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# Subjective Well-Being in Two Himalayan Communities, Post Road Development

Michelle U. Grocke

Montana State University-Bozeman, m.grocke@gmail.com

Kimber Haddix McKay

University of Montana - Missoula, kimber.mckay@mso.umt.edu

Thomas Foor

University of Montana - Missoula, tafoor01@yahoo.com

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# Subjective Well-Being in Two Himalayan Communities, Post Road Development

Michelle Ursula Grocke  
Kimber Haddix McKay  
Thomas Foor

Although the first road to ever be built into Humla, Nepal is still under construction, it has already spurred numerous sociocultural and economic changes, including an increased integration into the market economy, changing access to market-purchased foods, and new kinds of health-seeking behavior. This paper is part of a larger research project where we examined changing health and nutrition outcomes co-synchronous with the arrival of this road. In this paper, we focus on whether and how the road is affecting villagers' subjective well-being (SWB). We studied this while living and working with people from two Humli villages, one that is on the road, and one that is far from it. In these villages, we developed two local models of SWB, using the villagers' own conceptual frameworks and sense of the factors that play a role in well-being. Our analyses showed that villagers' conceptualization of SWB varied substantially according to road proximity.

Additionally, we quantified indices from villagers' SWB assessments and tested which variables were significant determinants of well-being. We discovered a significant relationship between an individual's well-being level and two variables: available resources per household and levels of social support. The purpose of this paper is threefold: to better understand how villagers from Upper Humla define SWB, to identify which subset of the population is not benefitting in terms of their SWB from the new road, and to present a mixed-methods, anthropologically-based approach for the development of a locally meaningful measure of SWB.

**Keywords:** Subjective well-being, ethnography, cultural domains, roads, Nepal.

## Introduction

Development in the form of infrastructure and road building is on the rise throughout the Himalaya. As these projects unfold, it becomes important to understand how they impact the lives of those around them. While the impact of new Himalayan roads on the growth of infrastructure, patterns of mobility, and traditional livelihoods has been studied (Rawat and Sharma 1997; Murton 2013; Kreutzmann 1991), changes in local people's well-being when new roads arrive are poorly understood. Our aim is to shed some light on this topic by better understanding both how individuals assess their own well-being, and whether and how the arrival of a new road in the previously roadless region of Upper Humla District, Nepal has affected local people's sense of their own subjective well-being.

### *The First Road in Humla, Nepal*

Humla is a remote, mountainous district located in the far northwest corner of Nepal, with China, (formerly Tibet), bordering it to the north and northwest. For centuries, Humla District had been an epicenter of trade, with routes for goods such as silk, wool, salt, and grain passing over and around this Himalayan region (Fürer-Heimendorf 1975). Aside from their involvement with trade, however, Humli have had limited contact with the outside world (Adhikari 2008; Citrin 2010; Levine 1989; McKay 2002; Sanders and McKay 2013). Fourteen years ago, construction on a small, one-lane, dirt road began. This road was constructed following the preexisting main footpath that villagers took to walk through the district; as of 2015, it began in Taklakot, a market town across the border in China, and terminated in the village of Thumkhot (see Figure 1).

Although the new road still does not provide Humli villagers with access to the rest of Nepal, it does provide them with relatively easy access to the Taklakot market, in addition to easier access to various local amenities including healthcare facilities, schools, and markets.

During our 2013 pilot study, we spent time in various villages in the district that soon would be connected to the road. We heard comments from villagers suggesting a connection between the road and their quality of life, such as: "We are so happy about the road!" and "Life is going to be so much easier when the road comes!" As we considered these statements, we realized that to understand how the new road might affect villagers' health, we needed to include a subjective self-assessment of health into the study. In this ethnographic context, objective and subjective health indicators are not salient as separate constructs in conventional understandings of health and well-being (Kohrt 2005: 93). Our interest in this perspective on health stemmed also from the now widespread acceptance that measuring subjective well-being is an essential component of measuring quality of life (OECD 2013).

### Subjective Well-Being

As a concept, subjective well-being (SWB) is comprised of people's evaluations of their own lives, (which includes pleasant affect, unpleasant affect, and life satisfaction) (Tov and Diener 2009); that is to say, "a person enjoys high levels of personal well-being or welfare when their life is going especially well *for them*" (Raibley 2012: 7). In recent decades, empirical studies on SWB have produced scholarship centered around three primary features: (1) how SWB is operationalized and measured (Diener et al. 1985; Diener 2000; Fordyce 1988; Lyubomirsky and Lepper 1999); (2)



Figure 1. Map of Upper Humla District and the location of the first road.

Basemap (Google Earth 2018); District Boundaries (HDX 2018)

what variables correlate with SWB, (for example, wealth and income (Diener et al. 2013); health (Böckerman et al. 2014), ethnic identity (Smith and Silva 2011), and height (Carrieri and De Paola 2012); and (3) the unification of the hedonic and eudaimonic components of well-being (Delle Fave et al. 2011).

As the scholarship on SWB advances, a consensus has emerged, holding that though some types and causes of well-being are consistent across cultures, SWB must also be understood within the context of each culture (Diener and Suh 2000; Oishi and Diener 2009; Tov and Diener 2009). In response to this need, numerous mixed methods studies undertaken across geographical regions and cultural groups have given us a more locally-rooted understanding of this health domain, using, for instance, folk psychology to explore culturally rooted well-being conceptions, (e.g., Lu 2001), or extensive qualitative inquiries to identify local components of well-being (Guatam and Andersen 2016). Other studies have found that considerable heterogeneity relating to SWB exists within cultures (e.g., Martin and Cooper 2017).

