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ORIGINAL PAPER

Sending the elevator back down: a mutual constitution between vertical and horizontal inequality

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Abstract

This paper explores inequality through a lens of mutual constitution between context and behaviour. It combines group-based, horizontal inequality with within-group, vertical inequality to assess how both shape certain behavioural dynamics. By drawing on unique primary data, containing egocentric network data of 205 adult Namibians, I study behavioural patterns of support within the context of a highly unequal and stratified society. In doing so, I further address the Black Tax narrative, a colloquial term which emphasises how former economic constraint has shaped the support practices of black Namibian families. More precisely, becoming better off comes with an expectation to support relatively worse-off family members, which has been expressed as 'sending the elevator back down'. Using a mixed-effect regression approach, I estimate the effect of individuals' socioeconomic positions in the observed socioeconomic distances in their support relationships—thus, how 'far' or 'economically distanced' one generally is from those mentioned within their support network. My results propose that economic distance in the support relationships of black Namibians tends to increase for those who hold higher socioeconomic positions. I hereby provide the first empirical evidence for the Black Tax narrative in the Namibian context. I further demonstrate a mutual constitution of horizontal and vertical inequality whereby former economic constraint seems to have shaped the support practices of black and white Namibian families in different ways.

Keywords Horizontal inequality · Vertical inequality · Egocentric networks · Family support · Namibia

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Introduction

Inequality is a problem of distribution. Whether in rights, goods, wealth, income or opportunities, someone is holding considerably, or increasingly, more than others. Higher levels of inequality have been associated with lower levels of well-being and societal welfare, including educational performance, life expectancy and physical as well as mental health (Wilkinson and Pickett 2009). Moreover, higher levels of inequality can undermine efforts to enhance economic and social mobility and 'imperil social cohesion as they may lead to …forms of social and political conflict' (Justino et al. 2003, p. 1). What differences are unfavourable to whom then also becomes a socio-political, if not moral, question.

A concept which has sought to account for the aspect of 'among whom' inequality occurs discusses horizontal inequality (Stewart 2005, 2014). This concept emphasises differences across the groups of a given society rather than among individuals per se, the latter of which would be deemed vertical inequality. Groups are constituted by social identities which are salient markers in a society, such as an individual's gender or ethnic identity. In pointing out differences across groups, this concept and associated debates also focus on processes that lead to such issues as discriminatory pay or differential access. In Namibia, and the context of this study, horizontal inequalities are often discussed as ethnic identity-based inequalities stemming from the former *apartheid* regime. Up the present day, such inequalities seem to persist (Government of Namibia 2016; Seekings 2007; Seekings et al. 2004).

In this study, rather than focusing on the processes that have led to ethnic identity-based inequality in Namibia, I assess how such inequality has shaped within-group practices. I especially focus on how different socioeconomic standings can be observed across individuals of black and white ethnic identity groups. However, I also assess the link between one's socioeconomic position and the vertical inequality observed in their support relationships. In doing so, I assess a mutual constitution between horizontal and vertical inequality following the perspective of Markus and Kitayama (2010). From a context perspective, this also speaks to the Black Tax narrative, which describes the obligations of non-white Namibians to support worse-off family members once one has become notably better off.

I draw on primary data stemming from fieldwork in Namibia. The data contain 205 egocentric networks of support of adult Namibians residing primarily in Windhoek from different ethnic identities and age groups as well as gender and socioeconomic strata. Drawing on a total of 5731 support relationships, I first assess whether differences in socioeconomic standing, measured by educational and professional attainment, can be observed across black and white ethnic identity groups. I further assess whether black and white egocentric networks have significantly different socioeconomic distances in support relationships. A mixed-effects regression approach then looks at the combined effect. It measures the extent to which an individual's socioeconomic position explains changes in socioeconomic distance in their support relationships, further controlling for other individual characteristics. I additionally compare results across all networks as well as black and white networks only.

I find empirical evidence for a mutual constitution between horizontal and vertical inequality in the context of urban Namibia. While the results remain inconclusive for white ego networks, for black ego networks, significant positive increases in socioeconomic distances can be observed for higher-positioned egos. In other words, a better situated black Namibian is more likely to have 'unequal' relationships. Hereby, the results also provide the first empirical evidence of the Black Tax claim in Namibia. Yet, it is worth mentioning that the results apply to Namibia's largest urban conglomerate, whereas different dynamics might prevail in rural areas.

In the following, I discuss the literature on horizontal and vertical inequality, followed by an introduction to the case study as well as the data informing this study.

A mutual constitution of horizontal and vertical inequality

Inequality is a relative concept. No individual alone can be unequal—it arises in comparison and in collective settings. What differences are unfavourable to whom then becomes a political, if not moral, rather than an economic question. In fact, inequality has become increasingly more complex, accounting for multiple dimensions beyond income, contexts and its instrumental and normative functions (Stewart 2016).

Inequalities can be shaped by social identities and the social groups one belongs to. Following Durlauf's argument, individuals are situated within and influenced by certain social group memberships (1997). Thereby, in-group dynamics determine common outcomes among group members. A greater divergence between existing groups defined, for example, by ethnic identity, income, education or language then leads to greater inequalities and decreased social mobility across group characteristics (Durlauf 1997). The author's perspective points to the dynamics of an 'array of groups whose memberships are themselves determined endogenously in the economy (and) society' influencing an individual's outcomes (Durlauf 1997, p. 6), generally known as the 'membership theory of inequality'. Equally emphasising the social embeddedness of individuals, Lin adds that individual outcomes are determined by their 'accessibility to shares', which in turn is tied to membership in socially or historically constructed groups (Lin 2002). Unlike economic systems, where structures and patterns are easier to identify, social groups are formed by social identities, which are multifaceted within a societal context yet instrumental to somewhat arbitrary and fluid group memberships (Stewart 2014). Accordingly, defining and identifying inequalities through this perspective remains a challenging task.

A concept that attempts to operationalise the above presents itself as horizontal inequality. This perspective describes inequalities among societal groups, whereas vertical inequality refers to inequalities among individuals, regardless of group memberships (Stewart 2005). In other words, horizontal inequality elicits social identities which can be associated with relative disadvantage or marginalisation. Prominent examples of such are gender-based inequalities or racialised inequality. The framing of horizontal inequality can thus play an important role in exhibiting certain cleavages in society. The acknowledgement of the latter can further provide pathways to redressing and rebalancing inequalities among groups.

However, in pointing to certain unequal structures within societies, inequality often gets portrayed as a contextual condition. It often frames the 'common individual' as a constrained participant who acts within the confined spaces and constraints of inequality or tries to overcome them—but not reversely, as an active shaper of such. Hereby, a different line of research sheds light on the influence of inequality on interpersonal behaviour. For instance, it positions the individual using concepts such as socioeconomic class to explore subjective dynamics within and across such positions. Hereby, relative positioning was found to make inequalities visible and appraised as the unfair shaping of individuals' perceptions and tolerances towards inequality (Buttrick et al. 2017). Furthermore, research has found that, often, perceptions of inequality are strongly linked to an individual's relative position and their interpretation thereof (Hauser and Norton 2018). Positions have also been associated with varying degrees of prosociality seen as other-beneficial versus self-beneficial behaviour (Choshen-Hillel and Yaniv 2011; Durante and Fiske 2017; Korndörfer et al. 2015; Kraus and Park 2017; Piff et al. 2010; Piff and Robinson 2017). Other studies have found the effects of shifts in positions, also termed social mobility, affecting status uncertainty and psychological and health outcomes as well as the aspirations and meaning-making of individuals (Destin and Debrosse 2017; Fisher et al. 2017; Kish-Gephart 2017).

