

**HAPPINESS IN THE AMAZON:
FOLK EXPLANATIONS OF HAPPINESS IN A HUNTER-
HORTICULTURALIST SOCIETY IN THE BOLIVIAN AMAZON**

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ABSTRACT

Researchers agree that most people value happiness, but debate whether happiness is universal or varies according to culture. A major setback in the research on cultural explanations of happiness is its bias toward industrial societies, urban areas of the developing world, and student populations. In this chapter, we explore folk explanations of happiness among the Tsimane', a hunter-horticulturalist society in the Bolivian Amazon. Data were collected through participant observation, free listings, and surveys. Free listings captured the concept of happiness of the Tsimane', whereas the surveys captured the reasons that made the respondents feel happy. According to free listings, the Tsimane' sense of happiness centers on social relations (i.e., spending time with close family, drinking home-brewed beer, having visitors) and success in common subsistence activities (i.e., hunting, fishing, agriculture). Possession of material goods and money, and participation in market-based activities (i.e., buying and selling), do not appear as important sources of happiness for the Tsimane'. Frequency of responses varied between Tsimane' living near to and far from the market town, social interaction being more important for happiness among those further away. As market economies expand, scholars and policy-makers have started to debate whether the trend improves or erodes people's quality of life. Much of the debate has centered on the transitions associated with globalization, and little attention has been given to how local cultures define happiness and integrate to the market economy. Understanding how people value their own happiness will contribute to a more informed discussion of the benefits and costs of those global processes.

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Happiness refers to how people feel and think about life, including their emotional reactions, moods, and judgments regarding life satisfaction and fulfillment (Argyle 2001; Campbell et al. 1976; Diener 1984; Diener et al. 1999; Kagan 2008; Kahneman et al. 1999; Pavot and Diener 1993). Researchers agree that most people value happiness (Diener and Suh 2000), but debate whether it is universal or varies according to culture (Biswas-Diener et al. 2005; Eid and Diener 2001; Lloyd and Little 2005; Oishi and Diener 2001; Suh and Oishi 2004; Russell 1991). Some authors have argued that happiness is a subjective state of mind, universal and common across human societies (e.g., Diener et al. 1999; Lyubomirsky 2001). Furthermore, among authors working on Western societies, there is a certain degree of consensus that happiness consists partly of a balance of factors, such as satisfaction with life and positive and negative affect (Argyle 2001; Pflug 2009). Authors have also shown that some characteristics correlate with happiness across cultures (Pflug 2009; Swami et al. 2009; Galati et al. 2006; Diener et al. 2003; Russell 1991). For example, Deci and Ryan (2000) suggest that, across cultures, the fulfillment of basic psychological needs—autonomy, competence, and relatedness—is essential to happiness.

An alternative view is that the meaning of happiness takes culture-specific forms (Diener et al. 1995; Lu et al. 2001; Uchida and Kitayama 2009; Chiasson et al. 1996). For example, studies have highlighted differences in the conceptualization of happiness between individualistic and collectivistic cultures: collectivistic cultures emphasize the importance of the group, whereas individualistic

cultures focus on the individual (Eaton and Louw 2000). Thus, according to this model, which has been discussed in detail elsewhere, happiness in individualistic European and American cultural contexts hinges on personal accomplishment (Emmons 1986), achievement of independent goals (Oishi and Diener 2001), and personal control (Kitayama et al. 2009). In contrast, predictors of happiness in East Asian cultural contexts include adapting to social norms, fulfilling relational obligations (Suh et al. 1998), attaining interpersonal goals (Oishi and Diener 2001), positive social engagement (Kitayama et al. 2006), emotional support (Uchida et al. 2008), and relational harmony (Kang et al. 2003).

