

Internal displacement and subjective well-being: The case of Ukraine

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WORKING PAPER

MARCH 2022

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ABSTRACT

Although Internally Displaced Persons (IDP) outnumber refugees globally, few studies have examined their well-being and assimilation into the local population. Here we investigate Ukraine, which hosts the largest IDP population in Europe. In 2014, war erupted in eastern Ukraine, resulting in around 1.7 million people forced to resettle throughout Ukraine. Despite being ethnically and culturally similar to the local population, IDPs encountered severe economic, housing, and social challenges, as well as residual trauma from violence. In this study we examine the extent to which subjective well-being (SWB) of IDPs differs from locals who were not displaced. We explore whether the difference in subjective well-being between IDPs and locals is due to economic hardship, inadequate housing, and/or weak social support. Using a unique survey conducted in 2018 and OLS regression methods, we find a sizable gap in SWB between IDPs and locals. The gap shrinks after accounting for economic and housing status, and support from local networks. Measures of loss in housing and social networks additionally account for the gap. However, none of the factors we measure can account for the difference between locals and IDPs who reported only leaving due to violence, pointing to the enduring impact of trauma on SWB.

KEYWORDS

Internally Displaced Persons; subjective well-being; trauma; Ukraine.

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The ESRC Centre for Population Change (CPC) is a joint initiative between the Universities of Southampton, St Andrews and Stirling, in partnership with the Office for National Statistics (ONS) and the National Records of Scotland (NRS). The Centre is funded by the Economic and Social Research Council (ESRC) grant numbers RES-625-28-0001, ES/K007394/1 and ES/R009139/1.

This working paper series publishes independent research, not always funded through the Centre. The views and opinions expressed by authors do not necessarily reflect those of the CPC, ESRC, ONS or NRS.

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INTERNAL DISPLACEMENT AND SUBJECTIVE WELL-BEING: THE CASE OF UKRAINE

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1. INTRODUCTION

Globally, internally displaced persons (IDPs) outnumber refugees and face many of the same challenges that refugees do (UNHCR 2021). Yet IDPs are less visible and less studied than refugees (Mitchneck, 2016). A large literature investigates the impact of war-time trauma and displacement on refugees' well-being (e.g. Hagstrom et al., 2019; Hartonen et al., 2021; Hocking, 2018; Kijewski, 2020; Shemyakina and Plagnol, 2013; Walther et al., 2020); however, little is known about how the experience of displacement affects the subjective well-being (SWB)¹ of IDPs. Like refugees, IDPs potentially lose economic resources, housing, and locally-embedded social connections, and often the process of displacement itself involves exposure to violence and trauma, all of which intuitively should lower SWB. On the other hand, unlike refugees, IDPs stay in their home country and could have an easier time integrating into the local population, especially when sharing the same language and ethnicity. Yet the communities in which IDPs resettle (hereafter "locals") face their own stressors. Resettlement often occurs in places where social and economic conditions have already deteriorated, and the arrival of large numbers of displaced people can cause economic, social, political, and psychological strain. Thus, while intuitively IDPs are likely to suffer declines in subjective well-being, they may be no worse off than corresponding locals. The precise mechanisms generating any "SWB gap" between locals and IDPs remain unclear, as do the prospects for the elimination of the gap via integration of IDPs.

In this study, we analyze the SWB gap between IDPs who fled the conflict-ridden territories of eastern Ukraine and local residents in the areas where they resettled. Ukraine is an important case study as it has the largest group of IDPs in Europe. Armed conflict broke out in Ukraine in the spring of 2014, initially with Russia's annexation of Crimea, and then in civil war between Russia-backed separatists and Ukrainian government forces in the country's eastern Donbas region. Since 2015, Ukraine has been among the ten countries with the largest IDP populations in the world, with an estimated 1.7 million displaced to Ukraine-held territory and another 0.8 million displaced within separatist regions (UNHCR 2015). Ukrainian IDPs had similar socioeconomic and cultural backgrounds to their new host population before displacement. However, as we document below, there are stark differences

¹ Here we use the term *subjective well-being* because it best reflects satisfaction with overall life. Subjective well-being refers to people's evaluations of their lives and encompasses both affective and cognitive elements, while *life satisfaction* is typically defined as a process of assessing individuals' perceived quality of life based on current circumstances (Diener et al. 2009).

between Ukrainian IDPs and the local population with respect to economic conditions, housing, social networks, and subjective wellbeing.

In contrast to standard survey-based reports on the experiences of IDPs, our research design features a comparable sample of locals who completed the same survey as the IDPs. Our matched IDP/local sample provides unique tool to address a methodological challenge: the lack of a baseline (pre-displacement) measure of well-being for those who are displaced. Although International Organization of Migration monitoring reports (2018) document problems such as high unemployment and lack of access to basic needs in Ukraine, without a pre-displacement baseline it is difficult to attribute these hardships to the experience of displacement itself. Retrospective questions can provide information on some changes due to displacement, but they cannot assess the impact of changes on SWB, because it is difficult for retrospective questions to capture prior SWB. Our approach, while not as optimal as a prospective panel survey, offers a second-best alternative that quantifies the impact of displacement and examines potential mechanisms.