Another aspect explored is the manifestation of inequalities in cultural systems and beliefs. A recent study found that, in addition to material conditions, cultural systems shape manifestations of social class, further leading to 'culturally divergent manifestations' (Miyamoto 2017, p. 1). Another study focusing on coloniality and the Global South challenges the idea of 'global inequality as a differential cultural progress' whereby 'modern affluence results from growth compatible mentalities' (Adams and Estrada-Villalta 2017, p. 38). Within the concept of culture and self, using cultural models, authors have also found that cultural beliefs and practices differentiate individuals with given socioeconomic backgrounds; for instance, despite equal qualifications, people from working-class backgrounds experienced disadvantaged career outcomes (Townsend and Truong 2017).

Inequalities also echo within the spaces of social power and wellbeing (Buttrick et al. 2017). The latter raises elements of subjectivities related to inequality, such as status competition, mistrust and optimism and their implications for an individual's happiness through the creation of subjective perceptions of inequality as well as its visibility that in turn affects wellbeing (Buttrick et al. 2017). The latest research even aims to go beyond behavioural, implicit or self-reported measures of inequality by exploring cognitive thinking patterns through neuroscientific methods; for example, the findings include that lower socioeconomic status can be associated with lower responsiveness to rewarding stimuli (for an extensive review, see e.g. Farah 2017).

Lastly, inequalities have also been explored within social relationships or networks more broadly, being a web of social interaction and associations. Thereby, authors have studied elements such as wealth accumulation and centralisation (Fuchs and Thurner 2014) and cooperative behaviour (Fowler and Christakis 2010) as well as how these vary depending on whether or not inequality is visible (Nishi and Christakis 2015). Another example can be found in analysing cooperation games, where certain network structures foster segregation between individuals,

particularly between poorer and wealthier individuals (Tsvetkova et al. 2018). Generally, the relational approach to inequality emphasises that '(membership of or) access to powerful networks, groups, and institutions, and inequalities in wealth and other economic resources shape proximal social environments that influence how individuals express their internal states and motivations' but also how individuals 'move up or down in the social class hierarchy' (Kraus and Park 2017, p. 2). In this way, it provides an argument for how individual attributes are intertwined with an individual's position and status within social systems, thereby constituting inequalities across such attributes. Moreover, these dynamics transcend interactions and relationships, as argued by Carey and Markus, whereby 'understanding and addressing issues tied to social class and inequality requires understanding the form and function of relationships across class contexts' (Carey and Markus 2017, p. 123).

The present study was inspired by an interest in the mutual dynamics of individual and interpersonal behaviour and unequal contexts. Theoretical and methodological approaches that attempt to understand behaviour generally reflect certain 'assumptions about the sources of human behaviour that are rarely explicitly identified or acknowledged but that are foundational to research and to interventions' (Stephens et al. 2012, p. 723). A new way of thinking about such research approaches places emphasis on a concept termed mutual constitution regarding inequalities. Mutual constitution refers to a general 'understanding that individuals and structures are inseparable forces that influence each other in bi-directional, ongoing cycle(s)' (Stephens et al. 2012, p. 724; see also Adams and Markus 2003).

For instance, Stephens et al. (2012) compare two approaches in exploring behaviour that they term as the individual model or structural model, depending on corresponding underlying assumptions. They describe the individual model as a model that 'views behaviour as emerging from the characteristics or attributes of individuals, such as their values, beliefs, attitudes, motives and traits' (Stephens et al. 2012, p. 726). Conversely, the structural model 'views behaviour primarily as a product of the conditions or characteristics of people's environments… (such as) material resources associated with one's position in the social hierarchy' (Stephens et al. 2012, p. 727). While they review how both approaches inform research in education and health inequality, they also propose a 'sociocultural self-model', which recognises the bi-directional relationship between individuals and structures. This further includes key assumptions for research approaches—that is, the indirect influence of individual characteristics and structural conditions on behaviour through the 'selves' or social personhood, whereby selves 'are a product of ongoing mutual constitution…and serve to guide people's behaviour by systematically shaping how people construe situations' (Stephens et al. 2012, p. 733). This rationale has been applied in studies that are generally interested in the two-fold process of individual behaviour being shaped by and shaping the structures and context in which they are embedded. This includes, for example, studies on social organisational practices (Michel 2014), social dynamics in media outlets and social media (Kim 2018; Reitmanova and Gustafson 2012), cultures (Markus and Kitayama 2010) and legal environments (Styhre and Arman 2015).

In this study, I explore the mutual constitution between horizontal and vertical inequality. Thereby, horizontal inequality is understood as socioeconomic

differences across groups defined by social identities salient in each society. Vertical inequalities are socioeconomic differences between individuals. Typically, vertical inequality thus does not pay attention to social identity groups. In this research, however, I look at socioeconomic differences between individuals who belong to the same social identity groups, which can be associated with horizontal inequalities. In doing so, I explore the extent to which horizontal inequality between groups and vertical inequality within groups determine each other.

In the following section, I detail the context of this study and illustrate its suitability to analyse the discussed. I further pay attention to the behavioural dynamics underpinning the analysis.

Namibia and the black tax narrative as a case study

In this section, I detail the context of this study. I begin by describing Namibia and its patterns of social, economic and political stratification stemming from former *apartheid* policies. I further elaborate on Black Tax being a colloquial term which not only emphasises continued inequality across black and white Namibians but particularly the resulting differences in within-group inequality and corresponding behavioural dynamics.

Race as a dimension of horizontal inequality in Namibia

Apartheid was a political system that institutionalised and reinforced ethnic segregation in South Africa and Namibia. It is a prominently discussed case of human rights violations and structural violence, conflict and power imbalances as well as social stratification and economic inequalities (Fosse 1997; Friedman 2011; Leibbrandt et al. 2012; Matlosa 1998; Seekings 2003). Central to these debates are racial and ethnic identities, formerly utilised for social fragmentation and corresponding discriminatory measures. It still resonates as a predominant feature when exploring the causes and consequences of inequality in South Africa and Namibia, demonstrating its tacit yet continued patterns.

The *apartheid* regime was implemented under South African rule and lasted from 1920 until Namibia's independence in 1990. Initially, South Africa followed the blueprint of the German colonial legacies, favouring white South Africans while forcing non-white Africans into becoming sources of labour (Jauch et al. 2009). Generally, the colonial government enforced ethnic identity-based segregation by implementing differential taxation or pension claims (for an example, see Online Appendix 1). It further restricted the mobility of non-white Namibians, which was manifested in a multitude of government policies, such as the 1963 Aliens Control Act and the Native Urban Areas Proclamation of 1951, particularly so for women and children by not allowing them to join the residence of their husbands and fathers living in urban areas (Jauch et al. 2009). Such policies led to a divide between rural subsistence farming and urban industrial workers along gender lines for many non-white African families in Namibia. Other discriminatory measures concerned

educational outcomes. Following the Bantu Education Act in 1953, in 1958, non-white education entailed four years of primary schooling whereby only 20% were to proceed to higher levels. Furthermore, while white education was tax-financed, non-whites had to pay in the form of fees, constraining access through affordability (O'Callaghan 1977). Furthermore, the United Nations Institute for Namibia (UNIN) demonstrated that observed income differentials across white and non-white Namibians surpassed any variations that could have been explained by differing skill levels, thereby reflecting ethnic discrimination based on payment levels (UNIN 1986). Yet, at the same time, on average, the white population held permanent jobs across the public and private sectors and had access to subsidised housing, healthcare and high-quality schools, as captured by Jauch et al.: 'the expenditure of health care resources for the white population differed from that reserved for the black population at a scale of about 10:1′ (2009, p. 14).

Though such policies were revoked when Namibia gained independence, the country's government and its people were faced with high levels of inequalities regarding wealth but also access to public services, opportunities and resources. World Bank figures from 1991 estimated that roughly two-thirds of Namibia's population found themselves living in absolute poverty, primarily constituted of non-white Namibians. This outcome was linked to former systems of labour exploitation and capped educational outcomes, which confined non-white Namibians to low-paid jobs (The World Bank 1991).