Although culturally-based understandings of SWB continue to increase, much of the well-being literature conducted across cultures has stressed the need for more scholarship in developing countries (Addai et al. 2014) and for distinguishing between definitions of well-being and the conditions and/or situations that promote it, particularly among people undergoing a transition to a more 'urban' environment (Martin and Cooper 2017).

This study adds to the cross-cultural understanding of SWB by providing insight into local conceptions and determinants of SWB in an understudied, rural area of Nepal that is currently undergoing rapid infrastructural development. Based on long-term ethnographic research, this study follows in the footsteps of those anthropologists that have studied this topic (Mathews and Izquierdo 2008) and aims to encourage further SWB-focused scholarship within the field of medical anthropology. We believe that in the SWB field, medical anthropology is an especially valuable perspective, given the need for culturally grounded studies of SWB, and the importance of incorporating subjective health metrics into overall health assessment.

By quantifying villagers' SWB based on its locally salient determinants, we were able to:

(1) decipher what other variables, aside from proximity to road, are influencing villagers' SWB levels; (2) identify the subset of villagers whose SWB is lowest, even after the arrival of the first road; and (3) provide insight into how infrastructure investments can have an uneven effect on the SWB of people living in nearby communities, thereby introducing another form of relative deprivation. This

study is part of a larger research project that investigated the impacts of the new road on villagers' dietary patterns (Grocke and McKay 2016), food security and malnutrition (Grocke and McKay 2018), and overall objective and subjective health status (Grocke 2016).

## Study Design

This research was ethnographic in nature and took place between August 2014 and May 2015. Since we did not have access to any SWB baseline data, we developed a case-control study to better understand how the arrival of the new road in Humla District influences villagers' SWB.

We conducted fieldwork in two villages: one that lies directly on the new road and has had road access for ten years, ('Gyepo', the case village), and one that lies on the other side of three high alpine mountain passes, and therefore does not have direct road access, ('Kale', the control village).<sup>1</sup>

Aside from their proximity to the road, the two villages are very similar: The villagers in both are Buddhist and ethnically Tibetan, both villages lie at roughly 12,000 feet, grow similar crops, are the only two villages in the area to only have one harvest per year, and between them there are no significant political differences. Most villagers continue to engage in agro-pastoralism as a mode of production, though villagers, (especially in Gyepo), are quickly becoming integrated into, and dependent on, the market economy. This research obtained Institutional Review Board approval from the University of Montana in Missoula, Montana on May 1, 2014 (IRB # 217-13), in addition to approval from the Nepal Health Research Council. Verbal consent was also provided for the first author to take and use photographs for non-commercial purposes.

## Methods: Obtaining, Ranking and Quantifying Local SWB Models

For an emic understanding of how villagers themselves conceptualized subjective well-being in their own cultural and environmental context, we crafted a model that did not rely on predetermined scales, but instead allowed locals to create their own well-being indices. This was a departure from other SWB studies which use self-reporting instruments supposed to be universal, (see Linton et al. 2016 for a review on self-reporting measures), but which we did not find suited to this ethnographic context. To obtain a local SWB model, we relied upon cultural domain analysis, a method initially used in cognitive anthropology and marketing (Coombs 1954, Jacoby 1991). This method is based on the simple premise that to exist, cultural knowledge must be articulated and shared within a social group (Borgatti 1994; Romney et al. 1986). In this case,

the ‘cultural knowledge’ that we sought information on was concepts of SWB. We used a variety of participatory methods to understand the content and boundaries around local understandings of SWB, including free- listing, ranking exercises, participatory index and value association for quantifying variables, and thematic discussions. This methodology also allowed us to discriminate local models of SWB in both field site villages.

### Step 1: Freelisting

Our first step involved finding a set of key informants in both villages.<sup>2</sup> We ensured that our key informant groups included both men and women, spanned different age groups, and included individuals from both the wealthy and poor households, (wealth assessments described in Grocke 2016). To ensure that we were accurately categorizing individuals, we waited until our second month of ethnographic research before selecting individuals. Once we identified our key informants, we conducted a freelisting exercise with each individual, during which we asked them to list all items, (tangible), and attributes, (intangible), that they would include as being important to them for achieving a high sense of well-being. We began this exercise by asking the following question: “In your village, what does it take to be content with life?” (Tibetan. *kherang ki drongsep ki keyduk-la ghari zjung na doethpa khangsong ngam*)<sup>3</sup>

Once we had conducted this exercise with each member of the key informant group in both villages, we aggregated

the lists by carefully studying them and removing the items that were mentioned more than once. These lists provided us with an initial understanding of which items and attributes are important components of SWB achievement in these two villages.

### Step 2: Ranking

We then asked each key informant to rank the items on his/her villages’ SWB lists by order of importance for SWB achievement. To prepare for this step of the exercise, we made two decks of cards, one for each village’s SWB list. Written on each card was one item from the list. Having these cards made the ranking exercise participatory, as villagers could themselves arrange the cards, shift them around, and visually assess the ways they were ranking the items.

Figure 2 shows this ranking exercise taking place.

Once each key informant had completed the ranking exercise, we calculated the mean ranking for each item on both lists. Based on the mean ranking, we gave each item a weight.

### Step 3: Quantifying Villagers’ SWB

The third step involved asking each individual over eighteen years of age in both villages whether they possess the items and attributes on their villages’ SWB list. Although our aim was to obtain information from all individuals, this proved difficult since many people were away from the



Figure 2. Conducting ranking exercises with villagers in Gyepo village. These ranking exercises were typically conducted outside, on villagers’ rooftops, over a cup of local yak-butter tea.

