

Faces of Inequality: a mixed methods approach to multidimensional inequalities

Ingrid Bleynat and Paul Segal

Working Paper 68

July 2021



LSE International Inequalities Institute

The International Inequalities Institute (III) based at the London School of Economics and Political Science (LSE) aims to be the world's leading centre for interdisciplinary research on inequalities and create real impact through policy solutions that tackle the issue. The Institute provides a genuinely interdisciplinary forum unlike any other, bringing together expertise from across the School and drawing on the thinking of experts from every continent across the globe to produce high quality research and innovation in the field of inequalities.

In addition to our working papers series all these publications are available to download free from our website: www.lse.ac.uk/III

For further information on the work of the Institute, please contact the Institute Manager, Liza Ryan at e.ryan@lse.ac.uk

International Inequalities Institute

The London School of Economics and Political Science

Houghton Street

London

WC2A 2AE

Email: Inequalities.institute@lse.ac.uk

Web site: www.lse.ac.uk/III

@LSEInequalities

© Ingrid Bleynat and Paul Segal

Acknowledgments

The authors would like to thank Sudhir Anand, María Cristina Bayón, Carlos Bravo Regidor, Milena Dovalí, Ricardo Fuentes-Nieva, Máximo Jaramillo, Jésica Pla, Alma Luisa Rodriguez Leal-Isla, Mike Savage, Diego Vázquez Pimentel, and Revista Chilango. We are grateful to King's College London, Oxfam Mexico, and PeriodismeCIDE for research funding.

Abstract

This paper presents a new mixed methods approach to measuring and understanding multidimensional inequalities, and applies it to new data for Mexico City. We incorporate quantitative and qualitative dimensions of inequality, integrating the concerns of both economists and sociologists. The method combines standard quantitative income gradients with two new ways of conceptualizing qualitative inequalities that relate to lived experiences, all based on the same underlying income distribution. First, we introduce the method of qualitative income gradients, or what we call *inequalities of lived experience*. These compare qualitative experiences in fields such as work, or health and education services, across the entire income distribution. Second, we describe *lived experiences of inequality*, which are experiences of social hierarchy, stigma, or domination, including those associated with categorical inequalities of gender or race. This portrayal of inequality combines the representativeness of quantitative approaches with the depth and nuance of qualitative analyses of lived experience and social relations.

1. Introduction

Well-being is a multidimensional concept, and today we use a variety of indicators to measure socio-economic development. But to understand how the different dimensions shape well-being we need to know their distribution within the society, and hence the level of inequality. While scholars of inequality have developed methods for analysing multidimensional distributions of quantitative variables, we have limited tools for incorporating qualitative dimensions of inequality, especially those that reflect sociological concerns regarding social inequality. This paper presents a new mixed methods approach to the measurement of multidimensional inequality incorporating both quantitative and qualitative dimensions, which we denote *faces of inequality* (FI). Its goal is to deepen our understanding of what inequality means for societies by systematically exploring the lived experiences across the income distribution. We thereby hope to illuminate the nature of socio-economic inequality, how it is reproduced, and how we might be able to reduce it.

There is a long history of multidimensional approaches to well-being, but modern attempts to operationalize and measure them typically start with Amartya Sen's capabilities framework (e.g. Sen, 1993). Sen takes us away from unidimensional understandings of well-being, such as the utility approach or the assumption that wellbeing depends wholly on income, and towards a broader understanding of the concept. He argues that a person's well-being depends on what they can do and be in a wide set of domains, and that it cannot be adequately reduced to a single dimension. These various doings and beings are then conceptualised as "functionings", which range from the "very elementary, such as being adequately nourished, being in good health, etc.", to the "more complex, but still widely valued, such as achieving self-respect or being socially integrated" (p. 31). Sen also makes a second move away from looking at outcomes to focusing on the option set that people face, denoted a person's capabilities. However, it can very difficult to measure capabilities because, as Sen himself notes, "the capability set is not directly observable" (Sen. 1992, p. 52). For this reason, in practice the measurement of multidimensional well-being tends to be based on outcomes or functionings rather than capabilities per se.

In the economics literature, scholars in the Sen tradition have developed indices of multidimensional inequality rooted in standard unidimensional measures such as the Gini or Theil coefficient (see Lugo, 2007 for a review). The main purpose of these indices is to account for the fact that well-being (and therefore inequality in well-being) depends not just on income or consumption expenditure, but also on other dimensions such as education and health.

_

¹ See (Decancq and Lugo, 2012b) for historical references.

Like these multidimensional inequality measures, our approach is based on income gradients which show how characteristics of interest correlate with income. But we then take off in a different direction with two new methodological steps. First, we explore what we refer to as *inequality of lived experiences*, or *qualitative income gradients*. These show how people's qualitative experiences vary across the income distribution, such as their experiences of health or education services, or of work in its multiple forms. Second, in addition to inequality of lived experience, we analyse what we call *lived experiences of inequality*. These refer to experiences of social hierarchies such as stigma, discrimination, and domination based on unequal interpersonal relations. These are often based on race, gender, class or other categories within status hierarchies, and are cases where the experience itself is an experience of inequality.

By combining these, FI presents a multidimensional portrait of inequality, exploring how life varies across the income distribution. We take an explicitly interdisciplinary approach, combining insights from Sen's capabilities framework with sociological approaches grounded in the work of Bourdieu (2010) and scholars of intersectionality (e.g. Crenshaw, 1989; Collins, 2015) that account for cultural and social dimensions of inequality.

The method starts with pre-existing data on income or consumption that divide the population into income groups such as deciles. It then locates n households in each income group, and in each household it takes a semi-structured interview covering the dimensions of interest, including using structured narratives. Finally, it presents the resulting multidimensional distribution by describing and exploring how each dimension varies over the income distribution and across categories such as gender and ethnicity, based on the components mentioned above: inequality of lived experiences (i.e. qualitative income gradients), and lived experiences of inequality. The goal is to combine the representativeness of quantitative approaches with the depth and nuance of qualitative analyses of lived experience and social relations.

Faces of inequality was implemented in Mexico City in collaboration with the non-governmental organization Oxfam Mexico and the popular magazine *Chilango*. Journalistic accounts were produced by *Chilango* and presented on a special issue of the magazine and dedicated website with audio-visual material that the project also collected.² In this paper we explore this new methodology and present findings on multidimensional qualitative inequalities in Mexico City.

-

² https://desigualdad.chilango.com/

2. The Measurement of Multidimensional Inequality: Existing Approaches

Multidimensional inequality refers to *inequality among individuals over multiple dimensions*. This means that it is based on a multidimensional distribution, where the unit of observation is the individual (or household) and each individual is assigned a vector of characteristics. These characteristics are usually quantitative, such as income or level of education, but in principle they can be qualitative, such as a set of experiences. When the dimensions are all quantitative, there are statistical indices one can use to measure the *degree* of multidimensional inequality, providing a generalization of standard one-dimensional inequality measures such as the Gini coefficient (Atkinson and Bourguignon, 1982; Lugo, 2007; Decancq and Lugo, 2012a, 2012b). That is, they transform a multidimensional distribution into a single number that tells how high or low is the level of multidimensional inequality.

These measures are based on the intuition that indices of income or expenditure inequality such as the Gini or Theil coefficient neglect important information on people's well-being, like education and health status. A society where education and health are monotonically increasing in income evidently has higher inequality of well-being than a society with the same distribution of income, but where health and education are uniformly distributed. While this is an advance over unidimensional measures in terms of capturing well-being, they remain vulnerable to Sen's criticism of reductivism in the sense that they reduce multidimensional inequalities to a single number. Moreover, they are necessarily confined to quantitative dimensions.