We address four key questions:

- 1) Recognizing that displacement often takes place in settings where poverty, inequality, social conflict, and political tensions are already rife, to what extent does the SWB of IDPs differ from those who are not displaced?
- 2) To what extent is the IDP/local SWB gap attributable to economic hardship, inadequate housing, and weak social support among IDPs?
- 3) How does the loss of economic, housing, and social resources or decline in relative status attenuate the IDP-local SWB gap?
- 4) Given that the reasons for displacement differ between IDPs some flee violence while others leave due to economic or family reasons how are different experiences of displacement associated with long-term SWB?

Taken as a whole, this study contributes to our understanding of how adverse events influence long-term subjective well-being. The study's unique research design allows us to capture the effect of an exogenous shock – war – and how individuals cope with forced displacement. Although prior studies have evaluated the mental health of IDPs, none have been able to disentangle the reasons why displacement leads to enduring declines in SWB. The context itself, Ukraine, is also understudied, despite being a site of social and political

unrest and a crucial geo-political linchpin. Thus, greater knowledge of how IDPs are adapting provides important knowledge about the conflict in Ukraine, as well as general insights into forced migration.

1.1. THEORETICAL FRAMEWORK

1.1.1. CURRENT CONDITIONS

Social scientists studying SWB usually focus on the factors that lead people to subjectively experience their lives as worthwhile and rewarding (see Diener et al 2018, Kahneman et al. 1999 for reviews). While SWB can be conceptualized in a number of ways, we focus on life satisfaction, a common measure in happiness studies (Veenhoven 2020). One of the most important factors influencing life satisfaction is relationships with others (Diener & Seligman, 2002, see Gable and Bromberg 2018, Umberson and Karas Montez 2010 for reviews). Marriage is often found to be associated with greater life satisfaction, compared to being single (Mikucka 2016, Stutzer and Frey 2006, Nelson-Coffey 2018). Divorce lowers SWB, although potentially only in the short-term (Kalmijn 2017). Children have a mixed effect, often lowering SWB directly after childbearing (Balbo and Arpino 2016; Margolis and Myrskylä 2015). Living arrangements – living alone, with nuclear or extended family or others – can be a source of both support and strain (Umberson and Karas Montez 2010). Social ties with friends and neighbors can provide support that mitigates the stress response to a negative event, for example, providing help when needed (Gable and Bromberg 2018). Having someone to rely on can be comforting and signal social embeddedness (Siedlecki et al 2014). Thus, social support and contact often buffers against threats and helps to cope with stress (Gable and Bromberg 2018).

Happiness also depends on the fulfilment of basic material and psychological needs (Tay and Diener 2011). Income and economic status often represent the ability to achieve basic needs, especially in low-income settings. Higher income can help maintain a certain standard of living or buffer against major life events (Diener et al 2013). Also, income relative to others may signify social status, such that individuals with higher income are happier than those with lower income (Tay et al 2018). Correspondingly, unemployment is consistently associated with lower subjective well-being (Clark et al 2008). Besides lowering one's standard of living, unemployment incurs psychological and social costs, with

pernicious consequences for perceived social approval and self-esteem, especially for men (van der Meer 2014).

Housing is also hypothesized to affect SWB, not only as a basic human need, but as the locus of family life, community connections, and household wealth (Clapham et al., 2018). Associations of SWB with multiple aspects of housing, including tenure, quality, and quantity, have been found across many contexts, although causation is more difficult to establish (Zavisca and Gerber, 2016). Homeowners' higher SWB may stem from social status and pride of ownership; a sense of ontological security; residential stability; or wealth accumulation (Angel and Gregory, 2021; Zhang et al., 2018). More space per capita, as well as privacy (such as a room of one's own), are associated with higher SWB (Campagna, 2016; Evans et al., 2000). Finally, factors such as quality of housing materials and access to utilities are associated with SWB (Cattaneo et al., 2009; J. Clark and Kearns, 2012; Devoto et al., 2012).

1.1.2. LOSS AND RECOVERY

Research has debated whether the impact of adverse life events on SWB is permanent or if people eventually return to baseline levels of happiness (Luhmann and Intelisano 2018). According to set-point theory, or hedonic adaptation, negative events lead to temporary declines in SWB, but recovery eventually occurs (Lykken and Tellegen 1996). However, adaptation often depends on the specific type of event (Lucas 2007). For example, on average, people quickly adapt after marriage and divorce (Kalmijn 2017), but are slower to adapt to bereavement and widowhood (Luhmann et al 2012). Loss of friendship and support networks can harm SWB, even producing emotional responses like bereavement. Job loss and disability can have long-term scarring effects on psychological well-being (Lucas 2007, Strandh et al 2014, Mousteri et al 2018), even after reemployment (Lucas et al 2004). Natural disasters, such as Hurricane Katrina, can have long-term effects on mental health (Paxson et al 2011); although other studies found that happiness levels returned to baseline after four years (Calvo et al 2015). The long-term impact of natural disasters may depend on factors linked to prior vulnerability, such as age, gender, and socioeconomic status (Jensen and Tiwari 2021).