(Grocke, 2014)

villages for months at a time either for livelihood or education purposes. In total, we were able to collect data from thirty-seven individuals in Kale and forty-seven individuals in Gyepo.<sup>4</sup> Although we were able to interview at least one representative from each household in both villages, there are limitations in terms of the representativeness of our data since we did not acquire 100 percent sample.

Once this portion of the exercise was completed, we tabulated how many of the SWB items and attributes each person had. For each respondent, we then multiplied each item that he/she possessed by the weight it was given, (based on the ranking and weighting exercise previously described). Each individual was given a total score, (from 100% indicating extremely high SWB to 0% indicating extremely low SWB). To run intra-village variability tests, we also calculated the average SWB scores for each household and generated an 'average household well-being score'; this allowed us to turn subjective well-being, which was initially an individual-level variable, into a household-level variable.

Although this method allowed us to quantify villagers' SWB, the real contextual value of this exercise arose from the informal conversations that occurred while these exercises were taking place. Participants would often tell stories that related to each item on the SWB list, and/or would reference times in the past when they did/did not have such an item/attribute and why. We rely heavily on the information gleaned from these conversations to explain the items that make up the SWB lists.

### **Results: Defining Subjective Well-Being in Kale and Gyepo Village**

Although these study villages are nearly identical in terms of ethnicity, language, subsistence, environment, and size, the way in which locals defined the concept of subjective well-being differs from village to village. In the following table (Table 1), we present the SWB lists that our key informants created, in addition to listing the mean value ranking which each item received and the percentage of interviewed individuals in each village that possess each SWB item and/or attribute.

Data suggest that while some items and/or attributes are important to well-being attainment in both villages (e.g. 'time for religious practice', 'calm and/or positive thoughts', and 'have a household where all members get along/cooperate'), others are unique to one.

### ***SWB Away from the Road (Kale Village)***

'Having access to education' is the most important factor in the achievement of SWB in Kale, the village away from the road. Although Kale has a primary school, the secondary school is more than a day's walk away, so attendees from Kale board at the school for each academic year. Since Kale villagers still almost entirely rely on agriculture and pastoralism, households require, on average, more able-bodied persons to complete household work than families living in Gyepo, who have begun to rely more on the road for opportunities. Parents in Kale often stated that if they are lucky enough to have additional support at home from other relatives, then they can afford to send their children away to continue their schooling. From this perspective, 'having access to education' can also be seen as a marker of strong familial support, which, according to villagers, strongly effects their perception of SWB.

Numerous items on the list: 'are kind to others,' 'have calm thoughts/calm mind,' and 'have the ability to take things lightly,' are in fact individual traits that represent qualities such as compassion, kindness, and thoughtfulness. Since most individuals that were interviewed in Kale possess these qualities, this could speak to the value of these individual traits within the village.

Another notable feature of this list is that two health-related items appear: 'are in good health' and 'have healthy children,' and that most individuals, (77% and 82% respectively), report that they possess these attributes. This indicates that a high percentage of individuals feel as though their health, and the health of their families, is good.

In assessing how this list reflects the fact that Kale is far away from the road, it is interesting to note that while 'having a successful business' is ranked sixth in terms of importance, only 23% of individuals do in fact possess this. Simultaneously, only 21% of individuals are in fact 'financially stable,' which is the eighth most important item on the list. Although villagers mentioned 'not having any debts'<sup>5</sup> as being an important item on their list, only 51% of individuals are debt-free. This information indicates that while most individuals feel physically healthy, most face some sort of financial difficulty. According to local people, the lack of business opportunities away from the road is exacerbating this problem and is a growing inequity of which villagers are keenly aware.

Given that Kale is quite far from both the road and from the main footpath that runs through Upper Humla District, it was not surprising that two transportation-related items/attributes—'have access to animals for transportation' and 'are able to walk independently around village

Table 1. Subjective well-being lists with percent of individuals possessing item/attribute.

KALE VILLAGE (Control Village)			GYEPO VILLAGE (Case Village)		
Rank*	SWB Indicators	%	Rank*	SWB Indicators	%
1	Have access to education	13	1	Have time for religious practice	76
2	Are kind to others	95	2	Have kind and positive thoughts	76
2	Have family members who get along	90	3	Savings	24
2	Are in good health	77	3	Have household where all members cooperate	98
2	Have a family	95	3	Are friendly with all people	100
3	Have time for religious practice	85	4	Have access to quality family time	91
3	Have children who can “stand on their own two feet”	26	5	Have chance to live with family members	91
4	Have opportunity to live in a separate house above village when older	92	6	Are able to avoid quarrels	80
5	Have healthy children	77	6	Have a healthy economy	26
6	Have a successful business	85	7	Are not greedy; content with what you have	54
7	Have enough food for household	21	8	Have time for leisure “party time” with friends	91
7	Have calm thoughts/calm mind	51	8	Able to have “tasty” foods	54
7	Have access to animals for transportation	95			
8	Are financially stable	72			
8	Do not have any debts				
9	Can take things lightly				
9	Able to walk independently around village and surroundings				

\* Equal ranks indicate that villagers designated those SWB indicators as having equal value.

and surroundings' were also included in the SWB lists. The 85% of villagers that had access to transportation all cited that they either had a *dzo* (a yak-cow crossbreed) or a horse, the two most commonly used modes of transportation. In terms of the second transportation-related attribute, 72% of individuals stated that they are able to walk independently, which could relate to the 77% of individuals that reported they are 'in good health,' since being able to walk from village to village without assistance is a sign that, from a physical health perspective, one is doing well.

