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Happiness among the garbage. Differences in overall happiness among trash pickers in León (Nicaragua).

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Abstract

This paper analyzes various aspects related to overall happiness expressed by 99 people who make their living in the dumps of León (Nicaragua) - a group that is difficult to access, heavily stigmatized, and living in extreme poverty. We interviewed all the people living from the garbage in the city of León using a heteroapplied structured interview. In order to gather information on overall happiness, we used an instrument that combined illustrations with explanations by the interviewers. The results show that people in León who make their living by collecting rubbish state that they are happy, have optimistic expectations regarding their future, and show a lack of any relationship between overall happiness and income. The respondents appear to obtain their main sources of happiness in areas of their lives other than the economic and labour spheres, and mainly from areas related to their social and leisure activities.

Keywords: happiness, trash pickers, poverty, Latin America, social exclusion, social activities

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Introduction

Although in recent years the study of aspects related to happiness has been a highly productive area of work, little research has focused on groups in a situation of extreme poverty and/or social exclusion, especially in countries with low development levels. This is despite the fact, as Diener (1984) points out, that the influence of external factors such as living conditions may be more relevant to personal happiness than internal factors.

Cantril (1965) noted that people believe that material aspects, and especially those related to standards of living, are the main source of happiness. After these aspects, the sources of happiness mentioned most frequently are those related to the family (spouse, children, parents, other relatives), followed by issues related to personal and family health; aspects related to work; and some personal issues (emotional stability, self-worth, self-discipline, etc.). Similar results to those reported by Cantril (1965) were subsequently found in different countries and cultures (Andrews and Withey, 1976; Campbell, 1981; Campbell, Converse, and Rogers, 1976; Veroff, Douvan, and Kulka, 1981). Meanwhile, Cummins (1996) noted that the scientific literature on happiness and life satisfaction tends to focus on seven areas of life: economics, health, family, work, friendship, leisure and free time, and community.

Various studies emphasize the existence of a positive relationship between happiness and level of income (Andrews, 1986; Argyle, 1999; Diener, Sandvik, Seidlitz, and Diener, 1993; Oswald, 1997), and note that the individual's personal financial situation could play an important role in explaining happiness (Rojas, 2011). Poverty has often been considered a situation in which the degree of well-being is very low (Rojas, 2006), and extreme poverty is thought to have a highly negative effect on happiness (Graham, 2005). The normal perception is therefore that very poor people can hardly ever be happy and in cases where this occurs, their happiness is attributed to the very low level of their future expectations, or their ability to adapt to their apparently unfortunate situation (Rojas, 2011).

Economic theory tends to emphasize the importance of income levels on happiness, by assuming that consumers constantly attempt to satisfy a growing interest in access to goods and services. Since there is a strong relationship between levels of disposable income and accessibility to goods and services, the tendency is to assume that there is a strong relationship between income and "utility" (the satisfaction obtained by a consumer when enjoying a certain amount of goods or services by means of consumption), with income playing a predominant role (Rojas, 2011). In practice, many economists associate "utility" and well-being, and consider income to be the main source of well-being among consumers (Rojas, 2011).

However, as Rojas points out (2011), individuals are more than mere consumers, and there are other things in their lives besides money. Indeed, the relationship between income levels and satisfaction in other relevant areas of life is practically non-existent, and as such income levels alone predict practically nothing about satisfaction in several areas that are important to people (Rojas, 2011). DeLeire and Kalil (2010) found that consumption of durable goods, personal care, food, medical care, vehicles and housing is not significantly associated with happiness. Only consumption of leisure is positively related to happiness, although in the authors' opinion this was

due to the positive effect it had on social relations, as a result of its impact on reducing loneliness and increasing membership of groups. It is therefore common to find happy people with very low incomes, which could explain why these people obtain a great deal of satisfaction in other areas of their lives (Rojas, 2008).

While income levels seems to have a limited effect on happiness, which decreases as income increases (Easterlin, 2001), social support from the family is significantly associated with it, with family support associated more strongly with happiness when the family income level is low than when it is high (Schimmel, 2009). Furthermore, changes in family social support are positively related to changes in happiness, while changes in family income does not appear to be so closely related to changes in the level of happiness (North, Holahan, Moos, and Cronkite, 2008). For example, being involved in a relationship within a couple is positively related to happiness (Frey and Stutzer, 2003), while separations have a strong negative relationship with subjective well-being (Dolan, Peasgood, and White, 2008).

