Race and Independent Living Among Elderly Brazilians Since 1980

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ABSTRACT

This paper examines independent living among elderly Brazilians 65+ of different racial groups since 1980. Consistent with current ideas about the living arrangements of elderly people around the world, there was an overall increase in independent living among Brazilian elders. However, the increase mainly reflects change among White Brazilians who constitute a little over half the population whereas there was little change among Browns or Blacks. Since in general Whites tend to have higher socioeconomic status than Browns and Blacks in Brazil, one might suppose that a racial disparity merely reflects socioeconomic differences, and that disparate change merely reflects differential change among different social strata. If this were true, there should be 1) no racial difference in the likelihood of independent living, and 2) no racial difference in the change in that likelihood once socioeconomic factors are controlled. We find from examining microsamples of the 1980 and 2000 censuses that, 1) there is a net racial difference in independent living in both 1980 and 2000, and 2) there is a net racial difference in change among unmarried men. Either or both situations among all elders could be due to some cultural or minority status factor not captured by the structural characteristics included in our statistical models. Additional study is needed to more positively identify what those explanatory factors might be, and would ideally include information about non-coresident kin as well as coresident kin.

keywords: race, gerontology, Brazil, living arrangements, elderly people

This paper describes independent living among elderly Brazilians 65+ since 1980. Elderly people, whether 60+ or 65+ constituted a small part of Brazil's populations initially, only 6 or 3.9 percent in 1975, but will constitute a significant proportion of the population by 2050, fully 23.6 or 17.9 percent (United Nations, 2002:152; see also Kinsella &Velkoff, 2001). It is thus of importance to observe that elderly Brazilians are increasingly likely to live by themselves, either totally alone, if not married, or with their spouse only, rather than with other family members. Overall increase in independent living among Brazilians 65+ in the last couple of decades rose from 26 percent in 1980 to 34 percent in 2001. Such increase is consistent with what has occurred elsewhere and with theoretical ideas about family modernization: that the extended family and the intergenerational bond weaken while the nuclear family becomes more common and the conjugal bond strengthens (e.g. Cowgill, 1986; Goode, 1963; Ruggles, 1996, 2001; Bongaarts, 2001).

However, the overall increase mainly reflects change among White Brazilians who constitute a little over half the population. Black and Brown elderly Brazilians experienced little overall change. Among White elderly Brazilians, an estimated 28 percent lived either alone or as a couple in 1980 compared with 38 percent in 2001. But among Black elders perhaps 29 percent lived independently in both 1980 and 2001, and among Browns the difference appears to be less than 4 percentage points (24% in 1980 and 27% in 2001). Yet similar statistics could be used to describe change among educational or income groups (with little change among people with little income and/or no education and substantial change among people with more income and/or education). Thus it is reasonable to ask whether the racial difference is really due to other, demographic, geographical and/or socioeconomic factors, or whether there might also be something else tied more directly to race itself causing a difference.

We focus on racial differences in Brazil because such differences are still a major source of social inequality. Despite the fact that slavery was legally abolished in 1888 there continue to be significant differences in infant mortality, educational opportunity, employment and wages (e.g., Cunha, 1994; Henriques, 2000, 2001; Reichmann, 1999; Silva, 1999; Silva & Hasenbalg, 1999; Wood & Lovell, 1992). And Brazilians in general acknowledge the existence of racial discrimination (Bailey, 2002). But when some researchers investigating health issues such as childhood stunting or differential self-rated health, control for factors related to resources such as income, race differences disappear (e.g. Burgard, 2002; Dachs, 2002), suggesting that it is those factors that are really behind the differences. Is that the situation with independent living among elderly people as well?

The remainder of this introduction provides background into some ideas about race in Brazil, about the family structure of different racial groups in Brazil, about ideas regarding change in the living arrangements of elderly people, and why examining racial differences in the independent living of elderly Brazilians could lend insight into the general situation.