As Diener and colleagues (2003) have argued, it seems reasonable to assume that happiness is both universal and culture-specific. The challenge, then, is to identify the building blocks and determinants of happiness, and the degree to which universal needs are channeled by culture. Researchers need to conduct in-depth studies on the interplay between culture and happiness. A major setback of research to date is a limited range of cultures and a bias toward industrial societies, urban areas of the developing world, and student populations. For example, studies have typically been conducted with samples such as Korean and Canadian students (Lee et al. 1999), Chinese students (Lu and Shih 1997), German and black South African students (Pflug 2009), Tagalog (Philippines) and German adults (Swami et al. 2009), or Italian and Cuban subjects (Galati et al. 2006); but much less has been written on conceptions of happiness in small-scale, pre-industrial societies. The gap is even larger for studies which aim to provide folk definitions of happiness in such contexts. Other than our own work on subjective wellbeing among the Tsimane' (Reyes-García et al. 2009; Reyes-García et al. 2010a; Godoy et al. 2006), we know of only one study directly focusing on folk concepts of

wellbeing in the Amazon. In a recent study on the Peruvian Amazon, Izquierdo (2005) analyzed the Matsigenka concept of health and wellbeing, suggesting that both concepts are fundamentally linked to ideals of happiness, productivity and goodness. This different conceptualization of happiness helps to explain why the Matsigenka perceive their health and wellbeing to have severely declined over the past three-decades, even though biomedical indicators of health status suggest that their physical health has improved. Matsigenka attribute their perceived decrease in wellbeing to newly instigated sorcery, stressors resulting from outside influences, and morality institutionalized by cultural outsiders such as missionaries, teachers, health personnel, and oil company employees.

This chapter helps fill this research gap by describing the initial findings of a research project designed to explore folk explanations of happiness among the Tsimane', a hunter-horticulturalist society in the Bolivian Amazon. The main aims are to analyze folk explanations of happiness and to explore potential intra-cultural differences among people more and less integrated to the national society and the market economy. Our study contributes to literature on happiness studies because it will provide a unique case study of happiness among an indigenous population in the first stages of integration into the larger, mainstream society. The study of such a unique sample can broaden our understanding of how people within and across cultures conceptualize happiness. The Tsimane' are an ideal case study in which to examine intra-cultural differences on folk perceptions of happiness as different communities in their ethnic group have different levels of integration into the market economy. Unlike many other samples, they are undergoing rapid lifestyle change, from traditional to modern ways of living, and display a large variation in participation in the national economy and society.

THE TSIMANE'

The Tsimane' are an indigenous ethnic society of foragers and farmers living in the Bolivian Amazon (Figure 1). They number about 8000, settled in approximately 100 villages along riverbanks and logging roads (Censo Indígena 2001). Most Tsimane' live in small villages with about 24 households, each containing an average of six people (adults and children). A great deal is known about the community, as they have received attention by cultural and physical anthropologists interested in their customs and traditional way of life. There have been studies on Tsimane' shamans, myths explaining the universe, reliance on folk knowledge to use the natural resources around them, and their nutritional and health status (Chicchon 1992; Daillant 2003; Ellis 1996; Godoy et al. 2005; Godoy et al. 2009; Huanca 2008; McDade et al. 2007; Reyes-García et al. 2008; Reyes-García et al. 2005; Ringhofer 2010).

<<INSERT FIGURE 1 ABOUT HERE>>

Until the late 1940s, most Tsimane' lived like a pre-contact Amazonian society, isolated from the outside world by the thick blanket of rainforest. For subsistence, they hunted, fished, gathered wild plants, and practiced slash-and-burn agriculture. Their relative isolation ended in the 1950s, when the country's development brought them and the rainforest into closer contact with mainstream society. Construction of new roads, arrival of missionaries and highland colonist farmers, and the logging boom, all put Tsimane' in contact with Bolivian society, a process that gradually transformed their social and economic system (Chicchon 1992; Pacheco 2002; Godoy et al. 2005). These changes brought modern ways of living, and a new

environment that has gradually encroached upon the Tsimane' and their society. Although some Tsimane' continue to be highly self-sufficient, continuing traditional subsistence practices such as hunting, foraging, and shifting agriculture (Vadez et al. 2004), others are adopting more modern activities such as dependence on cash cropping and employment as unskilled laborers in logging camps, cattle ranches, and in homesteads of colonist farmers (Vadez et al. 2008). Some Tsimane' are also selling forest and agricultural products, such as rice and thatch palms (Vadez et al. 2004), mostly to obtain local market goods (Godoy et al. 2007a).