Strong and positive social relationships facilitate social support and feelings of belonging and identity (Diener and Seligman, 2004), while those who relate well with their group are observed to obtain improvements in various positive aspects, including their health, welfare and happiness (Baumeister, De Wall, Ciarocco, and Twenge, 2005; Myers, 1992). On the contrary, a lack of social relations, or poor quality social relations, has a significant negative impact on happiness (Campbell, 1981; Dolan, Peasgood and White, 2008).

Various studies highlight the existence of a positive relationship between health and individual happiness (Schimmel, 2009), while a negative correlation between poor health and subjective well-being has been observed (Dolan, Peasgood, and White, 2008). While objective health correlated positively with individual happiness, the variable with the closest relationship to happiness is the subjective perception of health (Diener, Suh, Lucas, and Smith, 1999), meaning that suitable contextual and emotional conditions for adaptation would explain why a person may feel well despite suffering from a serious illness.

Schimmel (2009) points out that the quality of work done is a very important variable for individual happiness, and it is more important in this regard to have a high quality job than simply to have a job (Dockery, 2005). Among the determinants of happiness associated with work are the opportunity to be able to develop one's own abilities, the existence of defined objectives, the variety of tasks, transparency of information in the working environment, the salary received, personal safety, support from supervisors and the social status that the work confers (Kahenman, Diener, and Schwarz, 1999).

While there are no studies focusing on the study of the relationship between happiness and security, Schimmel (2009) believes that the results observed between violence and happiness suggest that physical safety is very likely to have a positive relationship with happiness.

Nicaragua, with an estimated population of 5.5 million inhabitants, is one of the countries in Latin America with the lowest levels of development (UNDP, 2011). 15.8% of Nicaragua's population lives on less than 1.25 dollars a day and 45.8% lives below the national poverty line (UNDP, 2010). León, the country's second most important city after the capital, has a population of approximately 185,000 inhabitants. It is estimated that more than half the city's inhabitants live below the poverty line, and that there are major pockets of population living in extreme poverty (Author, 2012).

The weakness of the Nicaraguan productive system and the increase in the number of people living in extreme poverty in recent decades has forced relatively large groups of people to seek their livelihood in rubbish dumps, with the serious health problems and the heavy social

stigmatization that this entails. While these people's work mainly consists of selecting and collecting items that can be sold for recycling - mainly plastic, metal, glass, cloth, paper and cardboard - they usually also collect basic goods from the rubbish for their own direct consumption (food, clothing, footwear, household goods, etc.) (Author, 2012). People who collect items from the rubbish in León, among whom the presence of minors is commonplace, do so without any personal protection, using only a bag to carry what they have collected and a metal hook for poking.

Despite being the object of social scorn, the work done by the trash pickers is important in societies with less developed states, as it prevents many tons of solid waste from increasing the size of dumps and enables raw materials to be delivered at low cost to various industries. Nonetheless, although the work done by the trash pickers is socially useful, economically productive and environmentally beneficial (Lozano *et al.*, 2009), they usually suffer from strong stigmatization, and their work is related to marginalization.

At various meetings with the people who collect rubbish in the city of León, we discussed the question of what they wanted to be called, given the stigmatizing connotations of most of the names used to refer to them. The term seen in the most positive light by these people was "collectors," as they felt that it lacked negative connotations. For this reason, in this paper we use the term **collectors** to refer to people seeking to make a living from rubbish in the city of León (Nicaragua).

This study was prompted by the lack of research on people living from the rubbish, one of the poorest groups in the poorest countries, who are also heavily stigmatized and experience very difficult life circumstances, in the hope that the conclusions obtained may be used to reduce the stigma they suffer from suffered and improve the situation in which they live.

Method

Participants

The participants in the research were 99 people who obtained their living from the rubbish dumps in León (Nicaragua). This group is difficult to access, heavily stigmatized, and lives in extreme poverty.

When the study was undertaken, the number of people making a living from rubbish in León was well defined, meaning that it was possible to interview all the collectors: 92 worked mainly in the metropolitan dump and 7 worked in the old city dump, which has become an illegal dumping site.

The main demographic characteristics of the collectors in León are shown in Table 1.

Table 1. Main sociodemographic characteristics of collectors in León (Nicaragua).