Race in Brazil

Even if the concept of race is everywhere nebulous, it is particularly so in Brazil. Race is assessed through looks rather than ancestry, there really is a whole host of color shades between white and black, and most censuses and surveys rely on a person's own definition of his/her race (Telles & Lim, 1998). However, reports are notoriously inconsistent (Carvalho, Wood, & Andrade, 2003; Harris, M., Consorte, J.G., Lang, J, & Byrne, B., 1993; Schwartzman, 1999; Telles, 2002), and one's color assessment often depends on how much money one has. What is known is that about 3.6 million African slaves were brought to Brazil (Wagley, 1948; Oliveira,

1996; 9 times as many as in the more populous U.S.) and the mixing of Black and White blood resulted in a large mixed or what the Census calls 'Brown' (or *pardo* but more popularly called *moreno*) population. The Brown population is estimated to have constituted 41 percent of Brazil's total population by the end of the 19th century, and although that proportion declined in the early part of the 20th century because of massive European immigration, it had become about 40 percent again by 1990 (Henriques, 2001; Telles, 1994). Blacks, on the other hand, now constitute a relatively minor proportion of the overall population, although in some regions such as the Northeast the Black population is still substantial.

The Brazilian Family

In contrast to discourses on many other sociological topics, sociological discussion of the family in Brazil is sparse. A rare discussion that considered relatively recent legal changes in the nature of marriage and the family described the early post-War concept of the Brazilian family to fallaciously assume that "1) family is synonymous with legal marriage, 2) marriage lasts until a spouse dies; 3) the husband is the breadwinner and the sole earner; 4) the wife is a full-time home-maker and her work has no economic value; and 5) the husband is the legal head of the family" (Goldani, 1990, p. 525). It continued to report that subsequently however, the Divorce Law of 1977 altered the character of marriage (including legalizing divorce) and the 1988 Brazilian Constitution considered the family to be a stable union between a man and a woman and/or a parent and child. The new Constitution made no legal distinction between children born into or outside a traditional marriage (Goldani, 1990).

Critical to us here, the 1988 Constitution also made pension coverage universal, including covering people, such as women and rural workers, who had not contributed into the system

because they had not participated in the formal economy (there have been major changes since then too but they cannot be covered here). Coverage has been a big issue throughout Latin America because the informal economy can be as big or bigger than the formal economy (Bertranou & Rofman, 2002). And although the benefit for many in rural areas especially is meager indeed (at about one minimum wage) it is still much more than many would have otherwise (see also Bonturi, 2002). With our data for instance, we estimate that in 1980, 55 percent of elderly unmarried men had less than one minimum wage worth of income but by 2000 this had declined to about 10 percent. We estimate that among unmarried elderly women, 73 percent had less than one minimum wage worth of income in 1980 but that this had declined to about 9 percent by 2000.

The Family and Race

Classic descriptions of the "Brazilian family" were limited to the White upper class in "old" (plantation) Brazil, and did not describe the situation of more recent immigrants from Europe, lower-class Whites or non-Whites of any class. For instance, we read that the "traditional" Brazilian family was based on the extended, patriarchal, Catholic family of the Portuguese, and that *casa grandes* (plantation mansions) were often lived in by an older couple, their married sons and grandchildren (see Azevedo, 1965; also Smith, 1972, pp. 459-483). We read that marriage was endogamous; divorce was non-existent; and that males were often active extramaritally. Curiously, little is said about the females to whom those males were married or with whom they had extra-marital affairs, about their children, or about people who did not own plantations.

Whites who came to Brazil during its major European immigration period from the end of

the 19th to the beginning of the 20th centuries brought with them a kind of family that was not particularly suited to overseeing a large plantation. Numbering perhaps four million people, immigrants from such European countries as Italy and Germany were often small family farmers who settled in Brazil's southern region, in a country whose total population in 1900 may have been around 18 million (Mortara, 1954). We do not hear much of them and they are statistically difficult to delineate except by examining regional patterns (since they predominate in the South). A regional view with 1980 census data did find that households in the southern region were much less likely to have extended families than households in other regions (e.g. De Vos, Palloni, Arias, & Rafalimana, 1995).

As for Blacks, it would appear that the nature of the family during slavery depended both on the size of the landholding on which they worked, and on the nature of the individual Master. Since it could be much easier for a slave owner to sell or trade an individual person rather than a whole family unit, marriage among slaves was often discouraged while the children of slaves became the property of Masters (see Durham, 1982; Samara, 1988; Slenes, 1984).