A related approach that is directed towards poverty measurement rather than inequality is the *Multidimensional Poverty Index* (MPI), based on Alkire and Foster (2011). The MPI specifies a set of dimensions of well-being, and within each dimension it defines a set of indicators. Each indicator is then given a threshold and a weight, with the weights summing to 1. If a household falls below the threshold in an indicator then it is poor in that indicator; if it is poor in enough indicators by weight, then it is counted as multidimensionally poor. Like multidimensional inequality indices, its purpose is to transform a multidimensional distribution into a single number.

In contrast to the above two approaches, the *Multidimensional Inequality Framework* (MIF) used by the international NGO Oxfam (McKnight *et al.*, 2018) presents a wide range of inequality indicators across multiple dimensions, and does not attempt to collapse them into a single indicator. Like the MPI, the MIF presents a set of high-level dimensions of well-being, titled *domains*, each containing a set of sub-domains. Each sub-domain is

then measured using a set of indicators of inequality in that dimension (see Gauster, Romero and Botella, 2019 for an application of the MIF to Guatemala).

The MIF can provide a rich set of information on socio-economic inequalities. But we suggest that they are better described as *inequalities in multiple dimensions* rather than *multidimensional inequality*. As noted above, multidimensional inequality refers to inequality among individuals where each individual is assigned a set of characteristics. If we do not have multiple characteristics for each individual but instead have separate data on inequality in income, inequality in education, and inequality in health, then we do not know, for instance, the extent to which richer people are also better educated and healthier. As Decancq and Lugo (2012a, p. 721) put it, "a dimension-by-dimension approach leads us to ignore the interrelationships and possible correlations between the dimensions of wellbeing... To neglect these interrelationships would be to abandon one of the primary motivations for a multidimensional approach to inequality."

Table 1 summarizes key differences between the approaches discussed above: multidimensional inequality indices, the Multidimensional Poverty Index (MPI), the Multidimensional Inequality Framework (MIF) and Faces of Inequality (FI).

Table 1: Different approaches to measuring multidimensional well-being

	Distributional focus	Output	Type of data
Multidimensional inequality indices	Multidimensional inequality	Unidimensional	Quantitative
Multidimensional Poverty Index	Multidimensional poverty	Unidimensional	Quantitative
Multidimensional Inequalities Framework	Inequalities in multiple dimensions	Multidimensional	Mainly quantitative, can incorporate qualitative
Faces of Inequality	Multidimensional inequality	Multidimensional	Quantitative and qualitative

Source: Authors' analysis

3. Faces of Inequality

Faces of Inequality (FI) proposes a methodology for producing and analysing multidimensional distributions that combines quantitative data and qualitative data, and can include audio-visual material. It starts from the observation that inequality statistics alone give little sense of the effect of inequality on people's lived experience (Bayón and Saraví, 2017; Pla, 2017), while ethnographic and qualitative research rarely explores the full distribution, focusing in detail on a particular community or group of individuals (Flemmen and Savage, 2017). The key conceptual move of FI is to present qualitative information (and potentially audio-visual material) for a sample that is stratified by incomes. In this way FI combines the representativeness of quantitative studies with the depth and nuance of qualitative analyses of lived experience and social relations. It aims to present a multidimensional picture of what life is like across the income distribution. This paper presents an analysis on the basis of the textual materials collected.³

The theoretical framing of FI draws on Amartya Sen's insistence on the multidimensional nature of human well-being (Sen, 1993), and incorporates sociological approaches rooted in Bourdieu's and others' work that recognize cultural and social dimensions of inequalities such as social status, stigma and recognition, and domination (Devine and Savage, 2005; Sayer, 2005; Bourdieu, 2010; Lamont, Beljean and Clair, 2014; Karen and Washington, 2015; Segal, 2021). We also follow scholars of intersectionality in considering how these processes implicate categories such as gender and race (e.g. Crenshaw, 1989; Collins, 2015). Many of these dimensions also have a spatial component as distance and proximity affect both the public resources that are available to households, and the contexts in which individuals interact with others.

Both Sen and Bourdieu explore the relationship between agency and socio-economic structures that help to explain inequalities, but in very different ways. Sen highlights the importance of economic entitlements, representing the economic and legal constraints on people's choices. Bourdieu, on the other hand, problematizes the idea of choice, seeing agency as partly socially constructed ('habitus'), and acting within social structures ('fields') that constrain this agency and reproduce inequalities. Our approach allows us to observe both the material and the non-material constraints that people face in their lives, including stigma, discrimination, and habitus.

We approach qualitative dimensions through two different conceptions of lived experiences: first, what we call *inequality of lived experiences*; second, the *lived*

⁻

³ This paper can be seen as complementary to the journalistic accounts and audio-visual material presented by *Chilango* magazine on the dedicated website https://desigualdad.chilango.com/

experiences of inequality. First consider inequalities of lived experiences, where we explore how particular sets of experiences vary systematically across the income distribution. This means we can also refer to them as qualitative income gradients. We find, for instance, that the poor have to wait longer than the rich to access a health specialist; their school teachers impart lower expectations to their children; and they experience worse working conditions. Equally, we may find that certain lived experiences are comparable across large ranges of the income distribution. For instance, we find similar attitudes to the gendered division of household labour among rich and poor.

While these topics are studied by sociologists or anthropologists in specific populations, our approach allows us to spot patterns and differences across the income distribution. We stratify by income rather than by class or other socioeconomic marker for two reasons. First, we believe the link with income is intrinsically informative and important, as is suggested by the steep differences in a variety of lived experiences that we find as we move along the income distribution. Second, it transparently reveals the population size of each group: as we present findings by income decile, we know by definition that each group contains 10% of the population. In contrast, when populations are stratified by class or by category, this information is not always transparent.

Our second perspective on qualitative elements of inequality is on what we call the lived experience of inequality: when someone experiences stigma or is discriminated against because of their race or class, or when a domestic worker is dominated by her employer – or indeed when an employer enjoys commanding a subordinate – then these are cases where the experience itself is an experience of inequality. These experiences arise from unequal interpersonal relations due to both social class hierarchies (Bourdieu, 2010) and out of categorical inequalities, where privileged categories such as whites or men discriminate against deprived categories such as indigenous people or women (Tilly, 2009; Collins, 2015) . These unequal interpersonal relations have a strong feedback relationship with economic inequality (Segal, 2021), and are constitutive of what is sometimes called social inequality (Anderson, 2010). We see an example of the link with categorical hierarchies in the case of Brazil, where domestic workers are disproportionately Black women, and their role in raising children of the upper middle classes allows those children to be "socialized in a deeply hierarchical logic, which places the maids in a world apart" (Brites, 2007, p. 103).

Lived experiences of inequality can also, of course, vary across the income distribution. This means we can also consider qualitative income gradients for lived experiences of inequality (that is, inequalities in lived experiences of inequality). For instance, below we find that all classes use public health services from time to time. People in lower deciles often feel disrespected by public health staff, while two of our high-income respondents

experienced a sense of horror at sharing the space with people from lower classes. Both of these are experiences of inequality as social hierarchy, one from the bottom of the income distribution (feeling disrespected) and the other from the top (feeling horror and disgust).