Characteristics	n	Percentage / Mean (SD)
Sex		
Male	72	72.7%
Woman	27	27.3%
Age (<i>Mean – years- (SD)</i>)	99	32.39 (11.56)
14 to 19 years old	10	10.1%
20 to 29 years old	34	34.3%
30 to 39 years old	30	30.3%
≥ 40 years old	25	25.3%
Marital status		
Single	27	27.3%
Married	20	20.2%
Stable <i>de facto</i> union	49	49.5%
Separated	2	2.0%
Widow/er	1	1.0%
Number of children (<i>Mean –children- (SD)</i>)	99	2.77 (2.26)
No children	13	13.1%
One child	23	23.2%
Two children	14	14.1%
Three children	17	17.2%
Four children	13	13.1%
Five children	9	9.1%
More than five children	10	10.1%
Number of people lived with (<i>Mean –people- (SD)</i>)	99	7.55 (4.52)
Age when his/her first child was born (<i>Mean-years- (SD)</i>)	86	18.62 (4.96)
Age at which he/she began living with his/her partner (<i>Mean-years- (SD)</i>)	91	16.96 (3.60)
Approximately how much money do you make each month?		
Less than 25 dollars a month	11	12.5%
25 to 40 dollars a month	34	38.6%
40 to 65 dollars a month	14	15.9%
More than 65 dollars a month	29	33.0%

As shown in Table 1, 73% of the collectors are men, with a mean age of 32.4 years old. The mean age of the women was 36.52 years old ($SD = 12.37$), significantly higher than that of males ($M = 30.85$; $SD = 10.94$) ($t = -2.215$, $p = 0.029$). 63% of the women and 52.8% of the men were over 29 years old. Ten collectors (8 males and 2 females) were aged between 14 and 19 years old, and three of them were under 16. A quarter of the respondents were over 40 years old.

69.7% of the collectors were in a relationship, which are mostly *de facto* unions. Only three collectors - all of whom were women - who had lost their partners did not have a new partner when interviewed.

The vast majority of the collectors (86.9%) have children. While the respondents had a mean of 3 children, 13% did not have any children, while 20% had five or more. The women had on average more children than the men: a mean of 4.7 children for the women ($SD = 2.70$) compared to a mean of 2.28 children for the men ($SD = 1.87$) ($t = -3.745$, $p = 0.000$).

Of the respondents who had children, 52.3% had their first child before they were 18 years old, and 8.1% did so before they were 15 years old. Statistically significant differences according

to sex are observed with regard to the age at which the collectors had their first child. The mean age among men was 19.63 years old ($SD = 5.53$) and the mean age among women was 16.27 years old ($SD = 1.76$) ($t = 4.242$, $p = 0.000$).

The vast majority of the respondents (92%) said they were living or had at some point lived as part of a couple, and on average, they began their life within the couple before they were 17 years old. All the women interviewed had lived as a part of a couple, and only 8 men had never done so. The women began living with their partners at a mean age of 14.70 years old ($SD = 1.71$), while the men did so at a mean age of 17.91 years old ($SD = 3.77$) ($t = 5.581$, $p = 0.000$).

Despite the small size of the collectors' homes (two thirds of which have only one or two spaces), the respondents live with a mean of 7.55 people ($SD = 4.52$). One third of the collectors are unable to read or write, and only 16% have completed primary education.

More than half of the collectors earn than 40 dollars per month, i.e. less than 1.5 dollars a day.

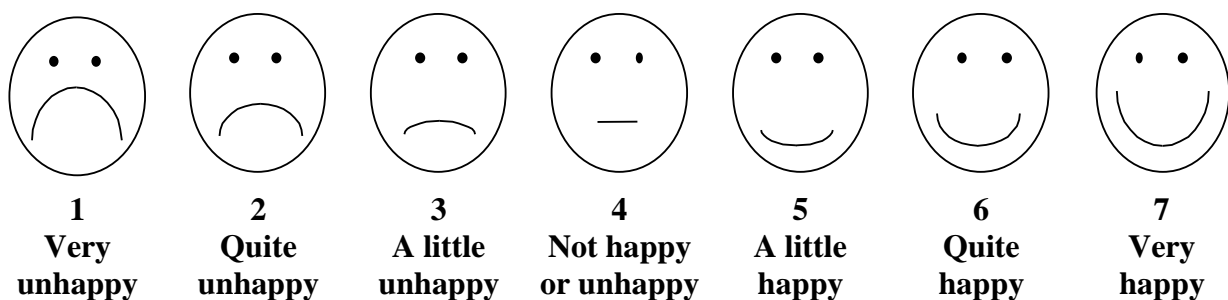
Procedure

The information was collected using a heteroapplied structured interview, which enabled the problems associated with the collectors' difficulties with reading and understanding to be circumvented. The structured interview collected information on various related to individuals making their living from rubbish in the city of León: Sociodemographic characteristics; Home and cohabitation; Education; Employment situation and income; Social support; Leisure and free time; Health; Victimization; Overall happiness and future expectations.

Due to the limited reading skills and understanding of those interviewed, an instrument that combined illustrations with explanations by the interviewer was used in order to collect information about the collectors' overall happiness, and is shown in Figure 1.

Figure 1. Instrument used for collecting information on overall happiness among collectors in León (Nicaragua).