Consequently, it may have been easier for slave families to stay intact on large plantations compared to small holdings. Since family stability was not encouraged, free Blacks inherited a legacy of instability, not an African family type. According to an article that is already over six decades old, the free Black family tends to assume the character of a natural organization (Frazier, 1942) in which common-law relationships rather than formal marriage prevails. That article concludes that whatever has been preserved of African culture in the *Candomblé* has become a part of the folklore of the people and, so far as family relationships are concerned, there are no rigid, consistent patterns of behavior that can be traced to African culture. The position of an older person in such a family goes unaddressed.

As Browns are neither White nor Black, nor a homogenous group, their family situation is likewise diverse and impossible to summarize. Nor does it simplify the matter to know that a dark-skinned parent can have a light-skinned child, or vice versa. Although often not applicable, the most relevant family issue might be that children born out of legal wedlock used to lack the same legal standing as children born in legal wedlock. This could be relevant to all the children or, if a White man fathered a child by a Brown or Black mistress rather than a White wife, that child did not have the same rights to his father's property as did his legal half-siblings. For a father to provide for such children depended on the individual, not on any legal standing, and many children were left destitute. If that occurred, what could be expected of filial responsibility in return?

In the U.S. there are glaring differences in the propensity of elders in different racial/ethnic groups to reside with relatives, nonWhites and those of Hispanic origin being more likely to live in extended households than Whites (e.g. Angel & Tienda, 1982; Burr & Mutchler, 1993, 1999; De Vos & Arias, 2003; Himes, Hogan, & Eggebeen, 1996; Mutchler, 1990; Wilmoth, DeJong, & Himes, 1997); and there are numerous ideas for why this may be so. Often, the literature offers either one, another, or a combination of two main explanations, economic or cultural. For instance, Rendall and Speare (1995) argue that older people can alleviate poverty through living with family. Since minorities tend to have less income, they may naturally be more likely to live with others. But others argue that minorities have stronger family ties and are more strongly committed to norms governing filial responsibility, family solidarity and coresidence (e.g., Burr & Mutchler, 1999; Goldscheider & Lawton, 1998; Lawrence, Bennett, & Markides, 1992). Yet an idea that may have greatest applicability to Brazil is neither economic nor cultural per se: it is that a "minority status" mentality on the part of Blacks or Browns fosters

closer family ties between elders and their offspring, as those ties, sometimes involving coresidence, may help people survive in a hostile world, may help transmit survival skills to the next generation (see Markides, Liang, & Jackson, 1990).

Theoretical Ideas about Social Change and the Family of Elderly People

A general idea of family change during modernization is that the conjugal bond strengthens at the expense of the intergenerational one, resulting in more independent living among old and young alike (Cowgill, 1974, 1986; Goode, 1963; see also De Vos and Palloni, n.d.). In part, the intergenerational bond weakens because the traditional family loses functions to other institutions such as schools, police, courts, banks, pension programs, and hospitals (see e.g. Bell & Vogel, 1960; Burgess & Locke, 1945) and in part because the extended family becomes separated through geographic and social mobility (but see Litwak, 1965). Changes toward more invidividualistic values are also likely to occur (Cowgill, 1986). One could also argue that it weakens because older people acquire more resources with which to live independently, younger people have more resources with which to be independent from their elders, or both (e.g. McGarry & Schoeni, 2000; Ruggles, 2001). There is no agreed-upon cause as researchers tracing the historical situation in the United States have come up with conflicting notions while historians in Europe talk about the "golden age that never was" (Laslett, 1976; see also Anderson, 1972; Wall, 1995). For instance, Laslett (1976) notes that most of the occupants of English Poor Houses were destitute elderly people who were left to fend for themselves, and European scholars generally speculate about the importance of economic resources interacting with preference in explaining the household position of elders in the past (Kertzer & Laslett, 1995). In other work, Laslett (1978) suggested that a "nuclear hardship model," in which

nuclear families predominated while maintaining ties with extended family that could provide/need help in a time of crisis, was characteristic of many European families (see also Palloni, 2001).