It is worth highlighting the linkages with the literature on intersectionality, given that people's experiences are heavily conditioned by their multiple categorical identities. A substantial literature explores intersectionality in developing countries, such as the discrimination and human rights violations suffered by indigenous women in different contexts (e.g. Banda and Chinkin 2004, Boesten 2010, Sylvain 2011), or the intersections of caste and gender in India (e.g. Anandhi, 2013; Rao, 2015). What our method adds to the intersectionality approach is to explicitly include income level as a characteristic that intersects with categorical identities. This matters because, for instance, women or indigenous people at the lower end of the income distribution are likely to experience categorical discrimination in different ways from women or indigenous people at the top of the income distribution.

Implementing Faces of Inequality

From this theoretical framing, the starting point for implementing FI is to use existing data to establish a spatial income distribution. In Mexico City we used the National Survey on Household Income and Expenditures (ENIGH). Table 2 provides average income levels for each decile in the city. Oxfam Mexico estimate a map of the city which uses household survey data and census data to estimate average household incomes at the level of *área geoestadistica básica* (AGEB), shown in figure 1. There are 2,366 AGEBs in Mexico City with an average population of 3,700. We used this map to identify 5 households per estimated income decile, 50 in total across the distribution.⁴ Our geographical selection of households according to the estimated average income level of their AGEB means that some households did not belong in the estimated decile. Below we report respondents' deciles, and where they reported an income substantially outside their predicted income decile we also note this.

-

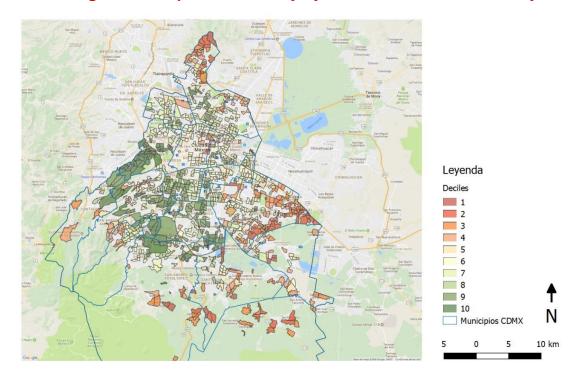
⁴ Because the top decile is far more heterogeneous than other deciles, we chose households in both the less exclusive and most exclusive AGEBs within that decile, according to house prices.

Table 2: Income by decile, Mexico City and Estado de Mexico, 2016

Decile	Average household monthly income per equivalent adult
1	\$ 1,240
2	\$ 1,877
3	\$ 2,354
4	\$ 2,828
5	\$ 3,377
6	\$ 4,090
7	\$ 5,066
8	\$ 6,643
9	\$ 9,508
10	\$ 30,597

Source: CONEVAL using ENIGH 2018.

Figure 1a: Map of Mexico City by estimated income levels, by decile



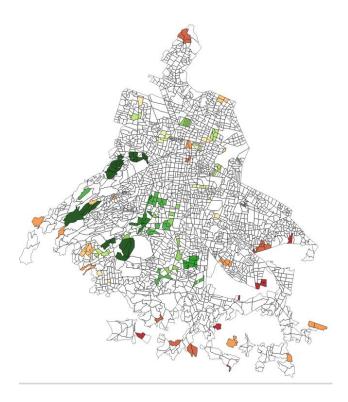


Figure 1b: Areas where interviews were taken

Source: Oxfam México

4. Income gradients and inequalities in lived experiences

We start with a brief illustration of quantitative income gradients to set the scene. Figure 2 portrays incomes, education levels, and share of indigenous households arranged by income decile. The bottom two deciles receive an average monthly income per equivalent adult of M\$1,240 and M\$1,877, compared with M\$30,600 for the top decile. This means households in the top decile receive 20 times the income of the bottom 20 percent, or 45 percent of total income, implying a very high degree of income inequality. The Gini coefficient for income inequality is correspondingly high at 0.51.

As expected, average years of education for adults has a strong positive correlation with income levels. We also see a positive correlation between income and the share of individuals who identify themselves as indigenous. However, this correlation is driven entirely by the bottom two deciles, which have a relatively high share of indigenous households at 22 and 20 percent respectively, and the top decile, which has a relatively low share of 6.3 percent. If we consider deciles 3 to 9 there is no significant correlation, and of those seven deciles it is decile 6 that has the highest share. Being indigenous

therefore does not appear to be an obstacle to being in the middle of the income distribution, and even in the higher deciles up to the ninth. But individuals in households in the top decile are substantially less likely to identify as indigenous.

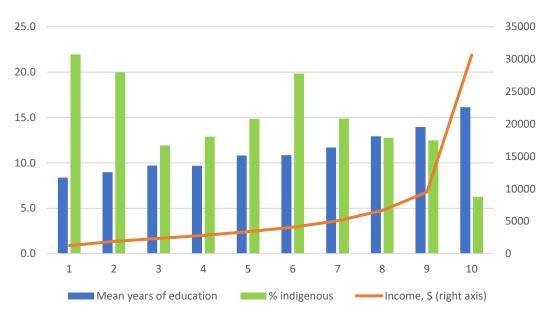


Figure 2: Income inequality, educational inequality, and race

Source: Calculations based on ENIGH 2018.

We now consider how lived experiences vary across the income distribution by presenting what we call qualitative income gradients, describing inequalities in lived experiences. We find that experiences of health, education, work, and food security all vary substantially across the income distribution. Moreover, interviewees told us about the strategies they use to access the best services they can, or to compensate for absent services.

4.1 Health

Households in deciles 1 to 7 rely mostly on health services provided by the state: IMSS, ISSTE, Seguro Popular, and the National Institutes under the purview of the Secretary of Public Health. Experiences with these health services vary. Among households in the first 7 deciles there is a range of deficiencies in their experiences of public health services provision. Several people complain of long waiting times, Adrian (D1) remarking that in the public service IMSS "they make people wait until they are nearly dead"; patients might arrive at hospitals or other health centres at 4 or 5 am, or even spend the night in a queue, in order to be able to obtain a ticket to see a specialist later that day. Luisa (D1) went to three different public hospitals when she was pregnant and was told they didn't have the equipment for the caesarean she needed, and she had to pay for it privately. Aldo (D3)

feels the medical personnel are dismissive of him while Margarita (D4) describes them as "a bit despotic". But reports are mixed, with some households expressing general satisfaction.

How do households in the first 7 deciles deal with these challenges? We find that despite relying mostly on state provision, households throughout these 7 deciles supplement it with private health services. To deal with long waiting times people sometimes choose to attend the consulting rooms attached to certain pharmacy chains, where they report feeling heard and respected. Both Rosario (D1) and Sara (D2), among others, comment that they get better attention in the private pharmacies. When conditions require blood tests, ultrasounds, and other investigations, all of which have long waiting times, several households report seeking them from private providers. The ability to pay for these services increases, as expected, with incomes, so that it is easier for people in decile 7 than for people in decile 3. But other factors also play a role. Several interviewees explained that they resort to borrowing to cover the costs, with those with stronger community bonds and social networks more able to do so. Doña Roselia (D1) needs regular medication for hypertension and she receives help from members of her church who sometimes buy it for her.

Deciles 8 to 10 mainly opt for private insurance and private services. But some of these interviewees also report dissatisfaction with health service provision, reporting seeing multiple specialists before they can get the treatment they need. Just as those who typically rely on public health services sometimes resort to private provision, we also find that those with the means to pay for private healthcare sometimes engage with the public sector. This is the case when they need medical certificates for sick leave, or for the check-ups that allow them to claim maternity leave. When this happens, they cross a class frontier and find themselves in the unusual situation of sharing both a space and an experience with those lower down the income distribution. Mateo (D9) expressed horror at seeing people "strewn on the floor like animals" in the General Hospital; Valeria (D9) was sent by her private doctor to a public hospital for an emergency consultation when she was pregnant, remarking "I saw horrible things there, those pregnant girls".