Which of the following faces best represents your overall happiness?



Although collecting information on overall happiness is complex, according to Schimmel (2009), people regularly think about happiness, and as pointed out by Karma and Karma (2004), they tend to have a fairly clear idea of what happiness is. While there is some disagreement on how best to measure overall happiness, authors such as Easterlin (2001) and Veenhoven (1993) emphasize that despite not being perfect, the use of subjective indicators (like the one used in this

study) adequately reflect the respondents' feelings regarding their happiness in different countries and cultures.

After locating each collector, the interviewer initiated the contact, briefly explained the objectives of the research and requested their consent to conduct the interview. All the individuals approached agreed to cooperate with the research study.

Data analysis

The database was developed and processed using the SPSS statistical analysis and data management system (version 19.0 for Windows.) The data obtained were used to perform a descriptive analysis that included the information about the collectors. When making comparisons, the χ^2 "Chi square" statistic was used for nominal variables, and the "Student t test for independent samples" was used for continuous variables.

Given the limited number of people who make their living from rubbish in León (99 persons), in order to facilitate analysis of the data, the decision was taken to dichotomize the "overall happiness" variable, with a distinction is made between those who said they felt "Unhappy" ("very unhappy "quite unhappy" and "a little unhappy") and those who said they were "Happy" ("very happy," "quite happy" and "a little happy").

Likewise, for similar reasons, other variables were dichotomized: satisfaction with the collectors' relationship with their partner, family, friends and co-workers - making a distinction between those who said they were "satisfied" ("very" or "quite" satisfied) and those who said they are "dissatisfied" ("not very" or "not at all" satisfied); general state of health, with a distinction made between those who said they had a "good state of health" ("good" or "very good") and "fair or poor health" ("fair", "poor" or "very poor" state of health); the approximate amount of money they earns a month - with a distinction made between those earning "over 40 dollars a month" and "less than 40 dollars a month" on one hand, and between those earning "more than 65 dollars a month" and "less than 25 dollars a month" on the other hand.

Because it is a particularly relevant variable, comparisons were made in different ways depending on the gender of the collectors.

Results

The results obtained suggest that people who make their living in the dumps in León tend to say they are happy, and believe that their outlook for the future is better than the present. Table 2 shows the general level of happiness expressed by the collectors and their opinion regarding their outlook for the future.

Table 2. Level of overall happiness and expectations for the future among collectors in León (Nicaragua)

	n	Percentage
Overall happiness expressed by homeless people		
Very happy	28	28.3%
Quite happy	21	21.2%
A little happy	20	20.2%
Neither happy nor unhappy	11	11.1%
A little unhappy	7	7.1%
Quite unhappy	8	8.1%
Very unhappy	4	4.0%
He/she believes that his/her outlook for the future is ...		
Better than the present	70	70.7%
The same as the present	24	24.2%
Worse than the present	5	5.1%

As shown in Table 2, 69.7% of the collectors said that they generally felt happy, and half (49.5%) said that they felt "quite" or "very" happy. However, one in five collectors (19.2%) said that they felt at least a little unhappy, while 12.1% said they were quite or very unhappy.

As regards expectations for the future, most collectors believe that their future will be better than the present, and only 5.1% believed that their situation in the future will be worse than the situation when the interview took place.

The relationship between the collectors' general level of happiness and their future expectations is shown in Table 3.

Table 3. Differences in overall happiness according to the expectations for the future among collectors in León (Nicaragua).

	Unhappy (n = 19)	Happy (n = 69)	χ^2
He/she believes that his/her outlook for the future is ...			7.901*
Better than the present	14.5% (9)	85.5% (53)	
The same as the present	33.3% (7)	66.7 (14)	
Worse than the present	60.0% (3)	40.0% (2)	

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

As shown in Table 3, there is a direct relationship between feeling happy and having positive expectations for the future, so that 85.5% of those who believe that their expectations for the future are better than the present say they are happy, compared to 66.7% of those who believe that their expectations for the future are the same, and 40% of those who believe that their future prospects are worse than the present.

The relationship between the different sociodemographic characteristics of the respondents and feeling happy or unhappy is shown in Table 4:

Table 4. Differences in overall happiness according to sociodemographic characteristics among collectors in León (Nicaragua).

