 0.001$. We find that, unlike our cross-sectional models, increases in mobility do not predict future institutional trust, $b = 0.053$, $se = 0.032$, $t(209,339.09) = 1.67$, $p = .096$, partial $R^2 = 0.000$; but they do predict decreased belief that the place in which they live is an acceptably-good place for members of immigrant or ethnic and sexual minorities to live, $b = −0.41$, $se = 0.035$, $t(201,168.25) = −11.74$, $p < .001$, partial $R^2 = 0.001$.

Meritocracy and civic engagement. Increases in mobility predicts future belief that people can get ahead by working hard, Estimate = 0.010, $se = 0.002$, $z = 4.24$, $p < .001$, $n = 200,804$, $OR = 1.01$; and predicts a future sense that the place people live is good for entrepreneurs, Estimate = 0.042, $se = 0.007$, $z = 6.28$, $p < .001$, $n = 53,318$, $OR = 1.04$; and predicts future rates of volunteering, Estimate = 0.014, $se = 0.003$, $z = 4.77$, $p < .001$, $n = 190,396$, $OR = 1.01$; however it does not predict future rates of helping strangers, Estimate = −0.003, $se = 0.002$, $z = −1.45$, $p = .15$, $n = 200,426$, $OR = 0.997$.

Across all the variables for which we could simultaneously run both Granger-causal and cross-sectional analysis, only one variable (Institutional Trust) showed a differential pattern of results. For the full models with estimates for all parameters, and for models without controls (which show essentially the same pattern of results), see
https://osf.io/wyckr/?view_only=acea5f1fda314f5d829d8dc97c0203b4.

Lagged Granger-Causal Effects

In addition to examining the effects of mobility on the next year's cultural values, we can test for the duration of these effects - how long does the effect of mobility seem to last? We ran analyses that tested for the two, three, four, five, six, seven, eight, nine, and ten-year lagged effects of changes in mobility, using the same Granger-causal framework (does mobility from three years earlier, for example, predict a given cultural belief in a given year above and beyond values of that belief from three years earlier) and the same controls as above. For all variables in which we find one-year lagged mobility Granger-predictive effects, we still find a relationship between mobility and that variable a good ten years later.

Specifically, we find ten-year lagged effects for the relationship between past mobility and a given year's satisfaction with the freedom in one's life, Estimate = 0.015, se = 0.002, z = 6.60, $p < .001$, n = 203,629, OR = 1.02; sense of social support and opportunities to make new friends, b = 0.23, se = 0.038, $t(58,905.15)$ = 6.14, $p < .001$, partial R^2 = 0.001; sense of thriving, b = 0.007, se = 0.001, $t(236,259.40)$ = 11.77, $p < .001$, partial R^2 = 0.001; (reduced) sense of daily stress, Estimate = -0.005, se = 0.002, z = -2.29, p = .021, n = 248,221, OR = 0.995; and sense of optimism, b = 0.56, se = 0.029, $t(212,432.97)$ = 19.18, $p < .001$, partial R^2 = 0.002.

While the mobility of ten years previous does not predict a given year's level of institutional trust, b = 0.038, se = 0.032, $t(210,655.86)$ = 1.21, p = .226, partial R^2 = 0.000; it does predict a given year's decreased belief that the place in which they live is an acceptably-good place for members of immigrant or ethnic and sexual minorities to live, b = −0.44, se = 0.035, $t(200,383.91)$ = −12.53, $p < .001$, partial R^2 = 0.001.

Finally, the mobility of ten years previous predicts a given years' belief that people can get ahead by working hard, Estimate = 0.009, se = 0.002, z = 4.22, $p < .001$, n = 199,285, OR = 1.01; that the place they live is good for entrepreneurs, Estimate = 0.040, se = 0.007, z = 5.98, p

$< .001$, $n = 52,732$, $OR = 1.04$; rates of volunteering in the community, Estimate $= 0.014$, $se = 0.003$, $z = 4.75$, $p < .001$, $n = 202,869$, $OR = 1.01$; but not rates of helping strangers, Estimate $= -0.003$, $se = 0.002$, $z = -1.31$, $p = .19$, $n = 199,181$, $OR = 0.997$. See Table 1 for a summary of results. See https://osf.io/wyckr/?view_only=acea5f1fda314f5d829d8dc97c0203b4 for the regression parameters for all lags for all variables.

For all variables, we tested for the inverse relationship, where the cultural value Granger-predicts changes in mobility (including our full set of controls). Only one of the 13 cultural values shows evidence for Granger-prediction: having felt stress in the previous day, $t = 1.97$, $p = .049$. In this dataset, unlike in Study 1, we find no evidence for Granger-prediction of future mobility by any trust-related variable. For the full set of models for all variables, see the SI.

Post-Hoc Multiverse Analyses

We conducted multiverse cherry-picking analyses for all WVS variables, using an approach that matched the approach in Study 1 - due to data restrictions with the Gallup World Poll, we only had access to the analyzed variables and so were unable to construct the multiverse of possible effects. We find no evidence that our reported results have stronger relationships than all other comparable variables in the WVS ($Z = 1.20$, $p = .117$ for the multiverse of continuous variables; $Z = -0.11$, $p = .459$ for the multiverse of binary variables), nor do we find evidence that they have stronger relationships than closely-related but unreported variables ($Z = 0.70$, $p = .250$ for the multiverse of continuous variables; $Z = -0.34$, $p = .614$ for the multiverse of binary variables). See the SI for details.

Discussion

In summary, we find, across a wide range of industrialized nations, controlling for both immigration and the state of the national economy, that years of higher residential mobility than

average are also years in which citizens are more individualistic, happier, more optimistic, feel like they have more freedom in their lives, are more cosmopolitan, extend their trust to a wider range of people in society, are more worried about the status of outgroups, are more likely to think that their country is a meritocracy, and are more likely to volunteer some time in their communities (at least among the people they know). We show that at least a meaningful subset of these findings are Granger-causal, where changes in mobility within a country predict future-year changes in cultural values. These effects, moreover, appear to be long-lasting, as every variable for which we find Granger-causal effects one year later shows a significant relationship on a ten-year lag. In an analysis of 18 different industrialized nations, each with their own specific pattern of changes in residential mobility, using decades of available data, we find a consistent pattern - changes in residential mobility within a country is related to changes in a myriad of theoretically-relevant cultural values.

Study 3: United States Longitudinal Panel Findings

After having established both within-nation and cross-national relationships between changes in residential mobility and changes in cultural values, we examined how these changes may come about within individual households over time. Nations are made up of people, of course - how is it that the experience of moving (or failing to move) might affect specific individuals? What are the microfoundations of the macro patterns that we have demonstrated in Studies 1 and 2? To answer this question, we use data from the Panel Study of Income Dynamics (PSID), a study that has been tracking the life outcomes of a panel of American households since 1968. While the PSID does not generally ask psychological questions to its household panelists, there has been one Well-Being module that was delivered to a little under 10% of the total PSID

sample in 2016. As the PSID tracks both actual moves and desires to move, we therefore are able to look at how both moving and wishing to move but not being able to are associated with feelings of dynamism and stasis within the individual movers and non-movers themselves.