According to recent estimations, the average Tsimane' adult has a daily personal income from cash earnings and from the imputed value of farm and forest goods consumed from agricultural plots and forests of US\$3.26 (Godoy et al. 2007b). Daily personal income reaches US\$9.05 when expressed with the index of Purchasing Power Parity. Most (59.08%) income comes from the value of consuming farm crops and animal wildlife, followed by monetary earnings (31.52%) from the sale of goods (17.56%) and from wage labor (13.96%). Goods received in barter account for only 2.79% of daily personal income, and social capital—gifts and labor help received—accounts for 3.74% of daily personal income.

The traditional, agrarian way of life is gradually being replaced by national systems of economic, legal, and social organization. For example, as far back as the 1950s, Protestant missionaries introduced schooling and programs to develop academic and practical skills (e.g., hygiene). Contact with missionaries and others also changed family structure among the Tsimane'. For example, the former polygamous practice (Daillant 2003) has been replaced by monogamy and nuclear households run jointly by wife and husband. Recent surveys suggest that only about 3% of Tsimane' continue to practice polygamy,

although most still practice cross-cousin marriage. Shortly after marriage, the couple resides with the wife's kin group, followed by a neolocal or independent post-marital living arrangement. This creates a wide and thick web of relatives, linked by blood and marriage, available for social support.

Contact with the mainstream society has also affected political structures. Like other native Amazonian societies, the Tsimane' traditionally had shamans (*cocojsi'*) who occupied the role of healer, priest, and political leader: the only source of hierarchy in an otherwise highly egalitarian society (Daillant 2003). As the Tsimane' gained greater exposure to the outside world, including access to modern medicine, the *cocojsi'* disappeared, replaced by a new leadership structure and reliance in modern medicine. Thus, during the 1980s, the Tsimane' started to organize politically. In the Tsimane' government - the Great Tsimane' Council - each village elects a representative (*corregidor*) to serve as a mediator between the village and the outside world. Because *corregidores* need to attend meetings in towns with local politicians, they are usually men with some education level and fluency in Spanish, Bolivia's national language. Because only about 30% of Tsimane' adults know how to write and read well (Reyes-García et al. 2010b), the number of people who can now fill the role of political leader is basically limited to literate, Spanish-speaking men.

Our research group has spent considerable time with the Tsimane'. Our previous research assessed the effects of market integration on several aspects of Tsimane' livelihood, such as health status (Byron 2003; Tanner 2005), traditional ecological knowledge (Reyes-García et al. 2005), income inequality (Godoy et al. 2004), use of renewable natural resources (Vadez et al. 2004), and wildlife consumption (Godoy et al. 2010). Our findings suggest that integration

into the market economy has had mixed effects on Tsimane' livelihood. For example, it does not seem to be strongly associated with a person's health status (Byron 2003) or economic inequality (Godoy et al. 2004), although there is evidence to suggest that the market economy affects agricultural strategies. Specifically, in a previous study we found that households and villages more integrated into the market economy planted more cassava and rice varieties, intercropped more frequently, and put more crops in new fields than more autarkic households (Vadez et al. 2004). This is probably because the market does not yet provide modern forms of self-insurance or well-functioning labor, credit, and product markets that would otherwise enable households to protect food consumption when faced with challenges.

