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"Karm Hi Pooja Hai (Work is Worship)" The Determinants that Influence the Subjective Health and Well-Being of Cycle Rickshaw Wallahs in Varanasi, India

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"Karm Hi Pooja Hai (Work is Worship)" The Determinants that Influence the Subjective Health and Well-Being of Cycle Rickshaw Wallahs in Varanasi, India Benjamin N. Bryer Dr. Azim Khan, Academic Director Chris Kurian, Project Adviser SIT Study Abroad India: Public Health, Gender and Community Action

Spring 2018 Semester

Table of Contents

Abstract	2
Glossary of Non-English Words	3
Acknowledgements	4
Introduction	5
Background and Prior Research	7
Methodology	10
Body	11
Age, Physical Appearance and Years Working	12
Daily Income and Work Hours	13
Money and Health	15
Ability, Accidents and Appearance	17
Perception of Work	19
Treatment by Others	21
Competition	22
Ownership	25
Environmental Conditions	27
God and Doctor	29
Accessibility, Affordability and Quality of Health Services	31
Ganja, Alcohol, and Tobacco Use	33
Living Conditions and Location	37
Presence and Role of Wife	39
Children's Impact	41
"Breaking the Cycle"	41
"Insurance Mechanism"	43
Social Support	46
Discussion and Recommendations for Further Study	47
Study Limitations and Ethical Considerations	49
Appendix	50
References	51

Abstract

A total of 11 interviews were conducted over a 4-week period to study the subjective health and well-being of cycle rickshaw drivers in Varanasi, India. Varanasi was chosen as the location of the study because cycle rickshaws remain an integral and common mode of transportation within the city. Using ethnographic and qualitative research methods, participants were asked semi-structured interview questions to determine their personal definitions of a good and healthy life. Participant observation was also a critical method of data collection, as it gave insight into the daily routine and schedule of a rickshaw puller.

Three overarching themes were identified throughout the study. The work-life, religion, and family dynamic, as well as the multiple factors that influence these three categories, were the most important determinants for subjective well-being. Common themes arose among responses, yet certain factors, such as living conditions, physical ability and presence of children, created a clear divide in the responses among participants. Although agency and personality impacted a respondent's interpretation of their life satisfaction, key factors such as the role of the government can be underlying influences on the subjective well-being of *cycle rickshaw wallahs*.

Glossary of Non-English Words

- Wallah Hindi origin, from Miriam Webster: "a person who is associated with a particular work or who performs a specific duty or service"
 - An individual defined by his/her occupation, mostly associated with manual labor jobs
 - i.e.: A "cycle rickshaw wallah" is a term used to describe the person whose job is to pull rickshaws.
 - o In this paper, it is used interchangeably with driver and puller
- Rickshaw a three-wheeled bicycle for public hire, with a (covered) seat for passengers behind the driver
 - o Predominantly used in South Asia





Acknowledgements

This independent study would not have been possible without the help and guidance of several contributors. First the author would like to thank the men who participated in the study for their honest answers and willingness to share sensitive details about their life. Additionally, those interviews would not have been possible without the help of Shyam Ratan, who translated between Hindi and English and created a clear line of communication between the author and the respondents. Similarly, respondent #1 was essential to the project, as he set up each interview. He helped the author establish initial trust and credibility, which would have been much more difficult without him. Goutam and Archna Merh helped to link the author to respondent #1 and the interpreter, and their guidance and connections were greatly appreciated. The edits, suggestions, and direction proposed by Chris Kurian, Abid Siraj and Dr. Azim Khan helped to strengthen the author's arguments, intentions, and clarity within the study. From the proposal to the final draft, their guidance was invaluable. Lastly, the author would like to thank Bhavna Singh and the SIT staff for providing support and a foundation in the Hindi language.

Introduction

The research question explored in this study is: How do "cycle rickshaw wallahs" define health and well-being and what are the determinants that influence their beliefs and experiences? The Indian city of Varanasi was chosen because cycle rickshaws remain an integral mode of transportation in the city. Many migrants from surrounding cities and states visit Varanasi looking for work. It is a popular tourist destination, and many religious people go to visit the holy Ganges river, temples and sacred sites around the city. Cycle rickshaw pullers were chosen as the focus of the study because these vehicles have been a part of the Indian transport system since as early as 1880 and continue to serve commuters in major cities around the country (History of Cycle Rickshaw, 2012).

It is estimated that over 2 million rickshaws line Indian roads, pulling 6-8 billion passengers a year (Rajvanshi, 2002). Yet these numbers are likely an underestimation, as many vehicles may not be registered and there are no reliable statistics available. Cycle rickshaw pullers are of special interest because they must physically bear the weight of the passenger as they pedal towards to determined destination. Since their introduction to Indian infrastructure, the design of the vehicle has not been significantly improved since the early 20th century (Rajvanshi, 2002). While the customer sits comfortably in the back seat, the rickshaw puller may have to struggle to pedal among heavy traffic and difficult road terrain. The nature and status of their work and limited incomes has ramifications for the quality of their lives, health and wellbeing and their subjective assessments of the same.

The intent of this study was to understand the subjective health and well-being of cycle rickshaw pullers. Quality of life and life satisfaction are extremely important terms for an individual's self-perception of well-being and can be defined by a variety of factors, including context, livelihood and personal perceptions. Additionally, the expression "psychosocial health" is a term that encompasses an individual's mental, social, physical, emotional and spiritual health. Well-being is an umbrella concept that can include social and financial aspects outside of the realm of health or disease (Shams, 2015). Well-being, or lack of it, varies by context. For example, a study of rural life in Bangladesh found that quality of life was measured by the term "shukh-shanti," meaning "happiness and peace" (White, 2010, P.4). Evaluation of one's "happiness and peace" was determined by, as one villager stated, "...rice, clothes and respect" (White, 2010, P.4). These three determinants indicate specific cultural and social dimensions that attribute to an individual's overall self-perception and life satisfaction. Survival, material, and relational factors interact to create a broader sense of well-being in rural Bangladesh. This study aimed to find what determinants are the "rice, clothes, and respect," of cycle

rickshaw pullers in Varanasi, India. In this study, open ended subjective well-being questions were used to allow participants to determine the criteria that make up their perception of a good quality of life, as well as the weight and importance of each piece of criterion (Pavot & Diener, 2008).

¹ The nuances and differences between these terms, including psychosocial health, will not be dissected in this paper are just mentioned to indicate the ways in which a respondent may describe his own life and experiences. Quality of life, life satisfaction, subjective well-being and psychosocial health are used interchangeably.

There are many unique determinants that influence the health and well-being of selected participants, yet three overarching themes were identified throughout the study. The factors that impacted the work-life of a driver, such as age, daily income, length of work day, years working, competition, ownership of vehicle, distance traveled, and work conditions were extremely important for the daily health of a cycle rickshaw puller. The second major theme apparent in the collected data was belief in and relationship to God. Religion had a major impact on an individual's inclination to use ganja (marijuana) or utilize medical services. Lastly, a respondent's family dynamic and social support system were critical components for good psychosocial health. A person's wife, children and living conditions strongly influenced their happiness and life satisfaction. These themes, among other determinants, will be explored in depth throughout this research paper to help provide a complete picture of the factors that impact the subjective health and well-being of cycle rickshaw pullers in Varanasi, India.