It might seem reasonable to expect that a trend toward family nuclearization would mostly involve elderly people who were still married since such people could live independently in couple-only households while still having someone near to rely on. But the curious fact is that independent living among unmarried people as well as married people has been increasing substantially (see also Ruggles, 1996). And a primary cause in the United States might be Social Security (McGarry & Schoeni, 2000); in Brazil universal pension coverage.

However, this picture of modernization might be too simple. While it assumes that the intergenerational bond weakens on account of greater independence among elderly people and the younger generation alike, a "modern" innovation such as a pension might actually strengthen the bond, not weaken it. For instance Brandes (1996) describes a situation in rural Spain in the 1960s in which elderly people started to receive government pensions, were able to contribute financially to the household, and were actually welcomed into the homes of children who otherwise might not have been able or willing to reside with them. In Brazil too, most of the income from the recently enacted non-contributory pension is shared with the rest of the household (Barros, Mendonça, & Santos, 1999; HelpAge International, 2003). Thus modern pension policy aimed at alleviating poverty among old people may actually have the unintended side effect of binding families closer together. But this should not cause a racial effect once controlling for income.

Summary

Our study grapples with two interrelated questions. One has to do with the statistical existence of racial differences in independent living among elderly people of different gender and marital groups after controlling for demographic, geographic and socioeconomic factors that could explain that difference (Skidmore, 1992). For instance, does the fact that Black and Brown males in Brazil generally have lower incomes than White males explain the fact that they have differential coresidence patterns when old (see Silva, 1999)?

The second question has to do with differential change between 1980 and 2000. Overall, there was a substantial increase in independent living among Whites but none among Blacks and only a little among Browns. Can differential change in geographical or socioeconomic factors account for the differential change among racial groups?

There was nothing in our review of the very sparse literature on racial differences in family structure in Brazil to suggest that, as is the case in the United States, there is a cultural reason for Black and Brown elderly Brazilians to be more likely to reside with relatives compared to White elders. On the other hand, if minority status does make a difference, we could expect Black and Brown elders to be more likely to live with others than White elders regardless of factors such as income.

We are thus at the beginning in trying to understand figures such as those in Table 1 that show differential levels of independent living, and differential change in the propensity to live independently, among Blacks, Browns and Whites in 1980 and 2000. Could the discouragement of maintaining relationships with children help explain why unmarried Black males have such a larger propensity to live alone than either White or Brown unmarried males in 1980? But then why did that propensity seem to decline during the 1980-2000 period even as the propensity

among unmarried White males drew up to the new Black level? If that trend continues, there will soon be a crossover. Could the generally greater adoption of independent living among White women between 1980 and 2000 compared to either Black or Brown women be accounted for by a 'minority status' attitude toward family on the part of Blacks and Browns?

THE STUDY

Data

Study data come from national micro-level samples of the 1980 and 2000 censuses capturing nicely effects of 1988 Constitution changes in family and pension law. Data cover people living in private (noninstitutional) households, currently most elderly Brazilians, and exclude the small number of people listed as Yellow (of Asian background). Both the 1980 and 2000 samples resulted from a similar use of probability sampling that, with weights, produced nationally-representative samples of households. They can reasonably be combined into one data set, enabling us to statistically test for the significance of an interaction between time and race after controlling for other factors.

Comparability is always an issue when using more than one data set but we feel confident in the equivalence of our measures. Coding of items such as age and sex might seem straightforward, but even race, marital status, urban/rural residence and education are not, while region and the monetary unit changed blatantly between 1980 and 2000. That coding and percentile distributions (using weighted scores) is summarized in Table 2. For instance, we coded age in quinquennial groups up to age 80 (65-69, 70-74, 75-79, 80+) to increase robustness (as some people round age to the nearest 5-year mark and/or exaggerate old age) and to reflect possible differences in the stage of life in old age. Since indigenous people were coded as

Brown in 1980, we included the small number of them in the Brown category in 2000 as well.