The Well-Being module contained several variables that matched our theoretical model, and so we selected constructs measuring individual flourishing (that incorporates individual well-being, optimism, and satisfaction with one's social life); life satisfaction; resentment (as an inverse to measures of trust and fairness); and belief that the life of the average person is getting better (as a hybrid measure of optimism and institutional trust). While the breadth of these constructs do not contain the full diversity of items in the WVS or GWP, we still feel that they encompass key elements of our general theoretical approach.

Method

Participants

In this study, we merged the 2003-2015 waves of the Panel Study of Income Dynamics with the Well-Being and Daily Life Supplement, ~8,300 participants in total. Panelists were coded as being 'stuck' in a year if they had indicated wanting to move in the prior year but their address had not changed. See the online supplement for descriptive statistics for the sample.

Analytic Approach

As we only had psychological data for the 2015 wave, we ran three sets of regression analysis, one investigating whether having moved the previous year predicted our outcomes; one investigating whether being stuck in that year (i.e., indicating a desire to move in the 2014 wave, but remaining at the same address in both 2014 and 2015) predicted our outcomes; and one investigating whether the number of years one had felt stuck (i.e., the number of consecutive years one had felt stuck, starting with the 2015 wave and working backwards) predicted our

outcomes. In all sets of models, we additionally control for age, gender, socioeconomic status (computed as the average of z-scored income decile based on 2015 IPUMS-CPS data and years of completed education), race, marital status, employment status, religiosity, self-reported health, and the rurality of their area.

Results and Discussion

We find that having moved in the prior year (26.2% of the sample), compared with remaining put, is associated (controlling for gender, socioeconomic status, race, marital status, employment status, religiosity, self-reported health, and the rurality of their area) with a belief that the average person's life is getting better, $OR = 1.03$ [1.007, 1.06], $se = 0.014$, $z = 2.44$, $p = .015$, $n = 7,818$; are more likely to say that their lives are flourishing (a construct made up of self-reported purpose in life, having supportive relationships, feeling engaged in one's daily activities, providing happiness to others, feeling capable in important activities, feeling that one is a good person living a good life, being optimistic about the future, and feeling respected, Diener et al., 2009; scale alpha = .89), $b = 0.38$ [0.15, 0.61], $se = 0.12$, $t(7,757) = 3.25$, $p = .001$, $eta^2 = .0000046$; and are less likely to say that there are a lot of people in the world who have things that they do not deserve, $OR = 0.97$ [0.94, 0.995], $se = 0.013$, $z = -2.31$, $p = .021$, $n = 7,767$.

By contrast, those who wish to have moved but find themselves stuck at the same address show a different pattern of results. The more years that they have been wanting to move, the more likely they are to say that the life of the average person is not getting better (but getting worse), $OR = 0.99$ [0.98, 0.99], $se = 0.0046$, $z = 3.35$, $p < .001$, $n = 7,772$; the less satisfied they are with their lives overall (*Satisfaction With Life Scale*, Diener et al., 1985; scale alpha = .89), $b = -0.16$ [-0.23, -0.088], $se = 0.036$, $t(7,726) = -4.42$, $p < .001$, $eta^2 = .0069$; and, directionally, the

less they see themselves as flourishing in their lives, b = -0.076 [-0.15, 0.0016], se = 0.40,

$t(7,713)$ = -1.92, p = .055, eta^2 = .0011. Even simply looking at whether a participant was stuck

in place in the year prior to being asked (13.5% of the sample), compared with the rest of the

sample, shows that those who were stuck have greater belief that the life of the average person is

not getting better, but getting worse, OR = 0.97 [0.94, 0.998], se = 0.016, z = 2.07, p = .038, n =

7,818; have lower satisfaction with life, b = -0.47 [-0.72, -0.23], se = 0.13, $t(7,771)$ = -3.79, p <

.001, eta^2 = .0073; and lower feelings of flourishing (albeit only directionally), b = -0.24 [-0.51,

0.034], se = 0.14, $t(7,757)$ = -1.72, p = .086, eta^2 = .0013. See the SI for full regression tables,

including regressions without control variables.

In summary, we find, at an individual level, that having moved in the previous year is

associated with a greater sense of flourishing and a decreased sense of resentment, while wanting

to move but being unable to act upon that desire is instead associated with increased pessimism

and decreased life satisfaction.[1]

Post-Hoc Multiverse Analyses

We conducted multiverse cherry-picking analyses using an approach that matched the

approach in Studies 1 & 2, and we find no evidence that our reported results have stronger

relationships than all other comparable variables in the PSID (Z = 1.65, p = .061 for the

multiverse of continuous variables; Z = 0.91, p = .204 for the multiverse of binary variables), nor

do we find evidence that they have stronger relationships than closely-related but unreported

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[1] It is of course the case that being forced into any course of action, whether being forced not to move, or indeed being forced to move, may also lead to feelings of reactance and ill-being. Our data do not allow us to test for differences within those forced to move, but we suspect that it is not pleasant. See, e.g., Desmond, 2016 for more on the consequences of eviction. Nevertheless, we believe that the state of being stuck in place is aversive, even if other states might be similarly-felt.

variables ($Z = 0.71$, $p = .172$ for the multiverse of continuous variables; $Z = 0.38$, $p = .401$ for the multiverse of binary variables). See the SI for details.

Discussion

Is a society more dynamic when its residents are moving from residence to residence than when its people are staying put? We find evidence that it is. We find that increases in residential mobility predicts that people across a wide range of industrialized nations are more likely to say that hard work leads to success, that they are thriving in their lives, are more optimistic, more individualistic, more likely to be more cosmopolitan in their identification and trust, and more likely to be satisfied with their social lives. These findings are echoed in the reports of two separate nationally-representative cohorts of Americans, where we find that higher levels of residential mobility predict greater national happiness; and among those Americans who themselves have recently moved, that they are more likely than those who have not moved to say that their lives have purpose, their relationships are supportive, they feel engaged, respected, and capable, they are optimistic about the future, and that they think that the average person's life in America is still getting better. Simply wanting to move, however, is not enough, and we find that, in this cohort, being unable to move when one wishes predicts a decrease in life satisfaction, an increase in cynicism, and a marginal decrease in feelings of flourishing.

Our results show that changes in residential mobility have similar effects to changes in the rate of immigration, but that the two patterns are nevertheless distinct. Both, of course, involve strangers coming to town, but the effects of residential mobility seem to be broadly stronger. We suspect this difference in magnitude is attributable to the ways that mobility and immigration shape a society - the effects of immigration may be more localized to the cities and

towns that new migrants use as an entrepot to their new cultures, while residential mobility may affect the culture more broadly as all citizens, in theory, can take part. Furthermore, immigration, and the associated demographic changes can sometimes bring with it a nativist backlash (Abrajano & Hajnal, 2015; Lesińska, 2014) which may not be present when the internal migrants are understood to be part of the same society.