Similar patterns seem to prevail up until today, reflected in high levels of inequality. On an aggregated level, income inequality measured by the GINI coefficient showed levels of 0.70, 0.60 and 0.59 in 1994, 2004 and 2010, respectively, ranking among the 10 most unequal countries (The World Bank 2017). Only a minority of people depict the living standards expected in an upper-middle income country (Namibia Statistics Agency and World Bank 2017).

The Black Tax narrative

Black Tax is a colloquial term that exists in Namibia and South Africa alike. While there is a paucity of empirical studies on Black Tax in Namibia, it nevertheless features prominently in the country's public discourse and media. I thus primarily draw on Namibian national media outlets and the available wider literature from South Africa to understand the Black Tax narrative more broadly. Given the intertwined history regarding *apartheid*, the aspects of Black Tax discussed below were found in both contexts.

Black Tax is a recent term in Namibia and South Africa. Before the term itself existed, it used to revolve around 'old African traditions' that entailed mutual caretaking of families, kinship and community. It was seen as family duty and family responsibility but also family upliftment (Mhlongo et al. 2019). While the term 'Black Tax' does not necessarily seem to be known or used by older generations (Busani-Dube 2019), some attribute its origin to economic recessions and socioeconomic implications that affected black individuals differently.

A traditional way of life—or communal life as an African way of life—seems to depict a somewhat negative connotation for younger generations. Material caretaking used to be a 'neutral' practice across the lifecycle. External challenges due to economic recessions and resulting unemployment in the late 2000s increased economic pressure for those who are typically referred to as black middle class. Considering decreasing resources to cater for one's own and others' needs, the sharing of resources became referred to as 'tax' (Mhlongo et al. 2019). For some, Black Tax 'unintentionally demonise(s) the idea of family upliftment by calling it some kind of 'Black Tax' or an 'abusive cultural practice, (including) a burden on black people's progress' (Mhlongo et al. 2019, p. 82). Further, the author describes that some black individuals felt the pressure to retreat from a traditional way of life.

In her master's dissertation, Magubane (2017) generally describes two schools of thought when referring to Black Tax. In one, it seems to be attributed to the discrimination of the *apartheid* system and the continued inequality because of such. The other primarily focuses on the members of the black middle class and their financial support to extended family members considering continued inequalities resulting from *apartheid*. While these do not differ in identifying the cause, namely historical inequality, the latter points to the fact that shifting up in terms of socioeconomic class bears consequences for black individuals. In fact, Busani-Dube (2019, p. 17) states that 'success comes with expectations; it comes with the responsibility to send the elevator back down to fetch the others'. This is not to say that support networks of better-off non-white Namibians tend to become poorer. Instead, it suggests that people in their support networks remain the same—often on low socioeconomic levels—which is then also associated with a greater number of people to provide support to.

However, whether these responsibilities, expectations or consequences more broadly are perceived as a positive or negative dynamic differs. While some acknowledge that 'Black Tax is not our culture, it has everything to do with the position (*apartheid* has put non-white individuals in)' (Busani-Dube 2019, p. 19), some state that it has been an 'intimate part of my life; I did not even give it a name' (Sithole 2019, p. 158). Others see it as a flawed social construct, whereby calling it 'tax' is 'premised on the selfish, capitalist attitude of "me first" and I was not raised that way. Therefore, I reject it with contempt' (Mofokeng 2019, p.109). More positive stances refer to it as family investment with potential multiplying effects as well as being a tool to address inequality (Mncube 2019). In sum, the term itself has no universal understanding, let alone definition, nor is it accepted and used by everyone.

Regardless of whether it is seen as a burden or a blessing, there are a few more general dynamics which refer to the previously introduced perspectives of this study. Central is the element of individual merit as economic success in the form of educational attainment and employment. Such individual merit comes with the expectation to be divided and sub-divided through economic support given to extended family members. This can cause one to 'defer your dreams in order to accommodate the immediate and pressing needs of others within your orbit' (Khumalo 2019, p. 30) but also to pay (or literally repay) attributes to those who have helped realise one's economic success. There are unwritten rules of 'family

first' or 'not saying no to those who raised you' (Busani-Dube 2019) but also to ensure that 'family roots and communal structure are not destroyed by the so-called alien civilization of an individualistic lifestyle' (Mhlongo et al. 2019, p. 85). This also indicates a collision between traditional norms and lifestyles and modern lifestyles within the same economic and social context.

In sum, while framed as a normative social script that individuals follow within the compounds of family, why and between whom Black Tax is mobilised seems to be associated with changing socioeconomic statuses among family members. For instance, such can be found in statements which describe it as '(a practice which) …many young black working professionals have to endure as part of their career successes in the modern world' (Mushaandja 2015, p. 1) as well as a 'cultural and moral obligation that people feel towards their families… (which) feeds an expectation that a person may be liable to carry a burden if they studied and found a job' (Mtolo 2018, p. 1).

Similarly, a recent article suggests that Black Tax is an 'affective term that is associated with shifting social identities' (Mangoma and Wilson-Prangley 2019, p. 444), whereby this shift is then understood as becoming or being 'better off', causing individuals to support '…their economically disadvantaged family' (Mangoma and Wilson-Prangley 2019, p. 447). Therefore, the authors point to the fact that 'balancing one's own personal growth ambitions against cultural and social pressures can create internal conflict' for those who provide support (Mangoma and Wilson-Prangley 2019, p. 456). More broadly, it has further been argued that 'Black Tax does the real work of income redistribution in the country', which deals with '*apartheid*('s)… socially engineered black poverty…and makes the need for Black Tax a reality' (Ndinga-Kanga 2019, p. 1).

Black Tax thus calls upon social group differences across racial or ethnic identities but also the varying extent of socioeconomic heterogeneity and potential necessities and responsibilities to provide support within such groups. While it does not call on nuanced differences in social behaviour within groups, it primarily stresses that i) differences exist, and ii) they exist due to group-based differences in Namibia's society.

While often being associated with poverty among non-white individuals, Black Tax is thus equally a story about vertical and horizontal inequality. It is about vertical inequality between non-white individuals who are better off than others, finding themselves in positions to support others—which might speak to the notion of 'sending the elevator back down' (Busani-Dube 2019). And it is about horizontal inequality in that such support dynamics seem to apply to black and non-white individuals but also in that they respond to economic disadvantages for black and non-white individuals. It therefore provides an interesting case to explore the bi-directional relationship of inequality through interdependencies between systems and behaviours—comparing within-group behaviour against the backdrop of systematic between-group differences. Hereby, I specifically focus on the behaviour of interpersonal support, which I shall describe when discussing the data informing this study in the following section.

Data and methodology

In this study, I draw on a unique dataset which informs the subsequent analysis. The data stem from fieldwork conducted in 2017/18 in Windhoek and the Khomas region of Namibia. Windhoek is Namibia's capital and the largest urban conglomerate in the otherwise sparsely populated country.