Recent results from a longitudinal study of the Tsimane' suggest improvement in several standard indicators of physical and mental wellbeing (Godoy et al. 2009). Particularly, the period 2002–2006 saw an increase in the real (inflation adjusted) value of food consumption; an increase in body mass index (BMI), a standard indicator of nutritional status; and a decrease in the frequency of self-reported anger, a sign of mental wellbeing. But the same period also saw a worsening of other wellbeing indicators, such as an increase in the number of self-reported physical ailments such as respiratory and gastrointestinal infections. Previous authors say that acculturation and access to market goods have the potential to impact negatively on Tsimane' health in the short term, because Tsimane' often misuse Western medicine (Tanner 2005; Calvet-Mir et al. 2008). Most Tsimane' do not have the skills to select appropriate drugs without relying on advice from traders and doctors, as they lack knowledge of pharmaceutical treatments. As a consequence, Tsimane' often do not use the appropriate drugs or dosages.

Although these recent studies on Tsimane' reveal interesting findings, more are needed. Our studies on topics such as integration to the market economy and on BMI are interesting, but they are mostly concerned with objective measures of wellbeing. In a general sense, objective and subjective indexes tell the same kind of story, but their relation is not always simple, which begs the need for studies on subjective wellbeing. With this in mind, the main aim of this chapter is to explore subjective wellbeing – that is, folk explanations of happiness – among the Tsimane'.

DATA AND METHODS

SAMPLE AND PROCEDURE

Our data come from the Tsimane' Amazonian Panel Study (TAPS), a longitudinal bio-cultural study in progress since 2002 (Leonard and Godoy 2008). The overarching aim of TAPS is to assess the influence of market exposure on the objective and subjective wellbeing of native Amazonians in Bolivia and their use of natural resources. TAPS involves annual tracking of about 2,000 people in 12 Tsimane' villages and their ~330 households. Information and data from this study are available on the TAPS website (<http://www.tsimane.org/>). Data analyzed and interpreted in this chapter came from four consecutive quarterly surveys, with the same participants, between August 2002 and November 2003.

DATA COLLECTION AND ANALYSIS

Methods used to collect information included participant observation, free listings, and a formal survey.

Participant observation: A team of six researchers and six Tsimane' assistants lived in one of the studied villages during the

study, and visited a second village periodically. During fieldwork, they immersed themselves and participated in the day-to-day activities of the Tsimane' and village life. They accompanied people in their everyday activities, festivities, and work activities. Participant observation encouraged an in-depth understanding of the different aspects that comprise objective and subjective wellbeing. During the first three-months of participant observation, we also pilot-tested the methods of data collection described below.

Free listing: Free listings were used to elicit a comprehensive list of items associated with the Tsimane' concept of happiness (Weller 1998), and the saliency of each item. Thus, free listings can be regarded as a representation of the Tsimane' ideal concept of happiness. The Tsimane' word for happiness is *majoi*, which connotes joy, gladness, and contentment; so, we asked respondents to generate a list of items in response to the question: "*What makes you happy?*" and to give as many reasons as they could. During this process we used our background ethnographic information and a census to select informants with different levels of integration into the market society: those who mainly conducted subsistence activities and those who also worked for wage labor. The total sample for free listing was 35 respondents from different households in 12 villages.

Quarterly survey: We used a quarterly survey to collect data in 12 villages along the Maniqui River, Department of Beni (Fig. 1), each differing in distance to the market town of San Borja (population ~19,000). Each quarter, we visited each household in the 12 villages and asked all adult residents (over 16 years of age) about events that made them feel happy during the previous week. A total of 329 women and 350 men were surveyed initially, although not all the participants could be located each quarter, so the total number of observations across all quarters was 2015. The survey question was

open-ended because it was designed to capture the reasons that actually made the respondents feel happy. We recorded responses *verbatim*. Respondents were prompted to list as many reasons as they could think of, and the length of their lists varied from none to nine reasons. Different from free listings, survey data inform about everyday reasons that provide a sense of happiness to the Tsimane', rather than their ideal concept of happiness.