Unexpectedly, given prior work showing that residential mobility was associated with less pro-community action, we found evidence that an increase in residential mobility was associated with an increase in volunteering behavior. We speculate that volunteering may act as a relatively low-cost signal that one is a good relationship partner in the competitive friendship markets of a residentially-mobile society (Barclay 2016); and that respondents may be volunteering, in part, for the purpose of making friends (Okun & Schultz, 2003). Indeed, these volunteers may be searching for the very sorts of approachable, low-commitment groups that residential mobility encourages (Oishi et al., 2015). Had we been able to measure more involved behavior, or even the overall intensity of volunteering (not its mere presence), we suspect that we may have found results in line with our original hypothesis.

Limitations and Future Directions. We note some unavoidable issues, given our underlying datasets. For one, since our psychological variables of interest were only asked in a single year of the American Panel Study of Income Dynamics, we were unable to explore how moving changed the psychology of our respondents, and we were only able to look at cross-sectional differences between respondents in different demographic states. This of course does not allow for properly causal inference, as there may be additional unmeasured variables that help to explain the observed differences. The limited number of questions asked does not allow us to know why people moved, why people wanted to move, and why they chose to stay put, all

of which would help to further contextualize our findings, and does not allow us to exactly mirror the constructs measured in the cross-national study.

The third-variable issue is also unavoidably present in our cross-national panel study results, albeit to a somewhat lesser degree. Since we are able to use countries as their own controls, we are able to rule out many possible alternate explanations for our findings. Additionally, since patterns of residential mobility differ quite a bit from country to country over the past few decades, any third-variable explanation would have to take these heterogeneous time-trends into account. However, since we do not have experimental or quasi-experimental evidence, it is still possible that there is another explanatory variable that is driving the relationships we show, one that is working on the same timecourse and in a similar way across our sample of nations as residential mobility, and so we therefore cannot make confidently causal claims about these inferences.

We also note that these findings are based on a sample of industrialized nations, due to the limited availability of high-quality mobility data. While our sample does cover a relatively wide range of cultural variation, our nations are all largely alike in their stage of economic development. We would expect that our findings would generalize to other similarly-industrialized nations, but we are less confident that residential mobility means something psychologically and culturally similar in countries that are still in the process of industrializing (though see de Toqueville, 1840/1969 for an analysis of residential mobility in pre-industrial America). Moving out of necessity, e.g., as a refugee (see Kraly et al., 2023 for a review), may lead to different outcomes than moving volitionally, associated with higher individualism, for example, but not higher optimism (Buttrick & Oishi, 2021; but see Shah 2020 for an argument in favor of universalism).

The virtues we show that are associated with mobility - greater cosmopolitanism, optimism, individualism, broader trust, and well-being - are essential to the functioning of modern multiethnic liberal societies (see, e.g., Galston, 1988). We do not wish to suggest that everyone should make a habit of constant motion; staying happily-settled brings its own joys and virtues. Most people, for example, report that they are perfectly happy with their homes and neighborhoods, with no desire whatsoever to move: in the 2015 Gallup World Poll, 66% of respondents worldwide agreed that the area in which they lived was ideal for them; ad in the 2016 Gallup Daily Tracking Poll, 74% of Americans agreed that their current domicile was ideal for themselves and their family. People choose not to move for a range of reasons: because they enjoy their job, find strength in their community, have relatives nearby, don't want to disrupt the social lives of their children; and because they worry about how easily they'll be able to rebuild their social and professional lives in a new location (see Schewel, 2020 for a review).

Nevertheless, we show evidence that, within a broad range of countries, more people moving around predicts an increase in a specific set of cultural values. A more mobile society is a more dynamic society (and a more stable society is a more static society) - one in which people report more individualism, greater well-being, more satisfaction with their social lives, less parochialism, and a greater sense of optimism, trust, and fairness. These effects are long-lasting, with mobility predicting changes in cultural values a full decade out. Declining rates of residential mobility within the United States over the past several decades have co-occured with an increasing sense of American stagnation and malaise (Buttrick & Oishi, 2021) - while we wouldn't argue that residential mobility, by itself, is a full explanation for this trend, the data we present here suggests that residential mobility, through the ways it shapes individual self-understanding, relationships with others, and how it helps spread information and cultural values

throughout a society, may be an important factor to consider when trying to understand how

cultures change.

References

Abramitzky, R., Boustan, L., Jacome, E., & Perez, S. (2021). Intergenerational mobility of immigrants in the United States over two centuries. *American Economic Review, 111*(2), 580-608.

Abrajano, M. & Hajnal, Z. L. (2015). *White backlash: Immigration, race and American politics*. Princeton, NJ: Princeton University Press.

Alvarez, M., Bernard, A., & Lieske, S. N. (2021). Understanding internal migration trends in OECD countries. *Population, Space and Place*, *27*(7), e2451.

Barclay, P. (2016). Biological markets and the effects of partner choice on cooperation and friendship. *Current Ppinion in Psychology*, *7*, 33-38.

Baumeister, R. F. (1987). How the self became a problem: A psychological review of historical research. *Journal of Personality and Social Psychology*, *52*(1), 163.

Bayoumi, M. T. & Barkema, J. (2019). Stranded! How rising inequality suppressed US migration and hurt those left behind. *International Monetary Fund Working Paper*, 19/122.

Bazzi, S., Fiszbein, M., & Gebresilasse, M. (2020). Frontier culture: The roots and persistence of "rugged individualism" in the United States. *Econometrica, 88*(6), 2329-2368.

Bishop, B. (2008). *The big sort: Why the clustering of like-minded America is tearing us apart*. Houghton Mifflin Harcourt.

Bleidorn, W., Schönbrodt, F., Gebauer, J. E., Rentfrow, P. J., Potter, J., & Gosling, S. D. (2016). To live among like-minded others: Exploring the links between person-city personality fit and self-esteem. *Psychological Science*, *27*(3), 419-427.

Borschel, E., Zimmermann, J., Crocetti, E., Meeus, W., Noack, P., & Neyer, F. J. (2019). Me and you in a mobile world: The devel-opment of regional identity and personal relationships in young adulthood. *Developmental Psychology, 55*(5), 1072– 1087.

Buttrick, N., Moulder, R., & Oishi, S. (2020). Historical change in the moral foundations of political persuasion. *Personality and Social Psychology Bulletin, 46*(11), 1523-1537.

Buttrick, N., & Oishi, S. (2021). The cultural dynamics of declining residential mobility. *American Psychologist, 76*(6), 904–916

Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, *44*(6), 945-963.

Chan, M., Cheung, F., Lau, C., & Ma, T. F. (2021). Global trends in cross-cultural endorsement of social mobility: Evidence from 167 countries. *American Psychologist, 76*(6), 917.

Choi, H., & Oishi, S. (2020). The psychology of residential mobility: a decade of progress. *Current opinion in psychology*, *32*, 72-75.

Clark, W. A. V. (2005). Intervening in the residential mobility process: Neighborhood outcomes for low-income. *Proceedings of the National Academy of Science, 102*, 15307-15312.

Clark, W. A., & Lisowski, W. (2017). Prospect theory and the decision to move or stay. *Proceedings of the National Academy of Sciences, 114*(36), E7432-E7440.

Coulter, R. (2013). Wishful thinking and the abandonment of moving desires over the life course. *Environment and Planning A*, *45*(8), 1944-1962.

Coulter, R., Ham, M. V., & Findlay, A. M. (2016). Re-thinking residential mobility: Linking lives through time and space. *Progress in Human Geography, 40*(3), 352-374.