One of the main reasons negative events continue to be painful is due to the experience of loss. A likely mechanism is relative deprivation in both material and social

status relative to one's past. For example, prior research has found that income losses have a stronger influence on life satisfaction than income gains, indicating little adaptation in the long run (Wolbring et al 2013, Boyce et al 2013). Downward occupational mobility can be perceived as a "fall from grace" (Newman 1999), deflating self-esteem, identity, and sense of purpose. Loss of employment not only influences available resources, but can entail the loss of the worker role, family strain, and declining relationship quality (Blom and Perelli-Harris 2020).

Similarly, loss of housing could affect psychological well-being more than persistent deprivation. The limited literature on housing and SWB concentrates on upward mobility, finding that transitions from renting to owning, house value appreciation, and home quality improvements have mostly positive SWB effects (Cattaneo et al., 2009; Diaz-Serrano, 2009; Zheng et al., 2020), although they may dissipate over time (Foye, 2017). A rare study of downward housing mobility found that loss of homeownership reduces life satisfaction and housing satisfaction (A. E. Clark and Díaz Serrano, 2020).

Most studies emphasize within-person changes due to loss, but studies comparing those who have and have not experienced negative events are important for understanding long-term consequences for life satisfaction (Luhmann and Intelisano 2018). Proximity to disasters also matter: for example the Chernobyl nuclear catastrophe had a stronger long-term impact on mental well-being for those closer to the reactor (Danzer and Danzer 2016). Yet studies that compare residents living in an area where some have directly experienced minimal loss and others have experienced profound loss are rare.

1.1.3. SUBJECTIVE WELL-BEING, MIGRATION, AND FORCED DISPLACEMENT

Although many migrants decide to move assuming their subjective well-being will improve, most studies have found that on average, migrants' life satisfaction is lower than the native population (see Hendriks, 2015 for a review). First- and second-generation migrants across Europe continue to have lower life satisfaction than native populations, potentially due to ethnic discrimination (Safi, 2010), or lack of social embeddedness (Arpino and de Valk, 2018). While some studies find the gap between migrants and natives shrinks after including controls such as income and employment, they seldom disentangle whether it is the act of migration or current conditions which reduces the gap, or alternatively, migrant selection (Hendriks and Bartram 2019). Most studies on migrants' happiness, however, do not

distinguish the reasons for moving, which is particularly pertinent if the immigrant experienced displacement and was forced to move.

Data and research on forced displacement and SWB are limited. Studies from clinical psychology find war refugees experience long-term mental health disorders and depression (see Bogic et al 2015, Blackmore et al 2020, Lindert et al 2009 for reviews). These effects may abate but remain; for example, victims of war-related displacement in Bosnia-Herzegovina had worse SWB ten years after the conflict than others in the area, but the association seemed to decline over time (Shemyakina and Plagnol 2013). On the other hand, post-traumatic growth, or positive psychological change, can occur after conflict; for example, Sri Lankans living in an IDP camp had greater well-being than those who had never lived in a camp (Jayasuriya 2014). This "growth" can produce heightened spirituality and appreciation for life (Tedeschi and Calhoun, 2004). Thus, although most research indicates that negative events such as violence and trauma lower life satisfaction, some individuals may recover and experience renewed happiness.

Studies of refugee integration, defined as the "mutual adaptation of migrants and the host society" (IOM, 2012), often examine many of the same factors found to influence SWB generally. For example, Ager and Strang's (2008) influential framework for refugee integration recognizes employment, housing, education, and health as key markers and means of integration. Access to private housing, integration into the host society through language and contacts, and secure legal status improve SWB for refugees in the early years after arrival; awaiting family reunification lowers it (Walther et al., 2020).

1.2. STUDY CONTEXT: INTERNAL DISPLACEMENT IN UKRAINE

Ukraine's IDP crisis started in late 2013, when protests in Kiev brought down Ukrainian president Yanukovich and Russia forcibly annexed Crimea. In March 2014, Russia supported armed uprisings by pro-Russian separatists, who took control of 35% of the territories of Donetsk and Luhansk oblasts in Ukraine's southwestern Donbass region. Approximately 1.7 million IDPs fled the fighting. Most settled relatively close to the Line of Contact which divided government and non-government controlled areas, but significant numbers moved to cities such as Kyiv and Lviv. Most Ukrainian IDPs settled into private rentals or with extended family (Dean, 2017). Ukrainian government benefits for IDPs, especially related to

housing, have been meagre and humanitarian assistance from NGOs has waned over time (IOM 2018). With the conflict ongoing, IDPs face protracted displacement and uncertainty about whether and when they can return home.

As a group, IDPs have encountered severe economic and social challenges during resettlement. IDPs have consistently named housing, employment, and income as their key problems and obstacles to successful integration (IOM, 2018), and studies have documented downward mobility in employment (Vakhitova and Iavorskyi, 2020) and housing (Zavisca et al., 2021). Displacement also often takes a psychological toll. Surveys of IDP mental health report high levels of anxiety, depression, post-traumatic distress disorder, and somatic disorder (Cheung et al., 2019; Roberts et al., 2019). Qualitative research in Ukraine finds levels of psychological stress symptoms and struggles with social adaption among IDPs akin to that experienced by military veterans (Singh et al., 2021).