Marital status was assessed with one question in 1980 and three questions in 2000. For 1980, marital status had been checked in-house so that people who were purported to be in a union were in fact in a union (De Vos, 1994). In 2000, the census asked about people's (a) living situation explicitly (currently in union, was in union in the past, has never been in a union), (b) type of union (both religious and civil marriage, religious only marriage, civil only marriage, consensual union, not in a union) and finally (c) what their official marital status was (married, annulled/separated, divorced, widowed, single). Since there was such disparity between people's actual living situation and their official marital status, we created a comparable variable of married and unmarried. Our definition of marriage including both formal and informal unions in which spouses/companions actually lived together in the same household.

The urban/rural residence variable that we use is also comparable as we reduce into common denominators what originally was four (1980) or eight (2000) categories. Urbanization in Brazil was particularly fast after the 1960s. In 1960 less than half of the population inhabited urban areas but by 1980 67.6% did and by 2000 81.2% did. The 1980 region scheme was used for both times because the state of Tocantins was created in 1988 and removed from Goiás. It may be noted that the Northeast and Southeast together contain most of Brazil's population, the proportions doing so basically being the same in both 1980 and 2000 (Table 2).

Finally, out of the many different ways to assess education, we settled on a three-category variable that is comparable for both times: illiterate, elementary (1-4 yrs. of school), and more than elementary (5 or more years of school). This scheme is more comparable than trying to use years of education because of the high repetition rates. We also transformed the 1980 monetary unit called the Cruzeiro by a factor of .055604 in light of economic time-trend information to

make it comparable with the 2000 monetary unit the Real. Income was furthermore defined in terms of minimum wages (where 1 minimum wage was 150 Reais) earned monthly. Individual income was categorized as: none, up to 1, 1 to 2, 2 to 4, 4 to 6, and more than 6 minimum wages. This categorization was preferred to the use the log of income, which did not seem to be as predictive because so many people had virtually no income. For married women, we used per adult (18+) household income, categorized as up to ½, ½ to 1, 1 to 2, 2 to 4, 4 to 6, and more than 6 minimum wages because many listed no income of their own but depended on their husband's income (Table 2). Income included income from jobs (sometimes from more than one job), pensions, assets and other sources. Finally, a dummy for time was included (1980=0 and 2000=1) for a pooled model (results not shown).

Model and Method

Our models reflect the fact that we wonder whether the likelihood of living independently vs. not independently (yes/no) differs among different racial groups after controlling for various demographic (age, sex and marital status), socioeconomic (education, income) and geographical (urban/rural residence, region) factors among elderly Brazilians in 1980 and 2000. We also test for the statistical significance of a difference in the effect of race on independent living between 1980 and 2000 but discuss those results rather than showing them in a Table, since we only found significance among unmarried men of the four marital status/gender groups.

As independent living is bivariate (1=independent, 0=not independent), it is suited for multivariate logistic modeling. As such, our approach is based on the previous examination of the living arrangements among elderly Brazilians of Agree (1993) and Saad (1998) and of living alone among elderly people over time in the United States of Kramarow (1995). For instance,

we run separate models for unmarried men, unmarried women, married men and married women because living totally alone and living with a spouse are qualitatively very different situations, men and women have very different roles within the family and, when married, consider income differently (married women of all classes often report having no income). To assess the importance of time, we combined the data into one file and entered time in additively and as an interaction with the other factors.

We used SPSS to ascertain the overall significance of multi-category independent variables (in addition to ascertaining the significance of individual contrasts involving dummy variables). Otherwise, we would have had to perform myriad χ^2 tests separately (similar to the F-test in OLS; see Menard, 1995). Given our sample size, we used p < .05 as the maximum value for significance, also reporting significance in terms of p < .01 and p < .001. We used weights to make the samples nationally representative and of equal sizes at the two times for the purpose of testing time differences. Results using pooled data to test for the effect of time are available upon request.

RESULTS

White married men and women are more likely to live independently than their Black or Brown counterparts in Brazil. Moreover, over time White elderly couples are increasingly likely to live independently whereas this is not true for Black or Brown married elders. Among unmarried elders, Black men and women were considerably more likely to live alone than their White counterparts in 1980, but by 2000, White unmarried men were almost as likely to live alone as Black unmarried men, and White unmarried women were actually more likely to live alone than either Black or Brown unmarried women (Table 1). Of our two questions, we found

support for the idea that there are indeed racial differences in the propensity to live independently among married and unmarried elderly men and women in Brazil in 1980 and 2000 after controlling for demographic, socioeconomic and geographical factors. However, we only found statistically significant change in the racial differences in independent living among unmarried men (results not shown). Our final runs are presented in Table 3.

