

# Subjective Well-being in Rural India: The Curse of Conspicuous Consumption

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**Abstract** Using data on 697 individuals from 375 rural low income households in India, we test expectations on the effects of relative income and conspicuous consumption on subjective well-being. The results of the multi-level regression analyses show that individuals who spent more on conspicuous consumption report lower levels of subjective well-being. Surprisingly an individual's relative income position does not affect feelings of well-being. Motivated by positional concerns, people do not passively accept their relative rank but instead consume conspicuous goods to keep up with the Joneses. Conspicuous consumption always comes at the account of the consumption of basic needs. Our analyses point at a positional treadmill effect of the consumption of status goods.

**Keywords** Subjective well-being · Conspicuous consumption · Poverty · India

## 1 Introduction

In recent years interest has emerged in the question whether the happiness of the poor in developing countries is negatively affected by positional concerns, as has been demonstrated to be the case for their wealthier counterparts, both in the developed and developing world. The common empirical approach to answer this question is to relate happiness to relative economic position, while controlling for absolute economic position and a set of

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covariates. Relative economic position is either measured in terms of income levels or, alternatively, consumption levels are used. The studies addressing this question do not send out a consistent message. Results diverge across countries that occupy similar ranks at the bottom of the world's economic ladder. In Nepal, it shows that relative consumption affects subjective well-being even at low absolute or relative levels of consumption. In Malawi, Ravallion and Lokshin (2005) find that subjective well-being falls with average neighborhood income, but only among upper income households. Low relative income/consumption does not appear to affect subjective well-being among low-income samples in South Africa (Kingdon and Knight 2006), rural Ethiopia (Akay and Martinsson 2008) and Venezuela (Kuegler 2009), whereas studies by Guillén-Royo (2008) for Peru, and Knight et al. (2009) for rural China show that an unfavourable relative economic position negatively affects well-being, even among the poor.

The fact that these studies do not point in the same direction should be viewed in the light of suggestions in the literature that if others are wealthier, this not only presents a negative externality for those who lag behind, but may also entail positive external effects in a developing country context. While the presence of economically more successful 'neighbours' is on the one hand believed to decrease the social status and/or self-esteem of those who care about relative position (e.g. Luttmer 2005), on the other hand relatively well-to-do neighbours may be regarded by others as an asset (e.g. Ravallion and Lokshin 2005). They can provide informal insurance through risk-sharing arrangements or even local public goods that would otherwise be difficult to finance or negotiate. Hence, economic disparities in poor areas may give rise to two opposite effects, which in turn offer two possible explanations for the above mentioned contradictory empirical findings.

First, depending on the specific context, one of the two effects may dominate. Variation in cultural norms, depth of poverty and the presence of formal safety net provisions could determine the extent to which positive externalities may offset negative ones. Second, studies may arrive at different results even if the above effects work roughly similar across contexts, i.e., when the authors differ in the extent to (and the way in) which they control for positive externalities in their regression analyses. Fafchamps and Shilpi (2008) in defence of their findings in Nepal, refer to this latter possibility.

When the impact of positional concerns on social well-being is the central question, it should be noted that the concept of relative income/consumption represents a rather crude measure. The use of relative income/consumption holds the implicit assumption that individuals, or households for that matter, do not try to manipulate their relative position in society and passively accept the rank that is awarded to them on the basis of how their total level of income/consumption compares to that of others. This assumption sits awkwardly with evidence of status-seeking behaviour among the developing country poor. In particular, it ignores the involvement of the poor in different types of conspicuous consumption, as has been observed in a variety of low-income settings (Bloch et al. 2004; Brown et al. 2009; van Kempen 2003). These studies show that indulging in the consumption of conspicuous goods is not an exclusive prerogative of the well-to-do, although it obviously entails relatively high cost for the poor in the sense of a direct trade-off with more essential, non-conspicuous goods. Powdthavee (2009) demonstrates with household survey data from Indonesia that subjective evaluations of economic position can indeed be effectively manipulated through conspicuous consumption. The value of 'positional goods' (Frank 1985) better predicts rank order perceptions regarding material wealth than total ownership of goods. While studies dealing with status consumption in developing countries tend to point out certain welfare gains and losses for the poor, these have not, to our best

knowledge, investigated the link between conspicuous consumption and subjective well-being.