Thus for the most part, the use of public and private health services are distributed as one would expect. But the fairly common exceptions to this pattern also indicate elements of lived experiences of inequality based on social hierarchies: lower deciles feel poorly treated by the public sector and sometimes choose the private sector in order to receive more respectful treatment, while upper deciles can find it unpleasant to share public health services with people from lower classes. The fact that everyone needs to use public health services from time to time makes this an important locus of inequality, and an example of an income gradient in lived experiences of inequality.

4.2 Education

All households in deciles 1 to 6 attend or have attended state schools. In decile 7 one household out of five opted, with much effort, to send their child to private school. In contrast all those in deciles 8 to 10 send their children to private schools. In the case of public education there is clear heterogeneity among schools, due not just to spatially regressive government expenditures, but also to the ability of parents' organizations to contribute financially to improve it.

There are clear inequalities among the 7 deciles that attend state schools. Some of them are spatial. Households in the first decile of income tend to reside in isolated areas where all type of infrastructure is lacking. This manifests itself, among other things, in long traveling times. The grandson of Doña Roselia (D1) from Milpa Alta, for example, leaves his house at 5:40 am to arrive to his high school in Xochimilco at 7am. Some households in deciles 2 and 3 have schools closer to home, but they report deficiencies including poor or damaged infrastructure, teacher absenteeism leading to cancelled days of schooling. and large class sizes—Concha (D2) reports their child's school has some classes with up to 55 pupils. There are also complaints about the social environment around the school area, especially high schools. Another grandmother (Constanza D3) in the low-income neighbourhood of Tepito recounts her grandson's classmates telling her they had no reason to study because their career options are limited to peddling alcohol or drugs, or picking pockets. (She joked with them that they should study in order to be "good delinquents, not mediocre delinquents".) Responses to these challenges include participation in parents' organizations to contribute funds to buy materials and carry out repairs; supporting schools financially for their operating costs; and spending time and resources to send children to better schools further away from their neighbourhoods. This latter strategy is feasible for those who can afford to transport their children either because a female member of the household is devoted to care work, or because they own a car, as in the case of a household in decile 2 where the main breadwinner is a taxi driver.

In contrast with the first three deciles, households in deciles 6 and 7 report higher satisfaction with the quality of the state schools their children attend. This is because the schools in their neighbourhoods are better, or because they are able to travel to better schools further away from home. Elizabeth (predicted D6, reported D2) praises the psychological support that pupils receive. Luis (D6) celebrates the swimming pool, computers, theatre lessons, and cultural outings available at his children's school. The main complaint in these deciles is that the school directors ask for monetary contributions, and that those children whose parents give money to the school are treated with favouritism. While our interviewees in deciles 1-3 did not complain about having to contribute money or resources to their schools, several in decides 6 and 7 did, which might reflect different expectations according to income level.

Households from deciles 8-10 choose private schooling for their children, because they believe this will help them develop and flourish as individuals. Parents are proud of their choices, highlighting what they see as the differences between the schools their children attend and what they construe as what is traditional or standard in Mexico, both in terms of the breadth of knowledge the teaching teams help pupils acquire (including visual arts and music), and the type of learning, which in their view tends to be innovative and to foster independent thought. They particularly like the foreign aspects of their schools: Jessica and Pablo (D8) are pleased that their school follows an "American system;" Valeria (D9) includes *tae kwon do* and English lessons alongside swimming and Spanish as characteristics she likes about her child's kindergarten; Tere (D10) praises the fact that her kindergarten-aged child has Chinese and Indian teachers, who teach the children their language and their culture. While they claim that their schools are academically demanding, at least one mother is willing to accept that selectivity is not based on academic merit, but on how prohibitively expensive the school fees are.

Experiences of schools therefore replicate income inequality, as expected, with poorer households tending to have worse experiences. This is not just at the level of satisfaction with education, but also with the social environment, where low-income children are expected to be socialized into crime while high-income children learn high culture and foreign languages.

4.3 Work

For the great majority of people, the great majority of their income is from work, whether through employment or self-employment, formal or informal. Average income levels and living standards, the stability of income, and therefore the sense of financial security, comes above all from work. But work is also much more than a source of income: it determines where we spend most of our day, how we experience the city, and how people treat us, whether they are co-workers, bosses, or customers. In this section we describe individuals' experiences of work, giving their income decile in parentheses.⁵

Many individuals from deciles 1 and 2 have firm roots in informal and locally-based economies, and report sporadic incomes. Luisa (D1) sells home-made ice lollies and household cleaning products; Doña Roselia's husband (D1) is a builder who cannot find regular work; Rosario (D1) is currently unemployed and relies on the variable incomes of family members, none of whom have regular work; mother and daughter Ximena and Sonia (D2) sell various items on the street in the central neighbourhood where they live and also rely on support from other family members; and Sara (D2) sells breakfasts to

16

⁵ The names of the interviewees were modified to preserve their anonymity.

people working in the city centre. Sara likes that she lives close to her workplace, and Sonia (D2) enjoys the freedom and flexibility; she believes that the reliability and level of her income is a matter of individual responsibility: "There are no time restrictions to opening, or permits. The more you work, the more financial security you have." Similarly, Oscar (D3) enjoys a steady income from his own business, which is close to his home, selling flour, chiles, and everything related to tamales, and says that "being the owner has a plus". Despite the insecurity and low level of incomes, these individuals report being reasonably content with their work and working conditions. To what extent it is a contentment borne of resignation we can only speculate—but it is certainly not the case that all interviewees were similarly content.

Several interviewees report that they prefer informal and independent work because of previous negative experiences in formal employment, such as poor working conditions and exploitation. Doña Roselia's (D1) former employment at a restaurant badly affected her health, and paid very little. Rosario (D1) reports poor treatment in past employment as a reason for her current irregular work habits, telling us that "Some bosses are very rude, and I couldn't tolerate it anymore and I dropped out." Jesus (D1) claims that the intended benefits of formal sector employment are misinterpreted to the point that they do not improve the conditions of workers: In his previous job, "Last year they gave us a pay increase of about 600 pesos, but it was fictitious, because they put us down as employed by another company. And in the end, we have to pay that increase [ourselves], because this company generates other taxes. What they are giving us as a raise, at the end of the fiscal year we have to pay it. Also, there are many other legal practices that harm employees".

We find similar negative reports from those in these deciles who are currently in formal employment. Ana (D2) works at a natural foods store, but suffered bad treatment in her previous workplace where, nonetheless, she stayed for 28 years out of necessity. Joaquín and Rosa (D2) work respectively in a wire factory and car factory. Joaquín's work is extremely stressful, and workers are treated badly, receiving fines when they do not arrive on time. When he lost two fingers while working some years ago, he was told he was 'obsolete' and was not given proper medical attention. He managed to keep his job, but he has now had his hours and pay reduced. Rosa feels discriminated against in her workplace for being a woman, and although she receives basic benefits such as maternity leave, a pension, and a small contribution towards work-related travel, she reports that the workers at the factory are 'not allowed' to get sick and will be sent home unpaid when they do.

Those in lower-middle income deciles also look back on previous waged employment negatively. Mirna (D3) remembers the 2- or 3-hour journeys she took to get to previous

jobs. Fabian (D4) feels he was exploited by his employer: "I really did everything, I ended up painting the house from top to bottom... I spent a year and a half there and she took advantage of my cheap labour and I painted all the furniture in her house, and her whole house."