Racial differences were not the same for the four groups although they did seem similar for married men and married women even when we used different income variables. (We used individual income for the men but per adult (18+) household income for the women.) Thus for married people, there seemed a greater likelihood for Whites to live independently (with a spouse only) than either Brown or Black elderly people. The Black-White difference was not significant in 1980 for either married men or married women, but by 2000 it was near -0.350 (odds ratio of about .70) for both married men and women (Table 3). Likewise, the Brown-White difference for married elders increased from a logit of -0.296 (odds ratio of 0.74) in 1980 to -0.370 (odds ratio of 0.69) in 2000 for men, and from -0.243 (odds ratio of 0.78) to -0.337 (odds ratio of 0.71) for married women.

The results for unmarried people were much more complex, reinforcing the idea that independent living is qualitatively very different for married and unmarried people. Consider first the situation of unmarried women since we found no significant difference in the situation between 1980 and 2000 (results not shown). For the Black-White difference however, we estimate that the difference was an insignificant logit of 0.056 (odds ratio of 1.1) in 1980, increasing to a significant logit of -0.174 (odds ratio of 0.84) by 2000. For the White-Brown difference, it changed only slightly from a significant logit of -0.127 (odds ratio of 0.88) in 1980 to a significant logit of -0.111 (odds ratio of 0.89) (Table 3). Brown unmarried women were

consistently less likely than their White counterparts to live alone.

The most complicated result was for unmarried elderly men because, not only was there a net racial difference in independent living, but that difference changed between 1980 and 2000 in a statistically significant fashion (results not shown). As shown in Table 3, Brown and Black unmarried men were more likely to live alone than their White counterparts in 1980 but not in 2000. Change is particularly impressive for the Black-White differential: In 1980, the Black-White contrast was a logit of 0.724 (odds ratio of 2.06) but in 2000 only 0.009 (odds ratio of 1). The Brown-White differential was a statistically significant 0.170 (odds ratio of 1.2) in 1980 but an insignificant 0.100 (odds ratio of 1.1) in 2000. The interpretation of this result could be a short-term racial merging in the likelihood of independent living. In the longer term however, if trends continued, we could well see a cross over in which unmarried White men will be more likely to live alone.

DISCUSSION AND CONCLUSION

Independent living among elderly Brazilians is on the increase, but the increase has occurred predominantly among Whites whereas Blacks and Browns have experienced little overall change. This prompted us to ask two related questions: (a) first, can the racial difference at any one time be explained away by such geographic or socioeconomic factors as urban residence, region, education or income? If not, might there be an additional cause related to a factor such as minority group status, discrimination, culture or preference? And (b) second, was the racial difference basically the same in 1980 and 2000 (our two data points) or was there change in the difference? Borrowing from speculations about the effect of minority group status on racial and ethnic differences in the United States along with what little information we could gather about

the family structure of different racial groups in Brazil, we hypothesized more coresidence among Blacks and Browns in general, but noticeably weak ties among unmarried elderly Black men.

Using microsamples from 1980 and 2000 censuses, and estimating separate models for married men, married women, unmarried men and unmarried women because of qualitative differences between living with a spouse only or living totally alone, as well as the gender difference in family relations, we found statistically significant racial differences in the likelihood of independent living among all the groups. However, in contrast to a generally greater likelihood that Whites lived independently compared to either Blacks or Browns among married men, married women, and unmarried women, we found that Black and Brown unmarried men were actually more likely to live alone than White men in 1980 but not in 2000. We speculate that we may be seeing part of a cross-over in the likelihood of living alone among Black, Brown and White unmarried elderly men and that in the future, we may find that Black and Brown unmarried elderly men are similar to other minority groups in having a lower likelihood of living alone than Whites.