Our paper aims to contribute to the understanding of how positional concerns affect the poor's happiness by looking beyond relative income/consumption levels and taking into account the extent to which people engage in conspicuous consumption. In doing so, we reintroduce the element of visibility (positionality) of consumption, as a crucial ingredient of effective status-seeking strategies, into the debate on relative economic position and subjective well-being. The fact that conspicuous consumption has not played a role in the statistical analyses conducted so far does not necessarily imply, however, that the insights offered by early writers connecting status to ostentation such as Veblen (1899) have been forgotten, but likely stems from the aggregate nature of consumption data collected in household living standard surveys. In most cases the data do not readily allow for making a distinction between conspicuous and inconspicuous consumption. Guillén-Royo (2008) circumvents this problem in her study on subjective well-being in poor communities in Peru by asking respondents for their motivations behind non-food consumption. Those who indicate social comparisons as a motivation are captured by adding a dummy variable to the regression that includes relative consumption levels. In our study, by contrast, we choose to directly identify a number of consumption categories that are considered highly conspicuous in the context under scrutiny, i.e., rural India. Studies that have taken an in-depth look at status consumption among the poor, in particular in India, inform this identification exercise. In this way we purport to conduct a more comprehensive empirical analysis of the relation between positional concerns and subjective well-being. Since the data that we investigate encompass below-poverty line households in two rural districts of the state of Orissa in the Northeast of India, the question to be addressed is the following: *To what extent can (a) relative consumption, and (b) conspicuous consumption, explain differences in subjective well-being among the rural poor in Orissa?* It will be shown that our results, obtained from multilevel regression, are different from the case in which we would have restricted our analysis to relative consumption only.

The determinants of subjective well-being in rural India have not, as yet, received much attention, compared to rural China for example (see Knight et al. 2009). This is unfortunate, given that despite a strong growth record of the Indian economy for more than a decade and a declining trend in poverty levels, one-third of the global poor still reside on the Indian sub-continent, and roughly three-quarters of the Indian poor live in the countryside (World Bank 2009). In Orissa, the region under scrutiny, poverty conditions are among the most extreme in the world, according to World Bank (2009) data. With regard to positional concerns, India presents a unique case. The persistence of hereditary caste-based social distinctions offers limited opportunities for social mobility compared to societies at similar levels of income. We discuss the implications of this ossified social structure for our finding on social well-being in the concluding section of the paper.

In order to formulate an answer to the abovementioned research question, we will briefly review the literature on the key variables in our analysis, i.e., relative and conspicuous consumption, and derive relevant hypotheses concerning subjective well-being. We further describe the data and measurements used to test these propositions. The data we use is structured along three levels. Individuals are nested within households and households reside in villages. Therefore, we will use advanced multilevel regression to test our hypotheses. In doing so, we contribute to the relevant discussions on the role of conspicuous consumption in developing countries.

## 2 Relative and Conspicuous Consumption

### 2.1 Relative Consumption

The attention for positional concerns with regard to material wealth stems from a seminal paper by Easterlin (1995), who showed that in a number of Western countries trends in happiness failed to keep up with rising average incomes. The existence of this ‘Easterlin paradox’ was corroborated for other high-income countries and linked to invidious comparisons (cf. Clark et al. 2008; Diener and Oishi 2000). Using more disaggregate data from the United States, Luttmer (2005) underscores the importance of relative income by showing that individuals report significantly lower levels of subjective well-being when their neighbours have higher income. The general notion behind these findings is that people, unlike the archetypal independent utility maximizing agents in neoclassical economics, compare themselves to significant others.

When it comes to developing countries, however, the literature on relative income often hints at a certain threshold level of income below which one is immune to social comparisons and fully preoccupied with improving absolute rather than relative income (Clark et al. 2008; Frey and Stutzer 2002). This idea that material poverty pre-empts positional concerns might be rooted in Maslow’s (1954) well-known hierarchy-of-needs that puts physiological needs first. Under this assumption, relative income should not affect social well-being in poor places where basic needs are not fulfilled. Empirical evidence on the effects of relative income/consumption on subjective well-being in poverty-stricken areas however, is mixed (cf. Arku 2008; Biswas-Diener and Diener 2001; Guillén-Royo 2008; Lever 2004). Kuegler (2009) shows that in Venezuela, people who perceive their own income higher as their siblings’ income report higher levels of life satisfaction. Contrastingly, no significant effect of relative income concerns on subjective well-being were found among the poor in Ethiopia (Akay and Martinsson 2008).