Data analysis: *Verbatim* responses from free listings were categorized into 37 different reasons for happiness. For each of these, we calculated: 1) the percentage of people who mentioned each reason; 2) the average ranking of mention of each reason; and, 3) the saliency of each reason, i.e., an index that evaluates, with a range from 0 to 1, its overall importance across all of the lists (Bernard 2006; Ross and Medin 2005). To ease comparisons of free listing and survey responses, we coded *verbatim* responses from surveys into the same categories used to code free listing responses. Survey data were analyzed using descriptive statistics. To explore intra-cultural variation, the respondents were grouped into two groups: Group 1 (those living nearby San Borja, the closest market town), or Group 2 (those living further away). Group 1 included six villages distanced between 6 and 15 km from San Borja, and Group 2 consisted of six villages between 33 and 50 km from San Borja (Figure 1). Free listing data were analyzed using Anthropac, and survey data with STATA 9.0.

RESULTS

THE IDEAL CONCEPT OF HAPPINESS

Table 1 lists the 20 (out of 35) salient reasons for happiness, reported by the Tsimane' during the free listings. From the 20 most salient reasons, nine relate to social relations and ten to Tsimane' economy.

Within the ten reasons related to Tsimane' economy, the first four reasons relate to subsistence, not market, activities. These responses, backed by our ethnographic understanding, suggest that the Tsimane' sense of happiness centers on social relations and success in common subsistence activities.

The types of social relations with a highest Saliency include spending time with close family (mentioned by 69% of informants), drinking home-brewed beer (*shocdye'*; mentioned by 40%), having visitors (34%), and visiting family and kin (29%). Our ethnographic observations allow us to illustrate how social relations permeate Tsimane' daily life. For example, Tsimane' visit family and friends frequently, and express sadness when members of the household go away for a long period of time. Not receiving social visits is a sign of social rejection, and a major reason for concern. Any Tsimane' at home is expected to be able to receive and entertain visitors, regardless of their activity at the moment when visitors arrive. A large proportion of the day is spent on social visits. For example, early in the morning, Tsimane' men typically visit each other to exchange information about their planned activities for the day, and in the afternoon meet again and comment on the day's events. The social visits sometimes have a purpose (to organize a fishing expedition, borrow a shotgun, or share a meal), but in many cases have no specific reason other than as a sign of a social need. Visits to family and friends residing in other villages are also frequent, sometimes lasting several weeks or months. It is common for the Tsimane' to temporarily move from one settlement to another, to places where they have relatives, in search of better places to farm, hunt, and fish. Thus visiting others is a key aspect of conviviality among the Tsimane', and temporary visits establish and maintain social relations.

<<INSERT TABLE 1 ABOUT HERE>>

A central event in Tsimane' social life is *shocdye'* drinking. *Shocdye'* is a beverage made by fermenting crops such as manioc or plantains, common in Amazonian societies (known as *chicha* in Spanish speaking countries; Jennings et al. 2005; Hayashida 2008). Tsimane' women prepare it for special occasions, such as for the return of hunting and fishing expeditions. It is customary for any Tsimane' to expect to be able to walk into a household serving *shocdye'* and to be served; those who do not prepare and share *shocdye'* are stigmatized as misers and held in contempt. People often drink *shocdye'* sitting in a circle with others of the same sex; as they pass time drinking, they tell stories, discuss a wide range of subjects, and make jokes, triggering generalized laughter and smiles (Godoy et al. 2010).

As results in Table 1 suggest, a second important reason for happiness relates to success in subsistence activities, such as agriculture, hunting and fishing. In a way, these reasons revolve around the Tsimane' concept of "good food." Traditionally, and even now, Tsimane' consider hunting and fishing as more desirable occupations than agriculture or wild plants gathering, which is also expressed in food preferences for wild meat over meat from domestic animals and the concept that a meal without game or fish meat is poor, bad, and unhealthy. Thus, for the Tsimane', having "good food" is directly related to success in hunting and fishing. For example, they express deep sadness when returning from a hunting or fishing expedition without a catch. Many Tsimane' rituals and taboos concern appropriate behavior to maximize the chances of a good catch. For example, important hunting expeditions are preceded by sexual abstinence (so the pray cannot smell the hunter) and the singing of ritual songs to the spirits of the animals asking them for a good catch (Huanca 2008). We also found that the Tsimane' express concern

when agricultural yields are insufficient because of weather conditions or the attack of pests.