	Unhappy (n = 19)	Happy (n = 69)	χ^2 / t
Sex			10,358**
Men	12.7% (8)	87.3% (55)	
Women	44.0% (11)	56.0% (14)	
Age (<i>Mean-years- (SD)</i>)	32.63 (11.92)	32.13 (11.70)	0.165
Marital status			5.494
Single	16.7% (4)	83,3% (20)	
Married	11.8% (2)	88.2% (15)	
Stable de facto union	26.1% (12)	73.9% (34)	
Widow/er	100% (1)	---	
Number of people lived with -(<i>Mean-people- (SD)</i>)	10.21 (7.31)	7.06 (3.46)	1,825*
Number of children -(<i>Mean-children- (SD)</i>)	3.23 (2.58)	2.67 (2.26)	1,075
Age when first child was born (<i>Mean-years- (SD)</i>)	16.39 (2.81)	18.97 (4.75)	-2,181*
Age when he/she began living with his/her partner (<i>Mean-years- (SD)</i>)	15.47 (2.89)	17.32 (3.63)	-2,027*

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

As shown in Table 4, the percentage of men who said they were happy is significantly higher than the percentage for women in this situation. Similarly, a larger percentage of those sharing their home with fewer people appear to consider themselves happy, as do those who began living with a partner later and those who had their first child at an older age. No statistically significant differences were observed with regard to considering oneself happy or unhappy depending on the collectors' age, marital status or number of children.

A large percentage of the collectors are satisfied with their relationship with their partner (85.9% satisfied versus 14.1% dissatisfied), with their relationship with their family (81.6% satisfied versus 18.4% dissatisfied) with their relationship with their friends (80.5% satisfied versus 19.5% dissatisfied) and with the relationship with their colleagues in the dump (88.5% satisfied versus 11.5% dissatisfied). With regard to these aspects, there were no statistically significant differences between happiness and unhappiness expressed by the respondents and satisfaction they express with their relationships ($\chi^2 = 0.001$, $p = 0.636$), family ($\chi^2 = 1.017$, $p = 0.244$), friends ($\chi^2 = 0.125$, $p = 0.489$) or their co-workers at the dump ($\chi^2 = 0.441$, $p = 0.377$). There is a lower level of satisfaction with their relationship among women than among men: 23% of the women are satisfied compared to 77% of the men ($\chi^2 = 7.344$, $p = 0.013$). No statistically significant differences by gender were observed as regards satisfaction with their relationship with family, friends or co-workers at the dump.

The results obtained as regards the respondents' happiness or unhappiness of respondents according to their perceived state of health are shown in Table 5.

Table 5. Differences in overall happiness according to perceived general state of health among collectors in León (Nicaragua)

	Unhappy (n = 19)	Happy (n = 69)	χ^2
General state of health			3.985*
Good state of health	14.3% (7)	85.7% (32)	
Fair or poor health	30.8% (12)	69.2% (27)	

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

As shown in Table 5, a larger percentage of those who felt that their health is "good" or "very good" say they are happy than those who say that their health is "fair" or "bad."

As regards the collectors' income, no statistically significant differences were observed in terms of happiness or unhappiness as expressed by those earning more than 40 dollars per month (48.9%) and those earning less than this amount (51.1%) ($\chi^2 = 0.022$, $p = 0.545$); or among those earning less than 25 dollars a month (12.5%) and those earning more than 65 dollars a month (33%) ($\chi^2 = 0.743$, $p = 0.364$). When asked about what net monthly salary they would deem sufficient for a full time job, given their training and experience, the collectors felt that an appropriate figure was a mean of 95.42 dollars (SD = 50.24). Those who said they were happy said that an average salary of 94.03 dollars (SD = 50.41) is sufficient, and those who said that they were unhappy said 96.89 dollars (SD = 51.40), with no statistically significant differences in this regard ($t = 0.213$, $p = 0.8355$).

Table 6 shows the information obtained regarding differences in happiness or unhappiness in terms of the availability of sufficient resources to meet specific needs during the month prior to the interview.

Table 6. Differences in overall happiness according to possession of sufficient resources in the month preceding the interview among collectors in León (Nicaragua).

Last month, did you have enough money for...	Unhappy (n = 19)	Happy (n = 69)	χ^2
Food			3,952*
Yes	11.1% (4)	88.9% (32)	
No	28.2% (15)	71.2% (37)	
Clothing			0.017
Yes	20.0% (2)	80.0% (8)	
No	21.8% (17)	78.2% (61)	
Medicine			0.170
Yes	16.7% (2)	83.3% (10)	
No	21.9% (16)	78.1% (57)	
Social and leisure activities			1,986
Yes	---	100% (7)	
No	22.5% (18)	77.5% (62)	

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

As shown in Table 6, a larger percentage of those with sufficient resources to obtain food in the month prior to the interview considered themselves happy than those who did not have enough money to cover this basic need. There were no statistically significant differences in the percentages of collectors who were happy or unhappy depending on whether they had sufficient resources to purchase clothing and medicines or to engage in social and leisure activities. In the four cases listed in Table 6, the percentage of collectors who consider themselves happy despite not having enough resources is above 77% in all cases.