De, S., Gelfand, M. J., Nau, D., & Roos, P. (2015) The inevitability of ethnocentrism revisited: Ethnocentrism diminishes as mobility increases. *Scientific Reports 5*, 1–7.

Delhey, J., Newton, K., & Welzel, C. (2011). How general is trust in "most people"? Solving the radius of trust problem. *American Sociological Review, 76*(5), 786-807.

Desmond, M. (2016). *Evicted: Poverty and profit in the American city*. Crown.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*, 71-75.

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research, 39*, 247-266.

Fairbrother, M. (2014), Two multilevel modeling techniques for analyzing comparative longitudinal survey datasets. *Political Science Research Methods, 2*, 119–140.

Feldman, S. (1988). Structure and consistency in public opinion: The role of core beliefs and values. *American Journal of Political Science 32*(2), 416-440.

Foster, T. B. (2017). Decomposing American immobility: Compositional and rate components of interstate, intrastate, and intracounty migration and mobility decline. *Demographic Research*, *37*, 1515-1548.

Foster, T. B. (2018). The persistent black-white gap in and weakening link between expecting to move and actually moving. *Sociology of Race and Ethnicity*, *4*(3), 353-370.

Foygel, R. & Drton, M. (2010). Extended Bayesian information criteria for Gaussian graphical models. *Advances in Neural Information Processing Systems, 23*, 2020–2028

Galston, W. A. (1988). Liberal virtues. *American Political Science Review, 82*(4), 1277-1290.

Gillespie, B. J. (2016). *Household mobility in America: Patterns, processes, and outcomes*. New York: Palgrave Macmillan.

Goldschmidt, W. (1971). Independence as an element in pastoral social systems. *Anthropological Quarterly*, 132-142.

Golino, H. F., & Epskamp, S. (2017). Exploratory graph analysis: A new approach for estimating the number of dimensions in psychological research. *PloS one, 12*(6), e0174035.

Granger, C. W. J. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica, 37*(3), 424–438.

Greenfield, P. M. (2013). The changing psychology of culture from 1800 through 2000. *Psychological Science*, *24*, 1722-1731.

Haynie, D. L., South, S. J. & Bose, S. (2006). The company you keep: Adolescent mobility and peer behavior. *Sociological Inquiry*, *76*, 397-426.

Hemmer, N. (2022). *Partisans: The conservative revolutionaries who remade American politics in the 1990s*. Basic Books

Hothorn, T., Hornik, K., Van De Wiel, M. A., & Zeileis, A. (2008). Implementing a class of permutation tests: the coin package. *Journal of Statistical Software, 28*(8), 1-23.

Hruschka, D. J. & Henrich, J. (2006). Friendship, cliquishness, and the emergence of cooperation. *Journal of Theoretical Biology*, 239, 1–15.

Ito, K., Tan, T. S.-M., Lee, A., & Li, L. M. W. (2019). Low residential mobility and novelty-seeking consumption. *Journal of Cross- Cultural Psychology*, 50(10), 1242–1252

Jackson, J. C., Caluori, N., Gray, K., & Gelfand, M. (2021). The new science of religious change. *American Psychologist, 76*(6), 838.

Jokela, M. (2009). Personality predicts migration within and between US states. *Journal of Research in Personality*, *43*(1), 79-83.

Jokela, M. (2020). Neighborhoods, psychological distress, and the quest for causality. *Current Opinion in Psychology*, *32*, 22-26.

Jokela, M., Bleidorn, W., Lamb, M. E., Gosling, S. D., & Rentfrow, P. J. (2015). Geographically varying associations between personality and life satisfaction in the London metropolitan area. *Proceedings of the National Academy of Sciences*, *112*(3), 725-730.

Joshi, P. D., Wakslak, C. J., Raj, M., & Trope, Y. (2016). Communicating with distant others: The functional use of abstraction. *Social Psychological and Personality Science*, *7*(1), 37-44.

Kang, N. & Kwak, N. (2003). A multilevel approach to civic participation: Individual length of residence, neighborhood residential stability, and their interactive effects with media use. *Communication Research, 30*, 80–106.

Kitayama, S., Conway III, L. G., Pietromonaco, P. R., Park, H., & Plaut, V. C. (2010). Ethos of independence across regions in the United States: the production-adoption model of cultural change. *American Psychologist*, *65*(6), 559.

Kitayama, S., Ishii, K., Imada, T., Takemura, K., & Ramaswamy, J. (2006) Voluntary settlement and the spirit of independence: Evidence from Japan's" northern frontier." *Journal of Personality and Social Psychology, 91,* 369.

Klein, E. (2021). *Why we're polarized*. Simon & Schuster

Kleiner, M. M., & Krueger, A. B. (2013). Analyzing the extent and influence of occupational licensing on the labor market. *Journal of Labor Economics*, *31*(S1), S173-S202.

Knudsen, A. S. B. (2019). *Those who stayed: Individualism, self-selection and cultural change during the age of mass migration.* Available at SSRN: https://ssrn.com/abstract=3321790

Koikkalainen, S. & Kyle, D. (2016). Imagining mobility: the prospective cognition question in migration research. *Journal of Ethnic and Migration Studies, 42*, 759–776 (2016).

Kraly, E. P., Abbasi-Shavazi, M. J., Torres Colón, L. L., & Reed, H. E. (2023). Social consequences of forced and refugee migration. *Annual Review of Sociology, 49*, 129-153.

Lee, N., Morris, K., & Kemeny, T. (2018). Immobility and the Brexit vote. *Cambridge Journal of Regions, Economy and Society*, *11*(1), 143-163.

Lesińska, M. (2014). The European backlash against immigration and multiculturalism. *Journal of Sociology, 50*(1), 37-50.

Li, L. M. W. (2017). Social class, social capital and residential mobility in China. *Social Indicators Research, 132*(3), 1117-1129.

Li, W. Q., Li, L. M. W., & Li, M. (2019). Residential mobility reduces ingroup favouritism in prosocial behaviour. *Asian Journal of Social Psychology*, *22*(1), 3-17.

Lind, E. A. & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.

Long, L. (1988). *Migration and residential mobility in the United States*. New York: Russell Sage Foundation.

Long, L. H., & Hansen, K. A. (1977). Selectivity of black return migration to the South. *Rural Sociology*, *42*(3), 317.

Lu, M. (1999). Do people move when they say they will? Inconsistencies in individual migration behavior. *Population and Environment*, *20*, 467-488.

Lun, J., Oishi, S., & Tenney, E. R. (2012). Residential mobility moderates preferences for egalitarian versus loyal helpers. *Journal of Experimental Social Psychology*, *48*(1), 291-297.

Massara, G. P., Di Matteo, T., & Aste, T. (2016). Network filtering for big data: Triangulated maximally filtered graph. *Journal of Complex Networks, 5*(2), 161-178.

May, E. T. (2017). *Fortress America: How we embraced fear and abandoned democracy*. Basic Books

McGhee, H. (2021). *The sum of us: What racism costs everyone and how we can prosper together*. One World.

McNamee, S. J. & Miller, R. K. (2009). *The meritocracy myth*. Lanham, MD: Rowman & Littlefield.