Despite increasing levels of integration into the market society, the results in Table 1 suggest that possession of material goods or money, and participation in market-based activities (i.e., buying or selling), do not appear among the highest sources of happiness for the Tsimane'. For example, "to buy commercial goods", "to sell goods" and to "to visit the town" were not high-ranking reasons for Tsimane' happiness (Table 1).

EVERYDAY CAUSES OF HAPPINESS

Results from free listing are interesting because they provide a representation of the ideal concept of happiness. However, they should be taken with caution because they come from a small sample. Furthermore, those results should be contrasted with the findings of our interviews with Tsimane' during which we asked the reasons that had actually made them happy in everyday life. The analysis of survey data shows that, over the four quarters, a third (32%; n=636) of the responses indicated that no particular event or item had made them happier than usual during the week prior to the interview. Among the respondents who reported at least one reason to be happy (68%), 658 mentioned at least two events that made them feel happy. Only five respondents mentioned as many as nine reasons.

Table 2 presents the most common reasons for happiness reported during the survey interviews. In contrast to the free listing data, the most important reason in the surveys was "not experiencing any unexpected problem" (10.75%). Other frequent determinants of happiness revealed in the surveys resemble those captured in the free listings: social interaction (including visiting and receiving visits from kin and kith), and success in regular activities (mainly hunting and

fishing, but also agriculture). Again, reasons related with the market economy or the national society (i.e., market related activities, religious ceremonies) did not seem to be prominent causes of happiness.

<<INSERT TABLE 2 ABOUT HERE>>

HAPPINESS OF TSIMANE' LIVING CLOSE TO AND FAR FROM THE MARKET TOWN, SAN BORJA

We found interesting differences in the frequency of responses between Tsimane' living near to and far from the market town, San Borja. The most notable difference between the two groups is the number of times social interaction was mentioned as a cause of happiness, more frequently reported by those further from San Borja. For example, 14 % of the respondents far from the town (Group 2) referred to visiting kin as a reason to be happy, compared to only 3.5% near the town (Group 1; Table 3). Similarly, 13 % of the respondents in Group 2 referred to spending time with close family, versus 0.7% among Group 1. The mention of work and regular productive activities as reasons to be happy did not differ much between the two groups, although those nearer to the town cited agriculture more frequently, whereas respondents in more isolated villages cited hunting more frequently. The absence of unexpected problems was more often cited by people in the nearby villages than in the isolated villages. It is also interesting to note that the categories that include interactions with the national society or the market economy (i.e., visit to town, or success in market activities), although more frequent in responses from people in the nearby villages, do not represent a big share of observations in either of the two groups.

<<INSERT TABLE 3 ABOUT HERE>>

DISCUSSION AND CONCLUSION

Our discussion of the findings relates to the two main objectives of this work: 1) the Tsimane' folk concept of happiness and 2) intra-cultural variations in the definition of happiness.

As revealed by the analyses of data on the ideal concept of happiness (free listings) and reported causes of happiness (surveys), as well as in our ethnographic observations, the Tsimane' concept of happiness centers on two seemingly related topics: social interaction and success in subsistence activities. Tsimane' do not list personal goals as reasons for happiness.

Previous research in industrial societies suggests that participation in social activities (e.g., frequency of visiting and going out with friends) predicts subjective wellbeing (Lloyd & Auld 2002; McCormick & McGuire 1996), probably because social engagement provides opportunities for personal interaction and material exchange, a potential source of psychological benefit (Auld & Case 1997). But, for the Tsimane', social relations seem to be the central and defining feature of happiness. This is reflected in their everyday life. For example, visiting friends and family (*sobaqui*) entails both temporary and frequent visits to family members living in the same or neighboring communities, and long-term visits to more distant relatives. Those visits serve to maintain social relations as well as to establish new ones (for example, when an adult woman takes her family to visit her brother, so the children can get to know their cross-cousins and potential marriage partners). Thus, through the establishment and maintenance of social relations, the Tsimane' create a thick social web that might act as a social support system.