A larger percentage of the collectors have access to consumer goods such as electricity (95.2%) and television (73.9%), and a smaller percentage have mobile phones (19.3%). In terms of access to this type of consumer goods, there were no statistically significant differences depending on access to electricity between those who felt they were as happy or unhappy ($\chi^2 = 1.799$, $p = 0.180$), owning a television ($\chi^2 = 3.201$, $p = 0.071$) or owning a mobile telephone ($\chi^2 = 1.202$, $p = 0.227$).

22.7% of the collectors had been the victim of a crime in the 12 months prior to the interview. No statistically significant differences were observed between feeling happy or unhappy and having been a victim of crime during the previous year ($\chi^2 = 1.081$, $p = 0.228$).

The collectors were presented with a list of 24 activities in order to ascertain the extent to which they engage in any of them, at least occasionally. 83% said they listen to the radio; 68.2% take part in sports activities; 56.8% walk; 53.4% read; 48.9% watch films at home; 46.6% do sports; 43.2% care for plants; 43.2% go shopping; 35.2% attend public events; 29.5% do manual jobs; 27.3% do practical jobs; 26.1% eat out or dine out; 25% go to the cinema; 20.5% go to bars; 22.7% go to nightclubs or disco-bars; 20.5% play parlour games; 15.9% play board games; 10.2% paint, carve wood or make pottery; 10.2% drink alcohol in the street; 8% do theatre or dance; 6.8% play a musical instrument; 5.7% attend musical concerts or shows; 2.3% use the Internet; and 5.7% do other activities. It should be noted that the women engage in significantly fewer activities than the men, and as such 29.6% compared to 61.1% of the men women say they read ($\chi^2 = 7.804$, $p = 0.005$), 7.4% of the women play sports compared to 62.5% of the men ($\chi^2 = 23.901$, $p = 0.000$), 7.4% of the women do manual jobs compared to 36.1% of the men ($\chi^2 = 7.976$, $p = 0.003$), 40.7% of the women attend sports activities compared to 75% of the men ($\chi^2 = 10.221$, $p = 0.002$), none of the women do practical jobs compared to 37.5% of the men ($\chi^2 = 13.922$, $p = 0.000$), none of the women drink alcohol in the street compared to 15.3% of the men ($\chi^2 = 4.641$, $p = 0.024$) and none of the women play parlour games compared to 26.4% of the men ($\chi^2 = 8.817$, $p = 0.001$).

No statistically significant differences were observed between feeling happy or unhappy and doing 22 out of the 24 activities for which information was collected. However, significant differences were observed in this respect for two of the activities mentioned: reading and playing sports. The results obtained are shown in Table 7.

Table 7. Differences in overall happiness according to the involvement in leisure activities among collectors in León (Nicaragua).

At least sometimes ...	Unhappy (n = 19)	Happy (n = 69)	χ^2
Read			4,641*
Yes	12.8% (6)	87.2% (41)	
No	31.7% (13)	63.3% (28)	
Play sports (baseball, football, basketball ...)			4,003*
Yes	12.2% (5)	87.8% (36)	
No	29.8% (14)	70.2% (33)	

*p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001

As shown in Table 7, a larger percentage of collectors who read or play sports considered themselves happier than those who do not engage in these activities.

Conclusions and discussion

In general terms, people who make their living collecting rubbish from the dumps of the city of León (Nicaragua) say they are happy, and appear to be optimistic about their future. This is despite the extreme poverty in which they live, the stigmatization they suffer from and the huge number of stressful life events that they are forced to confront (Author, 2012). In contrast to what has traditionally been reported (Andrews, 1986; Argyle, 1999, Diener et al., 1993; Oswald, 1997), there does not seem to be a direct relationship between happiness and income among the collectors.

There is a clear relationship between feeling happy and maintaining positive expectations for the future among the collectors in León. In this regard, Easterlin (2001) noted that even when the perception of happiness experienced remains constant, people tend to think they were worse off in the past and will be much better off in the future. Among the respondents, who are heavily stigmatized and live in extreme poverty, the sense of overall happiness appears to lead to more optimistic cognitions, and better expectations for the future. Their optimistic expectations for the future may in turn positively influence their feeling of overall happiness.

The high percentages of collectors who in general terms say they feel happy, calls into question some hypotheses advocated by economic theory, especially those emphasizing the importance of income levels on happiness. Collectors in León have a negligible (or even non-existent) capacity for consumption, and as such the association between "utility" (the satisfaction obtained by a consumer when enjoying a certain amount of goods or services by means consumption) and well-being argued by several studies (Rojas, 2011) is compromised. When the percentage of happy collectors is analyzed in terms of their access to consumer goods (electricity, television or mobile phone), access to these goods appears to have no effect on the percentage of happy respondents. There are also no differences in the percentage of happy collectors according to the availability of sufficient resources to cover their basic needs, such as clothing or medicine.