Background and Prior Research

Researchers with the Wellbeing in Developing Countries Group at the University of Bath, led by Dr. Sarah White, compiled analyses of subjective well-being research studies in low and middle-income countries (White, 2010). Three dimensions of well-being were identified, with each category containing objective and subjective components. The subjective aspects were concerned with an individual's perception, assessment and satisfaction with the objective characteristics of each dimension. The material dimension covered an individual's objective income and socioeconomic level, as well as their employment status and wealth. The social dimension housed a person's relationships with others and their network of support and

access, among other factors. Lastly, the human dimension was determined by education, household structure, physical health, and presence of love and care. How each person interacts with these three dimensions is inherently unique and individual.

White's formula of "doing well, feeling good, doing good, and feeling well" will help support the results found during the conducted study on cycle rickshaw pullers. "Doing well" refers to the material dimension, such as economic wealth and stability. "Feeling good" covers the subjective aspect of well-being, such as perception and satisfaction with one's current situation. "Doing good" is concerned with the moral values and ethics that one abides by, such as the importance of living a grounded life and helping others. Lastly, "feeling well" deals with health specifically, and can be affected by the presence of disease or illness.

Many researchers who have used a life satisfaction scale in their study were critical of it for many reasons. If life satisfaction is only evaluated at a single point in time, people will base their responses on temporarily accessible information and memories instead of a careful holistic evaluation of their life (Pavot & Diener, 2008). Participants will search through their immediate or recent context or experiences to subjectively evaluate their quality of their life. Responses can also be influenced by mood and personality and may only represent a person's life satisfaction on that specific day, rather than their entire life. Personality plays a large role in quality of life as well, since people react differently to circumstances in their life. A health challenge may severely impact a person's quality of life, whereas that same instance may not affect another person's life satisfaction. On the positive end, participants have the power to determine their own quality of life criteria. Subjective well-being is highly correlated with stronger social relationships, marital satisfaction, and a decreased risk of suicide. It is important

to consider the emotional or contextual factors that may influence a participant's response at a given time (Pavot & Diener, 2008).

9

The life and health needs of cycle rickshaw drivers remains an understudied subject. A thorough search was completed to find related studies and articles about health and well-being of this vulnerable population. One study conducted by researchers at Xavier Institute of Social Service recruited 1,000 cycle rickshaw pullers in Ranchi, India to investigate their level of health seeking behavior (Kumar et. al., 2016). The main finding of the study was that cycle rickshaw pullers are unable to prioritize their own health due to a variety of reasons, including poverty, lack of time and resources, negligence and illiteracy. Many pullers had no or little access to health services and occupational illness and injury was common.

Cycle rickshaws are prone to accident and cause many injuries each year. A study conducted Dr. Sanjay Meena and colleagues utilized observational methods to document the rate of treated injuries at a Lucknow hospital due to cycle rickshaw accidents (Meena et al., 2014). The most common cause of injury was collision with moving vehicles, and both drivers and occupants reported injuries throughout the study. The vehicles themselves are very vulnerable and susceptible to injury due to their outdated design.

An article from the Times of India portrayed a sense of frustration among cycle rickshaw drivers due to the competition from auto and battery rickshaws and city busses (Rao, 2017). Many drivers want to buy auto rickshaws but do not have the means to purchase these expensive vehicles. Also, since there is no fixed price for a rickshaw ride, drivers are subject to the cheapness of their customers.

Methodology

This independent study project was conducted over a four-week period from mid-April to mid-May 2018 in Varanasi, India. Due to constraints such as extreme heat and work schedules, each interview was conducted in the early morning, between 6 and 10 am. Each participant who was formally interviewed was compensated with 100 rupees for potential loss of income during the length of the interview. The research followed a semi-ethnographic format to generate sufficient data about the population of interest. The main method of data collection was qualitative, in-depth semi-structured interviews with drivers. A total of 11 interviews were conducted with the population of interest. Each respondent was male, as pulling rickshaw is an extremely male-dominated occupation. Out of the total interviews, 9 were semi-structured, in depth interviews while the data from the other 2 respondents was collected through informal conversations at a local *chai* stall. Most of the semi-structured interviews were conducted in a shaded spot at *Tulsi Ghat*, overlooking the river.

While extensive information was derived from the 45 minutes interviews, rich data was also gathered from participant observations. Notes and conversations during routine rides provided important insight into the workload and daily routine of a driver. Lastly, a critical piece of this study was the author's ability to personally observe participants' home and family environments. Three respondents showed the author their living situations and introduced him to their family, including one respondent who invited the author to dinner at his house along with his wife and children. The observations through these interactions were extremely informative in understanding the role of the family and living situation for their psychosocial health. Due to language constraints, a local interpreter helped to conduct each interview. At

times, questions were directed in Hindi towards the participant. For more complex questions, English questions and Hindi answers would be translated by the interpreter.

Informed consent was taken before the start of each interview. After an explanation of the topic and purpose of the study project, participants were asked for verbal consent to an interview and to being recorded on a cell phone. A written copy of the consent form was on hand in case a participant required more information, yet each respondent gave consent verbally. The confidentiality, anonymity, and privacy of respondents are honored throughout this paper. All names of participants have been replaced with "respondent" and their corresponding interview number. All recordings and notes will be safeguarded and will only be reviewable by the researcher and the SIT academic director.

Body

Table 1. Age Distribution Table

Respondent #	Age (years)	Years Pulling	Est. Daily Work Length	Est. Daily Income
		Rickshaw	(hours)	(rupees)
1	43	21	6-8	200
2	39	22	8-9	150-200
3	46	25	8-12	200
4	56	25-30	10-11	0-400
5	40	17	12	600
6	65	35	12	100-500
7	60	30	NA	100-500
8, 9	NA	NA	NA	NA
10	18	2	6	200
11	35	15	12	250

Bryer: Karm Hi Pooja Hai 12

Age, Physical Appearance and Years Working

The average age of respondents was 45 years old, with the oldest being 65 and the youngest 18 years old. Among the participants, the average number of years working as a cycle rickshaw puller was 21. The oldest participant had been driving rickshaw for 35 years, the longest period among participants. Equally, the youngest respondent reported having only worked for two years at the time of the interview. When cross-analyzed with various factors, age was not determined to be significant influence on the psychosocial health of participants. Physical ability, work day length, and income did not appear to be strongly correlated with the age of the participant. Yet, unsurprisingly, it was found that some older respondents reported having less energy or more difficulties with their profession as they grew older. The oldest participant, respondent #6, explained that it has become much harder for him to pull heavy loads of people and goods as he ages. His body and joints are painful after a long day of work and he especially feels the effect of his old age in the summer. When asked how long he plans to continue pulling rickshaw, he responded that he will work until he is physically unable or when he doesn't feel confident anymore in his strength to pull customers.

Yet, energy levels also varied widely among the elder participants. 60-year-old respondent #7 told of a story from less than a decade back. He was hired by a tourist couple who wanted to see Varanasi and its surrounding areas in one day. Not only did they see many of the city's narrow streets and bustling markets, but this driver even pedaled the tourist couple 10 km both ways to the Buddhist pilgrimage site Sarnath. By car, a trip to Sarnath from Varanasi can take between 30-45 minutes. Yet, to pedal by rickshaw while carrying two customers requires a certain level of strength and energy. He boasted that he had pulled the rickshaw that day for

60-70 km, or 37-43 miles. While a natural aging process may create difficulties for these manual laborers, one's own physical ability, motivation and personal will appeared to be more influential factors for a respondent's income and health.