Indeed, our participant observations show that, as in other native Amazonian populations (Gurven et al. 2000; Hill 2002), the Tsimane'

engage in many forms of reciprocity (Reyes-García 2006), which creates an inextricable link between sharing and social relations. For example, we have observed cooperation in many activities, such as fishing, hunting expeditions, maintenance of schools, and clearing of public places. In villages far from the market town, Tsimane' cooperate in difficult agricultural tasks, such as clearing forests in preparation for planting subsistence crops. Furthermore, people expect help from more prosperous people in the village. For instance, we have seen poor people in villages draw on the generosity of a more prosperous villager, such as asking the villager to take them in their motorized canoe to a health facility.

In a sense, the importance of sharing defines the second core component of happiness for the Tsimane': the ability to succeed in subsistence activities. Besides sharing *shocdye'*, Tsimane' routinely share food: Tsimane' women usually cook in open courtyards, and shout when the meal is ready, so that neighbors (typically neighboring families) can join the meal. People literally eat together from a common pot, and successful hunters share game with others. Tsimane' women also frequently borrow plantain (Tsimane' main staple), maize, or manioc (to elaborate *shocdye'*) from neighboring households or from the agricultural fields of their relatives. Thus, success in subsistence activities allows Tsimane' to establish a wide and thick net of social relations that provide some insurance and some help in physically-demanding daily activities (Godoy et al. 2007b).

The importance of social relations and success in subsistence activities in defining the Tsimane' concept of happiness dovetails both with previous empirical research on the Tsimane' (Reyes-García et al. 2009) and with findings from another Amazonian society, the Matsigenka (Izquierdo 2005). In a recent study we tested whether leisure activities with a social component (i.e., having conversations

with friends and family, drinking *shocdye'*, participating in community activities, or sharing a meal) contributed more to happiness than solitary leisure activities (i.e., listening to the radio, being idle, or reading; Reyes-García et al. 2009). Results suggest that leisure has a positive and statistically significant association with subjective wellbeing only when leisure is defined as a social activity. Similarly, in her study on health and wellbeing among the Matsigenka, Izquierdo (2005) found that:

"Among the Matsigenka, one's responsibility and respect for family, and the maintenance of nurturing relationships of support are central for achieving health and well-being. In adulthood, the Matsigenka strive to be good providers for their families, which includes being skillful and hardworking (hunters, fishermen, weavers), and maintaining clean bodies and clean households. One must cultivate good family relations by being social, by visiting and sharing" (p. 778).

Our second important finding relates to intra-cultural variation in happiness. Although analyses of the free listings suggest consensus among Tsimane' in a core group of reasons underpinning their happiness, the survey responses suggest differences between villagers living at different distances from the market town. Overall, people further away from the town, in more remote, isolated villages, and supposedly living a more traditional lifestyle, associated happiness with social relations and success in hunting and fishing more commonly than people living close to town. In contrast, social relations were a less important source of happiness for those living closer to town, as they seemed to define happiness more in terms of nothing bad happening to them. Interestingly, respondents closer to town also attached more importance to successful agricultural activities, as opposed to hunting and fishing, in their happiness. A possible explanation for this finding lies on the differential effects of acculturation and modernization on the two groups, with Tsimane'

living close to town, i.e., those who are more integrated to the market economy, showing a deviation from the traditional model of happiness and events that provide happiness in everyday life. Further research should examine whether the modernization process affects their concept of happiness or just the occurrence of reasons to feel happy. If the Tsimane' cultural ideal of happiness remains unchanged, but the occurrence of causes of happiness changes, Tsimane' living close to town might be experiencing a stressful situation where they feel they cannot attain happiness. Future research should analyze this topic, and whether such incongruity is actually associated with markers of stress, as it has been observed in other cultural settings (Bindon et al. 1997; Dressler and Bindon 2000).