Ukrainian IDPs, however, are not homogenous. Although they all experienced the exogenous shock of war, they left for a range of reasons. The initial wave of migrants fleeing immediate war and violence gave way to subsequent decisions driven by plummeting economic conditions, job prospects, and state capacity (Mykhnenko, 2020). These distinctions in motivations for leaving may correspond to differing levels of trauma based on exposure to conflict-related violence, which could have enduring impacts on subjective wellbeing. Furthermore, IDPs differ in their access to resources, networks, and transferrable skills (Bulakh, 2017; Sereda, 2020; Uehling, 2020).

Importantly, locals have also faced challenges related to the conflict that could impact SWB. While IDPs experienced the worst upheaval, Ukraine's broader population has also seen living standards fall, and experienced the psychological stress of a nation at war. Locals near the conflict zone have felt the largest impact with continuous violence and strained resources. Coupe and Obrizan (2016) found that the average level of happiness declined substantially in the eastern regions most affected by conflict, while other regions of Ukraine experienced little decline in happiness. Thus, an analysis of both IDPs and locals is needed to identify the factors that specifically lower SWB among IDPs, relative to locals who also experienced fallout from the war.

2. DATA AND METHODS

2.1. CHESS SURVEY

We use the 2018 Ukraine wave of the Comparative Housing Experiences and Societal Stability (CHESS) survey, which interviewed 1600 IDPs and 1600 locals aged 18-49. The age range reflects the larger study's focus on working during the reproductive ages. The survey sample is drawn from 12 urban settlements with large concentrations of IDPs, which are not nationally representative. Within the oblasts (regions) near the conflict zone, in which the vast majority of IDPs reside, settlements were selected to ensure variation in type of place (oblast capital versus other city), distance from the line of contact between Government Controlled Areas (GCA) and Non-Government Controlled Areas (NGCA), and density of IDP populations. In addition, Kyiv and Lviv, Ukraine's two largest cities, with sizeable IDP populations but distant from the conflict zone (at this time), were included.

Random local samples within each settlement were drawn using random walk selection of residential addresses, followed by random selection of one individual among eligible residents at the address. The local response rate was 24.4%. The IDP sample consists of a combination of IDPs encountered during random walk, referrals from the local sample (who were asked to provide contact information for IDPs who they knew), and purposive recruitment via organizations serving IDPs. The response rate for the IDP sample was 38.2% (among attempted interviews with known IDPs). A probability sample of IDPs was infeasible given the lack of a systematic and comprehensive sampling frame; other scholarly surveys of IDPs in Ukraine also employ non-probability methods to survey this difficult to reach population (Cheung et al., 2019; Sasse and Lackner, 2020; Vakhitova and Iavorskyi, 2020). Despite these limitations, the achieved sample resembles benchmark comparison surveys of urban and IDP populations in key characteristics. As descriptive statistics below demonstrate, the local and IDP samples in our survey are similar in their demographic characteristics, and in their socioeconomic characteristics at baseline before displacement. Our survey design does not permit application of sampling weights to make our sample representative of the national population; however, our OLS regressions include control variables that would typically be incorporated in sampling weights.

2.2. VARIABLES

2.2.1. SUBJECTIVE WELL-BEING

Our measure of *subjective wellbeing* and key dependent variable is general life satisfaction, based on the widely used question "To what extent are you satisfied with your life on the whole?" The response categories are: completely dissatisfied (1); somewhat dissatisfied (2); neutral (3); somewhat satisfied (4); and completely satisfied (5). Nonrespondents to this key question were dropped from the analytical sample (N=21, 0.66% of the total sample).

2.2.2. IPP STATUS

Our main explanatory variable is *IDP status*. We further subdivide IDPs by their primary reasons for moving. IDPs were asked to choose up to two main reasons from among nine options for leaving at the time of initial displacement. Respondents were categorized into three groups: those who selected <u>only</u> violence-related reasons (fear of military conflict, fear of local authorities, threat of violence, home was destroyed); those who selected both a violence-related reason and an economic or family-related reason (work prospects, education prospects, to join/reunite with family or friends, other); and those who selected only education/family reasons or did not provide a reason.

2.2.3. FAMILY AND NETWORK VARIABLES

Family and network variables include marital status (married or cohabiting; separated, divorced or widowed; and never married), a dummy variable indicating whether the respondent has children, and living arrangements (living alone; with only nuclear family (one's own spouse and/or children); with extended family; and with non-relatives). Size of social support network refers to the number of non-family members to whom the respondent could turn for help if ill, assistance finding work, a modest loan, or advice with personal problems, coded as 0, 1, and 2 or more.

2.2.4. ECONOMIC STATUS

Economic status includes variables capturing current employment status (employed, unemployed, not in the labor force), total household income (a linearized version of a 10-category ordinal variable with midpoints to each category), and a durable goods possession scale (number of the following items the household possesses: dishwasher, washing machine, refrigerator with freezer, microwave oven, personal computer, smartphone, and car). In cases

of nonresponse (29.6% of the analytical sample) on household income, we substitute the sample mean and include a dichotomous indicator of missingness.