However, the availability of sufficient money to cover one of the most basic needs, food, does appear to generate some differences, as the percentage of happy collectors is higher among those who had sufficient resources to obtain food. Following the results reported by Easterlin (2003), the collectors seem to adapt well to their economic situation, to the extent that once they have covered their most basic subsistence needs (such as food), access to other consumer goods has

no major effect on their happiness. However, it should be noted that most of the collectors who do not even have enough resources to feed themselves properly (71.2%) report that they are happy.

According to Schimmel (2009), the high proportion of poor people who say they are happy could be due to the fact that as they have no opportunity to satisfy their absolute needs, they do not compare themselves with other members of their society to whose living standards they aspire. However, in the case of collectors in León, many say they are happy even when faced with difficulties in meeting such basic needs as food, and say they are happy even in the most extreme economic conditions.

In the opinion of collectors in León, 95 dollars (about 3 dollars a day) is a sufficient monthly wage for a full-time job. Given that more than half earn less than 40 dollars a month, the salary they consider sufficient would double the resources to which they have access. Graham (2005) points out that when people are asked how much money they would need to make ends meet and/or to be happy, they generally base their answers on their disposable income at that time and increase it to some extent, regardless of the absolute level of income. This seems adequate to explain why collectors in León would be satisfied with a monthly salary that would keep them in poverty, without their general declared level of happiness playing an important role in their aspirations.

The collectors are therefore a group of people with very low incomes and few material aspirations who mostly consider themselves happy. If, as noted by Easterlin (2001), subjective well-being varies directly according to the resources available and inversely with material aspirations, in the case of the collectors the supposed unhappiness caused by the meagre resources available should be supplemented by significant levels of happiness derived from very low material expectations. However, it seems more reasonable to suggest that there is no significant relationship between income and overall happiness among the collectors in the city of León. The data collected are consistent with the results reported by Rojas (2011), and seem to reinforce the idea that like other people, collectors are more than mere consumers, and there are other important things in their lives apart from money that help them to be happy.

DeLeire and Kalil (2010) state that the consumption of various goods and services is not significantly associated with happiness, with the sole exception of leisure consumption, which has a direct relationship to happiness that could be due to its positive effect on social relations. The vast majority of collectors (over 80%) say they are satisfied with their relationships with their partner, family members, friends and co-workers at the dump. In line with the results reported by Rojas (2008), the high percentage of collectors who in general terms say they are happy could be explained by the great satisfaction they obtain in areas of life other than their economic status, such as their social relations. As noted by Easterlin (2001), issues such as social support from the family have an important relationship with happiness, which is especially pronounced when the family income is low (Schimmel, 2009). Among the collectors, the negative effects that low income could exert on their overall happiness could be offset by the positive effect of the strong social relationships that they appear to have. Strong and positive social relationships provide social support and create feelings of belonging and identity (Diener and Seligman, 2004) and increase the general level of happiness (Baumeister *et al.*, 2005; Myers, 1992).

While the collectors' social relationships appear to have a positive impact on their overall happiness, the overcrowding in their homes that many of them suffer from seems to have a negative impact on it. The average number of people that the collectors share their home with is over seven and one third of the respondents (32.3%) live in homes with a single space, another third in homes with two spaces (35.4%) and only 29.3% live in dwellings with three or more spaces (Author,

2012). In these circumstances of extreme overcrowding, it is understandable that there is a larger percentage of happy collectors among those who share housing with fewer people.

As well as being a significant source of positive reinforcement with a direct impact on overall happiness (Cummins, 1996), leisure activities play an important role in generating and maintaining social networks (DeLeire and Kalil, 2010). In their leisure time, the respondents were observed to have an understandable tendency to carry out activities requiring limited economic resources (listening to the radio, walking, reading, watching films at home or caring for plants), which are activities that create positive feelings and emotions, but which do not appear to enhance interpersonal relationships. Although there are no differences in the percentage of collectors who express happiness according to whether they engage in a great deal of activities, the percentage of happy respondents is higher among those who read or play sports, at least occasionally. Since the sporting activities mainly performed by the collectors are team sports (baseball, football, etc.), those engaging in them add the positive effects on social relations of these activities to the positive effects of exercise on health and mood. However, the larger percentage of happy collectors among those who read - an activity around half of the respondents engage in - is more difficult to explain. In principle, this could be attributed to a beneficial effect through the well-being that reading creates, the information it provides and the possible impact on the self-esteem of an individual who reads in a severely deprived environment.