Physical appearance can also help paint the picture of the quality of life and status of these men. While talking with respondent #9 and respondent #7, they showed off their cracked and calloused hands from years of gripping the handlebars. Many of the men wore dirty or stained collared shirts. Some wore pants while others wore large cloths on their lower half that helped them keep cool in the summer heat. Most notably, almost every cycle rickshaw puller observed was wearing open toed *chappal*, or sandals. Respondent #5 was the only participant observed wearing closed-toe sneakers. Unsupportive sandals can were a common sight among the city's rickshaw pullers, and although they may be the cheaper option for these men, they can create physical ailments over time.

Daily Income and Work Hours

Qualitative data analysis determined that there exists a positive correlation, though not substantial, of income and hours worked. On average, respondents reported a daily income between 200-400 rupees, equivalent to \$3-6 U.S. dollars. On a slow day, respondent #3 admitted that he is unable to earn any income for the day if he does not attract any customers. On the other hand, respondent #5 stated that if you are willing to work hard, you will not struggle to earn and find customers. This rickshaw driver had the highest reported daily income, with a stated daily earning of 600 rupees, or \$9 U.S. dollars.

For many cycle rickshaw pullers, their work day starts shortly after sunrise. Respondent #4 starts his day at 4 am, respondent #2 at 5 am and respondent #5 at 6 am. Each man described his work day in two parts, as the severe, midday heat forces them to take a break and rest. A normal work day for respondent #5 is a 12-hour routine between the hours of 6 am-12 pm, and 4 pm-10 pm. Respondent #6 also reported that he works around 12 hours a day, and will make a maximum of 500 rupees, or \$7.50 U.S. dollars. The only polled cycle rickshaw puller who varied significantly from the average daily schedule of the participant was respondent #11. He reported that he pulls rickshaw throughout most of the night and then rests in the midmorning. When asked if he receives customers at night, he responded that he transports many students and night-shift workers. Since this respondent does not live with his family in Varanasi nor does he have a house to sleep in, he would rather work throughout the night than worry about finding a safe and comfortable place to sleep.

Income and day length were consistent among age group groups. Yet, the youngest and newest cycle rickshaw participant, respondent #10, reported that he only works about 6 hours per day, resulting in 200 rupees profit. A possible reason for his significantly shorter work day may be attributed to his share of responsibilities in life such as his lack of dependents. He is not married, nor does he have children to look after. He lives at home with his family and does not have to provide his daily income for rent or food since his father is also working as a cycle rickshaw puller. Therefore, he does not feel obligated to work exhausting days since he does not have anybody depending on him.

Although income was correlated with the number of hours that he works in a day, a driver's flow of customers is also heavily determined by the season. During the tourist season in the

winter months, cycle rickshaw *wallahs* tend to have a higher daily income as many tourists prefer to take cycle rickshaws. Also, as respondent #2 pointed out, many locals know the fares and are not willing to pay more. Yet, as many tourists are unaware of a fair price for a ride, a driver may charge them more. As tourist season declines, so too may the daily income of cycle rickshaw pullers. Small deviations in daily income can cause significant harm and stress to an individual and may cause him to work more hours and longer days.

Money and Health

It is logical that money was a major topic and concern for all respondents. A person's ability to attain good health with their daily income is directly related to Sarah White's definition of the material dimension of subjective health and a person's ability to "do well" (White, 2010). With an average income of 200-400 rupees a day, a cycle rickshaw driver constantly struggles to provide basic survival needs, such as food, water and shelter, for him and his family. A participant's perception of a "good life" was commonly correlated with one's financial situation. The more money one has, the more comfortable one may be in life. Yet, a common perception of respondents was the natural correlation between money and health. When asked what makes him feel healthy, respondent #1, without hesitation, said that being healthy is having money for food. "If I don't have money, then I won't have good food, and then I won't have good health," he added. With concern, he explained that, due to inflation, prices for goods such as vegetables are rising, which makes it harder for his family to eat healthy foods.

Respondent #4 added that if he earned more, he would have better hygiene and health. He would eat healthier foods and live in cleaner conditions. Respondent #5 stated that his only

expectations for his life is to earn enough money to keep himself healthy. If he is unable to work or receive financial support, he acknowledges that his health will be severely impacted. Food, medical services, and shelter are some factors that respondents identified as being necessary for one's health. Yet, each determinant of health may come at a cost, and an individual may have to make concessions or compromises on his health or his pocketbook due to the challenge of affording good health.

The relationship between food and health is directly tied to the definition and experience of poverty within the Indian context. Food security is one of the main determinants that helps to categorize those labeled as BPL, or Below Poverty Line. In an urban context such as Varanasi, the Indian government determined that a person is BPL if they spend 33 rupees, or 50 ¢ a day or less on "food, education, health, electricity and transport" (Choudhury, 2015). This significantly low bar set by the government for the definition of poverty in India has been met with heavy criticism, as many people perceive these category determinations as an effort to keep the country's official poverty rate low (Choudhury, 2015). A cycle rickshaw puller's daily expenditure on food was unable to be determined in this study, but it can be deduced that many participants fall in and out of the BPL definition depending on their daily earnings. If they are categorized as BPL, they may be able to receive welfare and government assistance. Yet, if their meager daily income is higher than the BPL limits, they will not receive financial help from the state.

The role of money in a participant's subjective well-being can also be described in terms of White's classification of the "doing good," or moral dimension of well-being (White, 2010). When a small child interrupted the discussion with respondent #7 to ask for money, the

participant reached into his shirt pocket and gave the boy a few coins. Instead of becoming aggressive or rude, the participant chose to share his minimal earnings with those that may be less fortunate than him. The ability to do good and help others can have a positive influence on an individual's life satisfaction.

Ability, Accidents and Appearance

Pulling rickshaw is an extremely demanding profession. One must physically pull the weight of customers up inclines and through narrow streets over long distances all while trying to avoid colliding with the blur of cars, motorcycles, cows and people in the roads. The length of one's work day, and consequently the income one makes, is heavily dependent on one's own will and physical ability, or their "human dimension" of well-being (White, 2010). Age had a strong influence on physical ability, although many of the elder respondents shared that they still work long days, despite the increased difficulties of aging. The oldest respondent reported working more hours per day than the youngest person interviewed. Rather, physical ability varied case by case, regardless of age. Physical ability was related to an individual's history of injury and accidents, either while driving rickshaw or before.

During participant observations, a cycle rickshaw puller showed off the scars covering his stomach and leg, as well as his enlarged left elbow that was possibly due to fracture and swelling. Respondent #5 told the story of when he was hit by another cycle rickshaw whose driver was intoxicated. His vehicle was knocked over and he fractured his wrist and forearm. He had to get a cast on his arm and was out of work for may weeks. He lost income since he was not able to work, and his medical expenses of 4,000 rupees put a huge burden on him and his

family. Although his arm is healed now, his accident severely impacted his physical ability to pull the rickshaw for an extended period. Respondent #6 reported that while driving one day around two years prior, a stone got lodged in his wheel and his cycle flipped on its side. Though he was not seriously injured, the event was a sharp reminder of the dangers that driving rickshaw can have on his physical health.