A final significant feature of Kale's SWB list is that people cited the health and well-being of their children as being very important to the overall well-being of an adult individual. 'Have children that can stand on their own two feet,' (which villagers discussed more in terms of financial independence and in terms of housing),<sup>6</sup> was ranked third, and 'have healthy children' was ranked fifth. Although 82% of households indicated that they have healthy children, only 23% of households indicated that their children could 'stand on their own two feet,' which could reflect the limited opportunities for young people. Kale sees much less traffic on its footpaths, (both in terms of local travel and tourism), and therefore has no service businesses, (e.g. teashops, small markets), to serve as income generators for villagers. This limits the opportunities through which young adults can achieve financial independence—either they become successful in their traditional agro-pastoralist livelihood, or they take a high amount of risk and migrate, (to Kathmandu, for example), in search of employment. This, however, is an opportunity only available to a small few, typically to those whose families have the means to provide them with education and some savings with which to start their new life.

### **SWB Similarities Between the Two Villages**

To examine how the new road may influence villagers' sense of what items and/or attributes are important for their SWB, it was important to compare both lists and identify which indicators are unique to Gyepo, the village directly on the road. In Gyepo, the two most important factors for well-being achievement are 'time for religious practice' and 'have kind and positive thoughts,' the latter of which reflects a similar character attribute that was mentioned as important in Kale. This is exemplified in a remark made in a discussion on religious practice in Gyepo village, when an older man of approximately seventy years of age said:

I am lucky enough to live in a house on the mountainside above the village and spend my days praying. Others are not so lucky.

They must stay in their homes and help their children with the grandchildren. I am happy because I can spend my days praying, which I have worked my life to be able to do. It is calm, and I don't have to worry about much things. Right now, though, I am here [at his home in the village] because my daughter went to Simikot [the capital of Humla District] for health checkup and so I am responsible for the children.<sup>7</sup>

In addition to both villages' lists containing indicators that pertain to individual character attributes such as kindness and positive thoughts, another similarity between the two lists are the family-oriented items associated with well-being achievement: 'have a household where all members cooperate,' 'have access to quality family time,' and 'have the chance to live with family members.' Notably, most villagers, (98%, 91%, and 91% respectively), have access to these items/attributes, indicating that family relationships are strong.

### **SWB on the Road (Gyepo Village)**

Two specific finance-related items were included on Gyepo's well-being list: 'savings' and 'have a healthy economy.' Although these items are similar to the finance-related items on Kale's list, it is noteworthy that while Kale villagers placed 'not having debts' on their list, Gyepo villagers placed 'savings' on their list. Interviews suggest that the subtle difference between these two financial variables reflects the fact that villagers in Gyepo are sensitive to the reality that 'savings' could be used to start a road-related business. Despite this preference, at the time of the study, only 21% of households in Gyepo had marshaled any savings, and only 26% indicated that they had a 'healthy [household] economy.'

Another feature of Gyepo's list is the appearance of 'luxury items,' such as 'have time for leisure/'party time' with friends' and 'able to have tasty foods.' Although these items had the lowest value ranking, it is important to note that key informants commonly listed these comfort, or 'luxury-items,' as being important to SWB achievement. We note that these desires were in stark contrast to Kale, where most desired items satisfied very basic needs.

The inclusion of such 'luxury items' suggests that since householders now have easier access to an array of Chinese products, (e.g. foodstuffs, alcohol, textiles, cleaning supplies), via the road, their desire for these goods has grown and, according to local people, continues to grow. While we found the appearance of these items on Gyepo's list interesting, we also noted that only 54% of individuals have access to 'tasty foods,' a marker of 'luxury' in the

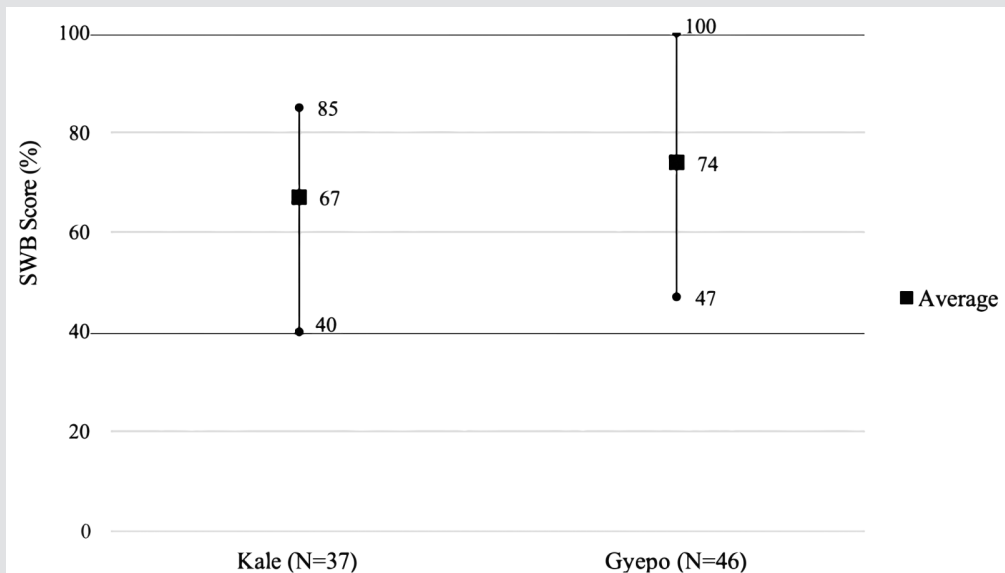


Figure 3. Subjective well-being attainment in Kale and Gyepo villages. Although Gyepo shows a higher maximum SWB score, the average scores for Kale and Gyepo (67 and 74, respectively) are similar.

community. According to our interview data, villagers without access to such items are keenly aware of the lack and perceived it as such. Common knowledge of these items is understood to be a new thing; also new is a blossoming sense of inequality, as awareness of who has, and who has not, grows. Important to our work on well-being is recognizing the significance of the fact that villagers themselves blame these newly-felt inequities on the road. This foregrounds local people's perception that, while beneficial in many ways, the road's arrival has precipitated the socio-economic conditions that create conflict.