Theoretically, satisfaction drawn from consumption, and consequently subjective well-being, depends on the gap between actual levels of consumption and a comparison benchmark (Senik 2009). Benchmarking is both internally and externally applied. Internal benchmarks are set on the basis of aspirations and comparisons with own income or consumption at different points in time. External benchmarks are set on the basis of consumption levels of significant others with whom one has daily interactions such as family, friends and neighbours. Internal and external benchmarking act interdependently. Consequently, subjective well-being is derived from having a higher income than significant others. With respect to external benchmarks or reference groups, relative income thus refers to a higher level (social) aggregate. For the case of rural India, we assume that the ‘significant others’ upon which comparison is made, are the residents of the same village. This is in line with the finding from Knight et al. (2009) in China that most rural people confine their reference groups to the village: their orbits of comparison are narrow. This leads to the following hypothesis: *The higher a household’s relative consumption, the higher an individual’s subjective well-being.*

### 2.2 Conspicuous Consumption

Contributions on the effects of conspicuous consumption mostly originate from the works of Veblen (1899) and Bourdieu (1984). Bourdieu argues that conspicuous consumption

acts as a social differentiating mechanism. Through slight differences in taste preferences, people show both distinction from, and relatedness towards social groups. Moreover, conspicuous consumption elicits one's standing in the social hierarchy. As Veblen (1899) put it, not even the "abjectly poor" are immune to positional concerns. Recently, conspicuous consumption is, rather counter intuitively, also observed in various developing countries. In South Africa, where burial practices signal social status, households spent the equivalent of a one year household income to bury their deceased family members (Case et al. 2008). In Bolivia, van Kempen (2004) demonstrates with a field experiment in low income neighbourhoods that the poor are not only willing to pay a premium on designer goods, but sometimes prefer conspicuous goods over basic needs. In India, we encounter the quest for status at the marriage market, which is fuelled by dowry prices as high as six times the annual household income (Anderson 2003). Bloch et al. (2004) stress the highly conspicuous nature of ritual expenditures in India, specifically wedding celebrations and dowry. However, the effect of conspicuous consumption on subjective well-being has been largely overlooked in the existing body of literature.

We propose two different, antagonistic mechanisms for the effect of conspicuous consumption on an individual's subjective well-being. First, those who consume conspicuous goods, score off the Joneses, keep up appearance and demonstrate that they are better off than their peers, which would result in higher levels of subjective well-being. On the other hand, a positional treadmill effect might be in place for those who consume conspicuous goods, resulting in lower levels of subjective well-being. These competing mechanisms show that the relationship between conspicuous consumption and subjective well-being is a priori indeterminate.

First, we argue that social comparisons are made on the basis of observed conspicuous consumption. Conspicuous goods consumption simply visualizes a person's relative position attained, also among the poor. In our view, it is not relative income or consumption as such that predicts people's happiness, but status consumption in particular. In short, status goods explicate wealth and show one's ability to keep up with the Joneses. From this the hypothesis follows: *The higher a household's conspicuous consumption, the higher an individual's subjective well-being.*

Second, we like to point at the existence of a positional treadmill when consuming status goods. One of the essential characteristics of conspicuous goods is that their value stems from the particularity that they are unavailable to others (Frank 1985). It is needless to say that it is impossible for everybody to outperform everybody else. Thus, conspicuous consumption is, on aggregate, a zero-sum game. Frank (1985) goes as far as judging the production of status goods as a misallocation of productive resources due to their inability to increase aggregate levels of happiness. However, as Frank (1999) puts it, if an individual outperforms relevant others by means of conspicuous consumption, well-being derived from the possession of this conspicuous good is eroded by overall levels of consumption. If total levels of consumption rise, more and more people will be able to afford status goods and consequently these goods lose both their exclusiveness and conspicuousness. Thereafter, one needs to put more effort in maintaining the "status" quo. This idea is illustrated by Frank (1985) as if one is running on a treadmill. To keep up and to maintain the status quo, people have to run faster on the treadmill. The perseverance of conspicuous consumption is fuelled by the irrational idea that everybody is able to outperform all others.