Still, the potential benefits of formal employment are not lost on this group. Taxi driver Omar (D2) recognises that he is missing out on healthcare cover and other benefits that would come with being formally employed. Fernanda (D3) also notes the absence of state protections through her work. She sells glasses in Tepito and has her own employees, and the work seems reliable and consistent, but she feels the lack of the state's support for her line of work, in particular pertaining to insecurity in her market: "the government, instead of protecting us, and eradicating crime, has let this go out of control."

Formal employment becomes more of a regular occurrence as we move up the deciles into the middle of the distribution. However, several individuals also note certain 'hidden costs' of this kind of work. Mirna (D3) has had stable work as a high school teacher for the past 8 years, but she has yearly renewable contracts that feel insecure. Elizabeth (D6) left her previous job doing domestic work through an online agency and began working 'independently', because they were requesting her to register with the tax authorities, which would have meant tax contributions that she felt she could not afford.

Complaints about formal employment do not change substantially in quality as we rise up the income distribution, though they are less common. Monica (D7) enjoys her current work teaching in a kindergarten but is not happy with working conditions. Staff never receive holidays, "not even for important national holidays". Monica was permitted to take time off for her daughter's 15th birthday, but had pay deducted. She says her boss "believes he has slaves, instead of having workers". Mario (D8), who works in human resources, says that his work isn't as secure as it once was: he works part time for one company and freelances for another. He doesn't receive the benefits he would like or the salary he thinks he deserves, and believes he is discriminated against for his age (he is 50 years old). Valeria (D9) notes that, when working at TV Azteca for several years, she was contracted through an agency so had no benefits, unlike unionised full-time employees.

There are a small number of positive accounts of formal work in the bottom half of the distribution, though far fewer than the negative accounts. Adrian (D1) works in a shopping mall and has always had formal though low-paid work and has even had the chance to travel abroad in a previous job. He enjoys his current work environment and has two days off a week to spend with his family. Aldo's (D3) work in sales comes with a "healthy" work environment, with good colleagues and bosses. Bruno (D5) very much enjoys his job at

an insurance company and gets along with his colleagues and boss. He feels he is building the skills to move up the ladder and earn more at his current job or go elsewhere for better pay. Mariana (D5) always wanted to work for the public sector and managed to do so since finishing her studies 30 years ago. It is possible that public sector work is perceived as entailing better treatment.

The ambivalent feelings that our interviewees expressed about formal and informal work are consistent with studies in both Brazil and Mexico that find that workers do not systematically prefer formal work over informal work: they tend to move in and out of both over time, and do not choose informal work only when formal work is unavailable (Bosch and Maloney, 2006; Bosch, Goni Pacchioni and Maloney, 2007).

Interviewees in the middle of the distribution complain more about their incomes than those at the bottom, suggesting that expectations rise faster than incomes as we move up the income distribution. Israel (D5) left a job as an Uber driver where he had been making round M\$1,000 per week, when all of a sudden the company reduced the fares, and it no longer made financial sense for him to stay. Both Aldo (D3) and Jonathan (D6) are reliant on commission to top up a low basic salary. Jonathan (D6) reports that benefits are unsatisfactory: "we have social security, *infonavit* and nothing else". Mariana's (D5) partner, Bruno, would like to earn more because "The prices of everything are through the roof." Eduardo (D6) has been a taxi driver and chauffeur for 18 years but on weekends also works painting cars and preparing food for events on the side for extra income as he is unhappy with the amount he is earning.

Those in the upper deciles report positive aspects of their work. Valeria (D9) has a good salary, benefits, pension, and savings, and is paid triple for national holidays. Andrea (D9) is happy with her work and the benefits, especially while she was pregnant and needed to go to doctors' appointments. Still, it is noteworthy that she did not take this for granted.

In decile 7 and above, self-employment can be an attractive option for those wanting flexibility. For Elsa (D7), opening her own business allowed her to raise her son. She has always worked in her area of interest, design, across website design, prestigious television channels, and a printing press, but now runs her own business focusing on prints, invitations, cards, and so on, and a retired mother works with her. Carlos (D7) studied Visual Arts at UNAM and has worked in set design and teaching. He now manages his own studio as a sculptor and has achieved international prestige. For Francisco (D10), self-employment was a natural choice. He found his first real 'lasting' job as an employee at Televisa. Now that he runs an agency for digital content, he looks back and notes that he was uncomfortable being an employee, feeling that it did not foster enough innovation.

While income levels matter to all households, what stands out in people's responses is that working conditions seem to matter at least as much: complaints about poor treatment at work, and appreciation of independence and freedom when it is obtained, are more frequent than remarks on the adequacy or inadequacy of pay. These conditions are strongly associated with formal versus informal work, where in the lower deciles formal work is often seen as involving mistreatment by bosses.

4.4 Food security

The answers pertaining to food security reveal as much about attitudes to food as they do about availability and affordability. We asked interviewees whether they find food expensive, and whether they ever lack money to buy enough food for their households. We found that inequality informs understandings of what having enough food means: for people at the bottom of the distribution it can mean being able to afford a meal a day, while for somebody in the top deciles, it means being able to buy whatever food their household has grown accustomed to. In our study, nobody in the first decile claimed to lack food, explaining that they always have enough for a daily meal of beans and rice. In contrast, the much richer Mateo (D9) claims that when his children were little, he experienced extreme financial hardship, which made it difficult for him to feed his family. However, when relating the same period at a different point in the interview, he explained that he managed to keep enough capital to invest in real estate.

We find some reported of food insecurity are in deciles 2, 3, and 6. Here too we can see how multidimensional inequalities inform both the understanding of the question, and the ways households cope with these challenges. For some interviewees in decile 2, economising by skipping meals does not equate to not having enough to eat. Sara (D2) works long hours informally as a street vendor and acknowledged that she had enough to prepare a soup or similar at home, but problematised not being able to afford ready-made food outside of her home, presumably because it was impossible for her to carry her homemade food with her to work. Joaquín (D2), who is one of the two earners in a household of 10, joked that he might skip breakfast to "keep one's figure." Several people report often having, or previously having had, problems buying enough food for their households. These interviewees reported having borrowed money to deal with these episodes. However, while the poorer households resorted to their communities and networks for informal credit, some of those in decile 6 used a credit card to see them through.

The importance of food to the bottom deciles is also indicated by their responses to our question of what they would do if there were given a gift of M\$1000 (about US\$52). Many

interviewees in the bottom half of the income distribution stated that they would use it for food, highlighting preoccupations with food security.

5. Lived experiences of inequality

Lived experiences of inequality refer to the experiences of social hierarchy, stigma or domination that comprise social inequality. These interpersonal or relational aspects of inequality can have a large impact on people's lives. Here we explore how these experiences are informed by class and education, gender, ethnicity, and location.

5.1 Class, education, and intersectional inequality

In our interviews, female domestic workers report the most explicit mistreatment by others, especially when working in the most affluent parts of the city. In Mexico 94.8% of domestic workers are female, of which 28.4% identify as indigenous compared with 21.5% of the general population,⁶ and by construction they are of low social class. They therefore suffer the effects of these intersecting characteristics. Elizabeth (predicted D6, reporting a D2 income) stressed that her experience in the rich neighbourhood of Polanco was very unpleasant: "The people there, with the people I have to go to, are very arrogant people. They are people who demand too much work and want to pay you a peso for what you do. They are very slave-driving people". Olivia (D7) described it this way:

When you work as a domestic, they treat you the way they want. Because they pay us, they want everything done for them. And they tell you that either you do as they say, or you don't get paid. You've already cleaned and they go and tell you it's not clean, 'clean it again and if not, we won't pay you'. I've worked in houses like that. That's when I worked in Condesa [a rich neighbourhood]. ... I went through a lot of trouble because the women were very jealous and thought I had something with their husbands. I was pretty when I was young, although I'm running out of pretty. Yes, even with some vegetarians [I worked for]. At 6 a.m. they were ringing the bell for me to make them lunch, so I got annoyed and left the key downstairs. The lady's daughters wanted me to wax their bikini line just because they were paying me!