Macy, M. W., & Sato, Y. (2002). Trust, cooperation, and market formation in the US and Japan. *Proceedings of the National Academy of Sciences, 99*(suppl 3), 7214-7220.

Magdol, L. &. Bessel, D. R. (2003) Social capital, social currency, and portable assets: The impact of residential mobility on exchanges of social support. *Personal Relationships, 10*, 149–170.

Mateyka, P. J. (2015). *Desire to move and residential mobility: 2010–2011* (Report P70-14). U.S. Census Bureau.

Molloy, R., & Smith, C. (2019, October). US internal migration: Recent patterns and outstanding puzzles. In *Federal Reserve Bank of Boston's 63rd Economic Conference.“A House Divided: Geographical Disparities in Twenty-First Century America*.

Molloy, R., Smith, C. L., & Wozniak, A. K. (2014). *Declining migration within the US: The role of the labor market* (No. w20065). National Bureau of Economic Research.

Molloy, R., Smith, C. L., & Wozniak, A. (2017). Job changing and the decline in long-distance migration in the United States. *Demography*, *54*(2), 631-653.

Obschonka, M., Stuetzer, M., Rentfrow, P. J., Shaw-Taylor, L., Satchell, M., Silbereisen, R. K., ... & Gosling, S. D. (2018). In the shadow of coal: How large-scale industries contributed to present-day regional differences in personality and well-being. *Journal of Personality and Social Psychology*, *115*(5), 903.

Oishi, S. (2010). The psychology of residential mobility: Implications for the self, social relationships, and well-being. *Perspectives on Psychological Science*, *5*(1), 5-21.

Oishi, S. (2014). Socioecological psychology. *Annual Review of Psychology, 65,* 581–609

Oishi, S., & Kesebir, S. (2012). Optimal social-networking strategy is a function of socioeconomic conditions. *Psychological Science*, *23*(12), 1542-1548.

Oishi, S., Kesebir, S., Miao, F. F., Talhelm, T., Endo, Y., Uchida, Y., ... & Norasakkunkit, V. (2013). Residential mobility increases motivation to expand social network: But why?. *Journal of Experimental Social Psychology*, *49*(2), 217-223.

Oishi, S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science, 22*(9), 1095-1100.

Oishi, S., Krochik, M., Roth, D., & Sherman, G. D. (2012). Residential mobility, personality, and wellbeing: An analysis of cortisol secretion. *Social Psychological and Personality Science, 3*, 153 – 161

Oishi, S., Lun, J., & Sherman, G. D. (2007). Residential mobility, self-concept, and positive affect in social interactions. *Journal of personality and social psychology*, *93*(1), 131.

Oishi, S., Rothman, A.J., Snyder, M., Su, J., Zehm, K., Hertel, A.W., et al. (2007). The socio-ecological model of pro-community action: The benefits of residential stability. *Journal of Personality and Social Psychology, 93*, 831–844.

Oishi, S., Saeki, M., & Axt, J. (2015). Are people living in walkable areas healthier and more satisfied with life? *Applied Psychology: Health and Well-Being, 7*(3), 365-386.

Oishi, S. & Talhelm, T. (2012). Residential mobility: What psychological research reveals. *Current Directions in Psychological Science, 21*, 425–430.

Oishi, S., Talhelm, T., Lee, M., Komiya, A., & Akutsu, S. (2015). Residential mobility and low-commitment groups. *Archives of Scientific Psychology, 3*(1), 54.

Oishi, S., & Tsang, S. (2022). The socio-ecological psychology of residential mobility. *Journal of Consumer Psychology, 32*(3), 519-536.

Okun, M. A., & Schultz, A. (2003). Age and motives for volunteering: Testing hypotheses derived from socioemotional selectivity theory. *Psychology and Aging, 18*(2), 231–239.

Pearlstein, R. (2020). *Reaganland: America's right turn 1976-1980.* Simon & Schuster.

Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century: The 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies, 30*(2), 137-174.

Putnam, R. D. (2000). *Bowling alone: Revised and updated: The collapse and revival of American community.* Simon & Schuster.

Rodgers, D. T. (2012). *Age of Fracture*. Belknap Press.

Roos, P., Gelfand, M., Nau, D., & Carr, R. (2014) High strength-of-ties and low mobility enable the evolution of third-party punishment. *Proceedings of the Royal Society B: Biological Sciences, 281*, 20132661.

Rothstein, R. (2017). *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997) Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*, 918–924.

Santos, H. C., Varnum, M. E., & Grossmann, I. (2017). Global increases in individualism. *Psychological Science, 28*(9), 1228-1239.

Sato, K., Yuki, M. & Norasakkunkit, V. (2014). A socio-ecological approach to cross-cultural differences in the sensitivity to social rejection: The partially mediating role of relational mobility. *Journal of Cross-Cultural Psychology, 45*, 1549–1560.

Schewel, K. (2020). Understanding immobility: Moving beyond the mobility bias in migration studies. *International Migration Review*, *54*(2), 328-355.

Shah, S. (2020), *The next great migration: The story of movement on a changing planet.* Bloomsbury.

Sharkey, P. (2013). *Stuck in place: Urban neighborhoods and the end of progress toward racial equality*. University of Chicago Press

Sng, O., Neuberg, S. L., Varnum, M. E., & Kenrick, D. T. (2018). The behavioral ecology of cultural psychological variation. *Psychological Review, 125*(5), 714.

Spencer, P. (1965). *The Samburu: A study of gerontocracy in a nomadic tribe*. Berkeley: University of California Press.

Squire, P., Wolfinger, R. E., & Glass, D. P. (1987). Residential mobility and voter turnout. *American Political Science Review, 81*(1), 45-65.

Steegen, S., Tuerlinckx, F., Gelman, A., & Vanpaemel, W. (2016). Increasing transparency through a multiverse analysis. *Perspectives on Psychological Science, 11*(5), 702-712.

Su, J. C., Chiu, C. Y., Lin, W. F., & Oishi, S. (2016). Social monitoring matters for deterring social deviance in stable but not mobile socio-ecological contexts. *Plos one, 11*, e0167053.

Sznycer, D., Takemura, K., Delton, A. W., Sato, K., Robertson, T., Cosmides, L., & Tooby, J. (2012). Cross-cultural differences and similarities in proneness to shame: An adaptationist and ecological approach. *Evolutionary Psychology*, *10*, 147470491201000213.

Talhelm, T., & Oishi, S. (2014). Residential mobility affects self- concept, group support, and happiness of individuals and communities. In P. J. Rentfrow (Ed.), *Geographical psychology: Exploring the interaction of environment and behavior* (pp. 219– 239). American Psychological Association.

Taylor, C. (1989) *Sources of the self: The making of the modern identity.* Harvard University Press.

Thomson, R., Yuki, M., Talhelm, T., Schug, J., Kito, M., Ayanian, A. H., . . . Visserman, M. L. (2018). Relational mobility predicts social behaviors in 39 countries and is tied to historical farming and threat. *Proceedings of the National Academy of Sciences of the United States of America, 115*, 7521–7526

de Tocqueville, A. (1840/1969). Democracy in America. (G. Lawrence, Trans.). Garden City, NY: Doubleday.