An interesting note found through interactions with physically impaired rickshaw pullers is that driving a rickshaw may be a possible alternative for an individual who has suffered an injury but is still able to work. For example, respondent #8 is missing four fingers on one of his hands and is only left with a thumb. He mentioned that before pulling rickshaw, he used to work in a factory on an assembly line. He got his hand stuck in a machine one day and lost all the fingers on one hand. After recovering from his injury, he was unable to continue working at his job or any other occupation that required him to predominantly use his hands. Since the power of pulling rickshaws comes from the legs, he found that he could wrap his thumb around the handlebar and pedal customers without increased difficulty. Despite its physical demands, the ability to pull rickshaw and earn an income after a debilitating injury was very important aspect for several respondents.

Respondent #11 suffered a severe leg injury over 15 years prior yet still finds pulling rickshaw to be a reasonable way to provide for himself and his family. Before coming to Varanasi, he had worked in mining and quarrying. While working, he fell from a high point and fractured his right leg and his spine. After recovering from intense medical care, he had to find another way to earn a living. Since there were no quality jobs in his village, he came to Varanasi in search of work. He first went to a rickshaw garage to rent a vehicle, but the owner did not agree because

of the condition of his leg. He searched for other jobs but was also turned away because of his disability. With the "help of God," his friend helped him get a rickshaw of his own and he has been working as a cycle rickshaw *wallah* for over a decade. It is still extremely difficult for him to exert force with his legs due to his disability, but he sets reasonable limits for himself to maintain his strength. He does not pull more than one customer and avoids routes that he knows include an incline or a hill. To compensate for his inability to pedal far or carry many passengers, he works long hours and often works throughout the night.

Physical ability is a critical determinant for the health of cycle rickshaw pullers. Without the strength of their bodies and legs, they would be unable to work and earn a living. Yet, due to the safety risks of their occupation, many drivers have suffered accidents that severely impact their ability to perform their job. However, pulling a rickshaw also provided an opportunity for those with physical injuries to earn a meager living.

Perception of Work

As most of their days, and work life, are consumed by pulling rickshaw, it is important to analyze how each participants' answers reveal insights into their work satisfaction. Their perception of their work ties into the need for "feeling good," or satisfaction with one's current situation (White, 2010). Respondent #8 summed up his attitude towards pulling rickshaw with a famous saying: "Karm hi pooja hai," which translates to: "Work is worship." He feels consumed by his work, as his days, and his entire life, revolves around pulling rickshaw. He added that he values the lifestyle of rickshaw pulling because it gives him total independence. He can work when he wants to and is not tied to a contract or a set work schedule. Even though he rents his

rickshaw from the garage owner, he is his own boss in the sense that he perceives that he has full control over his work life.

Many respondents echoed these sentiments and voiced their appreciation for working on their own schedule. Respondent #10 said that he sees himself as a freelancer, as he does not have to cater to the needs of a boss. Respondent #7 agreed, adding that pulling rickshaw depends on his own will, energy levels, health, and environmental conditions. He has power and control over his income; he can choose to work four hours in a day or twelve. Due to its flexibility, pulling rickshaw is also a desirable option for migrants or for those whose family does not live in Varanasi. Respondent #11 explained that he is unable to work a "permanent job" because he has an obligation to his family, and he tries to visit them once a month in their native village. If he was working under contract, it would be much more difficult for him to take time off and care for his family. By pulling and renting rickshaw, he can return his vehicle whenever he chooses to leave the city and visit his family.

For other respondents, pulling rickshaw was the best option available to them due to their limited education, caste and economic background. Due to his classification as a member of a schedule caste, respondent #3 explained that there are very limited job options for him and others in his caste. Thus, he, along with 10-20 other people in his caste from his village, chooses to pull rickshaw because it is the best option for him to earn a living. If he wasn't pulling rickshaw, he would be working in agricultural fields or making bricks under a supervisor and work schedule. Respondent #4 explained that many people leave his village to come to Varanasi in search of better opportunities. Pulling rickshaw is a better alternative to laboring in fields near his village. Although pedaling all day can be exhausting, some respondents reported

that pulling rickshaws makes them healthy and strong. Respondent #5 added that he does not need extra exercise because he is active all day.

Despite the strength that he may build from pedaling rickshaws, respondent #1 explained that he feels weak in many ways. Whether it is when people take advantage and exploit him, or the minimal income he earns a day, he acknowledged that being a rickshaw puller is a very difficult job and takes a toll on his health and self-confidence. Respondent #2 replied that in pulling rickshaw, there is no future. He does not foresee that pulling rickshaw now will help him live a better life in the coming years. An individual's satisfaction with their work has a very strong influence on their overall health and well-being. Cycle rickshaw pullers reportedly value the flexibility of the job, and the sense of power and control that comes with it. Yet, despite having ownership over their time, several acknowledged the difficulties that a low-income, high-exertion occupation can create.

Treatment by Others

One's perception of oneself is often influenced by how one is treated by others and perceived within society. Especially within the hierarchical nature of Indian society, manual laborers, such as cycle rickshaw pullers, may fall near the bottom of the ladder, in terms of respect or power. When asked how they are treated by customers and people within the city, each polled respondent acknowledged that they are often taken advantage of in society, but treatment from customers always depends on the empathy of the individuals. "Not all fingers on a hand are equal length," answered respondent #5, meaning that not all people are the same. Some people may try to act superior to him, but most of the people he meets are nice to him. Since

there is no fixed price for a ride, a customer can bargain to pay the price that he deems the trip is worth. Some people try to pay less than the fare, and some people tip more than the fare, so the actions of his rude customers are counteracted by those of his best customers. Respondent #6 added that he has had bad experiences with drunk customers who tend to be more obnoxious and rude, but he has also met nice customers who invite him for *chai*. Respondent #1 mentioned cycle rickshaw pullers are often easy targets and he has been the victim of harassment, especially from shopkeepers and police. Sometimes the shop owners will yell and verbally abuse him to leave an area, or a police officer may use physical force to send his message.

22

When these abuses happen, respondent #1 mentioned that he tries to keep quiet and follow order so as not to cause any more trouble. He often feels humiliated and added that people do not tend to verbally or physically abuse those who drive cars. Due to their lack of power within society, cycle rickshaw pullers are often compliant to the attitudes and behavior of those they interact with. They can only hope that their customers will be genuine and generous, but they are often at the mercy of the mood and personality of the people they transport. A cheap customer, a rude store owner, or an abusive police officer may have significant impacts on their self-esteem, which may lead to negative mental health outcomes.

Competition

The cycle rickshaw is one of the oldest modes of transportation in India. In recent decades, India's major cities have introduced metro railway systems², cab and taxi services such as OLA

² At the time of writing, Varanasi does not have a metro system in place.

and Uber, and modern versions of the cycle rickshaw such as the auto rickshaw, or "auto", and the battery powered e-rickshaw, or "totos" (as they are referred to in Varanasi). Like countless other workers in various industries, cycle rickshaw wallahs not only compete amongst themselves for customers, but also with the ever-increasing transportation options present in the city.³ A cycle rickshaw can only fit two people comfortably and is the slowest option since it is man-powered. A participant's perception of auto and battery rickshaws provides insight into the effect that competition has on their income and work-life.