Being interested in patterns of private redistribution, the data collected comprise egocentric networks of adult Namibians. Egocentric networks represent an in-depth collection of information about the immediate social environment of an individual rather than the sociometric structure of a network as a whole.[1] Thus, the collected data consist of support relationships between respondents and their immediate contacts but not among the contacts themselves, generally described as first-level data. The method employed to elicit respondents' contacts is aligned with the resource generator of Van der Gaag and Snijders (2005). Thereby, respondents are asked with whom they engage in a predefined set of support activities, recording their contacts by activity. With each support activity, respondents further elaborate on the characteristics of their contacts and the activity itself. Using the resource generator further allowed me to expose respondents to the same set of support activities. This step was also taken to reduce reporting biases, that is, by simply asking how many people one supports. In addition, by asking for detailed information about each support activity, respondents had to think about concrete events that have taken or are taking place in their lives. Support practices are defined using economic welfare as a framework and comprise 21 support activities, such as in-kind and financial transfers, co-habitation, unpaid labour and care as well as economic opportunity sharing.[2]

Three sampling criteria were applied, namely age, gender and ethnic identity. The majority of the interviews were conducted with residents of Windhoek (83%). The interviews were conducted by the author of this study and 10 research assistants. The research assistants were responsible for recruiting study participants in line with given sampling criteria. The study participants were sampled through the research assistants' networks from roughly 27 neighbourhoods/areas in Windhoek, including low-income, informal, such as Katutura, to high-income, such as Ludwigsdorf, neighbourhoods. Neighbourhoods continue to be linked to different socioeconomic profiles as a result of the former spatial separation during *apartheid*. At least two researchers would collect data on each sub-sample, defined by ethnic identity and language spoken. To hire the second assistant, I would first assess the socioeconomic profiles of the networks collected by the first assistant. I would then hire

[1] Social networks generally capture sociometric data which contain all relevant links within a population of interest. Personal networks, also called egocentric networks, can be viewed as zooms into the larger structure as they focus on the social relations of individuals (for further discussion, see e.g. Crossley et al. 2015).

[2] Support practices in this study can be broadly summarised as follows: (1) financial transfers of 100 Namibian dollars and up to 5000 Namibian dollars; (2) non-durable asset transfers, such as food and clothing; (3) durable asset transfers, such as livestock and land; (4); co-habitation arrangements and household assistance; (5) childcare and elderly care; and 6) opportunity sharing, including assistance with applications, job referrals and hiring through contacts or mentorship.

Table 1 Age and network size

Variable	Obs	Mean	Std. dev	Min	Max
Age of respondents	205	43.718	15.39	18	84
Degree	205	27.956	16.006	7	105
Unique size	205	16.415	8.189	3	47
Female	96 (47%)				

Source: Primary data, collected 2017/18

someone who is familiar with different neighbourhoods and corresponding socioeconomic profiles than those collected by the first assistant. This sequential step further enabled the construction of a diverse sample in socioeconomic terms.

In all, the sample includes 205 networks of adult Namibians with a total of 5731 support activities (see Table 1). It includes adults aged 18 years and above, with the oldest respondent being 84 years of age. The sample is balanced across gender (47% female respondents). Network size (represented as degree) varies across respondents. The smallest reported network comprises seven support activities, while the largest one includes 105. In part, such variation can be explained by double-mentions: egos were able to mention alters multiple times if they engaged with them in different support activities. On average, egos reported 27 support activities across approximately 16 mentioned individuals. This is a comparatively high number for egocentric networks (Crossley et al. 2015) and can be explained by the total of 21 types of support activities covered.

The subsequently employed categories 'black' and 'white' are then defined as comprising black and white ethnic identities.[3] This aggregation of ethnic sub-groups does not represent a homogenisation of ethnic identity groups in terms of their cultural practices and social dynamics. What gives meaning to a dualistic lens is the focus on historically grown inequalities. Whether historical systems discriminated against some ethnic identities and not others can present a binary answer—yes, systematic discrimination applied to black ethnic identities, and, no, this systematic discrimination did not apply to white ethnic identities. In fact, discrimination against black Namibians was designed in a way to favour white Namibians. I thus account for ethnic identity groups owing to their former instrumentalisation in generating differentiated access, rights and opportunities. The sample comprises 165 black and 40 white respondents, whereby the larger number of black ethnic identities is primarily owing to the sampling by language groups and greater ethnic sub-diversity within the non-white space. To reflect ethnic diversity, the sample was primarily sampled in Windhoek, being the largest and most ethnically diverse urban conglomerate in Namibia. Further, most support activities can be interpreted as 'family support', with as many as 68.03% of activities occurring within the extended family. The remaining 30% then applies to friends, colleagues or acquaintances, whereby

[3] The ethnic identity groups include Ovambo, Herero, Caprivian, Nama/Damara, German Namibia and White Afrikaans.

Table 2 Age and network size across ethnic identity groups

	N	Mean	Std. dev	Min	Max
White					
Age of ego	40	45.075	15.996	20	80
Degree	40	25.45	14.732	9	86
Unique size	40	15.375	7.074	6	37
Female	18 (45%)				
Black					
Age of ego	165	43.389	15.271	18	84
Degree	165	28.564	16.283	7	105
Unique size	165	16.667	8.437	3	47
Female	78 (47%)				

Source: Primary data, collected 2017/18

only 1.4% involves strangers. Thus, support was primarily reported within one's close social circles, with the majority of contacts being considered as 'very close' or 'close' (79.3%).

In the following, I shall refer to a respondent, that is, an individual reporting their support network, as an 'ego'. Their mentioned contacts within their networks are then referred to as 'alters'. In this study, I divide the sample into two sub-samples to assess between- and within-group inequality. As indicated, I use ethnic identity groups to compare groups which have (black) and have not (white) experienced former institutionalised discrimination. Thus, networks of white egos present one sub-sample, whereas networks of black egos present a second one. This distinction is also meaningful as 84% of support activities took place with members of the same ethnic identity group.[4] Hence, this allows me to explore differences across both groups as well as support relationships that primarily take place within groups. Further, the sub-samples of white and black egos (rows) do not differ considerably in terms of gender composition, average age or network size (see Table 2). This allows for an interesting comparison of both groups, particularly regarding their socioeconomic standing being of primary interest in this study.

Table 3 then displays socioeconomic indicators across ethnic identity groups (columns). The sub-sample consisting of white egos does not contain respondents who have completed no education or only up until primary school. Similarly, there is a notably lower share of unemployed white egos (only 5% versus 25.5% for black egos). In addition, a share of 10.3% of black egos have no educational degree.

Recalling that all respondents are above the age of 18, this reflects a higher share of black Namibians who have not completed primary education. However, it is noteworthy that each sub-sample differs considerably in size. Hence, the percentage shares within each group might be more interpretable for black than for white egos. This further calls for an approach that compares patterns in relationships in general

[4] This stems from a question included in the survey which asked respondents, 'Do you consider (name of person) as being from the same ethnic identity you identify yourself with?'.

Table 3 Socioeconomic indicators across ethnic identity groups

	White		Black		Total	
	No	%	No	%	No	%
Education						
None	0	0	17	10.3	17	8.3
Primary	0	0	33	20	33	16.1
Secondary	9	22.5	56	33.9	65	31.7
Tertiary	31	77.5	59	35.8	90	43.9
Total	40	100	165	100	205	100
Profession						
Not in labour force	5	12.5	22	13.3	27	13.2
Unemployed	2	5	42	25.5	44	21.5
Manual labour	2	5	36	21.8	38	18.5
Service/office worker	3	7.5	18	10.9	21	10.2
Lower-grade professional	2	5	13	7.9	15	7.3
Higher-grade professional	26	65	34	20.6	60	29.3
Total	40	100	165	100	205	100

Source: Primary data, collected 2017/18

as well as within groups. Regarding observed relationships, there is sufficient information available for both groups, namely 4713 relationships observed across black ego networks and still 1018 relationships observed across white ego networks.

In an additional step, I assess the representativeness of the given sample by comparing the above-mentioned results to comparable statistics in the Namibian Household Income and Expenditure Survey (NHIES), of which the latest available version was conducted in 2015/16 (Namibia Statistics Agency 2018). The NHIES is a nationally representative study. However, it does not include information on ethnic affiliation or racial identities. Therefore, I use the variable 'most common language spoken' as an available approximation. It is noteworthy that especially English and Afrikaans are languages that are spoken by Namibians who would identify as either white or black. Direct comparisons would thus need to account for deviations in these language categories.