Many gerontologists now believe that privacy is a normal good everywhere, not just in Europe or North America (e.g. DaVanzo & Chan, 1994). In the specific case of Brazil, Agree (1993, p.: 196) found that "... economic resources are associated with a higher probability of living alone in Brazil, and a lower probability of living with kin." Our findings confirm that those at the bottom of the income distribution are less likely to live independently. The logical extension of such reasoning is that providing more resources to elderly people, such as in the way of pensions, will result in more independent living. That is certainly what has happened in countries such as the United States (Dahlin, 1993; Ruggles, 1996). However, since 1988,

Brazil's pension program has covered everyone, not just those who have contributed into the system; and studies have found most recipients of this largesse to share their pensions with family members who reside with them (HelpAge, 2003). Rather than promoting independent living, the modern policy of universal coverage may actually be promoting extended family residence among many elderly people. Elders in the working class may actually prefer to exchange in-kind support involving coresidence, rather than using extra resources to live independently. Modern pension policy may be assisting members of minority groups to help family members cope with a potentially hostile outside world.

A major weakness in our model is that living with or not with other people is a function of both the elders themselves and the people with whom they might reside, but we could only look at the characteristics of the elders themselves. Controlling for a characteristic such as the income of an elder could be of limited value, if the factor of more importance is what that income is relative to the income of potential cohabitors who went unmeasured. That is, relative to the income of some children, the pension income of an unmarried mother of one minimum wage might be seen as a major asset to a household comprised of herself and some of her children. On the other hand, that same income may seem trivial relative to the income of others. If there is a racial difference in the income of children that is a major influence on the likelihood of independent living among elders, and we are not taking that income into account in our models, then structural factors could still be at the root of the differences we are seeing and our study has failed to test the structural hypothesis correctly. Our data also do not allow us to explore the role of such factors as health or cultural norms that could help explain some of our findings.

Thus, as is frustratingly common in social research, we end our study by pointing to the tentativeness of our findings, to how our study can only provide some pieces to a puzzle, and to

the need for additional research. Still, our hope is that the present study at least laid firmer ground upon which we can wonder.

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Table 1

Independent Living by Race Among Brazilian Elders Age 65+ in 1980 and 2000, in percents

	White		Black		Brown		Total	
	1980	2000	1980	2000	1980	2000	1980	2000
Married men	32.6	40.3	28.2	28.1	23.4	25.6	29.2	34.8
Unmarried men	24.9	33.2	44.8	35.2	32.3	35.9	29.2	34.3
Married women	40.1	47.9	36.4	34.9	32.4	32.2	37.5	42.7
Unmarried women	18.2	25.3	20.9	19.3	17.5	19.2	18.2	23.1
Sample Size	18,845	28,055	2,540	3,260	16,080	14,126	37,465	45,441

Table 2Percentile Distribution of Characteristics in Study Sample

	Married Men		Unmarried Men		Married Women		Unmarried Women	
	1980	2000	1980	2000	1980	2000	1980	2000
Race	1700	2000	1700	2000	1700	2000	1700	2000
White	59.6	61.9	60.7	56.4	55.6	56.0	62.9	66.4
Black	6.2	6.8	6.5	8.4	8.8	8.6	5.1	5.4
Brown	34.1	31.3	32.8	35.2	35.5	35.3	32.0	28.1
Age	5 1.1	31.3	32.0	33.2	33.3	33.3	32.0	20.1
65-69	46.1	40.1	43.3	34.8	27.7	31.4	56.3	47.9
70-74	30.1	30.0	30.0	25.8	26.0	25.8	27.3	30.6
75-79	15.5	17.4	16.4	21.5	20.2	20.9	12.1	14.0
80+	8.3	12.5	10.3	17.9	26.1	21.8	4.2	7.5
Education								
Illiterate	47.8	31.6	40.1	56.8	43.3	50.3	60.4	37.1
Elementary	43.0	47.0	44.9	36.3	41.4	38.7	32.4	43.2
More than elementary	9.2	21.4	15.0	6.9	15.3	11.0	7.2	19.7
Urban	62.1	78.3	70.1	58.9	76.5	67.4	62.0	79.5
Region								
North	3.5	4.5	4.0	4.6	5.4	5.0	3.5	4.2
Northeast	35.2	29.2	32.3	31.8	30.5	31.2	34.1	27.9
Southeast	42.2	44.2	43.1	43.1	42.8	43.0	43.2	45.8
South	14.9	16.5	15.7	15.0	13.7	14.4	15.8	17.3
Central-West	4.2	5.6	4.9	5.4	7.6	6.4	3.4	4.7
Income ^a								
None	2.1	2.8	2.4	5.7	4.3	5.0	22.8	3.8
Up to 1	35.2	5.9	21.2	50.5	7.1	29.7	29.4	22.4
1-2	26.0	48.3	36.7	22.4	58.7	39.9	21.6	40.9
2-4	15.7	18.5	17.0	10.4	15.9	13.1	12.4	16.9
4-6	5.9	7.9	6.9	4.6	5.1	4.8	5.0	5.7
6+	15.1	16.5	15.7	6.3	8.8	7.5	8.8	10.3
n	13,600	15,244	4,342	4,848	6,553	8,912	12,970	16,437