Respondent #2 reminisced about his steady income before three years ago, but since then, the presence of autos and *totos* have hurt his income. Respondent #3 points his finger towards government initiatives such as "Green India, Clean India," that he says have helped subsidize *totos* so that battery operated, "no emission" rickshaws can replace other non-efficient or pollution-causing vehicles. The subsidy of *totos* has led to more e-rickshaws on the roads, which has hurt the business of cycle rickshaw pullers. In fact, in November 2017, a government committee in New Delhi recommended that battery powered e-rickshaws should "completely replace" the presence of cycle rickshaws in the capital ("Replace cycle rickshaws with e-ricks," 2017). In an affidavit filed by the Delhi police in 2009, the law enforcement officers saw cycle rickshaw pullers as a threat to the efforts to make Delhi a "world class city," citing their slow speed and inefficiency and adding: "The rickshaw-puller lives on the pavement, rests in his rickshaw, eats and washes himself on the pavement which... causes strain on the civic infrastructure of the city... giving rise to social problems in the city" ("Police opinion on plying of

³ Auto rickshaws are semi covered, run on petrol, can travel long distances and can comfortably hold 3 people, with a maximum of around 5-6 people. Totos are powered by a rechargeable battery and can comfortably hold 5 people, with a maximum of around 8-9 people.

cycle-rickshaws irks Court," 2009). The obvious distaste of government employees and policy for cycle rickshaw pullers can have a significant effect on participants' perception of their work. Respondent #1 emphasized this point, saying that the government helps people take erickshaw out on loan so that they can cut into the business of cycle and auto rickshaws.

Respondent #4 agrees that *totos* are more appealing to people because they are faster, safer, and are often cheaper as they do not rely on man power. Yet when asked if he wants to be a *toto* driver instead, he replied that he is satisfied with his work. Due to battery charging costs, a *toto* is 400 rupees per day to rent, significantly more than his 60-rupee daily rent. Thus, even if *toto* drivers may receive more customers and more money each day, their rent is so high that he believes his income "evens out" with the income of an e-rickshaw driver.

Respondent #5 shared his appreciation for pulling rickshaw in Varanasi specifically, a sentiment echoed by some of his fellow drivers. Cycle rickshaws are a desirable of transportation in the city because many of the alleyways are so narrow that *totos*, autos, and cars cannot squeeze through. Respondent #1 said that during peak season, their income is not affected by competitors because many tourists like to take cycle rickshaws for their novelty. The introduction of cheaper, more efficient transportation options, such as the battery powered rickshaw or *toto*, have hurt business for cycle rickshaw pullers. Many of the cycle rickshaw *wallahs* in Varanasi have had to compensate accordingly, by increasing their work hours or working long after tourist season ends. Many expressed a frustration with their new competitors, whereas some seemed to take the changes in stride and were more concerned with their own work. A rickshaw *wallah's* subjective well-being may be compromised because of the added stress of a decreased income due to competition from auto and battery rickshaws.

Ownership

The concept of ownership was a common theme throughout the conducted interviews.

Participants were asked if they own or rent their rickshaw and to elaborate on their perception of the importance of ownership in terms of their work. Out of 11 people polled, only two claimed that they personally own their vehicle. The rest of the drivers rent their rickshaw daily from several garages throughout the city. Daily rickshaw rental can cost an average of 50 rupees, or 75¢. While this might seem like a meager amount, it may exceed, match or constitute a significant portion of a driver's daily earnings. Many of the respondents expressed a desire to own the rickshaw so that they can save the 1,500-rupee average monthly rental fee. Respondent #4 mentioned that he rents a rickshaw each day for 60 rupees. He emphasized that although he is losing almost 2,000 rupees a month to rent the rickshaw, it does not compare to the 15-16,000 rupees, or \$235, it costs to purchase one. He is not able to save money to fund a new rickshaw, as his daily earnings directly help him and his family survive and sustain each day. Any extra money that he can save is directed towards higher priorities, such as family, food and shelter.

Responses from those who own their rickshaw help summarize the communal sentiment about why owning rickshaw is desirable. Respondent #7 has owned his rickshaw for 22 years and has kept it in good, working condition. He gets it repainted every time the colors start to fade and brings it to the mechanic when a part breaks or needs to be replaced. He takes great pride over his vehicle because the quality and appearance of his rickshaw is important to him. There were no obvious broken parts or sharp edges on his vehicle, which are common sights on other rented rickshaws throughout the city. Respondent #7 emphasized that it is important for him to

own the rickshaw because he can work and maintain the bicycle on his own time. He reported that if a rented rickshaw needs maintenance, the owner of the garage is responsible to make any necessary fixes and can attend to the matter when it suits him. Meanwhile, the rickshaw puller may be out of work for days without a rickshaw to rent. On the other hand, if a puller personally owns the rickshaw, he can get an issue sorted out on his own time.

Respondent #1 emphasized that it is important to have ownership over his rickshaw because he can have control over his work day length and can choose to ride when it suits him. When the weather is pleasant and there are more tourists in the city, he spends long days pulling his rickshaw. But as the summer season begins and the tourist season ends, he chooses not to pull rickshaw and instead sells lemon tea along *Assi Ghat*. Although he may be able to rent rickshaw when he wants to, it is important for him to have ownership and control over his time and work schedule.

Additionally, respondent #10 shed a positive outlook on rickshaw rentals. If you own the vehicle, you also have the responsibility of maintaining and caring for it. Even though respondent #7 was very proud of his well-maintained cycle, not everybody has the energy or desire to maintain their rickshaw with their own hands, time and money. Maintenance is the responsibility of the garage owner for those who rent their vehicles. Therefore, those who pull rented rickshaws may not have to worry about the pristine quality of their vehicle because it is not coming directly out of their pockets, unless it is a major fix. Also, as many of these manual laborers are migrants or seasonal workers, they do not have to worry about leaving their job if they choose to. If one no longer wants to rent his rickshaw for a certain length of time, he must notify his owner, pay his final rent, and leave the vehicle at the garage. If someone who owns

his rickshaw wants to move or change his occupation, he must go through the hassle of selling the vehicle.

Each participant responded that, ideally, they would rather own their rickshaw to save the money they spend on rent. Ownership of the rickshaw gives more power and control over one's work life, such as when and for how long they work, and the condition of their vehicle. Yet, since many of the respondents are not native to Varanasi or may not have a stable life in the city, renting rickshaw is the best option for them as they can stop working when they choose to without the hassle of selling or storing their vehicle.

Environmental Conditions

As cycle rickshaw pullers spend their entire day outside weaving in and out of traffic, it's worthwhile to note the effects that the physical environment can have on the health of an individual. During the four-week research period between mid-April to mid-May, the average temperature in Varanasi hovered around 40 degrees Celsius, or 104 degrees Fahrenheit. The highest recorded temperature during this time was 44 degrees Celsius, or 112 degrees

Fahrenheit. The intense heat and strong sun severely impact a driver's ability to work during the day, especially during mid-day when the sun is the strongest. In June, the annual monsoon season brings heavy and consistent rain for many weeks. The wet roads and uncovered vehicles may prevent many cycle rickshaw pullers from earning a steady income during this period.