2.2.5. HOUSING STATUS

Housing status is also a well-known factor of SWB in general and for wellbeing of displaced persons in particular (Zavisca, Mitchneck, and Gerber 2019). Homeownership is a dichotomous variable indicating that respondents and/or other members of their household own their current residence. Housing quantity includes logged square meters of housing space per capita and a dichotomous indicator of having a room of one's own (including a room shared with a spouse/partner, and/or children up to 3 years old). Housing quality is measured with separate additive scales capturing amenities and comfort derived by Zavisca et al. (2021) based on data from four post-Soviet societies, including Ukraine. Housing amenities include a kitchen, toilet, bath/shower, and PVC windows, and ordinal measures of frequency of access to piped water, hot water, central heating, and pipeline gas. The housing comfort scale is based on the frequency of problems with leaky roofs or pipes, temperature control, noise, air quality, and the safety of infrastructure. Both variables are rescaled to range from 0 to 1.

2.2.6. CONTROLS

We specify age as a continuous variable, education as a dummy for university degree, and language spoken at home as three groups: Ukrainian, Russian, and mix or other. We classify localities based on distance from the line of contact (following IOM (2018) zones) and IDP density: 1) cities in Donetsk GCA; 2) Eastern cities with 50 or more IDPs per 1,000 host population; 3) Eastern cities with under 50 IDPs per 1,000 host population; 4) Kyiv; and 5) Lviv.

2.2.7. CHANGE VARIABLES

Our second set of models incorporates measures of change in friendship networks, occupational status, consumer possessions, and housing status. All respondents were asked about their situation in December 2013, before the conflict started, and 2018. Note that the responses could be affected by recall bias.

Network change. Based on respondents' retrospective perceptions, we constructed a variable on self-reported change in the respondent's circle of friends from 2013 to 2018: no change, better before, or better now.

Economic status. The change in durable goods scale is estimated as an absolute difference between 2018 and 2013 indicators, with three categories: same, lower now, and higher now. Because respondents' individual or household income in 2013 is unavailable, we use occupation and employment status in both 2013 and 2018 to construct a rough proxy for upward or downward earnings mobility. First, we map respondents' occupations in both years onto a 10-category version of the Erikson-Goldthorpe class schema developed by Gerber and Hout (2004) for post-Soviet societies. We then calculate the mean earnings for each class category in 2018 using a linearized version of 2018 individual earnings (based on the midpoints in the intervals for each of 10 response categories) and assign the means corresponding to the respondent's class category in 2013 and 2018, respectively. In effect, these variables represent occupational earnings in both years. We subtract 2018 occupational earnings from 2013 occupational earnings to yield a measure of change in occupational earnings, which we view as a crude proxy for changes in earnings between the two years. To allow for asymmetric effects of increases and decreases in earnings and deal with nonemployment in either year, we compare four categories: no change (the baseline), decreased occupational earnings, increased occupational earnings, and non-employment in either 2013 or 2018.

We also included changes in housing status between 2018 and 2013, including loss of homeownership, loss of one's own room, and absolute changes in housing amenities. We do not include gains in ownership or own room, because there are too few cases to support estimation. The change in housing amenities is constructed analogously to the change in durable goods scale.

2.3. ANALYTICAL STRATEGY

Our analytical focus is on quantifying the IDP/local gap in subjective well-being. We address our interest in experiences with war trauma by distinguishing IDPs based on their reasons for leaving. This introduces some measurement error: IDPs may have experienced fear of violence even if they did not say it was one of the two main reasons for leaving. However, it is reasonable to assume that *on average*, IDPs who cited violence-related factors had more

exposure to violence than those who cited only non-violence-related factors. Thus, our three categories of IDPs are reasonable proxies for levels of trauma, at least insofar as those experiences related to the migration decision. Accordingly, our first step is to estimate baseline gaps between locals and each of the three categories of IDPs, net of basic demographic controls using OLS regression for SWB.²

We introduce our measures of current family/network, economic, and housing conditions – both individually and as a group – to assess differences across groups in each set of current conditions (at the time of the survey in 2018). We then introduce our *measures of changes* in these same sets of conditions since 2013 to assess to what extent the IDP/local gaps in SWB are compounded by the changes that the IDPs experienced.

3. RESULTS

3.1. DESCRIPTIVE ANALYSES

Our research design is based on three preconditions: due to their displacement, IDPs have: 1) lower SWB on average than locals; 2) less favorable current conditions (2018); and 3) more adverse changes in their conditions since 2013. Descriptive statistics confirm each of these claims (Table 1). Average life satisfaction is highest for locals and lowest for IDPs who cited only violence-related reasons for leaving, while IDPs who cited either one or two non-violence reasons for departing fall in between the two extremes. Note that by design, locals and IDPs each constitute half the sample. Most IDPs (73%) left primarily for only violence-related reasons, another 20% left for both violence-related and economic or family considerations; while just 7% did not report any violence-related reasons for leaving (including 56 who gave no reason at all). The statistically significant differences among the groups of IDPs are consistent with the argument that experiences of violence contribute to more enduring trauma among the displacement.