This is also evidenced by the fact that the item 'are able to avoid quarrels' appeared as an SWB item in Gyepo. Villagers placed this item as sixth in terms of importance to SWB achievement, which further supports the notion that increased road-related competition, (due to there only being limited space in the market for businesses such as restaurants), has created the socio-economic conditions for a heightened number of disagreements between households in Gyepo. Our data show that 20% of individuals reported they were unable to avoid quarrels with members of other households in the village. Since our SWB assessment does not account for the fact that quarreling may have existed prior to the road, we again rely on our interview data, where we found that villagers often referred with concern to the fact that quarreling and disagreements have increased since the road's arrival. These well-being lists offer us a preliminary understanding of SWB among villagers in both Kale and Gyepo. Additionally, these lists provide empirical evidence that even within the same geographic region and cultural context, heterogeneity within SWB conceptualization exists.

### Proximity to Road and Subjective Well-Being Attainment

We also quantified villagers' well-being levels based on the amount of locally-defined well-being attributes and items each person, (n=83, one adult member of every household in the two villages), possessed. The following graph, (Figure 3), illustrates the mean, minimum, and maximum level of SWB attainment in both villages.

The similarity in the average SWB scores in Kale and Gyepo indicate that there is only a small difference in average well-being attainment based solely on villagers' proximity to the road. However, data also indicates that the range of scores is larger in Gyepo, with more individuals' well-being scores being centered on the mean in Kale, (representing a community more 'equal' in terms of their well-being achievement).<sup>8</sup>

There were only two individuals who managed to achieve a well-being score of 100 percent, both of whom live on the road, in Gyepo. Our ethnographic data helps to explain the situation of these individuals. One is a twenty-two-year-old woman that lives in a household with nineteen other individuals; (the family is polygamous/polygynous and therefore the household has more children than the average Humli home—additionally, the parents adopted four other children in the village who did not have any other family support).<sup>9</sup> During a conversation, she explained some of the reasons why she is so content with life:

My house has so many people! Sometimes I forget how many people. I have a newborn, and another child, and have much help with them. I never feel

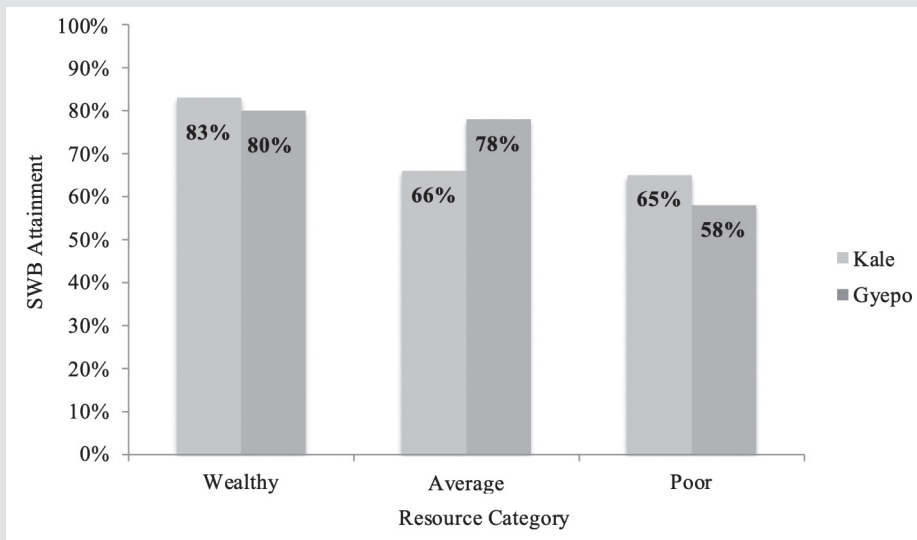


Figure 4. Average subjective well-being score by available resource category<sup>11</sup> Data suggest that those who are 'poor' living near the road, (in Gyepo), have, on average, the lowest SWB levels. On the contrary, the 'wealthy' away from the road, (in Kale), have, on average, the highest SWB levels.

alone. We always have family to eat food with and to do jobs [household tasks, agricultural work] with. He [points to her adopted father] also has a restaurant business on the road so there is always something to do, people coming through the village. We also have enough food, too. And sometimes when we don't want to cook at the home we eat at the restaurant with the guests, it's just easier sometimes.

Her response indicates that not only does she live in a household with a high level of social support,<sup>10</sup> but her father owns one of the three restaurant/hotels that operate directly on the road. The other individual who reported a well-being score of 100% belongs to a family that splits their time between Gyepo in the winter months and Hilsa, (the village right on the Nepal/China border on the Nepal side), during the summer months. This family owns and operates a restaurant/hotel in Hilsa for villagers that are travelling to the market in China. These are two examples of how individuals who can capitalize on the road can achieve an extremely high level of subjective well-being.

### Determinants of Intra-Village SWB Variance

In this section, we address intra-village SWB variability by both identifying and explaining potential reasons *why* individuals from certain households have attained a higher level of well-being than others. Particularly after the arrival of the first road in Humla, the ability to identify common determinants, (or predictors), among those individuals with the lowest well-being scores will aid in our assessment of which individuals did not seem to experience an increase in their SWB post infrastructure development.