As mentioned, basic needs are (often) not fulfilled in developing countries and under severe monetary constraints the consumption of conspicuous goods is preferred at the cost of basic needs and this can consequently decrease one's subjective well-being. Thus,

especially in developing countries running on this positional treadmill results in lower levels of subjective well-being. Accordingly, we propose a contrasting conspicuous consumption hypothesis that reads: *The higher a household's level of conspicuous consumption, the lower an individual's subjective well-being.*

### 2.3 Controls

We do not aim to provide an exhaustive study of all possible factors contributing to individual subjective well-being. In order to isolate the effects of consumption, we account for the most important variables drawn from the extensive literature on individual characteristics explaining subjective well-being (For an overview see Diener and Lucas 2000; Veenhoven 1996).

A distinctive feature of Indian society is its social stratification based on the caste structure. The most marginalized castes are scheduled castes mainly consisting of untouchables, scheduled tribes, formed by the indigenous people of India and other backward classes, respectively. Various studies underline the widespread influence of caste in the social sphere. For instance, inter-caste disparity is still the backbone of overall income inequality in India (Deshpande 2000). Lower-caste membership is associated with lower self-confidence and directly affects individual performance (Hoff and Pandey 2004). Moreover, we find the prevalence of caste specific social customs in the continuing use of dowry payments (Banerjee et al. 2009; Bloch et al. 2004). It is therefore we assume caste affects people's subjective well-being and include caste as a control variable.

Subjective well-being is found to be dependent on one's current standard of living compared to a set goal (Sirgy 1998; Stutzer 2004). In this line of reasoning income aspirations often act as a benchmark for subjective well-being (Stutzer 2004). When people are making comparisons, people usually look upward. Then, under conditions of adaptation, people strive even higher. As a consequence, their income aspirations will grow. Sirgy (1998) argues that materialists tend to experience more dissatisfaction with life since they set their goals for standards of living unrealistically high. By including income aspirations we control for the extent to which an individual's current standard of living meets the goals set. Besides, we hope to capture a possibly confounding effect resulting from a materialist attitude and thus isolate the specific conspicuous consumption component.

Various other factors contribute to an individual's subjective well-being. First, religion is believed to increase subjective well-being (Helliwell 2003). Second, we note that conventional wisdom holds true, money cannot buy happiness; health does. On average, healthy people or people who perceive themselves as healthy report higher levels of subjective well-being. Thirdly, concerning age and subjective well-being, Helliwell (2003) shows that age groups between 35 and 65 are less happy compared to adolescents and elderly people. Fourthly, married people are generally happier than singles, divorced and widowed people. Fifthly, we control for possible differences in subjective well-being between men and women (Helliwell 2003). Gender effects are largely dependent on the specific context (Arku 2008). In Scandinavian countries, women are happier compared to men whereas in the former Soviet Union the opposite holds true. Sixthly, higher educational attainment is associated with higher levels of subjective well-being (Helliwell 2003). Finally, unemployment is found to significantly lower subjective well-being (Veenhoven 1996).

### 3 Data and Measurements

#### 3.1 Data

To test our hypotheses we employed data on consumption patterns and subjective well-being from face-to-face interviews in the Puri and Bolangir regions of Orissa, India, during 2008.<sup>1</sup> Puri district is located on the coast of the Bay of Bengal and approximately 75% of its rural households are classified as living below the national poverty line. Literacy rates in Puri are somewhat higher than the national Indian average (75% compared to India's average of 59.5%). Bolangir is located in the western part of Orissa and amongst the poorest regions in India, where approximately 90% of households in rural areas live below poverty line and approximately 45% of the population is illiterate (Census of India 2002). Our sample consists of 9 villages in Puri and 10 villages in Bolangir. Within these villages interviewers used a random walk procedure to select respondents. In total 375 households were interviewed. Within these households both the household head and their spouse responded on relevant items concerning consumption and subjective well-being. This means that our analysis covers 697 individuals in 375 households nested in 19 villages.

#### 3.2 Measurement

Subjective well-being is measured using the standard question "How happy would you say you are with your life in general?". Respondents could state their answers on a five point Likert scale ranging from 1—very unhappy to 5—very happy. We use information on absolute consumption in the last 7 weeks as a proxy for a household's level of consumption. Next to the items households purchased, we added own food production of the household during the past 12 months. The replacement value of various durable goods, as estimated by the respondents, is also incorporated in our measurement of absolute economic position.

As mentioned, relative consumption refers to own consumption compared to the consumption of an exogenous reference group. In our design we model relative consumption as the interaction between the average consumption level of the village and a household's absolute consumption.