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² None of our findings change when we use ordinal logistic regression models, and we prefer to report the OLS results because their coefficients are easier to interpret.

			Life s	atisfaction
	N	%	Mean	95% CI
IDP status				
Local	1590	50.0	3.52	(3.45, 3.58)
IDP, displaced only due to violence	1153	36.3	2.89	(2.83, 2.95)
IDP, displaced due to both violence and				
economic/family reasons	319	10.0	3.16	(3.06, 3.27)
IDP, displaced due to only economic/family				
reasons, or did not respond	117	3.7	3.23	(3.05, 3.41)
Total	3179	100.0	3.25	(3.21, 3.28)

Table 1: IDP status and mean life satisfaction.

Notes: Excludes 21 cases with missing values on life satisfaction.

Turning to current conditions, IDPs and locals are similar with respect to marital and parental status, although those who left for reasons other than violence are more likely to be single and childless (Table 2). IDPs are more likely to live alone or with nonrelatives and lack social support. They also have lower average income, own fewer durable goods, and are less likely to be employed (though mainly because they are more likely to be out of the labor force: they have only slightly higher rates of unemployment). IDPs are particularly disadvantaged with respect to housing. There is a stark gap in homeownership, as 90% of locals live in homes they or their families own, versus just 9% of IDPs. Around one-third to a quarter of IDPs do not have their own room, compared to 12% of locals.

	Local	IDP, displaced due to only violence	IDP, displaced due to both violence and economic/family reasons	IDP, displaced due to only economic/family reasons, or did not respond
Life satisfaction				'
Completely dissatisfied	2.8	8.0	4.1	4.3
Somewhat dissatisfied	15.7	28.0	19.8	19.7
Neither satisfied nor	27.0	25.0	27.2	22.2
dissatisfied	27.0	35.8	37.3	33.3
Somewhat satisfied	35.4	23.4	33.5	34.2
Completely satisfied	19.2	4.8	5.3	8.6
Family/Network				
Marital status				
Married/cohabiting	60.7	58.3	53.9	53.0
Separated/divorced/widow	17.6	23.1	23.5	12.8
Single	21.8	18.7	22.6	34.2
Have any children	67.5	71.2	66.1	53.9
Living arrangements				
Living alone	8.4	12.3	15.4	13.7
Nuclear family	54.3	60.3	60.8	41.9
Extended family	34.8	18.1	14.4	29.9
Living with non-relatives	2.5	9.3	9.4	14.5
N of people could ask for help				
0	13.3	27.5	29.5	29.1
1	18.1	19.1	11.3	10.3
2 or more	68.6	53.4	59.3	60.7
Economic status				
Employment status				
Employed	69.3	56.6	63.6	59.0
Unemployed	7.2	9.3	11.3	7.7
Not in labor force	23.6	34.2	25.1	33.3
Total household income (mean)	8.1	6.8	7.0	6.5
Missing total household income	33.3	25.5	24.1	35.0
Durable goods scale (mean)	4.7	3.1	3.6	3.4
Housing status				
Homeownership				
Homeowner	90.3	8.2	9.4	9.4
No homeownership	8.7	87.5	87.5	84.6
Missing	0.9	4.3	3.1	6.0
Have own room	87.7	68.8	64.9	75.2
Living space per capita (mean m²)	2.9	2.5	2.6	2.5
Housing amenities scale (mean)	0.91	0.77	0.81	0.79
Housing comfort scale (mean)	0.78	0.77	0.78	0.76
Controls				-·· -
Women	58.6	72.3	60.2	51.3
Age (mean)	35.3	37.1	35.3	34.0
Higher education	43.4	39.4	46.4	41.0
Language spoken at home	.5.1	55.1	.3.1	12.0
Ukrainian	14.9	5.7	9.1	3.4
Russian	56.5	66.5	69.3	49.6
Mix/other	28.6	27.8	21.6	47.0
Locality type	20.0	27.0	21.0	47.0
Cities in Donetsk GCA	12.5	11.5	17.2	7.7
Eastern cities: >=50 IDPs/per	12.3	11.3	17.2	1.1
1,000	25.0	25.4	21.9	29.1
Eastern cities: <50 IDPs/per	23.0	23.4	21.3	25.1
1,000	37.5	39.3	31.4	37.6
1,000 Kyiv City	37.5 12.5	39.3 11.9	31.4 14.7	37.6 12.0
Rylv City	12.5	11.9	14.7	12.0

 Table 2: Descriptive statistics: current status and conditions, 2018.

Notes: All figures are percentages unless otherwise noted. For dichotomous measures, small numbers of missing cases are combined with the residual ("no") category.

We also measure change in conditions using retrospective measures. Table 3 shows individuals' relative status in 2018 (at the time of the survey) compared to December 2013 (pre-displacement), by IDP status. Most IDPs, particularly those affected by violence, reported a negative change in their friendship networks, while most locals reported no change. Notably, however, 9-17% of displaced persons claimed to have a better circle of friends now than before, (versus only 7% of locals), which shows that post-displacement experiences can be positive for some individuals.