Other interviewees discuss feelings of discrimination, though they are not always happy to call them that. They describe feeling they don't get treated like others do in the shops, or feeling deliberately ignored. Some notice marked distances: "In my work [in a factory], then, people come in nice clothes, in a suit, and approach us and ask what we do, and leave a distance of half a metre. 'I'm not going to eat you and I'm not going to make you dirty because I'm not going to touch you. Tell me what you want to know' but they have their distance, they see you as a freak, from top to bottom and from bottom to top," says Joaquín (D2). Valentina (D3) remarked, "I don't like that people feel superior to others.

 $^{^{\}rm 6}$ Bensusán (2019) and 2015 Intercensal Survey.

They don't even look at you. I've never worked there [in high-income area Santa Fé], I don't think they even give work to people like me in those places."

A few of the interviewees reported feeling discriminated against because of their level of education. Valentina (D3) says that she felt discriminated against at work "for not having studied." Aracely (D5) mentions having felt discriminated against "a little when I mention that I haven't finished my degree, but nothing else." Joaquin (D2), an employee in a factory, said that he was not considered by his superiors, in his opinion, because he did not have a higher academic degree: "They restrict us, we cannot give an opinion". Still, not everybody's experience was this straightforward. Fabian (D4) considers that he has only rarely been discriminated against for not having studied. Cuauhtémoc (D8), while he considers that he has never been discriminated against, adds: "I have a friend who discriminates against people without a university degree, but I'm the one who's asked for advice the most and I don't have one."

We also find a sense of distance, alienation and sometimes inferiority expressed by those at the bottom end of the income distribution with respect to the rich. When we ask them about affluent areas of the city, they refer to the people living in them as in "another world", "among clouds" or "flying". Lucia (D2) reported her feelings this way: "Well, it feels... I feel very small over there" [she laughs nervously, as if ashamed]. "I feel very simple and you see people there,... fly, don't you think?" Mirna (D3) had to go to Polanco for work and reported, "My perception is that it is another world (...) The way people dress, or what they eat." She adds that "the people who were contemptuous or rude were the people from those places." Eduardo (D6) goes almost daily for work (he is a driver for a water company and takes members of the technical team to water plants) and says "I don't know anyone who lives in those [rich] areas. I wouldn't know what they look like... They are people who live... they feel like they live on another planet. (...) I have no dealings with them. I have never spoken to any of them." Elsa (D7) also worked at Polanco and went there every day, and she relates her experience as follows: "I don't have any friends who live in that area. It's nice Polanco, pretty taken care of, very posh. It's kind of high class, so to speak. Some people are very nice but other people who seem to live in a cloud – 'don't look at me, you're at my door, get off'. There are people who abuse that, who think it gives them more rights over one who's not from the area. People have treated me well, except for those who live in the clouds". Monica (D7) used to deal with people who live in these areas in her youth while her brothers were studying at university and later when she studied for her degree. Her perception is that "Yes, there are suckers. Very materialistic people. Who live in another world. In other dimensions, who solve everything with money, with brands. There is everything, but there are some very hollow people. Obsessed with money, brands, cars, who has more and who has less. I know

what those people are like because I co-existed with them when my brothers were studying at the university... I don't have any friends from there."

Gerardo (predicted D9, reported D10) corroborates these perceptions with respect to his own high-income neighbours in Polanco, reporting that "My neighbours are that kind of people, they have a very stark social class consciousness and not because they are bad people. People who live here were born and grew up in a very privileged environment and they believe they are different, they believe they are a different type of person." He also reports "classism" in the college he attended.

We find notable instances of discrimination within the top 20 percent of the income distribution. Inequality within the top income quintile is very high: decile 9 has an average per capita income of 9,508 pesos per month while the top 5 percent are nearly five times richer, averaging 45,241 pesos per month. This may be one of the reasons why some people in the highest income deciles report experiences of "feeling less," especially "not properly dressed". Valeria (D9) reports the possibility of going to a nightclub in Las Lomas as seeming rather distant, as she couldn't afford it, and also suspects she would be discriminated against if she tried. Andrea (D9) felt discriminated against in high school: "I didn't feel I had the money they had or the giant houses." In a similar experience, Tamara (D9) relates "I studied at [the private school] Oxford College and when I arrived, I was the little girl who had just come from the Hidalgo de la Tolteca school. My grandmother lived in San Pedro de los Pinos and I was embarrassed to say."

There are even those in decile 10 who feel "inadequate" because of where they live, though they claim it doesn't affect them: Tere considers "Maybe I dress unsuitably [fachosa] for the area [Lomas de Reforma], a little hippie." Gerardo (predicted D9, reported D10), who lives in Polanco in a property that belongs to his grandmother, says he feels discriminated against: "In some places I go around here, I'm dressed differently from how people go. When I ate meat, I used to go to posh restaurants, those with three waiters on top of you such as Astrid & Gaston. If I was badly dressed or in sports trousers I felt uncomfortable. People made me feel that in that context I had to dress differently. There were places where they wouldn't let you in if you were wearing tennis shoes, I guess they still exist but that's not supposed to happen anymore." These reports of strongly-felt social hierarchies within rich groups are consistent with Krozer's (2018) finding that even the very rich in Mexico are highly conscious of hierarchies within the elite, and being less rich than some of their acquaintances, and Hecht's (2017) analysis of "relative (dis)advantage" among elites in London.

5.2 Location

Another strategy that allowed us to learn about experiences of class discrimination was to ask our interviewees if they had felt discriminated against because of their place of residence. The female residents of the poor but centrally-located La Merced neigbourhood, Tamara and Sonia (D2), reported that when they were studying for their high school diploma they used to say that they lived in the centre, generically, to avoid the stigma of prostitution and the questions about it from their classmates. Fer (D3) from Tepito, proud of her neighbourhood, told us that people are always surprised to learn that she lived there because "They think that Tepito is the birthplace of criminals, that there is no good person here, that everyone here is a criminal, so when they meet us, they are surprised".

Mirna (D3) grew up in Ecatepec and said that when she was still living there, she experienced discrimination because of it, and that, "one person even once told me that he could offer me a dignified life and I broke up with him because he was more than discriminating against me, he was nullifying me. Popularly, the expression is that these are slums, shantytowns. At the school where I work, they call it *Ecaterror*."

Mariana (D5), a resident of Iztapalapa, says she has trouble getting taxis to take her home: "you say you live in Iztapalapa and you take a taxi and they say 'Oh, I'm not going there!". Israel and Diana (D5), neighbors in Iztacalco, said that their relatives and friends have distanced themselves from them since they moved there (for economic reasons) because they avoid visiting them in an area they consider complicated. Israel notes, "My brother-in-law once came and saw a guy get shot back here, so he doesn't want to come anymore." Diana adds, "The family itself distanced from us because we live in a bad area. Because we have to be careful with the cars. The first time my mother-in-law came to see us, they stole her mirrors." Another of Iztacalco's residents, Elizabeth (predicted D6, reported D2) reported that she has lost jobs as a domestic worker when her employers found out where she lives: "Yes. There are people at my job, whom I had to tell where I live in the city and they have cancelled my job. The neighbourhood and the place have a bad reputation... I think the rest of the city sees us as a violent area."