### Available Resources

During our fieldwork, we also collected data on 'available resources per household' in both villages, using the same emic-focused methodology we used to gather information on SWB (Grocke 2016). This allowed us to classify each household in both Kale and Gyepo as 'poor,' 'average,' or 'wealthy,' and we were able to further investigate whether the amount of resources a household could command correlated with the SWB levels of individuals within that household.

According to our data, there is a relationship between the amount of available resources a household has and SWB scores. The following figure, (Figure 4), illustrates the differences in SWB levels between 'poor,' 'average,' and 'wealthy' groups within a village and across resource groups between villages.

### Subjective Well-Being Levels of the Wealthy

Numeric data illustrates that the average SWB score among wealthy villagers is very similar across the two villages. However, our interview data adds some complexity to this comparison. Villagers in Gyepo explained that the wealthy in their village are typically the ones engaged in business,<sup>12</sup> and therefore are constantly trying to succeed in the face of ever-increasing competition and road-induced stressors, which, according to villagers, has implications for their well-being. In contrast, the wealthy villagers in Kale have the highest SWB, (with an average score of 83%), of any group when assessing SWB by resource category.

This could be explained by the fact that Kale residents cited these individuals as being the select few in their village that have access to the amenities that the road

provides, (i.e. they can much more easily purchase foods to supplement their agricultural yields, which increases their food security and dietary diversity), yet they are not battling with the stressors that accompany life on the road.



Figure 5. Local monks making the offerings in the days leading up to the ceremony. The offerings are made from a dough-water mixture, and then painted. They are then given to the spirits throughout the ceremony to help heal the patient.

(Grocke, 2015)

According to interviews, another opportunity that brings a heightened sense of well-being to individuals is the ability to have a large communal *puja* (worship ceremony)<sup>13</sup> for loved ones when they fall ill. These ceremonies typically involve hiring monks from an adjoining village to conduct the ceremony, (the monks are typically paid in both food and money). Additionally, the family hosting the *puja* will cook food for the entire village for the duration of the ceremony.

These ceremonies are understood to be both medically curative and spiritually healing. According to one forty-six-year-old father in Gyepo who was in the process of organizing a *puja* for his fifteen-year-old daughter:

The ability for me to be able to organize a *puja* at my home is a type of medical service I can provide

to my daughter; I hope it will bring calmness to her, and I know it will bring calmness to us [the family]. This *puja* will last three days. I have brought monks from the next village to conduct the religious ceremony. My hope is that they [the monks] will help my daughter and bring good health back to her.

The SWB lists illustrate that 'have time for religious practice,' 'have calm/positive thoughts,' and 'are in good health' are all indicators of well-being. A ceremonial event like the *puja* described above is a way for individuals to attain these states of being. Ceremonies such as this can also be an opportunity for families to 'have access to quality family time.' However, ethnographic data suggests that it is mainly the wealthy families who can afford to access these well-being attributes/items via a ceremony or *puja* where the entire village comes together.

### **Subjective Well-Being Levels of those with an Average Level of Available Resources**

The SWB scores of those individuals with an average amount of available resources tells a different story. Data illustrates that this group in Gyepo has, on average, a 12% higher well-being score than the corresponding villagers from Kale. According to both observations and informal conversations, data suggests that this difference may arise since this group in Gyepo, as they are striving toward upward mobility, is realizing that this movement is in fact achievable. Villagers explained that if a road-related opportunity seems within reach, it increases their sense of well-being. This sentiment could explain why the overall sense of well-being is much higher among those with an average amount of available resources in Gyepo than their Kale counterparts, who may not have the sense that their lives have the potential to change drastically for the better. The difference between subjective well-being levels is most notable between these groups in both villages.

### **Subjective Well-Being Levels of the Poor**

On average, poor villagers in Gyepo have lower SWB scores than any other group. Their average score is 7% lower than that of the poor in Kale, and 20% lower than those with average levels in Gyepo. To help explain this, interview data suggests that the poor in Gyepo have higher household debts than other families, which makes it difficult to achieve SWB markers such as those related to financial stability, and afford luxury items, which were also cited as a SWB indicator in Gyepo. According to interview data, the poor near the road are also often plagued by feelings of inequity, as they have, relative to wealthy individuals, much less in terms of resources.

Considering many of these villagers spend most of their time concerned with acquiring basic necessities, it is not surprising that many do not have ‘time for religious practice’ or ‘the opportunity to pray/live above the village when older,’ two other markers of well-being. Many villagers with a low amount of relative available resources in Gyepo also made frequent reference to the fact that their animals are not worth what they used to be, (in terms of providing a means for transportation), and would often idealize a time in the past when the number of animals they had would directly correlate with their sense of contentment.

In comparison, the households with the lowest amount of available resources in Kale have an average SWB level that is nearly identical to that of the SWB levels of those with average available resource levels in Kale (65% and 66%, respectively); in Kale, many villagers said that animals still hold similar transportation value as they did in the past, which could help to explain this phenomenon.

### Social Support and Well-Being Attainment

According to our data, on average, Humli villagers work thirteen hours per day; this number increases or decreases, however, based on how many able-bodied adults are in the household and available to help with livelihood and/or domestic tasks. This led us to further investigate as to whether a person’s SWB increases as the number of able-bodied persons in their household increases.