To pinpoint conspicuous consumption, goods need to meet two important criteria. First, we assume there needs to be agreement on the extent to which goods are desirable (usually scarce and expensive). Second, status goods need to be visible. We include the replacement value of several conspicuous durable goods owned by the household in our measure for status consumption (camera, television set, DVD-player, mobile phone, wristwatch and jewellery). While acknowledging that jewellery may partly function as a store of value in rural India, due to poor access to banking services, we follow Powdthavee (2009) in designating it as a positional consumption category. Next, we also include last 7 day's recreation expenses, social and religious expenses and dowry expenses in our measurement. Social and religious expenses are consumption categories

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<sup>1</sup> The data is collected within the Participatory Impact Assessment project (contract no. 600/10166), carried out by CIDIN, Radboud University Nijmegen, on behalf of Cordaid, one of the larger non-governmental development cooperation agencies in the Netherlands and member of Caritas Internationalis. The project aims at providing rigorous impact evaluations of several NGO interventions in India, Ghana and Peru, which range from health education programmes to empowerment schemes directed at women and small farmers. We will use the specific subsample of data concerning the Puri and Bolangir region in India.



pre-eminently used for signalling one's position in the social hierarchy (Brown et al. 2009). Moreover, social and religious expenses are efficient goods to mark social distinction (Bourdieu 1984). Dowry is a very conspicuous good in India. The amount of dowry along with the celebration signals the quality of the new groom's family and consequently acts as an indicator for the enhanced status of the bride's family (Bloch et al. 2004). We used the ratio of the total value of the conspicuous consumption compared to a household's total consumption as measurement for conspicuous consumption in our analysis.

Caste is measured as scheduled tribe and scheduled caste (combined), other backward classes, and general caste. Categories are introduced as dummy variables in the analyses. Respondents were also asked which religious denomination they belong to. The vast majority of respondents is Hindu. Other categories included as dummy variables in the analysis are Muslim and Christian.

In line with Stutzer (2004) we use the standard aspiration measure. People's reaction on the statement: "Given your present household circumstances, what monthly household-income level would you consider to be a good income" is believed to adequately assess aspirations. We asked the head of household to indicate this amount in Indian Rupees, which we use in the analyses.

An individual's current health situation is indicated by the number of days a respondent missed primary daily activities during the last 4 weeks. We include age as a continuous measurement ranging from 20 to 90. We used the number of years individuals were in daytime schooling as a continuous measure for educational attainment. Respondents who did not indicate a main occupation but instead reported to be unemployed will be included in the category "unemployed". We also account for marital status. Here we distinguish between those who are either single, divorced or widowed (combined) and those who are married. Only 32 respondents reported other marital status than married. Finally, gender is also incorporated in our models. Descriptive statistics and the definition of the variables are displayed in Table 1.

## 4 Analyses

### 4.1 Multilevel Design

Since both theory and data are structured along three levels we test our hypotheses employing a three level regression analysis (Snijders and Bosker 1999). More specifically our hypotheses refer to individuals within households nested in various villages. As a result using simple OLS regression would violate the assumption of uncorrelated error variance leading to an underestimation of standard errors. Multilevel analysis is able to deal with the homogeneity that exists within hierarchically structured data (Snijders and Bosker 1999). All income/consumption related measures concern the household. Control variables age, education, health, caste, religion, employment status, marital status and gender all refer to the individual level. We start our analysis with a null model that estimates variance at three different levels without any explanatory characteristics. In model 1 we enter conspicuous consumption and absolute consumption simultaneously. In model 2 village level characteristics are incorporated as well as the cross-level interaction with respect to average village level consumption and a household's absolute consumption. Finally, model 3 includes all controls. Results are presented in Table 2.