People in the top three deciles generally do not visit the areas of the city considered dangerous. An exception is Michelle (D10), who volunteered in a foundation for abused women. She claims that she didn't feel insecure, but that this was mainly out of ignorance: "Maybe because I wasn't so clear about how insecure it was. In Tepito, that's where I'm a bit afraid." Jessica (predicted D8, reported D9) reports that "We have [visited those areas]. We know people living in these areas, we feel insecure, but people treat us well, people treat us differently." Her husband remarks, "What an incongruity!" For him it was incongruous to feel afraid despite the good treatment they had always received.

Spatial inequality therefore has strong links with social inequality, both via cultural performance such as wearing the right or wrong clothes in high class areas, and via the stigma of criminality and violence associated with some poor areas.

5.3 Gender

Our female interviewees generally did not identify structures of gender discrimination within their homes, but they did so in relationship to the workplace and in public. This occurs across the entire income distribution. Rosa (D2) reported feeling discriminated against for being a woman in the factory where she works. She sums up her superiors' attitude as, "You are a woman and you don't know anything". Elsa (D7) also reported her experience of discrimination: "In a job interview, yes. For being a single mother. Everything was going well until that moment in terms of professionalism and academic data, until they asked if I had a family, if I was married and they changed the questions to who you depend on, what condition you are in." Juana (D8), when asked if she had faced discrimination, hesitated and said something very general about Mexico being sexist, claiming that what she has experienced was "nothing that has not been experienced by other women here in Mexico at any [socioeconomic] level." Tere (D10) lives in Lomas de Reforma. The gym she goes to is nearby but if she walks there she faces a lot of sexual harassment in the street.

While these women do not report feeling oppressed due to the gender at home, ⁷ there are many indications of entrenched gender roles. Some men referred to the performance of care tasks or domestic work as "support" for their partners: When Eduardo (D6) was asked about days off, he replied: "Well, the chores don't stop. Washing clothes, that's my wife. I help her with the chores." Luis (D6) tells us "If I can, I'll support Laura by taking [our child] to school", or also, about his days off, "If I'm not going for a run, I'll stay home and do some housework to help Laura". Francisco(D2), while relating his routine, reported "sometimes I support my wife and I take the children to school". Most men did not mention doing any reproductive labour, suggesting even less involvement than these cases. Oscar (D3), for example, when asked about his routines, responded "I eat the traditional breakfast, eggs, bread, beans, coffee, milk, fruit, vegetables. Depending on what my wife has for the morning, and at lunchtime the same thing". Raul (D8) was recently widowed and says of the new dynamics, "We have been organizing ourselves little by little in the absence of the mother to help with all the domestic chores".

-

⁷ Only one women explicitly reported any gender-based problems in the home: Olvia (D7) told us that her husband does not let her go out dancing because "My husband is very jealous."

Bruno (D5) was the only interviewee who related his involvement in domestic work and care tasks with the naturalness that implies co-responsibility. This was later reinforced by his partner Mariana. In one other case, Valeria (D9) implied that her husband is substantially involved in domestic and care work.

Several women, ranging across the income distribution, related how they adapt their economic lives to their care responsibilities. Some women decided to stop working when they had children, such as Concha (D2), or Valentina (D3) who worked until her third child was born and then stopped. Others make adjustments in order to continue working. Tere (D10) works from home when her daughter is in daycare and after she goes to bed. Elsa (D7) decided when her son Sebastian was born to set up a design studio independently (with her mother's support), so she works while Sebastian is in kindergarten. She adds that in the afternoon she tries to work, but Sebastian is restless and the graphic design workshop becomes a playroom. Antia (D1) decided to set up a shop and open at times that suit her care and household chores. In addition, the children are with her in the store in the afternoons. There they eat and do their homework.

Women across the income distribution bear the childcare responsibilities, and this has an impact on their work life: they feel their employers discriminate against mothers, and they have to make adjustments to their working hours to fit in with childcare.

5.4 Race

We saw above that people identify as indigenous throughout the income distribution, but that the share is disproportionately large in the bottom decile and small in the top decile. In our sample only one person described the experience of being indigenous. Roselia (D1), a Tzeltal Indian without a regular income, reports having experienced discrimination due to her race: "when you feel most humiliated is when they tell you: Look she is an Indian. You feel trampled, because that's how I feel." Although she also says that "there are good people who speak beautifully of you, they say, oh look, she has her language, she is an Indian, where will she come from, and how much will she say? I'm not ashamed now, I have my dialect and I have to go on. With my husband sometimes I speak my language, and my grandchildren say: what did you say, Grandma? They are curious. They know a little bit."

Raul (D8) is of Japanese descent and has experienced mocking due to his origin, but he does not consider it discrimination. He considers it friendly and doesn't believe it has affected his insertion in social and economic activities: "Obviously they make fun of the Japanese surname or some things, but it is a normal situation for the Mexican, they make fun of everything, they make fun or try to bother you, it is a normal situation."

On the other hand, Andrea (D9), of Spanish descent, related her experience of preferential treatment: "I think that having half-light hair (blonde) was an advantage in this country. It sounds strange, but my maternal family is from Spain and they are all light-eyed blondes (my cousins), and when we are together I have felt preferential treatment. Without a doubt (in Mexico) we're racist and classist."

Some people at the top of the income distribution admitted their own prejudices with respect to race. When asked how they would feel if an indigenous family, a family from the southeast of the country, or a family from Haiti were to move in next door, they were quick to fall into stereotypes, conceding that they would think they were narcos, or at least that their neighbours would think so: Tere (D10) recognized: "Maybe I would say 'narco', I don't know, it sounds bad, but you're right (it happens sometimes)". Francisco (D10) did not say that he himself would think so but that the rest of the neighbours would: "I have no doubt that they would be discriminated against. Here it is a very segregated neighbourhood. Sometimes you hear: 'those who moved there are probably drug dealers or nouveau riche' and that, many times, has to do with the colour of your skin." Gerardo (predicted D9, reported D10) referred to his neighbours' prejudices, saying sardonically, "I would be very happy, especially because my neighbours would be very upset." He also describes a student with an indigenous name being bullied by a blond and blue-eyed student in the college he went to.

We do not have cases of indigenous people in the top deciles in our sample, although we know they exist. What we do observe is the stigma associated with being indigenous both from the perspective of a low-income indigenous woman and from the perspective of people with high-incomes who recognize, even if they are reluctant to admit in their own cases, the discrimination that people in their socioeconomic class tend to perpetrate against indigenous people. They also recognize the benefits associated with being white and, in particular, blond. This chimes with the fact that in Mexico the term "güero/a", which literally means someone with light-coloured skin and hair, is used as a compliment and term of respect by street vendors, shop owners, and others trying to ingratiate themselves with potential customers.

6. Conclusion

This paper presents a new approach for analysing multidimensional socioeconomic inequality across quantitative and qualitative dimensions. It is theoretically based in insights on the multidimensional nature of well-being as explored by Amartya Sen, and understandings of the social nature of well-being due to sociologists such as Pierre Bourdieu and others, thereby combining economic and sociological perspectives on inequality.

Starting from pre-existing survey data, we select a sample of households across income deciles and take semi-structured interviews, allowing us to examine different aspects of life across the income distribution. On the basis of these data we analyse inequality using two techniques: qualitative income gradients which we also refer to as *inequality in lived experiences*; and what we call *lived experiences of inequality*, which refer to experiences of stigma, discrimination, and social hierarchy, from the perspectives of both those at the bottom and those at the top of the respective hierarchies. These enable us to expand our understanding of inequality in the sense of differences (and similarities) in life at different income levels, and for people in different categories such as gender and race.