One of the most pressing environmental concerns for the health of cycle rickshaw drivers is air

pollution. Not only are they subject to the baseline pollution that exists within the air, but they

make a living pedaling on the streets behind cars, motorcycles and busses. The particles from

the fumes and exhaust from these vehicles can be harmful if inhaled in large amounts over a long period of time. Some cycle drivers choose to wrap a scarf over their face or wear a protective mask, but most drivers do not take any external precautions. Within the air that people breathe, there are small floating particles due to dust, pollution and numerous other factors. The smaller the particle is, the deeper it can travel down the respiratory tract when breathed in. If a person inhales a particle that is PM_{2.5} or smaller, that person is at a high risk of developing complications because the particle can get lodged within their alveoli and air passageways. Lower respiratory infections are the fifth largest cause of mortality in India (Sharma, 2017). Although the air a person breathes helps them sustain life, it may also be slowly killing them if there is a high concentration of pollution and PM_{2.5}.

According to India's Central Pollution Control Board, the average AQI (Air Quality Index) in Varanasi on May 03, 2018 was 114 micrograms per cubic meter ($\mu g/m^3$). This level is categorized as "moderate," meaning that the air may cause breathing discomfort for those with existing respiratory issues. Yet, this measure was the baseline pollution level and did not consider the increased pollution a cycle rickshaw driver may be exposed to when he is pedaling in traffic and is surrounded by high-pollutant vehicles from all sides.

Varanasi's baseline pollution levels have even reached hazardous levels in recent months. On November 10, 2017, Varanasi was recorded as having an AQI of 491 μ g/m³, which is well beyond the 401 μ g/m³ lower limit that the Indian government categorized as "severe" pollution (Tripathi, 2017). A 2015 report found that Varanasi was home to the most polluted air in the country (Safi, 2016). According to data taken over a 220-day period, Varanasi did not have one day of "good" air quality, which is categorized as an AQI of 50 μ g/m³ or below (Safi, 2016).

Many cycle rickshaw drivers do not have the luxury to take time off from work due to high pollution levels. They are extremely vulnerable to their environmental conditions as they spend up to or over 12 hours a day working outside. Exposure to a high concentration of air pollution may put cycle rickshaw pullers at an increased risk to develop respiratory disease or other communicable health complications. It is crucial to understand the implications and causes of air pollution to comprehend the impact of a person's physical, external environment on their health.

God and Doctor

When asked about the actions they take when they get sick, every single participant responded that prayer and a connection to God were the most important ways to ensure their health. 10 out of the 11 rickshaw pullers who participated in this study are Hindu, the other being a Muslim. Varanasi is one of the most ancient living cities in the world, with over 3,000 years of continuous civilization. According to Hindu tradition, the city was founded by Lord Shiva and is the holiest of the "Sapta Puri," or the seven Hindu pilgrimage sites in India. The city lies on the banks of the holy Ganges river, and Hindu mythology states that the river was formed from the locks of Lord Shiva's hair. Many Hindus flock to the river because they believe that the water cleanses them of their sins. The religious significance of Varanasi has an ancient history and the city welcomes countless worshippers of Shiva and devout Hindus every year.

For cycle rickshaw drivers, God and health are undeniably intertwined. A common theme that was apparent in each interview was the importance of prayer, especially when sick or ill.

Respondent #2 emphasized this his "first priority" is always to God. He can only hope for good

each day, he hopes to be blessed with good health.

health if he has a good relationship with God. Although he hopes God will bless him with good health, his only expectation from God is to be able to eat at least two meals a day of "bread and butter." Respondent #6 added that "God is the supreme power." He sees his health as being in God's hands, and it is his responsibility to pray to God to have good health in return.

Respondent #3 introduced the Hindi terms "Bhakti and Shraddha," which can be interpreted as "devotion and reverence." By dedicating himself to God, believing in his powers and praying

In more practical terms, prayer to God is the "cheapest option" for cycle rickshaw wallahs to hope for good health. They do not have to pay money to pray in a temple or bathe in the Ganges river. Due to their minimal income, many of them do not have the luxury of finding medicine or seeing a doctor each time they are sick. None of the participants denied the curable abilities of medicine or doctors, but some expressed reservations about using clinical methods to treat an illness. Respondent #6 said that medicine may help provide short term relief, but prayer to God is a more effective long-term way to ensure good health. Respondent #7 echoed these sentiments, adding that there are no side effects to prayer and belief in God. There was an interesting spread of opinions about the use of medicine in terms of severity of disease. Since prayer is the cheapest option, many people indicated that they would only use medicine when they find that their prayer is not enough to cure them. On the other hand, the youngest participant mentioned that medicine is most effective for non-severe cases, but prayer to God was the best way to get better when seriously ill.

When discussing prayer, no participant mentioned any specific God that they pray to without first being asked to specify. It is believed that there are 330 million of Gods and demigods under

the umbrella of the overarching Hindu religion (Dasa, 2012). It can be drawn then that each participant has a God that is important to him based on the area he is from and which Gods his family prays to. Accordingly, people originally from Varanasi are more likely to prioritize Lord Shiva. Respondent #7 added that, since he is originally from West Bengal, he prays to the local deities that are important to his village and his family.

People offer their prayers by clasping their hands in together in front of their body when walking by temples, and offering incense, food, and other offerings to small idols within their home. Due to their strenuous and long work days, some rickshaw pullers mentioned that they are not always able to attend temples and pray to their God at a house of worship. Instead, respondent #5 expressed that he accepts God in his heart so that even if he is unable to make it to the temple, his prayers will reach God through the belief in his heart. The single Muslim respondent has a similar predicament. Although Muslims are commanded to pray 5 times a day, respondent #11 is not always able to fulfill his obligations. His belief in God is not wavered and tries to make it his priority to pray to Allah as often as he can. Belief and acceptance of one's God was a very important theme throughout the conducted interviews. God helps give their lives a purpose, and by appeasing to God and performing rituals, the men hope to be blessed with good health in return.

Accessibility, Affordability and Quality of Health Services

If the power of prayer is not curing their ailments, many participants reported that they seek out the help of a doctor or hospital when seriously ill, or not "feeling well" (White, 2010). An important aspect of an individual's external environmental health is physical accessibility. This

term applies to the ability of people to utilize available health services, and considers distance, appointment availability, reliability of service and hours of operation of these services.

Affordability and quality are also directly tied to an individual's likelihood of using a health service. If they can access a hospital but they cannot afford the services, they may be discouraged from using that service. If an individual can access and afford a service but they believe that it is of bad quality, they may not be inclined to utilize it. Affordability, accessibility and quality of health services were common topics during discussions with cycle rickshaw wallahs.

When asked about what clinical options were available to him, respondent #5 explained that he uses a government hospital in a neighboring town for minor issues but if he has a critical issue, he goes to the public hospital on the campus of Banaras Hindu University (BHU) in Varanasi. Respondent #10 added that he has a government doctor in his neighborhood and he can see him free of charge. Yet, as respondent #4 stated, many of the government hospitals and services are in bad condition and do not offer quality care. To get good treatment for an illness, many of the respondents reported that a private clinic is more desirable than a government health service. But, private medical services require out of pocket payments for fees.