The analysis of changes in happiness for populations rapidly embracing the market economy matters for one important reason: As globalization unfolds, and market economies expand, the public, scholars, and policy-makers have started to debate whether these trends improve or erode people's quality of life. Much of this debate has centered on the social, economic, and cultural transitions associated with globalization, and little attention has been given to individual cultures and subsistence populations, and how this is affected by integration to the market economy. Understanding how people value their own quality of life will contribute to a more informed discussion of the benefits and costs of global processes that are at the center of the public policy debate.

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Figure 1: Map of Tsimane' settlements

Table 1

The Tsimane' ideal of happiness: most salient causes of happiness

Reasons for Tsimane' happiness	Type^a	Percentage^b	Average ranking^c	Saliency^d
To spend time with close family	Social	69	2.75	0.56
To have a good garden plot	Economic-S	71	4.00	0.46
To have good food	Economic-S	54	3.89	0.35
To succeed in hunting	Economic-S	66	5.26	0.35
To drink <i>shocdye'</i>	Social	40	4.93	0.24
To succeed in fishing	Economic-S	46	4.87	0.23
To have good health	Health	43	6.00	0.21
To receive visits	Social	34	4.75	0.21
To acquire commercial goods	Economic-M	49	6.71	0.19
To visit kin	Social	29	2.00	0.19
To have money	Economic-M	43	6.13	0.19
To visit the town	Social	23	5.50	0.13
To have good work	Economic	20	5.00	0.13
To have domestic animals	Economic-S	23	5.75	0.12
To have a bike or a motorbike	Economic-M	20	4.71	0.12
To play sports	Social	20	5.57	0.12
To be in /return to the house	Social	26	5.89	0.12
To sell goods	Economic-M	17	5.67	0.09
Not to be angry	Social	17	4.83	0.09
To be with friends	Social	14	4.80	0.08

^a Categorization of the reasons as Social, Economic-Subsistence, Economic-Market, and Health

^b Percentage of people who mentioned each reason (n = 35)

^c Average rank in which each reason was mentioned across free lists

^d Index that evaluates, with a range from 0 to 1, the item's overall importance across all of the lists. It is calculated as the weighted average of the inverse rank of an item across free lists where each list is weighted by the number of items on the list.

Table 2

Everyday happiness: most frequently mentioned reasons for happiness.

Causes of individual happiness	Frequency^a	Percentage^b
Nothing bad happened	273	10.75
To have a good plot	271	10.67
To visit kin	214	8.43
To have good work	179	7.05
To spend time with close family	169	6.65
To succeed in fishing	154	6.06
To succeed in hunting	149	5.87
To drink <i>shocdye</i>	118	4.65
To have good health	104	4.09
To have good food	89	3.50
To play sports	87	3.43
To attend a party	84	3.31
To visit the town	73	2.87
To receive visits	70	2.76
To sell products	69	2.72
To have domestic animals	52	2.05
To acquire commercial goods	50	1.97
To attend religious workshop	38	1.50
There was no gossip	37	1.46
There was good weather	26	1.02

a,b Frequency and percentage of people that mentioned each reason (n =2015)

Table 3

Reasons for happiness among Tsimane' living at different distances from San Borja

Causes of individual happiness	Far from town	Close to town
To visit kin	14.03	3.54
To spend time with close family	13.44	0.74
To have good work	7.69	6.48
To have a good plot	7.61	13.34
To succeed in hunting	6.42	5.38
To succeed in fishing	6.09	6.04
To have good food	4.56	2.58
To have good health	4.48	3.76
To drink <i>shocdye'</i>	4.31	4.94
To receive visits	3.97	1.69
To have domestic animals	2.7	1.47
To visit the town	2.45	3.24
Nothing bad happened	2.37	18.05
There were no gossips	2.2	0.81
To play sports	2.11	4.57
To sell products	1.86	3.46
To attend a party	1.52	4.86
To acquire commercial goods	1.18	2.65
To attend religious workshop	0.42	2.43
There was good weather	0.34	1.62

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