Varnum, M. E. & Grossmann, I. (2017). Cultural change: The how and the why. *Perspectives on Psychological Science, 12*, 956–972.

Vigen, T. (2015). *Spurious correlations*. Hachette UK.

Wang, C.S., Lee, M. Ku, G., Leung, A. K. y. (2018) The cultural boundaries of perspective-taking: when and why perspective-taking reduces stereotyping. *Personality and Social Psychology Bulletin, 44*, 928–943.

Wu, J., Balliet, D., & van Lange, P. A. (2016). Gossip versus punishment: The efficiency of reputation to promote and maintain cooperation. *Scientific Reports 6*, 1–8.

Yamagishi, T. (1998). *The structure of trust.* University of Tokyo Press [in Japanese; English version is available at the author's website: http:// lynx.let.hokudai.ac.jp/members/yamagishi/english.htm].

Yuki, M., & Schug, J. (2020). Psychological consequences of relational mobility. *Current opinion in psychology*, *32*, 129-132.

Zimmermann, J., & Neyer, F. J. (2013). Do we become a different person when hitting the road? Personality development of sojourners. *Journal of Personality and Social Psychology*, *105*(3), 515.

Tables and Figures

Table 1
Consolidated Results, Study 2

Outcome	Contemporaneous	1-Year Lag	10-Year Lag
Individuals			
Individualism	***	-	-
Endorsement of competition	**	-	-
Protection of rights	***	-	-
Freedom	***	***	***
Thriving	***	***	***
Less Stress	**	*	*
Optimism	***	***	***
Interest in new ideas	***	-	-
Relationships			
Opportunities for friendship	***	***	***
Cosmopolitanism	***	-	-
Trust in institutions	*	#	*n.s.*
Trust in outgroups	***	-	-
Higher standard for treatment of minorities	***	***	***
Rights & Responsibilities			
Endorsement of meritocracy	***	***	***
Good place for entrepreneurs	***	***	***
Greater formal volunteering	***	***	***

Note. Table reports *p*-values for in-text results for Study 2, with controls. *n.s. p* > .10 # *p* < .10, **p* < .05 **p < .01, ***p < .001. – indicates that data for this question is too sparse for Granger time-series models.
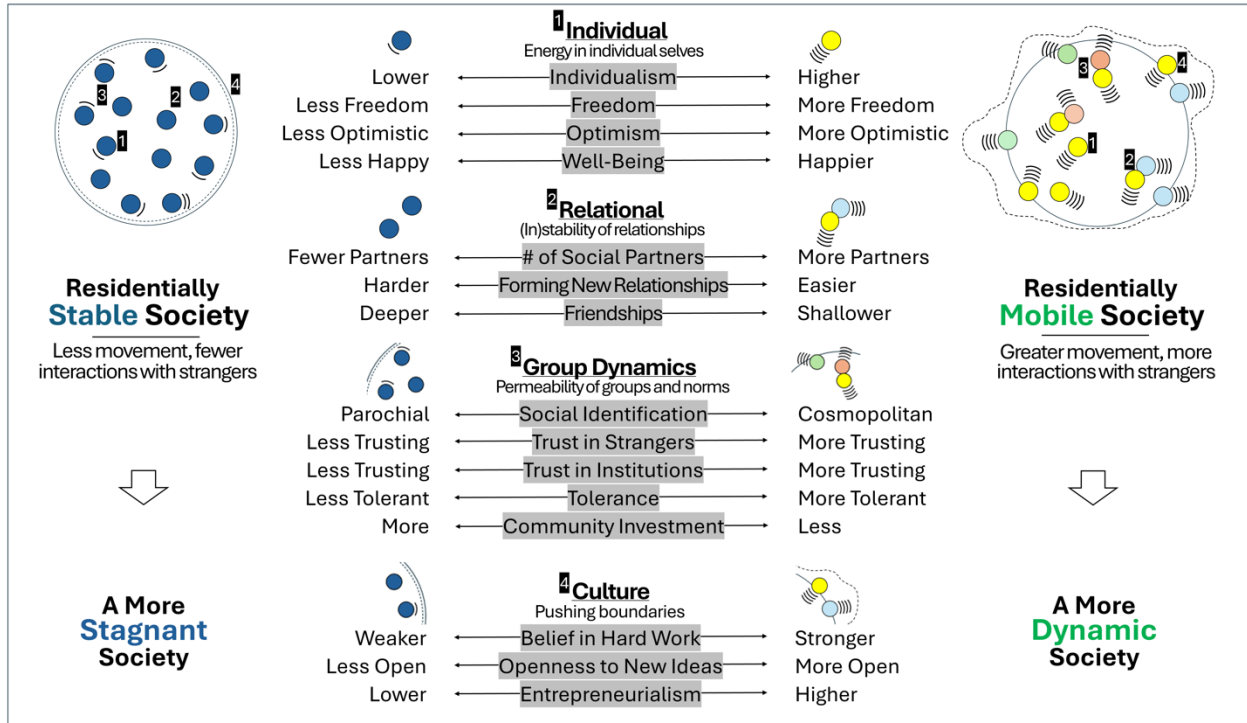
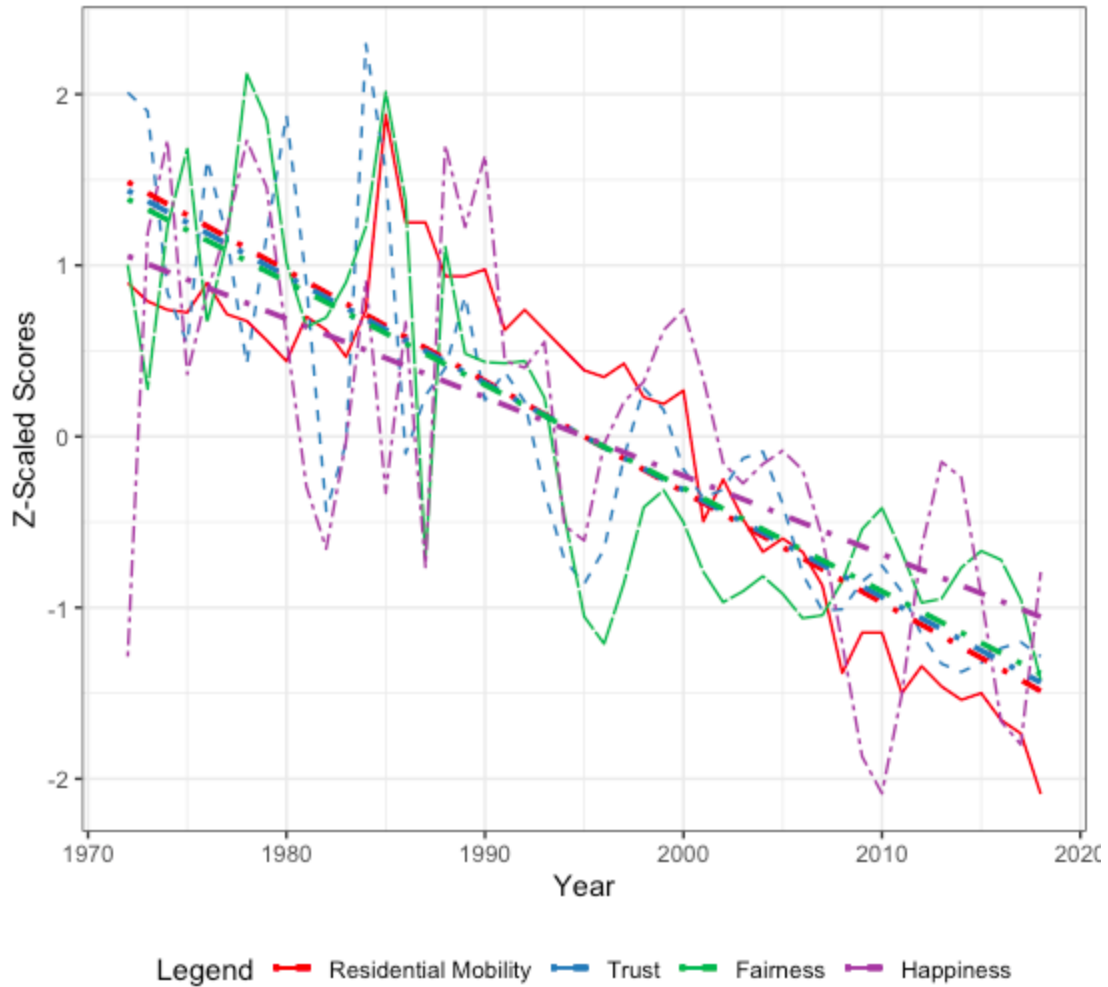**Figure 1.** Implications of residential mobility