Similar to what has been found in the primary data, the share of those with no formal education is notably higher among Namibians that can be considered as being non-white (see Online Appendix Table 12, 3.32% white, 18.18% black).[5] In contrast, the share of tertiary degree holders is roughly three times higher among white Namibians. In the region where the study took place, these deviations are even more notable; for instance, around 43% of language groups primarily affiliated with white ethnic identities hold a tertiary degree versus 17% among non-whites. More detailed results by language groups can be found in Online Appendix, Tables 10 and

[5] Note that the distinction by race is based on spoken languages and thus represents only an approximation.

11. Regarding employment measures, there is less information available on employment ranks based on different remuneration levels or professional prestige. It is noteworthy, however, that within the study's region, most of the Afrikaans, English and other European language speakers work in private-sector companies (see Online Appendix, Table 15), whereas the share of those working in private households is twice as high among non-white Namibians.

While the primary data were not constructed as a nationally representative study, given the scope and data collection requirements of network data, they reflect two key distributional patterns pertinent to this investigation. First, the overall higher education levels, especially tertiary degree holders, closely resemble the patterns of the Khomas region where the study took place. This is evident from comparisons of educational achievement in Namibia overall and in the Khomas region with the primary data. For instance, the share of tertiary degrees holders is three times higher in the Khomas region, about 22%, compared to about 7% for the country. Thus, a high share of tertiary and secondary degree holders in the primary data reflects this higher regional average. It further allows me to describe the support behaviour of those who—on average—fare economically better. This speaks to the Black Tax dynamic, which seems to affect those who became better off in comparison to other family members.[6] Second, the distribution of educational attainment across black and white Namibians in the primary data closely resembles those that can be observed across language groups in the NHIES. Both constructed groups shall be seen as approximations of racial identity – yet though constructed on different criteria (primary data: self-acclaimed; NHIES: most common language), very similar patterns emerge as described above. Nevertheless, the findings do not apply to the Namibian society as a whole but rather to the urban areas within the Khomas region and to the particular socioeconomic classes represented in this study.

A measure of inequality

In the following, I explain a process which obtains measures of the socioeconomic positions of egos and alters in absolute as well as relative terms. A primary goal is to assess the ego's socioeconomic position as well as the socioeconomic distance in their support relationships. This is to determine the extent of a mutual constitution between horizontal inequality (socioeconomic variations in the ego's position) and vertical inequality (socioeconomic variation in their relationships).

I thus compute a socioeconomic score (SES), which functions as a proxy for an individual's general socioeconomic status. I follow the rationale suggested by Brown-Iannuzi et al. (2015), in which indicators of education or occupational prestige can indicate levels of material resources held. Thus, to generate a continuous scale for socioeconomic positions based on data availability, I use an individual's

[6] Note that respondents were able to mention contacts that they support who do not reside in Windhoek or the Khomas region. However, the questionnaire did not include a specific question on the location of contacts.

Table 4 Inequality measures

Variable	Obs	Mean	Std. dev	Min	Max
SES_e	5731	4.871	2.533	0	8
SES_a	5731	3.455	2.643	0	8
Distance	5731	2.922	2.283	0	8

Source: Primary data, collected 2017/18

education level E_i as well as their profession W_i to generate their socioeconomic status position SES_i.

$$SES_i = \sum E_i, W_i$$

Education levels are based on a scale from zero to three, whereby zero represents no education, followed by primary, secondary and tertiary education obtained. Professions are clustered and ranked using Goldthorpe's class scheme (1987).[7] The resulting scale ranges from zero to five, whereby zero represent not in the labour force and one represents unemployment,[8] followed by manual labour, service workers, lower-grade professionals and higher-grade professionals. The resulting sum ranges from zero to eight. The score in itself is not interpretable but should merely be used as a tool to rank individuals in relation to others connected to them.

To see which SES positions are linked via support activities, I computed the distance, D_i, between egos and their alters. I compute absolute distances, which allows every ranked position of egos to have the same maximum distance regardless of whether alters are positions above or below them. Thus, distance can be seen as a measure of socioeconomic heterogeneity which sums up all observed distances between socioeconomic ranks in a given network. Given a finite scale of ranks, with the rising positions of the egos, observed heterogeneity then becomes increasingly more downward directed.

$$D_i = |SES_e - SES_a|$$

Table 4 summarises the obtained measures across all 5731 observed relationships, whereby across the whole sample, egos rank on average at 4.8 and alters slightly lower at 3.4. The average distance between egos and their alters in support relationships amounts to 2.9. In other words, on average, support reaches others who are about 3

[7] Goldthorpe's class scheme is the dominant schema in the international sociology literature. It generally facilitates the computation of comparable categories related to socioeconomic class – in the case of this research, professions obtained. Since professions were captured using an open question, clustering was necessary for the proposed analysis. In this study, I apply the five categories of (1) unemployed; (2) manual labour, food service workers and household staff; (3) service workers and office staff; (4) lower-grade professionals; and (5) higher-grade professionals (Goldthorpe 1987).

[8] I scale unemployed individuals at one instead of zero as some individuals who are currently unemployed recorded some source of (informal), or additional income as compared to those who were not in the labour force.

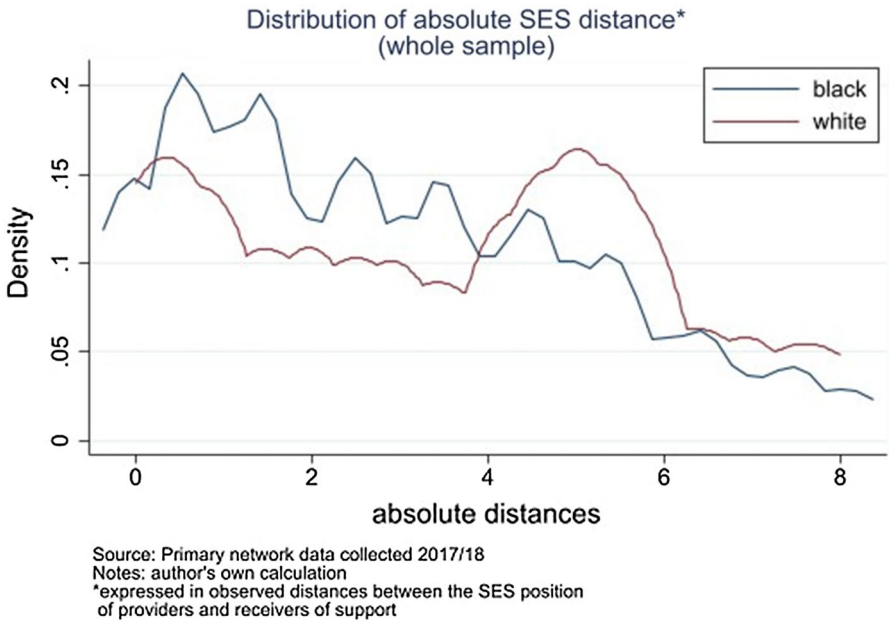

Fig. 1 Dsitribution of absolute SES distance (whole sample)

units further up or down in comparison to one's own position and depending on where an individual would sit on the overall scale.

Regarding ethnic identity groups, the following graph (Fig. 1) displays absolute SES distances observed between egos and their alters across black and white ego networks. It appears that greater distances between egos and their alters are less often observed across both black and white ego networks. Hereby, zero, on the very left of the scale, represents peer-to-peer support, where an ego and their alter have the same SES. Peaks in the absolute distances of white ego networks can be explained by the pattern of their observed SES position. For instance, there seems to be an accumulation of SES distances spanning four to six units.

Yet, Fig. 1 does not reveal who tends to be linked to whom, particularly whether individuals ranking at higher scores can be associated with greater distances in their support relationships. Greater distances directly speak to the previously discussed Black Tax narrative, which framed it as follows: 'having studied and found a job comes with the expectation to support worse-off family members'. I thus propose a modelling framework to assess this claim in estimating how SES positions correspond to the observed SES distances linked to them. More broadly, this also estimates a mutual constitution between horizontal and vertical inequality.