Our findings were not entirely what we had expected. In general, villagers’ SWB scores rise as their family size increases, though individuals who are single heads-of-households actually have a *higher* average well-being score

than those individuals who live with one or two other able-bodied persons. The following graph, (Figure 6), illustrates this phenomenon:

This table illustrates that the mean level of SWB for an individual who lives in a household with only one able-bodied person is actually higher, (mean SWB = 73%), than that of a person who lives in a household with either two or three able-bodied persons, (mean SWB = 65% and 72%, respectively). Ethnographic data suggests that because social networks are so strong in the villages, people are very cognizant of the households that only have one able-bodied person and consciously try to help him/her in any way they can. For example, it was very normal for villagers to provide single heads-of-households with yields from their greenhouses, to take their animals with them to the yak camp, and/or to make purchases at the market in China on their behalf. This strong intra-village support of single heads-of-households could be helping to increase their overall well-being level.

By contrast, those households with two able-bodied persons, (45% of households in the villages make up this human capital category), have the lowest level of SWB. Even though this level of human capital is fairly low, it is relatively common; therefore, villagers do not take special care of household members in such a situation. This social support similarly does not extend to those families in human capital category three, whose average SWB level is also below that of the single head-of-households.

On the other hand, individuals with the highest average SWB level are those who have four or more able-bodied persons in the household, (mean SWB = 80%). The familial support that these individuals receive is not only beneficial

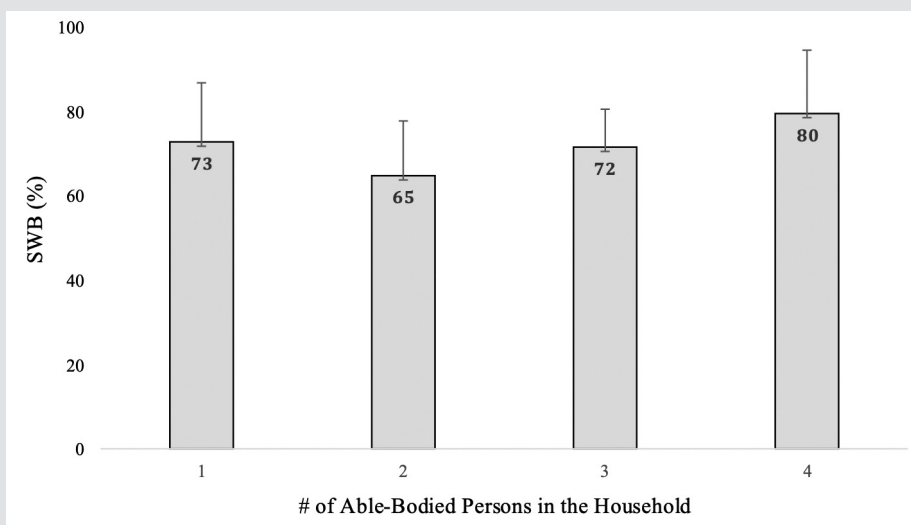


Figure 6. Subjective well-being scores by household size<sup>14</sup> (1= single head of household; 2 = two able-bodied people; 3 = three able-bodied people; 4 = four or more able-bodied people in the household).

in terms of the household being able to diversify their livelihoods, but it lessens the stress that any one individual needs to take on.

Additionally, this support is useful in the sense that if someone falls ill, others can cover the workload without it causing an overwhelming burden. Notably, however, there are only six households across Kale and Gyepo that have four or more able-bodied persons. This is partly a result of the fact that out-migration of villagers in Humla is becoming more common. With opportunities for both wage labor and higher education being so minimal in Humla, numerous individuals leave their natal villages in search of opportunity elsewhere.

The subjective well-being data demonstrates local notions about the economic, sociocultural, and psychological benefits of belonging to a larger household, ( $\geq$  four persons). Further, they show that in this society, being a single head-of-household results in a higher level of overall well-being than if one lives in a household with only two or three able-bodied persons.

## Conclusions

The SWB lists in Gyepo and Kale have both overlapping and unique components. The fact that there are differences shows how the identification and value ascription of SWB items can vary from place to place. This particular case illustrates that even two villages with the same ethnic, environmental, cultural, linguistic, and religious composition, located in the same region of Nepal, are different in terms of how community members conceptualize SWB.

This variability highlights the fact that what constitutes SWB is not universal, and that to make assessments regarding an individuals' subjective well-being level, an emic, ethnographically-grounded perspective is required. We found that using cultural domain analysis to quantify well-being in Gyepo and Kale provided useful information for beginning to understand villagers' value systems, how items of value are ranked by importance, as well as what proportion of individuals possess these valued items/attributes.

Our ethnographic data suggests that the arrival of the first road in Upper Humla District is creating a new environment, one with opportunity, but also with an increasing sense of stress, relative deprivation, and competition. These changes have introduced yet another type of inequality among villagers, and this inequality showed up in people's subjective well-being.

Those individuals who can capitalize on these road-related opportunities often have a higher sense of SWB. While we show that a high amount of available resources, paired with strong levels of social support, is associated with high SWB levels, our findings also highlight that the arrival of this road is perceived by local people already as a mixed blessing. It did indeed deliver, as promised, new goods, opportunity, and convenience. At the same time, our data, paired with the reflections of many of our study subjects, showed that this road's underbelly contained other unanticipated consequences, appearing to catalyze a widening of SWB levels, and introducing and then heightening a sense of relative deprivation.

Our research also illustrates the benefit of embedding a mixed-method approach into a longer ethnographic study. While our quantitative data provided us a way to compare SWB levels within and among the two villages, our ethnographic data provided us with stories, anecdotes, and examples that provided context for the SWB lists and helped us to understand the meanings behind the items and attributes that were listed by the informants. However, this is a study of two small communities with correspondingly small sample sizes. We urge that further ethnographic-based exploration of individuals' SWB be carried out in other areas of Nepal and throughout the Himalaya, specifically in those localities where rapid infrastructural change is taking place. Although individuals may be granted increased and/or easier access to resources and services, every person will not benefit equally. An assessment of how SWB is defined, and whether individuals can attain satisfactory, (or better), levels of SWB, is one way to identify those people who are not benefiting, or who are being negatively affected, by infrastructure investments and/or programs designed to enrich the lives of all.