Figure 2. Annual rates of American residential mobility (solid red) and rates of American self-reported trust in others (short-dashed blue), self-reported sense of the fairness of others (long-dashed green), and self-reported happiness (dot-dashed purple). Thick straight lines indicate the linear trend of each variable.
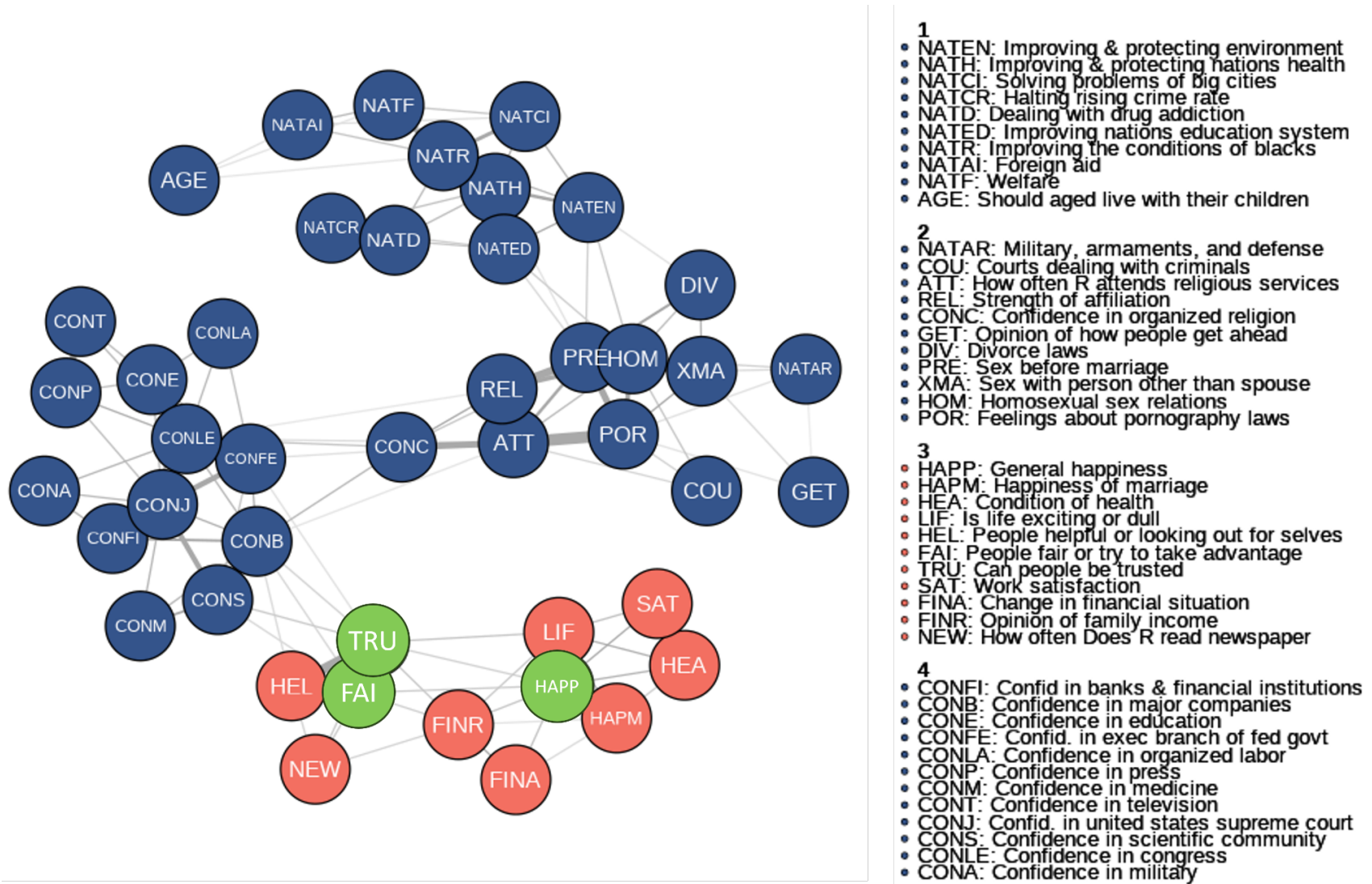
Figure 3. Exploratory Graph Analysis illustrating the dimensional structure of continuous variables within the GSS (Study 1). Nodes represent variables, edges demonstrate correlations, and node colors indicate the clusters (green = *focal* group of variables; red = *proximal-other* group of variables; blue = *distal-other* group of variables).