Table 5 Group differences in ego and alter positions

	Obs White	Obs Black	Mean White	Mean Black	Dif	St. err	*t* value	*p* value
SES_e	1018	4713	6.877	4.437	2.44	0.082	29.95	0
SES_a	1018	4713	4.435	3.244	1.192	0.09	13.25	0

Source: Primary data, collected 2017/18. Note: two-sample *t*-test with equal variances

Model approach

To assess whether more unequal relationships can be observed for egos of higher socioeconomic positions, I use a multilevel linear model. Egocentric network data, if networks are non-overlapping, as in this study, constitute nested data. Hereby, the alters mentioned by a particular ego can share certain characteristics and similarities. In addition, ego characteristics are then repeated for each observation, in this case being support relationships with an alter. These interdependencies can cause correlations in the error term. To account for such, I choose a model specification with random intercepts and residuals on level two, being the ego networks. Hereby, the dyads, being support relationships and their properties, present the unit of analysis on level one.

$$y_i = X_e\beta_e + Z_e u_e + \varepsilon$$

To recall, y_i is represented by distance D_i being the score which measures socioeconomic distances as vertical inequality within relationships. SES_e is the score indicating an ego's position and is included as an independent variable in X, whereas further ego characteristics, such as degree, unique size and the age and gender of the ego (see Tables 1 and 2), are included in a set of control variables Z. I further specify SES_e as a categorical variable so that the effects can be compared for each position against the reference category being zero and thus the lowest position.[9] I run this model specification on the whole sample as well as both sub-samples, being white and black ego networks. I further compare sub-samples by including only ego networks where egos hold a position of five and above. This specifically then compares the vertical inequality observed among egos who could be regarded as equally well-off across both ethnic identity groups.

[9] Including SES_e as a categorical variable further makes results more interpretable as a unit change on the scale does not strictly represent the same value or extent across positions.

Table 6 Group differences in alter positions among highest ego positions

	Obs White	Obs Black	Mean White	Mean Black	Dif	St. err	*t* value	*p* value
$SES_e = 5$	75	404	3.72	2.876	0.844	0.285	2.95	0.003
$SES_e = 6$	40	420	6.9	2.978	3.921	0.388	10.1	> 0.001
$SES_e = 7$	119	341	4.37	3.508	0.863	0.256	3.35	0.001
$SES_e = 8$	648	932	4.367	3.633	0.734	0.141	5.2	> 0.001

Source: Primary data, collected 2017/18; note: two-sample *t*-test with equal variances.

Table 7 Group differences in ego and alter positions

	Obs White	Obs Black	Mean White	Mean Black	Dif	St. err	*t* value	*p* value
Distance	1018	4713	3.319	2.837	0.482	0.079	6.15	0

Source: Primary data, collected 2017/18; note: two-sample *t*-test with equal variances

Results

I first discuss horizontal inequalities as between-group differences (see Sect. 4.1). Subsequently, I assess vertical inequality as within-group differences and particularly within the space of support relationships.

Horizontal inequality: socioeconomic differences between groups

When comparing socioeconomic positions (see Table 5), indicated by the computed score including educational and professional attainment, significant group differences become apparent. On average, black egos (SES_e) hold a position of 4.4, which is considerably lower than that of white egos, amounting to 6.8. Further, the lowest observed position for a white ego is a position of two, while it can be as low as zero for black egos.

The difference between the alters (SES_a) mentioned by black versus white egos is comparatively smaller. On average, the alters of black egos rank at 3.2, while those of white egos rank at 4.4. 'Sending the elevator back down', however, describes a practice of supporting worse-off family members if the ego becomes (notably) better off. To test such, I also compared the average positions of alters mentioned by egos of different socioeconomic positions, namely five and above (see Table 6).

There are significant differences across networks of black and white egos of higher positions. For instance, alters in networks of black egos ranked at five, generally sitting on a position of 2.9, as opposed to 3.7 for the alters of white egos of the same position. The most notable difference across groups is revealed

Table 8 Group differences in absolute distance among highest ego positions

	Obs White	Obs Black	Mean White	Mean Black	Dif	St. err	*t* value	*p* value
$SES_e = 5$	75	404	2.56	2.728	− 0.168	0.172	− 1	0.329
$SES_e = 6$	40	420	2.3	3.455	− 1.155	0.264	− 4.4	> 0.001
$SES_e = 7$	119	341	3.135	3.639	− 0.505	0.22	− 2.3	0.022
$SES_e = 8$	648	932	3.633	4.367	− 0.734	0.141	− 5.2	> 0.001

Source: Primary data, collected 2017/18; note: two-sample *t*-test with equal variances

when comparing egos ranked at six. Alters of white egos hold almost the same position as egos at 6.9, which can suggest more peer support.[10] For black egos of the same position, alters rank at 2.9 and thus considerably lower.

These group differences provide an indication of the different socioeconomic standings of ethnic identity groups and thus suggest that horizontal inequalities continue to prevail. However, when comparing the average positions of egos and alters across the two groups, one cannot see whether the average differences occur to the same extent within relationships.

Vertical inequality: socioeconomic differences within groups and relationships

Next, I assess vertical inequality understood as inequality within relationships. There is a significant difference across black and white ego networks (see Table 7). Black ego networks show an average distance of 2.8 in support relationships with their alters, while white ego networks show a slightly higher average distance of 3.3. This is an interesting finding for the following reasons. First, Black Tax is often discussed under the umbrella of racial inequality, which often revolves around processes of racial discrimination. In that, it appears to be often misunderstood by 'outsiders'. The findings show that there is inequality, or socioeconomic heterogeneity, within both groups. This is also in line with the observed greater intra-racial inequality (Seekings 2007). The finding below, however, can help to clarify the claim of Black Tax further. While it is not a claim about inequality being more prevalent among black Namibians, it is a claim about inequality being prevalent across different spectra of the socioeconomic scale.

Indeed, when we look at Table 8, we can see that black ego networks show significantly greater inequality within their networks than white ego networks once a black ego holds a position of six or above. In addition, knowing that fewer black egos hold such positions might explain why the general average distance observed across black ego networks is lower than those of white egos.

Table 8 also directly speaks to the notion of Black Tax on 'sending the elevator back down' once you reached a notably higher position. While the differences across

[10] Note that the observations for white ego networks at position six are comparatively small, which limits group comparisons in this particular aspect.

Table 9 Model results

	Basic model (all networks)	White ego networks	Black ego networks	White ego networks > 4	Black ego networks > 4
	Distance (D_i)				
Position 0	0		0		
	(.)		(.)		
Position 1	0.453		0.450		
	(0.463)		(0.437)		
Position 2	0.142	0	− 0.0839		
	(0.414)	(.)	(0.396)		
Position 3	0.173	− 1.251	− 0.00925		
	(0.417)	(0.668)	(0.404)		
Position 4	0.374		0.188		
	(0.445)		(0.427)		
Position 5	1.004*	− 0.296	0.827	0	0
	(0.455)	(0.743)	(0.446)	(.)	(.)
Position 6	1.521***	− 0.318	1.433***	− 0.0404	0.619*
	(0.445)	(0.978)	(0.428)	(0.898)	(0.285)
Position 7	1.678***	0.370	1.602***	0.700	0.896**
	(0.452)	(0.743)	(0.443)	(0.558)	(0.287)
Position 8	2.230***	0.670	2.231***	1.042*	1.294***
	(0.413)	(0.618)	(0.415)	(0.497)	(0.249)
Ego gender	− 0.254*	− 0.268	− 0.204	− 0.238	0.0151
	(0.118)	(0.260)	(0.127)	(0.296)	(0.194)
Ego age	0.00813	0.0246*	0.000408	0.0231*	0.0000359
	(0.00452)	(0.00991)	(0.00516)	(0.0103)	(0.00914)
Degree	0.00674	− 0.0107	0.0126*	− 0.00715	0.0271*
	(0.00506)	(0.0168)	(0.00523)	(0.0192)	(0.0111)
Unique size	− 0.0103	0.00226	− 0.0141	− 0.0113	− 0.0259
	(0.00997)	(0.0362)	(0.00997)	(0.0449)	(0.0173)
Constant	1.841***	2.666**	2.153***	2.456**	2.430***
	(0.511)	(0.969)	(0.507)	(0.846)	(0.545)
Ego					
Random intercept	− 0.360***	− 0.561**	− 0.427***	− 0.552**	− 0.546***
	(0.0659)	(0.187)	(0.0748)	(0.203)	(0.127)
Random residual					
	0.686***	0.853***	0.642***	0.878***	0.753***
	(0.00951)	(0.0226)	(0.0105)	(0.0242)	(0.0157)
N	5731	1018	4713	882	2097