	Local	IDP, displaced due to only violence	IDP, displaced due to both violence and economic/family reasons	IDP, displaced due to only economic/family reasons, or did not respond
Network				
Change in circle of friends				
Better now	7.3	13.7	16.9	9.4
No change	72.2	16.2	18.2	35.9
Worse now	19.0	66.4	60.5	49.6
Missing	1.5	3.6	4.4	5.1
Economic status				
Change in occupational earning				
Better now	4.8	6.5	7.5	6.0
No change	50.6	34.1	37.9	35.9
Worse now	2.4	7.8	8.2	10.3
Not working in 2013 and/or 2018	42.0	52.0	46.0	48.0
Change in durable goods scale				
Higher now	48.4	14.5	15.4	18.8
No change	40.0	22.5	24.8	22.2
Lower now	11.6	63.1	59.9	59.0
Housing status				
Change in homeownership				
Lost	2.8	74.5	71.8	76.1
Did not lose	96.1	19.9	23.8	15.4
Missing	1.1	5.6	4.4	8.6
Lost own room	0.6	25.3	26.0	19.7
Change in housing amenities scale				
Higher now	4.8	14.3	17.6	18.0
No change	92.1	37.1	46.4	41.9
Lower now	3.1	48.6	36.1	40.2

Table 3: Descriptive statistics: change in status and conditions, 2018 compared to 2013.

Compared to locals, IDPs are more likely to experience downward occupational earnings after displacement, that is to be in an occupational class with lower average earnings than their occupational class in 2013. Still, downward occupational earnings mobility rates are modest: 8-10% for IDPs, compared to 2% for locals, which is nearly offset by upward mobility (6-7.5% for IDPs versus 5% for locals). On the other hand, more IDPs were not working in either 2013 or 2018, and IDPs were more likely to experience a decline in the

number of durable goods. IDPs also experienced dramatic downward mobility in housing. Most IDPs lost homeownership and 20-26% of IDPs lost their own room; however, the proportion of IDPs who still have their own space is high. Nonetheless, IDPs were more likely to move to lower quality accommodation.

3.2. REGRESSION RESULTS

Model 1 confirms significant differences in SWB by IDP status net of basic demographic controls (Table 4). The magnitude of the SWB gap between IDPs and locals varies according to the reason for displacement. The SWB gap is largest between locals and IDPs who moved for 'violence only' reasons, while IDPs who did not cite violence as the main reason for leaving have SWB closest to that of locals. Measures of family and network resources, economic conditions, and housing have intuitive effects on SWB, and in each case their addition to the models reduces the estimated net SWB gap between IDPs and locals (Models 2-4). Individually, some variables are not statistically significant (notably, homeownership and housing space per capita)³, but the statistically significant factors have the expected signs: divorce/separation/widowhood, residence with non-relatives, and unemployment reduce SWB, while having multiple people to turn to for help, more durable goods, higher income, a room of one's own, and higher quality home amenities and comforts all tend to increase it.

When considered together, family/network factors are less important in explaining the difference in SWB between IDPs and locals, than economic and housing conditions. This reflects the lower degree of variation between IDPs and locals in family/network conditions compared to economic and housing conditions. In fact, net of the controls for economic and housing conditions, even when entered as separate blocks, IDPs who did not cite violence-related reasons for leaving do not differ statistically from locals in terms of their SWB (the corresponding coefficients in Models 3 and 4 are not significant.)

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³ This does not mean that homeownership is irrelevant to IDPs; lack of ownership is the top housing-related concern reported in IOM surveys as well as our survey. If we restrict analysis to only the IDP sample, homeownership is a highly significant predictor of SWB.

IDP status (refslocal) IDP, displaced due to only violence -0.595*** -0.556*** -0.348*** -0.412*** IDP, displaced due to both violence and economic/family reasons -0.351*** -0.311*** -0.156* -0.181* IDP, displaced due to only economic/family reasons, or did not respond -0.293** -0.264** -0.070 -0.110 Male (gender) -0.064 -0.091* -0.007* -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.015** -0.018** -0.112* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.127* -0.029* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.130* -0.129* -0.110* -0.057* -0.05	Model 4 Model 5	del 3 N	Model	Model 2	Model 1	
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F 33.2*** 22.6*** 36.9*** 31.2***						

 Table 4: OLS regression models of subjective well-being: current status and conditions.

Notes: Unstandardized OLS regression coefficients are reported. * p<0.05, ** p<0.01, *** p<0.001

All of our measures of current conditions combined (Model 5) account for considerable portions of the SWB gaps between locals and IDPs who experienced the most, and the second most violence: from .595 to .367 (a 38% reduction) and .351 to .165 (52%), respectively.

This pattern indicates that current living conditions account for more of the SWB gaps for IDPs who experienced less severe violence and associated trauma. In fact, they explain all of the statistically discernible gap for those who experienced the least violence (by our measure) and more than half for IDPs who report both violence-related and other reasons for migrating.