Note. ^a For married women intervals of per adult household income are: up to ½, ½ to 1, 1 to 2, 2 to 4, 4 to 6 and more than 6 minimum wages.

Table 3

Beta Coefficients of Logistic Regression Analysis for Variables Predicting the Likelihood of Independent Living (1=ves. 0=no) Among Elderly Brazilians (65+) in 1980 and 2000

<u> </u>	Married		Unmarried		Married		Unmarried	
	Men		Men		Women		Women	
	1980	2000	1980	2000	1980	2000	1980	2000
Race	***	***	***		**	***	*	*
Brown	-0.296***	-0.370***	0.170*	0.100	-0.243***	-0.337***	-0.127*	-0.111*
Black	-0.162	-0.349***	0.724***	0.009	-0.167	-0.358**	0.056	-0.174*
Age	***	***	***	***		***	***	***
65-69	-0.555***	-0.596***	0.649***	0.807***	-0.512***	-0.363***	0.426***	0.088
70-74	-0.247***	-0.303***	0.690***	0.705***	-0.282*	-0.070	0.398***	0.271***
75-79	-0.191*	-0.027	0.536***	0.533***	-0.344*	0.014	0.247**	0.144*
Urban	-0.084*	0.044	-0.360***	-0.042	0.121	0.030	-0.345***	0.143*
Region	***	***			***	***	**	***
North	-0.626***	-1.007***	0.030	-0.039	-0.687***	-0.850***	-0.544***	-0.785***
Northeast	-0.483***	-0.575***	0.146	0.035	-0.776***	-0.533***	0.045	-0.277***
Center-West	-0.084	0.183***	-0.036	-0.005	-0.261***	0.035	-0.039	0.152***
South	-0.428***	-0.226**	0.169	-0.187	-0.412**	-0.390**	-0.175	-0.020
Education	*		*	***	*		***	
Illiterate	-0.042	-0.005	0.140	-0.021	-0.326**	0.024	0.349***	-0.110
Elementary	-0.142	-0.021	-0.108	-0.289**	-0.205	-0.070	0.027	-0.127*
Income b	***	**	***	***	***	***	***	***
None	-0.756***	-0.505***	-1.648***	-0.959***	1.036***	-1.882***	-2.851***	-1.137***
Up to 1	0.118	-0.254*	-0.280	-0.054	0.564***	-0.861***	-0.571***	-0.373***
1-2	-0.082	-0.192**	0.010	-0.240	0.023	0.065	-0.299*	-0.394***
2-4	-0.010	-0.150*	-0.119	-0.078	-0.388**	-0.437***	-0.316*	-0.195*
4-6	-0.088	-0.079	-0.305	-0.114	-0.384**	-0.533***	-0.092	0.105
Constant	-0.084	0.136	-1.211***	-0.882***	0.143	0.502***	-1.091***	-0.940***
n	13,600	15,244	4,342	4,848	6,553	8,912	12,970	16,437

Note. ^a The contrasts are: Race: White; Age: 80+; Urban vs. Rural; Region: Northeast; Education: More than elementary; Income: more than 6 minimum wages.

^b For married women intervals of per adult household income are: up to $\frac{1}{2}$. $\frac{1}{2}$ to 1, 1 to 2, 2 to 4, 4 to 6 and more than 6 minimum wages.

^{*}p < .05. **p < .01. ***p < .001.