Standard errors in parentheses, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$

Coefficients expressed in unit changes of distance

Source: author's own calculation

ego networks are not high, there are fewer black egos who show greater socioeconomic heterogeneity within their networks. This can also indicate that there might be fewer better-off black Namibians who support others on lower positions of the scale. To see whether this dynamic holds true when controlling for other characteristics, I shall turn to the model results.

Assessing a mutual constitution of vertical and horizontal inequality

Table 9 summarises the results obtained from the modelling approach. Effects are expressed in units of the SES used to measure distances between egos and their alters as well as for the position of the egos themselves. At first, a general distance that can be observed in ego networks (reflected in the constant) amounts to 1.8 units. This is important to bear in mind when interpreting the additional effects of socioeconomic positions in regard to increasing this average distance further or reducing it.

Compared to networks with egos in the lowest position (position zero), holding a higher socioeconomic position can be associated with an increase in the observed socioeconomic distances in the ego's networks, though to varying extents. The networks of egos positioned from 1 to 4 see negligible increases in distances, ranging from 0.5 to 0.1 unit increases. This could suggest that there tends to be more peer support among lower positions who fare worse economically or are less 'independent' in economic terms, that is, as they are still finishing education or have no income from labour. Knowing that those positions are also more likely to be held by black egos suggests that such peer support occurs more among black egos and their alters. A more notable increase in socioeconomic distances can be seen for egos positioned at five (increase of one unit), whereby distance then consistently increases for higher positions—from 1.5 up until 2.2 for egos positioned at eight. This means that the support of egos at the top end tends to reach an alter up to 4 positions lower than themselves. Thus, egos holding higher positions tend to have more 'unequal relationships', where distances increase and also become increasingly different to distances observed for egos on the bottom of the scale. This might also reflect what has been described in the Black Tax narrative as 'becoming notably better off' in relation to others. It then seems that there might be a certain threshold as to when such notable differences can be observed. Yet, at the same time, there seems to be a certain extent to which such downward support occurs. While changes in distances are notable, support from positions on the upper end of the scale show support links to the middle range of positions but not necessarily the bottom ones.

It is further important to notice that, while gender has a negligible effect, the age of an ego, number of support relationships (degree) or number of individuals mentioned (unique size) has no notable effects on socioeconomic distances in support relationships. It is often assumed that Black Tax merely describes support obligations that respond to the greater share of black Namibians living in poverty, which leads to more support towards worse-off individuals. This could be reflected in

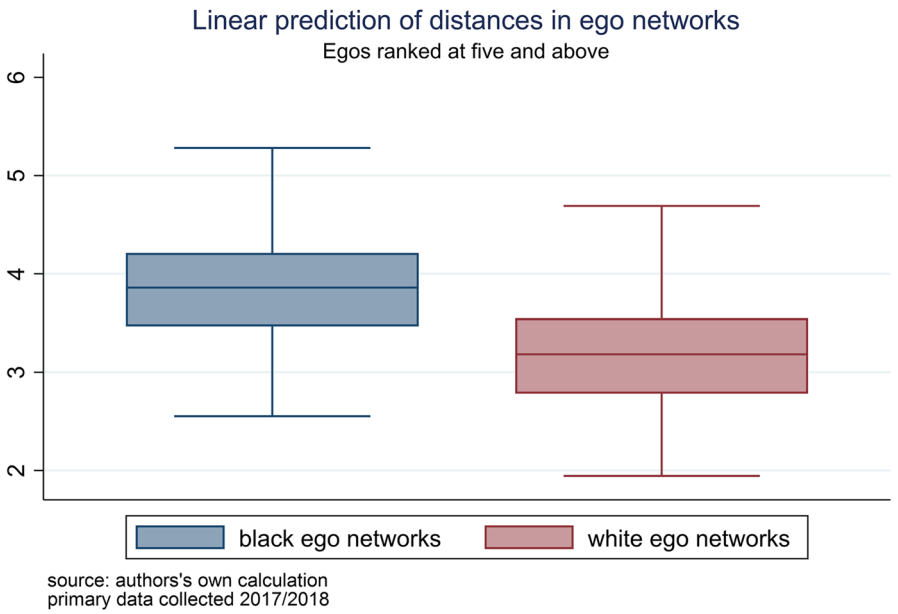

Fig. 2 Linear prediction of distance in ego networks

having larger networks catering to more worse-off individuals. Indeed, on average, black ego networks tend to be larger, yet the difference across both groups is small (about three support relationships more).[11] Other factors such as the amount and frequency of the support itself might then explain the extent of Black Tax further.

Next, I discuss how patterns change when running the same model specification on sub-samples and thus black and white ego networks separately. At first, the sample does not include white egos at certain lower socioeconomic positions. Thus, for estimations of socioeconomic distances in white ego networks, the reference category against which distances are compared is egos positioned at two, not zero, as for black ego networks.

First, the sub-sample of white ego network does not render significant results. This might simply be due to the small sample size, especially regarding egos at lower positions. It, however, also stresses that the observed dynamics overall largely apply to the ego networks of black egos—especially so since the study still includes more than 1000 support relationships of white egos and given the previously discussed group differences in mean positions and mean distances. Yet, whether similar patterns regarding increasing distances in support relationships could be observed for white ego networks remains inconclusive.

[11] Respondents were able to mention the same individual being associated with more than one support activity. Thus an increase in network size might not necessarily result in greater socioeconomic heterogeneity if contacts were repeated. In this study, the network density amounts to 0.62, which indicates that on average 60% of support activities are linked to a unique individual in personal networks whereby 40% then involves re-mentioning previously stated alters.

For networks of black egos, similar effects as those observed for the whole sample apply. Egos holding a position of six or above tend to have more unequal support relationships. This can constitute empirical evidence of the Black Tax narrative, providing evidence for two aspects. First, distances tend to increase when black Namibians become better off. And second, there seems to be a certain threshold as to when 'being better off' seems to be the case given that distances increase only once an ego holds a certain rank in terms of position.

Lastly, I compared whether the results differ when only comparing black and white ego networks starting at the same position of five or above. Doing so establishes the same reference base for the effects of positions across both sub-samples. White ego networks now show a significant positive effect on socioeconomic distances in support relationships of roughly one unit. For black ego networks, this amounts to 1.3 units. The overall smaller effects are due to distances now being compared against those found in the ego networks of egos holding a position at five. Thus, even among those being better off (ranking on the upper half of the scale introduced in this study), egos of higher positions still show significantly more inequality in their support relationships. For black ego networks, this also applies for egos holding positions of six and seven, though increases in socioeconomic distance are less than one unit on the scale. It is also noteworthy that regardless of the additional effect of position, support relationships tend to reach others across distances of two unit changes in positions (see the effect of the constant across samples). Comparing the predicted distances for ego networks positioned at five or above is further displayed in Fig. 2. There is a similar variety in both black and white ego networks, as shown by the number of distances both networks span. However, the distances are generally greater for black ego networks, ranging overall higher than those observed for white networks.