**Michelle Ursula Grocke** received her Ph.D. in Medical Anthropology from the University of Montana in 2016. She is currently an Assistant Professor in the Department of Health and Human Development at Montana State University and the Health and Wellness Specialist for Montana State University Extension. Her research focuses on socio-cultural determinants of health, food security, dietary transitions, and drug addiction among rural populations. In her work, Michelle utilizes anthropological concepts and field methods to help design and evaluate community and public health programs in rural Montana, Peru, and Nepal.

**Kimber Haddix McKay** is an applied medical anthropologist with expertise in research design, quantitative methods, and evaluation. Her research focuses on the interplay between marriage systems and fertility, and on demographic and health trends in South Asian and African societies. After completing a post-doctoral training fellowship in demography at UC Berkeley, she joined the faculty at the University of Montana, where she is jointly appointed to Anthropology and the School of Community and Public Health Sciences. In between terms she enjoys teaching a regional seminar on global health at NYU Abu Dhabi, traveling with students to Nepal and Uganda.

**Thomas Foor** received his Ph.D. in Anthropology from the University of California, Santa Barbara in 1982. He specializes in ethnological and archaeological theory, quantitative and measurement applications with a particular focus on ethnohistorical and archaeological records. Dr. Foor did his undergraduate work and earned his M.A. in anthropology at The University of Montana. He did his post-doctoral work at the University of Michigan in mathematical psychology and is a Professor Emeritus in the Anthropology Department at The University of Montana.

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## Endnotes

1. The village pseudonyms we chose are Tibetan: *Gyepo* (pronounced Gye-Pō), which means fast, and *Kale* (pronounced Kah-Ley), which means slow.
2. In Gyepo, we worked with five key informants (three men, two women), while in Kale we worked with six key informants (three men, three women). We stopped recruiting key informants once their responses became repetitive.
3. In preparation for this initial free-listing exercise, we worked with our research assistant to translate this question from English to the local dialect of Tibetan, careful to not lose the integrity of the meaning. After much discussion, we settled on the phrase '*kherang ki drongsep ki keyduk-la ghari zjung na doethpa khangsong ngam,*' with the phrase '*doethpa khangsong*' as our best translation of 'content or satisfied with life,' which we decided most closely resembled the essence of the word well-being.
4. We obtained SWB information from at least one adult (eighteen years of age or older) from each household (HH) (Gyepo = 36 HH, Kale = 31 HH).
5. The nature of debts in both Gyepo and Kale is worth mentioning, as debts can take on many forms. Not only can households have debts in the form of owing cash to another household or villagers, but debts can be in the form of labor, (i.e. helping another household in their fields), or in the form of food, (i.e. owing another household either ground flour if their mill was used, or traded food if that was agreed upon).
6. If a daughter was married and living in her affinal household, she was considered as 'standing on her own two feet' as the parents generally did not have to worry about her as much. Also, if a child was running a business, they were considered as 'standing on their own two feet' as well. In general, villagers expressed this attribute less in terms of the biological and/or mental health of their child, and more in terms of their independence, both financially and in terms of their living situation.
7. All Buddhist villages in Upper Humla have houses above the village, (at a slightly higher elevation than the village on the same hillside), where elderly can go to live and pray when they are older. The elderly typically spend months at a time in these houses, and their families bring them food and tea every few days. However, it does tend to be the larger families that have higher levels of social support, (and don't need the elderly to, for example, watch the children from time to time), that can afford to have their parents or grandparents live above the village in a 'religious house.'

8. Although we interviewed at least one representative from each household in both villages, the fact that we did not obtain data from each person does lower the representativeness of our sample.

9. Although polyandry, (where a woman marries a band of brothers), is traditionally more common in the ethnic-Tibetan communities in Upper Humla, there are also some families that practice other forms of polygamy. In the case mentioned here, the family practices polygyny, when a man is married to more than one wife. In recent years however, more and more families have begun to practice monogamy.

10. Here we refer to social support as the number of able-bodied adults that help with household livelihood tasks, (i.e. agriculture, cattle, trade, business ventures, household tasks, raising children).

11. It is notable that the number of people in each available resource category is different across villages. Data illustrates that Kale is much more equal in terms of resources. Because available resources are positively correlated with SWB, this could explain why there is slightly higher variance amongst the SWB levels in Gyepo. In Kale, most villagers (83%) have an average number of available resources, while only 7% are wealthy and only 10% are poor. In contrast, Gyepo has fewer villagers constituting the average group (55%) while 16% are wealthy, and 29% are poor. Of the 29% of the households in Gyepo who are poor, we see a low average well-being level of 58%.

12. Of the wealthy households in Gyepo, 60% reported having a “successful business”; the other 40% of wealthy households reported that they are trying to start a business.

13. There are, of course, many smaller-scale religious ceremonies or rituals that occur. In some families, these small-scale rituals occur as often as every day. The ceremony described here, however, included the entire village and occurred over a three-day period; this is a much more infrequent occurrence and is typically hosted by families who have the financial means to do so.

14. We also tested whether numerous other variables, (land abandonment, presence of a female head-of-household, age of individual, and/or presence of a greenhouse or business), had a statistically significant relationship with SWB, but no such relationships exist.

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