Respondent #1 added that when necessary, he and his family use a private clinic in the city which costs him 300 rupees just for a consultation, with extra added for the price of medicines. With an average income of 200 rupees a day, a simple consultation could cost him over a day's worth of income. Respondent #11 mentioned that he would rather a use private hospital than government one. He added that the village in which his family lives is too far from the government hospital and primary health center, and they are unable to access those services.

They also cannot afford private care and are left with in a difficult and dangerous situation without access to quality and affordable clinical care. Respondent #3 said that he is unable to afford medicine when he is not feeling well, so he tends to use local remedies of plants and herbs to treat his infections. Affordability, access and quality of care are extremely relevant and important determinants that influence a person's decisions and ability to obtain available health services.

Ganja, Alcohol, and Tobacco Use

While conducting observations and interviews at a chai stall early in the morning, a conversation was started with two cycle rickshaw pullers beginning their day. They were holding a small hollow, vase-shaped clay pipe and were packing down a grainy substance with their hands. When probed about what they were holding, they responded with smiles on their faces that they were preparing ganja. They combined the ganja with the contents of *bidis*, or thin cigarettes of tobacco wrapped in a brown leaf. They put the marijuana inside the clay pipe, put it to their mouths, put a match to the ganja and smoked the substance through a hole on the side of the pipe.

When asked about their marijuana use, the men responded with numerous reasons, ranging from social to personal to work-related. They explained that smoking is a good way for them to kill time when not working, as they often get up with the sunrise and work long days. When they get a break, they may use ganja to fill that space. Smoking ganja is also viewed as a social activity and provides a reason to gather. Pulling rickshaw is a physically strenuous job and can cause aches in their joints and back and ganja helps to soothe those pains. Both men admitted

that they do not have a permanent place to live and sleep and spend most of their nights sleeping on the rickshaw or wherever they can find a place to rest. Smoking ganja helps them become more comfortable and allows them to sleep well despite their less-than-ideal living arrangements. Yet, an interesting reason cited by the men is the connection of ganja to Lord Shiva and its legality within India, specifically in Varanasi.

34

In the *Atharvaveda*, one of the five holy Hindu texts dating back to 2000 to 1400 B.C., cannabis is said to be one of the five most sacred plants in the world, as it contains a "guardian angel" in its leaves, and is a "source of happiness, joy-giver" (Gumbiner, 2011). Many Indians and Hindus are familiar with the legal form of *bhang*, which is finely ground from the leaves of the female cannabis plant (Ramadurai, 2017).⁴ The leaves of the plant are not considered illegal to cultivate, possibly due to its connection to ancient Hindu mythology. Varanasi is known for its abundance of *bhang* and is home to over 200 legal, government-approved *bhang* shops (Ramadurai, 2017).

Although it is believed by Hindu scholars that *bhang* is reserved for holy beings and gods and should not be used for getting high, the line is often blurred for less educated Hindus or followers of Shiva (Sapru, 2016). Many *babas* and *sandhus*, or holy men, can be seen throughout the city smoking the ganja directly from clay pipes called *chillum* (Ramadurai, 2017). The two men observed using ganja were using a *chillum*, despite not being religious Hindu

⁴ In Hindu mythology, it is believed that the Lord Shiva used *bhang* to help find inner peace and is therefore known as the "Lord of *bhang*" (Gumbiner, 2011). *Bhang* is also described in the Vedas as having the ability to treat many medical conditions, such as epilepsy or depression (Sapru, 2016).

figures. Due to its acceptance within Hindu and Shiva mythology and its legality within Indian law, ganja can be considered a rooted part of Varanasi culture and society.

Although some men may smoke because of its immediate benefits, they may excuse their use as an offering to Lord Shiva. When asked if he uses ganja, respondent #10 admitted that he drinks *bhang lassi*⁵ during festivals but chooses not to use it regularly even though he has many friends who use it daily. He explained that ganja is harmful for the body, so he wouldn't be able to use it to relax if he knew he was hurting his body. He also does not consume alcohol. Yet, he said that he smokes cigarettes and uses other tobacco products. Respondent #11 echoed these sentiments, saying that he uses ganja during festivals and will only use it otherwise if he is experiencing a lot of pain or needs help to relax to fall asleep.

Unlike ganja, which has a certain level of acceptance within the city, alcohol use is discouraged in Varanasi. Since it is one of the holiest Hindu sites, alcohol is not as widely available as it may be in other major Indian cities. Drinking on or near the Ganges river is frowned upon and many restaurants and hotels near the *ghats*, or steps to the river, are completely dry. Respondent #5 was the only cycle rickshaw *wallah* polled who reported alcohol use. He mentioned that he only drinks one night a week to help relax from the pain and stresses of the week. Other than respondent #5, every other participant who was questioned about drinking reported no alcohol use.

As abundant as *chai* stalls, *paan* shops and makers are scattered along almost every street in Varanasi. *Paan* is a mixture of betel nut, herbs, spices and often tobacco all wrapped within a

⁵ A famous drink in Varanasi, *Bhang Lassi* is prepared by mixing the cannabis leaf with the dairy-based beverage.

betel leaf. It is chewed thoroughly and is either spit out or swallowed. Like many other smokeless tobacco forms, *paan* has been linked with oral and esophageal cancer and can lead to negative oral hygiene, such as stained gums and tooth decay ("Risks of *paan*, betel, bidi and shisha," 2016). Chewing tobacco is not only served within the betel leaf as *paan*, but it is also sold in small ready-to-use packets among the many street vendors. Despite the Indian's government's efforts to curb tobacco use by putting graphic images of tumors and cancer on the outside of cigarette and chewing tobacco packets, tobacco use is still widespread. Cycle rickshaw *wallahs* can be observed spitting out the red *paan* residue as they are working throughout the day. Many of the drivers hired for rides and recruited for this study project had obvious signs of chewing tobacco use. Many people's gums were stained red from *paan* and some were missing teeth. Respondent #1 is missing his 4 bottom front teeth and was observed at multiple points using and spitting *paan*. Due to the social acceptance of *paan* and the abundance of shops around the city, chewing tobacco should a major public health concern for city and government officials.

Many substances can be consumed in moderation without posing a significant threat to one's health. Yet, with the prevalence of ganja and *paan* use within the city and by cycle rickshaw drivers, the line of moderation can be blurred and may lead to negative health outcomes for these manual laborers. Especially if cycle rickshaw drivers turn to substances in the form of

⁶ When combined with saliva in the mouth, the substance becomes red in color, and it is a common sight to see red stains on the concrete and stones of roads. Many people will eat it after a meal to cleanse their palate. It is not only served from street vendors but also at festivals and celebrations such as weddings.

marijuana, alcohol, or tobacco to cope with daily stresses and pains, they may be exhibiting concerning behavior that can impact their health and well-being.

Living Conditions and Location

Each participant in the study was not originally from the city and had come to Varanasi in search of work and better opportunities. Some men were able to relocate their families to their current location, and others had to part with their loved ones to earn an income. One of the most important subjective well-being components of a migrant worker is the ability to live with his family. For each participant, their relationship with their family shaped much of their priorities in life. A comparison of daily living conditions between men who live with and without their families is crucial in understanding the determinants that shape an individual's subjective well-being. Four out of ten, or 40 % of polled respondents said that they did not have a stable living environment, meaning a house or even a sheltered bed to sleep on, in Varanasi. Respondent #5 explained that since his wife and children and extended family live in his village, his only possessions in Varanasi are a few small cooking items. He sometimes cooks food for himself on the side of the road, and spends his nights sleeping on the rickshaw or another safe place to rest. He works almost all waking hours to occupy his time and to be able to support his family. With the 600-rupee average daily income that he reported, he keeps 200 for himself to survive and saves the rest to bring back to his family.