In sum, I observed significant differences in both socioeconomic positions and socioeconomic distances in support relationships across black and white ego networks. The notable difference in socioeconomic positions indicates continued horizontal inequality across ethnic identity groups in Namibia. Having a given extent of vertical inequality, being socioeconomic distances in one's support relationships, generally applies to both groups. Both white and black Namibians support others who can be associated with different positions in terms of their educational and professional outcomes. However, for white ego networks, the effect of egos holding a higher position on observed vertical inequality remains inconclusive. This could in part be due to the comparatively smaller sample size. It could, however, also suggest that different dynamics determine support obligations for white Namibians, who are less tied, or tied differently, to their own economic outcomes. For black ego networks, I find empirical evidence for the Black Tax claim in that higher positions are associated with an increase in vertical inequality in support networks.

This also provides evidence of a mutual constitution between horizontal and vertical inequality in that there seems to be a certain threshold as to when the effect of one's own position becomes evident. Being notably better off appears to matter in determining vertical inequality as the effect of one's own position yields significant and greater effects on vertical inequality once an ego holds a position of six or above. The aspect of inequality being perhaps more visible among formerly

economically marginalised groups suggests that the former constraints of their environment and opportunities continue to shape social and behavioural practices. In the following section, I shall discuss this further as well as situate my results in the literature on support practices and inequality.

Discussion

In this study, I explored a mutual constitution between horizontal inequality and vertical inequality. The former relates to differences across groups defined by markers which are salient in a given society, such as racial- or gender-based inequalities (Stewart 2014). Vertical inequality refers to inequality among individuals regardless of group membership. In this study, I explore socioeconomic differences across ethnic identity groups and thus horizontal inequalities as ethnic identity-based inequalities in the Namibian context. Vertical inequality is then observed within the space of individuals' relationships—more precisely, within relationships that facilitate economic support. An interesting aspect of the data informing this study is that support relationships, occurring to a large extent within one's extended family, are then also primarily taking place within ethnic identity groups.[12] This allows me to explore the extent to which individuals' socioeconomic positions, and thus horizontal inequality, determine vertical inequality in their support relationships.

This interdependency has also been stressed by the Black Tax narrative (Magubane 2017; Mhlongo et al. 2019; Mtolo 2018). Rather than being a narrative about racial discrimination per se, it is one that emphasises that social behaviour, and particularly support among family members, has been altered by economic and political conditions. Specifically, it is the notion that once one has become better off in economic terms, one is expected or obliged to support worse-off family members. Rather than being an arbitrary or non-random outcome, for both black and white Namibians, economic outcomes were formerly crafted by the *apartheid* regime and continue to resonate in notable differences across black and white Namibians. It is interesting that younger generations of black Namibians (as Black Tax is a rather recent term) also show conflicting positions towards their 'cultural habits', where some see Black Tax as a term which paints a negative picture of African traditions of community and family support.

My analysis utilises primary network data to revisit the claim of Black Tax but also to discuss a mutual constitution between horizontal and vertical inequality more broadly. Drawing on more than 5000 support activities of 205 adult Namibians of different black and white ethnic identity groups allows me to assess behavioural patterns that respond to inequality across and within groups in Namibia's

[12] I tested whether the model results differ when only accounting for the sample of within-ethnic identity contacts, thereby excluding 960 observations. However, the results remain vastly the same as a majority of the data occur within ethnic identity groups. The low number of activities across ethnic identity groups does not allow me to perform the same analysis; hence, the same or different patterns could hold true.

capital region. This study's findings show support for the claim of Black Tax that having a higher socioeconomic position is associated with greater socioeconomic distances in relationships of economic support in urban Namibia. Hereby, the results particularly apply to black ego networks, whereby they remain somewhat inconclusive for white ego networks. In addition, there seems to be a threshold which might capture the aspect of being 'notably better off'. Only when a certain position is reached (in this study's measure, the top three positions) do changes in socioeconomic distance in support relationships become more notable. Yet, it is important to mention that a certain extent of socioeconomic distance can be observed across white and black ego networks, which suggests that socioeconomic heterogeneity exists in the ego networks of both groups to similar extents. However, the additional effect of having a higher position can be observed for black and not white ego networks.

These empirical insights are in line with broader studies which have suggested that while inter-racial inequality decreased, intra-racial inequality increased (Seekings 2007) in Namibia and South Africa. In part, this trend could be reflected in the socioeconomic heterogeneity in egos' networks. However, it is also noteworthy that the measures used in this study to determine such, namely educational and professional achievement, are sensitive to one's age. While there is no significant effect of age in the model outcomes, a part of socioeconomic heterogeneity might be explained by relative age and thus by inter- and intra-generational practices between egos and their alters, which is an aspect worth further exploration. In addition, further explorations on the nature and type of support and associated behavioural patterns can enable further insights into individual practices in the urban contexts of Namibia.

Another body of literature my findings speak to is that on informal safety nets, understood as economic support practices among members of community, family and kinship. It has been found to constitute a vital source of livelihood support and hence has been primarily studied within the conceptual space of poverty or the geographical spaces thereof, such as rural communities (Arnall et al. 2004; Di Falco and Bulte 2013; Werger 2009). While the importance of these mechanisms in terms of livelihood sustenance are well acknowledged, scholars have also pointed to certain unequal dynamics. For instance, Wood and Gough describe support relationships depicting elements of hierarchy and asymmetry as resulting in 'problematic inclusion, or adverse incorporation, whereby poorer people trade some short-term security in return for longer-term vulnerability and dependence' (2006, p. 1696). Further, kinship networks can impose moral obligations to support their members, which leads to the discouragement of wealthy members to increase their income and simultaneously to the similar discouragement of relatively poor network members owing to the comfort provided by the safety net of their family (Werger 2009). Further, individuals were found to evade traditional sharing norms by 'accumulating durables that are non-shareable at the expense of durables that may be shareable and reducing savings in liquid assets', resulting in more extensive kinship networks with overall lower incomes (Di Falco and Bulte 2011, p. 1128). In essence, while personal practices of support can benefit some, they can bring forth burdens and disincentives for others. A critical stance has suggested kin systems as 'poverty traps'

or a 'collective force of conservatism' that can maintain its members at the expense of the individual (Hoff and Sen 2005).

While my findings do not allow me to identify disincentives or obligations or the effects of unequal relationships on individuals' economic outcomes, they do add a new perspective. This is one of group comparison and the importance thereof. While understandings on kinship practices provide important insights, they often set a rather narrow range in terms of the spaces or individuals studied. My findings show that having a comparative perspective across social identity groups, in this case ethnic identity as well as including individuals broadly considered as poor *and* non-poor, can reveal how social practices respond to certain structures in an urban society where such groups coexist. This matters especially in Windhoek, where *former* apartheid policies have set people apart in economic, social, spatial and political terms. Lastly, it is important to mention that, of course, this study is limited to a certain scope as well. As mentioned in Sect. 4, the data were primarily sampled in Windhoek. Hereby, different behavioural patterns than those discussed in this study might prevail in rural spaces in Namibia (see Schnegg 2015 for an example of a study on food transfers in North-western Namibia). Comparing dynamics within urban and rural spaces, as well as across, such as found in studies on remittances (for example, Greiner 2012), can be another avenue of further exploration to understand whether these dynamics mainly take place in modern and diverse urban spaces or the Namibian society as a whole.

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Data availability The datasets generated and/or analysed during the current study are not publicly available due to privacy agreements with respondents and the data protection guidelines of the ethical review committee but are available from the corresponding author upon reasonable request.

Declaration

Conflict of interest None declared.

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