There are no differences in terms of the overall happiness expressed among the collectors in León according to basic demographic characteristics such as age, marital status or number of children. However, there is a larger percentage of happy collectors among the men, among those who delayed the start of their life within a couple and those who had their first child at an older age.

To a large extent, the collectors began living together as a couple and had their first children very early. Many went straight from childhood to taking responsibility for caring for their children in environments with major shortcomings, forming couples at various ages, which sometimes led to them distancing themselves from their family and friends. Separations are extremely common among these very young couples, and as reported by Dolan, Peasgood, and White (2008), these separations are strongly negatively related to subjective well-being. Separations could play a particularly negative role among the collectors who were forced to raise their children with no support from their partner (who were mainly women). This series of circumstances may have a direct impact on higher rates of unhappiness among those who began their life as a couple and had their first child at a younger age.

The scientific literature indicates that women tend to have lower levels of subjective well-being than men (Stevenson and Wolfers, 2009). This is also observed among the collectors in León, where there is a larger percentage of happy respondents among men than among women. Several points may help to explain this. First, the female collectors began living within a couple and had their first child at a significantly younger age than the men, and separations had a particularly negative impact for them, as they were often to bring up their children without any help in environments with major shortcomings. The women also report less satisfaction with their relationship, with only 23% satisfied with it, compared with 77% of the men. This figure is consistent with the data collected in various studies, which shows a lower level of marital satisfaction among women (Corra, Carter, Carter and Knox, 2009). Women collectors also engage in far fewer leisure activities: they play sports eight times less than the men, do manual jobs five times less, read and attend sports activities half as much, and unlike the men, none of them do any practical jobs or parlour games. In addition, among the collectors in León, women have significantly less access to economic resources and experience a higher number of stressful life

events (Author, 2012). Together with other elements, these circumstances may help to explain the relatively low percentage of women collectors who say they are happy.

The scientific literature indicates the existence of a strong relationship between health and happiness (Schimmel, 2009) and particularly between subjective health and happiness (Diener *et al.*, 1999). Likewise, it makes sense that a larger percentage of those collectors who subjectively perceive a better state of health say that they are happy.

The high percentage of collectors who say they are happy challenges the finding that the quality of work plays an important role in individual happiness (Schimmel, 2009), as the "work" done by the collectors - selecting and collecting rubbish from the dump - does not seem particularly likely to increase the overall happiness of those who do it. In fact, none of the items identified by Kahenman, Diener, and Schwarz (1999) as being related to happiness at work (the opportunity to develop abilities, the existence of defined objectives, a variety of tasks, transparency of information, an appropriate salary, personal safety, support from supervisors and social status conferred by the work) is apparent in the "work" done by the collectors. Based on the elements identified by Kahenman, Diener, and Schwarz (1999), rather than being a source of happiness, the collectors' "work" should play an important role as a causal element of unhappiness. However, a significant level of satisfaction with relationships with co-workers was observed among the collectors. This could have a significant impact on their overall happiness, despite the harsh and unhealthy conditions in which they work, the stigma that they suffer from as a result and the very limited resources that they are provided with.

Schimmel (2009) believes that while there is a lack of studies on the relationship between happiness and security, the results observed between violence and happiness suggest that physical security may play an important role in overall happiness. Nevertheless, no differences in happiness were observed among collectors in León according to whether they had been a victim of a crime in the year prior to the interview, which is particularly relevant considering the large number of crimes that this group is exposed to, despite their extreme poverty. The overall happiness expressed by the collectors is remarkably high despite the high percentage of them who are victims of assaults, robberies and even murder attempts (Author, 2012).

Overall happiness appears to be based on the satisfaction that people find in different areas of their life. As regards the collectors, the extreme poverty in which they live, the difficulties they are forced to confront in their daily lives and the stigma they suffer from should be cause for the appearance of feelings of unhappiness. However, these aspects appear to be offset by the well-being obtained in other areas of their life, and especially those related to their social relations, the leisure activities they do and their subjective perception of their health.

It is undoubtedly a source of concern that 12% of collectors say that they feel quite or very unhappy, and that 5% consider that their situation in the future will be worse. What is truly remarkable is that the vast majority of the collectors are happy, and are convinced that they can achieve a better quality of life in the future with hard work and perseverance. In this regard, the collectors' ability to cope with adversity, as well as their perseverance and capacity for work, are some of the items that provide an optimistic tone regarding their ability to take advantage of the new opportunities that fall to them, which will provide them with access to better quality of life for both themselves and their children.

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