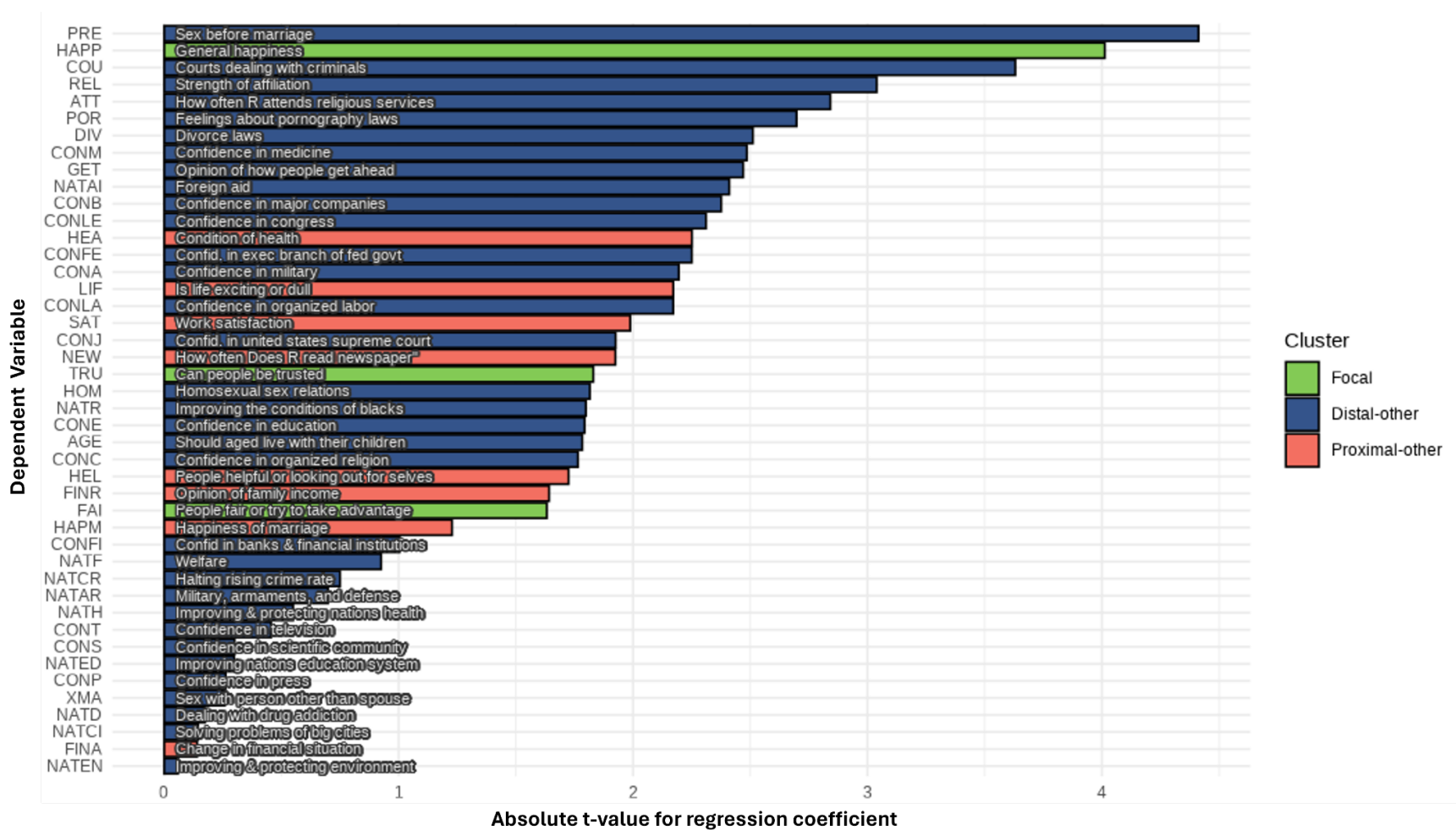
Figure 4. Effects for continuous variables in GSS. Effects (*t*-values) are the results from Granger prediction by residential mobility (Study 1). Green bars illustrate the effects of our focal variables of interest. Red bars indicate *proximal-other* variables. Blue bars depict *distal-other* variables.
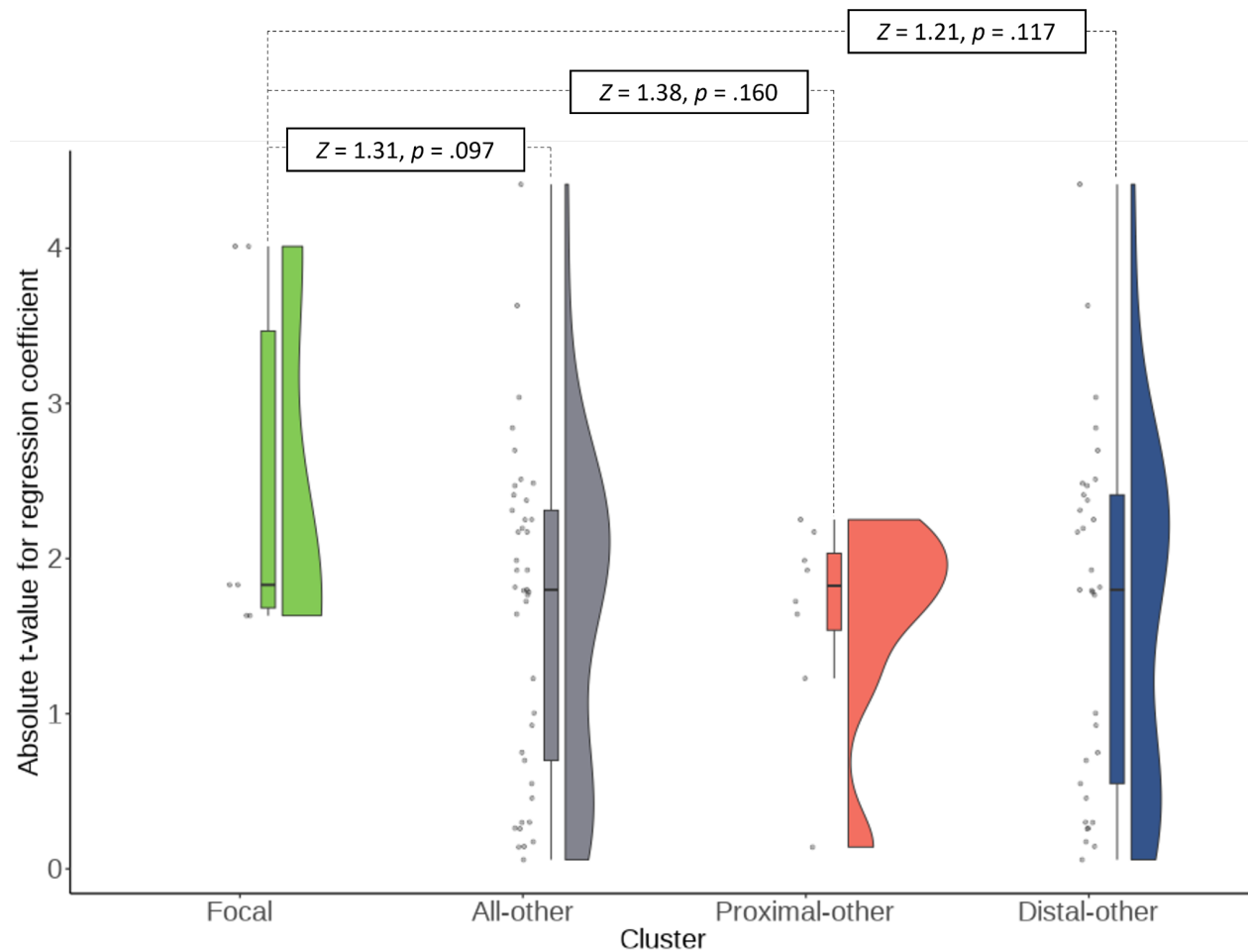
Figure 5. Raincloud plots showcasing effect distributions across variable groups (Study 1). The right side ('cloud') illustrates data distribution, while the left side shows jittered raw data ('rain'). Boxplot lines denote quartiles, with whiskers extending 1.5 times the interquartile range. Text-boxes display Fisher-Pitman Permutation Test results.