**Table 1** Definitions and descriptive statistics

Variable	Definition	<i>n</i>	Mean	St. Dev.	Min	Max
Subjective well-being	Item: "How happy are you with your life in general?" 5 point scale, ranging from -1-very unhappy- to -5-very happy	697	3.369	1.21	1	5
Household level characteristics						
Absolute consumption <sup>a</sup>	Natural logarithm of all items bought during last week, all homegrown consumption during last 12 months, durable goods bought last year and replacement value of durables, per capita	398	7.31	1.08	3.58	10.52
Conspicuous consumption	Durable goods (jewellery, watches, mobile phones etc.), social and religious expenses, recreation expenses and last five years dowry expenses as percentage of a household's total consumption	398	0.08	0.018	0.056	0.12
Village level characteristics						
Average consumption in village	Absolute consumption, aggregated average per village	19	7.3	0.53	6.71	8.58
Cross level interaction terms						
Absolute consumption * Average consumption in village	Included as a proxy for relative consumption					
Control variables						
Income aspirations	What household level income would you consider to be a good income? "Amount in Indian rupees (measured at the household level)"	398	3344.33	1219.42	1,000	10,000
Health	Number of days respondent missed primary daily activities due to sickness during last 4 weeks	697	0.89	2.69	0	30
Age	Respondent's age. Continuous measurement	697	45.43	11.61	20	90
Education	Measured in full-time years of education	697	3.51	3.6	0	15
Caste	Scheduled caste/Scheduled tribe	370	53.08%			
	Backward caste	236	33.86%			
	General caste	134	19.23%			

**Table 1** continued

Variable	Definition	<i>n</i>	Mean	St. Dev.	Min	Max
Religion	Hindu	610	87.52%			
	Muslim	26	3.73%			
	Christian	59	8.46%			
Employment status	Employed	506	72.60%			
	Unemployed	191	27.40%			
Marital status	Married	664	95.27%			
	Divorced/Widowed/Single	32	4.59%			
	Female	350	50.22%			
Gender	Male	347	49.78%			

<sup>a</sup> Our survey provided us with very detailed information on the household's expenses. We used the consumption categories food consumption, food produces and consumed at home, non-food consumption and the replacement values of durable goods owned. We encountered several missing values which we imputed using multiple imputation methods

**Table 2** Multilevel regression analysis subjective well-being on relative and conspicuous consumption

	Model 0		Model 1		Model 2		Model 3	
	B	Se	B	Se	B	Se	B	Se
Intercept	3.386***	0.094	2.808***	0.392	1.3202	5.171	0.504	5.026
Household level characteristics								
Absolute consumption			10.729**	5.837	-15.873	65.353	-11.618	63.666
Conspicuous consumption			-0.481***	0.213	-0.459***	0.214	-0.353**	0.215
Aspirations							0.044***	0.014
Aspirations squared							-0.001***	0.001
Village level characteristics								
Average village level consumption					24.203	71.261	32.870	68.942
Cross level interaction terms								
Absolute consumption * Average consumption in village					3.066	8.892	2.354	8.663
Individual level characteristics								
Scheduled caste/tribe							-0.019	0.201
Backward caste							0.011	0.192
General caste							ref.	ref.
Missed days due to health							-0.028**	0.016
Age							-0.008**	0.005
Education							0.005	0.015
Married							ref.	ref.
Divorced/widowed/single							0.111	0.219
Hindu							ref.	ref.
Muslim							0.410	0.340
Christian							-0.495**	0.248
Employed							ref.	ref.
Unemployed							-0.165*	0.124

Table 2 continued

	Model 0		Model 1		Model 2		Model 3	
	B	Se	B	Se	B	Se	B	Se
Women							ref.	ref.
Men							-0.322***	0.112
Variance components								
$\sigma_{\text{village}}$	0.226	0.076	0.340	0.082	0.235	0.075	0.153	0.088
$\sigma_{\text{household}}$	0.350	0.110	0.382	0.102	0.384	0.101	0.392	0.098
$\sigma_{\text{individual}}$	1.103	0.043	1.101	0.043	1.101	0.043	1.078	0.042
-2loglikelihood	2,330.744		2,208.912		2,185.721			2,203.751
Number of villages		19						
Number of households		375						
Number of individuals		697						

\*  $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$

## 4.2 Results

In model 1 we find that higher absolute levels of consumption lead to higher levels of subjective well-being. Moreover, this basic model shows that, controlling for absolute consumption, the consumption of conspicuous goods is negatively associated with subjective well-being. In model 2 we test the cross-level interaction effects and model the rally between relative consumption and conspicuous consumption. We find that the cross-level interaction term between average village consumption and a household's consumption as such does not have a significant effect on subjective well-being. However, conspicuous consumption remains negatively associated with subjective well-being after controlling for the cross-level interaction effect. The positive effect for absolute consumption disappears when controlling for average consumption levels of other villagers. In model 3, we enter our control characteristics and find that the negative relationship between conspicuous consumption and subjective well-being still holds.