In Mexico City we used this approach to explore how inequalities in health, education, and experiences of work and of food security interact with income inequality. We then showed how inequality is experienced on the bases of class and education, location within the city, gender, and race, providing a new perspective on intersecting inequalities by showing how these multiple dimensions interact. Piketty (2014, p. 213) notes that when discussions of inequality are confined to purely statistical measures, "it is impossible to distinguish clearly among the multiple dimensions of inequality and the various mechanisms at work." Our approach attempts to combine the advantages of the statistical approach with the depth provided by qualitative analysis. By systematically uncovering the relationship between material inequalities and lived experiences we hope to better capture what it means to live in an unequal society.

References

Alkire, S. and Foster, J. (2011) 'Counting and multidimensional poverty measurement', *Journal of Public Economics*. doi: 10.1016/j.jpubeco.2010.11.006.

Anandhi, S. (2013) 'The Mathammas: Gender, caste and the politics of intersectionality in rural Tamil Nadu', *Economic and Political Weekly*, 48(18), pp. 64–71.

Anderson, E. S. (2010) 'The Fundamental Disagreement between Luck Egalitarians and Relational Egalitarians', *Canadian Journal of Philosophy*, 40(sup1), pp. 1–23. doi: 10.1080/00455091.2010.10717652.

Atkinson, A. B. and Bourguignon, F. (1982) 'The Comparison of Multi-Dimensioned Distributions of Economic Status', *The Review of Economic Studies*. Oxford University Press (OUP), 49(2), p. 183. doi: 10.2307/2297269.

Banda, F. and Chinkin, C. (2004) *Gender, Minorities and Indigenous Peoples*. London.

Bayón, M. C. and Saraví, G. A. (2017) 'Place, Class Interaction, and Urban Segregation: Experiencing Inequality in Mexico City', *Space and Culture*. SAGE Publications, 21(3), pp. 291–305. doi: 10.1177/1206331217734540.

Bensusán, G. (2019) Perfil del trabajo doméstico remunerado en México, OIT.

Boesten, J. (2010) *Intersecting Inequalities: Women and Social Policy in Peru, 1990–2000.* Pennsylvania State University Press.

Bosch, M., Goni Pacchioni, E. and Maloney, W. F. (2007) 'The Determinants of Rising Informality in Brazil: Evidence from Gross Worker Flows', *IZA Discussion Papers*. Institute of Labor Economics (IZA). Available at: https://ideas.repec.org/p/iza/izadps/dp2970.html (Accessed: 10 February 2021).

Bosch, M. and Maloney, W. (2006) 'Gross Worker Flows in the Presence of Informal Labor Markets. The Mexican Experience 1987-2002', *CEP Discussion Papers*. Centre for Economic Performance, LSE. Available at:

https://ideas.repec.org/p/cep/cepdps/dp0753.html (Accessed: 10 February 2021).

Bourdieu, P. (2010) *Distinction : A Social Critique of the Judgement of Taste*. London: Taylor & Francis Group.

Brites, J. (2007) Afeto e desigualdade: gênero, geração e classe entre empregadas domésticas e seus empregadores, Cadernos Pagu. Available at: https://periodicos.sbu.unicamp.br/ojs/index.php/cadpagu/article/view/8644819 (Accessed: 15 December 2020).

Collins, P. H. (2015) 'Intersectionality's Definitional Dilemmas', *Annual Review of Sociology*, 41(1), pp. 1–20. doi: 10.1146/annurev-soc-073014-112142.

Crenshaw, K. (1989) 'Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics', *University of Chicago Legal Forum*, 1989(1), pp. 139–167.

Decancq, K. and Lugo, M. A. (2012a) 'Inequality of Wellbeing: A Multidimensional Approach'. doi: 10.1111/j.1468-0335.2012.00929.x.

Decancq, K. and Lugo, M. A. (2012b) 'Weights in Multidimensional Indices of Wellbeing: An Overview', *Econometric Reviews*. Taylor & Francis Group, 32(1), pp. 7–34. doi: 10.1080/07474938.2012.690641.

Devine, F. and Savage, M. (2005) 'The Cultural Turn, Sociologyand Class Analysis', *Rethinking Class*. Macmillan Education UK, pp. 1–23. doi: 10.1007/978-0-230-21454-5_1.

Flemmen, M. and Savage, M. (2017) 'The politics of nationalism and white racism in the UK', *British Journal of Sociology*, 68, pp. S233–S264. doi: 10.1111/1468-4446.12311.

Gauster, S., Romero, W. and Botella, C. (2019) 'Entre el Suelo y el Cielo: Radiografía multidimensional de la desigualdad en Guatemala'. Oxfam.

Hecht, K. (2017) A Relational Analysis of Top Incomes and Wealth: Economic Evaluation, Relative (Dis)advantage and the Service to Capital. Available at: www.lse.ac.uk/III (Accessed: 22 January 2021).

Karen, D. and Washington, R. E. (2015) Sociological Perspectives on Sport: The Games Outside the Games, Sociological Perspectives on Sport: The Games Outside the Games. London: Routledge. doi: 10.4324/9781315870854.

Krozer, A. (2018) *Inequality in Perspective: Rethinking Inequality Measurement, Minimum Wages and Elites In Mexico*. Cambridge University.

Lamont, M., Beljean, S. and Clair, M. (2014) 'What is missing? Cultural processes and causal pathways to inequality', *Socio-Economic Review*. Oxford University Press (OUP), 12(3), pp. 573–608. doi: 10.1093/ser/mwu011.

Lugo, M. A. (2007) 'Comparing Multidimensional Indices of Inequality: methods and application', *Research on Economic Inequality*. Emerald Group Publishing Limited, pp. 213–236. doi: 10.1016/S1049-2585(06)14010-7.

McKnight, A. *et al.* (2018) 'Multidimensional Inequality Framework Final draft', (June), p. 59. Available at: https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2018/09/Final-Multidimensional-Inequality-Framework-110918.pdf.

Piketty, T. (2014) *Capital in the twenty-first century*. Cambridge Mass; London: The Belknap Press of Harvard University Press.

Pla, J. L. (2017) 'Trayectorias de clase y percepciones temporales sobre la posición ocupada en la estructura social. Un abordaje multidimensional de las clases sociales. Argentina (2003-2011)', *Revista Internacional de Sociología*. Editorial CSIC, 75(3), p. 72. doi: 10.3989/ris.2017.75.3.16.05.

Rao, N. (2015) 'Marriage, Violence, and Choice: Understanding Dalit Women's Agency in Rural Tamil Nadu', *Gender and Society*, 29(3), pp. 410–433. doi: 10.1177/0891243214554798.

Sayer, A. (2005) 'Class, Moral Worth and Recognition', *Sociology*. SAGE Publications, 39(5), pp. 947–963. doi: 10.1177/0038038505058376.

Segal, P. (2021) 'Inequality as Entitlements over Labor', Socio-Economic Review.

Sen, A. (1992) Inequality Reexamined. Oxford: Oxford University Press.

Sen, A. (1993) 'Capability and Well-Being', in Nussbaum, M. and Sen, A. (eds) *The Quality of Life*, pp. 30–53. doi: 10.1093/0198287976.003.0003.

Sylvain, R. (2011) 'At the intersections: San women and the rights of indigenous peoples in Africa', *International Journal of Human Rights*, 15(1), pp. 89–110. doi: 10.1080/13642987.2011.529690.

Tilly, C. (2009) *Durable inequality*. Berkeley: Univ. of California Press.