3.2.1. CHANGE IN CONDITIONS

We next add to Model 5 our measures of changes in family/network, economic, and housing conditions (Table 5), first as separate sets (Models 6-8), then all together (Model 9). As individual sets, the change measures offer only modest improvements to model fit, as shown by the small increases in adjusted R-square. None of the changes in housing conditions have statistically significant associations. However, both better and worse self-reported friendship networks have the expected association with SWB, as does downward occupational earnings mobility. Moreover, accounting for changes in conditions reduces the gap between locals and IDPs who reported both violence-related and non-violence reasons so that it is no longer significant at the .05 level. It reduces the remaining gap for the "violence-only" IDPs (net of current conditions) from .367 (model 5) to .306 (model 9), a 17% reduction. Overall, differences in current conditions and changes in conditions account for all of the statistically significant SWB gap between locals and IDPs who did not cite violence-related reasons as the two main reasons for their departure. Note, however, that most of the IDPs in our sample (73%) reported only violence-related reasons. Current conditions and changes in conditions reduce the gap between IDPs and locals by about half (from .595 to .306, or 49%), but half of the original gap (net of demographic controls) remains unexplained.

4. CONCLUSIONS

Here we find that the experience of forced displacement, even within one's own country, has a long-term impact on well-being. Up to four years after resettlement, internally displaced persons in Ukraine continued to be less satisfied with their lives than local people who were never forced to move, even though they share a similar language, culture, and economic background. These findings suggest that individuals who were directly affected by the exogenous shock of war do not return to the "baseline" of comparable locals who were only indirectly affected. Although local populations also experienced social upheaval and strain, they were still better off than those who were driven from their homes.

Nonetheless, IDPs are heterogeneous and move for a variety of reasons, which can influence how they adapt to their new lives and assimilate with local populations. We find that multiple factors help to explain the gap between locals and IDPs. We first evaluate compositional factors known to influence SWB, for example education and family situation (Diener and Seligman 2002). While these factors were associated with SWB, they did not eliminate differences between IDPs and locals. We then examined specific factors previously found to differ between IDPs and locals: support networks, employment status, and homeownership (Zavisca et al. 2021). These sets of factors each reduced the gap independently, indicating that not only relative economic deprivation affects SWB, but also social support networks. The addition of these factors also started to reveal differences between IDPs dependent on the reason for leaving. After controlling for employment, income, and housing status, IDPs who left for economic, family, or other reasons were nearly indistinguishable from locals. However, IDPs who reported fear and violence as a main reason for leaving continued to differ significantly from locals.

We then evaluated the hypothesis that IDPs differ from locals because they experienced profound losses which lower well-being. We found that reporting a worse friendship network and housing situation narrowed the gap between IDPs and locals, and the gap disappeared completely for those who reported leaving for both violence and economic/family reasons. Loss of earnings narrowed the gap less but was still detrimental to life satisfaction. After controlling for both current conditions and loss of prior social and material resources those who reported leaving for a variety of reasons no longer differed from locals. However, even after accounting for a large range of socio-economic conditions, we found that IDPs who were forced to flee because of fear, threats of violence, or the destruction of their homes continued to suffer years later. Thus, the long-term impact of forced displacement on subjective well-being seems to be directly attributed to the psychological trauma and fear experienced by IDPs, not only loss of socio-economic resources.

Our study has the following limitations. First, we have no measure of baseline subjective well-being from before the conflict, which would have been ideal for capturing the impact of displacement on SWB. Nor do we have prospective measures of change. However, while a nationally-representative longitudinal panel would have been most suitable, it is rare that such a survey is set up in advance before an impending crisis, especially with a large

enough predicted sample of IDPs. In Ukraine, existing large-scale surveys from before the conflict are rare, with data collection largely stalling in the 2000s. It also would have been nearly impossible to trace IDPs from any original survey samples. Thus, given the data had to be collected after the conflict and we required an oversample of IDPs, our existing survey design is optimal for approximating a counterfactual by comparing IDPs with local compatriots.

Second, although we included a large set of potential explanatory variables, we were unable to control for unobservables, or account for any migrant selection. Keep in mind that while Ukrainian IDPs were to a large extent forced out due to violence or loss of employment, many Ukrainians stayed in the non-Government Controlled Areas, even though they might also have experienced violence and the severe degradation of economic and social conditions. Although the civil war was an exogenous shock that few predicted would be so violent, some people were able to leave while others were not. While some IDPs had no choice because their homes were destroyed and they feared for their lives, others who fled west may have been selective in that they had the means to start new lives, relatives to live with in resettlement areas, or some hope to transfer their skills. Those who remained behind were often unable to leave because they were caring for elderly relatives, or they felt that they were better off staying in place because they had homes and jobs, despite the fear and anxiety of living in a conflict zone. Thus, our survey does not capture the complexity of decisionmaking or severity of trauma, nor does it capture the life satisfaction of those who stayed behind, which may in fact be more similar to the IDPs who fled than the local populations where IDPs resettled.

In conclusion, our study provides evidence that current adverse conditions, as well as losses in earnings, housing, and social networks, explain about half the gap in life satisfaction between IDPs and locals. Programs aimed at restoring the economic, housing, and network resources of the displaced can be quite effective at mitigating the adverse impact of displacement for some IDPs. However, the trauma and violence associated with displacement has had a long-term impact on life satisfaction above and beyond contextual factors. Additional measures, perhaps involving trauma counselling and support groups, are necessary for IDPs who directly experienced trauma related to conflict.

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