Our control characteristics yield straightforward results. We find that the elderly, the unemployed, and those suffering from a poor health report lower levels of subjective well-being. Income aspirations appear to be related to subjective well-being in a non-linear fashion. Moreover, we find, somewhat counterintuitive in a male-dominated society as the Indian one, that women are more satisfied with their life than men. This also holds for Christian individuals.

## 5 Conclusion and Discussion

In this study we tried to disentangle the relationship between subjective well-being and relative consumption by explaining differences in individual subjective well-being using conspicuous consumption as an explanatory factor. We argued that relative income as such is an insubstantial, if not misguided, indicator for explaining differences in subjective well-being, whereas the literature on conspicuous consumption provides theoretical ground to unravel these effects. The consumption of conspicuous goods enables people to demonstrate that they are either faring worse or better than their peers. Such theoretical notions lie at the roots of the motivations explaining relative income effects. In particular, we contributed to the current discussion on the relation between relative income and subjective well-being in the context of material deprivation in the developing world, which has so far produced contradictory results.

Our results indicate positive effects for absolute levels of consumption. This effect, however, was not robust to controlling for various other factors (such as the average village level income). With respect to relative consumption our results indicate that relative consumption, and likewise relative income, does not explain differences in subjective well-being among the rural poor in India. Most strikingly, our data revealed that, in rural India, conspicuous consumption has a negative impact on subjective well-being, after controlling for relevant characteristics attributing to subjective well-being. This negative effect seems to corroborate the positional treadmill thesis as postulated by Frank (1999). One has to walk faster (consume more conspicuous goods) to keep up with the treadmill (significant others in the community who consume conspicuous goods), and this eventually leads to lower levels of subjective well-being, due to the inflation in costs.

Our findings are somewhat counterintuitive. Why would people keep on trying consuming status goods if their happiness does not increase? Frank (1985, 1999) explains this by asserting that individuals are guided by the irrational idea that they are able to

outperform everybody else and ignore the fact that social comparison in general and, consuming conspicuous goods in particular is eventually a zero-sum game. The idea that people ignore the fact that conspicuous consumption is eventually a zero-sum game and people carry on consuming conspicuous goods, irrespective of the negative effect on their subjective well-being, warrants more research. Irrational motivations and especially the psychological processes which encourage these motivations must be studied in more detail.

Next, a word of caution concerns the direction of causality. In our study we linked conspicuous consumption to subjective well-being. If conspicuous consumption acts as a compensatory strategy, low levels of subjective well-being can also result in consuming more conspicuous goods, reversing the causality. The positional treadmill, heavily influenced by hedonic adaptation, nonetheless acts as a vicious cycle. Therefore, within the self-reinforcing mechanism of the positional treadmill, assuming reversed causality would not have far-reaching consequences for the theory posed. At the individual level, satisfaction drawn from conspicuous goods is time specific, especially under influence of hedonic adaptation. However, on aggregate, people report lower levels of subjective well-being when consuming conspicuous goods. It is possible that the treadmill keeps spinning due to the effect of temporary hedonic adaptation. Unfortunately, we were unable to put this notion to the test in the present study. Further research (panel studies) should enlighten this matter by incorporating a time dimension.

Another point of attention concerns our measurement of conspicuous goods. We constructed a measurement combining the approaches of Veblen (1899), Bourdieu (1984), van Kempen (2007) and Banerjee et al. (2009). Yet, what constitutes status and the goods that represent status is highly culture specific and subject to change over time.

Finally, we found that the distinctive feature of the Indian society, the caste system, did not have a predominant effect in explaining differences in subjective well-being. Given earlier findings that caste has a cardinal impact on life in India (Anderson 2006; Banerjee et al. 2009; Bloch et al. 2004; Carlsson et al. 2009; Deshpande 2000) this result has to be interpreted with caution. After all, it is not easy to imagine that caste based characteristics such as discrepancies in life chances and living under the yoke of social and political repression would not affect subjective well-being in India. The absence of caste specific effects may be due to the specific context in which our research is set. Compared to India as a whole, our sample covers a fairly homogeneous group, namely individuals within rural households living below poverty line. In the same vein, rural, below-poverty line households will be relatively similar in their life chances and the degree of social and political repression they experience. It is possible that more representative samples reveal significant effects of caste on subjective well-being. Further research should address these issues.

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