Respondent #11 values his short visits with his family, especially because he does not own a cell phone and is unable to extensively communicate with them while he is working in Varanasi. He admitted that it is very difficult to live away from his family, but he does not have another

option to make a reliable income. To save money for their family, each respondent that lives away from home reported that they are homeless. They sleep on the seat of their vehicle, on the side of the road, or at the rickshaw garage. Without a stable living environment in the city, respondent #11 chooses to ride rickshaw throughout most nights so that he does not have to worry about being robbed or being in an unsafe situation in the dark. Living away from one's family can cause strain on one's health and safety, as evidenced by the high percentage of respondents who were reported to be homeless.

Those who are fortunate to physically live with their families in a stable household were observed to live in simple conditions. Yet, their lack of space or material items was compensated by the ability to live side by side with their loved ones. The researcher had the opportunity to eat dinner with respondent #1 and his family. The family of five lives in a one room home with cement walls. They have electricity, with a television and one light bulb to illuminate the room. One corner is designated as the kitchen, with numerous pots and pans and a stove connected to a gas tank by its side. Shelves lined the walls, holding items such as clothes, bedding sheets, school books, spices and more cooking supplies and more. One shelf was filled with candles and images and small statues of Hindu gods. The participant explained that his daughter takes the responsibility of performing *pooja* or prayers every day. The family sits on a thin stuffed mattress on the floor during meals. At night, they lay down adjacent mattresses on the floor and the five family members sleep side by side.

In his interview, respondent #1 explained that he perceives his own health and happiness as tied to his family's. One of his most important daily priorities is to make sure that his family spends time together in the evening, especially for meals. His wife works as a cook and cleaner

for an elderly woman in the neighborhood. If she is not home in time for dinner, he and his children will wait for her to return so that they can all eat together. During the meal, respondent #1 chose to sit on the outskirts of the circle, while his wife entertained the guests, served food, and led the conversation. A wife's power within the household and family is an important aspect of one's family life and will be discussed in depth in a further section.

Spending quality time with one's family daily is a luxury that is not afforded to all cycle rickshaw pullers. Those that live with their family saw their health and happiness correlated with their ability to physically be with their loved ones. Though those with houses may live in very simple conditions, they appreciate and value their ability to eat with their family during dinner. While some rickshaw pullers sleep on a mattress on the floor with their children and wife, others must find a safe place to park their rickshaw and get much needed rest on the side of the road.

Presence and Role of Wife

Throughout the conducted interviews, a man's relationship to his wife, and her subsequent role within their family dynamic, was strongly correlated with his overall happiness and life satisfaction. This section will present two stories of rickshaw pullers who have polar situations regarding their marriages. For participants, having an active, engaged, and working wife was a vital determinant for their own personal happiness. Consequently, losing one's wife can create a void that is unable to be filled by other aspects of one's life.

When asked about the role that his wife plays in his family, respondent #7 had no shortage of praises for the mother of his children. His wife earns her own income by working as a maid for another family in their neighborhood and earns around 3,000 rupees a month. Even though she

does not earn a significant amount of money, when coupled with the income from his earnings pulling rickshaw and his sons' incomes from their jobs, their family is able to live a more comfortable life. When their kids were younger, the wife worked for 3-4 families. When she was working, respondent #7 would stay at home to take care of their three sons and one daughter. When his wife would return home between shifts or at the end of a long day, she would take over the responsibility of the household while her husband would pull his rickshaw.

Respondent #7 added that he considers his wife to be the head of family. Not only because she birthed and nursed their children, but also because of her active role within the family. She is the "bank" of the household. At the end of each day, each earning member of the family is expected to give her their daily earnings. She makes sure that everybody is responsible with their money, as they can only spend what she allows them to take. When talking about his wife and his children, respondent #7 put a beaming smile on his face, and spoke of how proud he is of his family. Her ability to take care of the children, earn an income, and take responsibility for major decisions in the family can help to ease many of the struggles that he may face as a low income manual laborer. His story demonstrates the powerful effect that a caring, contributing wife can have on a family, especially the subjective well-being of the participants.

Yet, if that role is lost, then the husband may struggle to find an equivalent satisfaction with other aspects of his life. Respondent #6 shared his struggles since the passing of his wife.

Without his wife, he has nobody to depend on but himself. After exhausting work days, he has nobody to help take care of him when he goes home. Before she died, his wife used to help massage his aching body after pulling rickshaw. She would take care of the house and make sure that everything was clean and in its place. She would look after their children while he was

working, and she would cook food for the whole family. He has had to assume all the responsibilities of the household since she died. As a 65-year-old man, he struggles to find the energy to pull rickshaw each day to make a living. Coupled with the effort of cooking, cleaning, and massaging, he greatly feels the loss of his wife and the role that she had in the family. When asked about where he finds happiness in life, he mentioned that he enjoys interacting with his grandchildren and buying them gifts or food. Yet, he added, "real happiness" existed in his wife. Even though his children and grandchildren are an important part of his life, the happiness they bring cannot compensate for the loss of his wife. Without the comfort and care that a wife can provide, widow participants reported a lower satisfaction with their situation and struggled to find happiness in other aspects of their daily life.

Children's Impact

Active participation of a wife within the family was a key determinant for a participant's happiness and well-being; likewise, children have an important role in the psyche of respondents. When discussing their sons and daughters, two underlying themes were identified. Not only did respondents hope that their offspring be successful and prosperous in their lives, but many also discussed the importance of children as a means of support. These themes will be discussed further in this section.

"Breaking the Cycle"

It is not surprising that many respondents reported a desire for their children to be successful in their lives. The accomplishments of a son or daughter were observed to have immense effects on the happiness and life satisfaction of participants. Despite not having children of his own,

respondent #3 summarized his wishes for his brother's children, whom he lives with, when he stated that he hopes that they can break the line or cycle of a hard life. His father and past generations worked as manual laborers, and he has also had to work hard for his income so that his family's lineage can improve their situation in life. Similarly, respondent #4 described himself as very prosperous because his oldest son got a good education and is now working and living in Goa with his wife and children. Since he himself only received an 8th class education, he has tried to make school a priority for his children so that they can find a job that pays a salary and do not have to work manual labor jobs for a daily income.

The push to get their children educated was a common thread among polled respondents. As both of his sons are studying for the BHU entrance exam in pursuit of a Bachelor of Commerce degree, respondent #1 explained that a good life for him is measured in the education and future occupation of his children. When asked if other cycle rickshaw pullers share the same priorities, he mentioned that although many do, some do not push their children to get a good education and their children end up as poor as them. Respondent #7 emphasized how proud he is of his daughter, who had graduated with a degree from BHU. A marriage has prevented her from pursuing a higher degree, but he mentioned that her husband told her that she can continue her education. Although his daughter completed a higher education course, respondent #7's sons did not see the value in school and are essentially illiterate. One son works in construction, while his two other sons share the responsibility of driving a *toto*. Yet, respondent #7 was still proud of his son's accomplishments and work ethic and is satisfied that they can make a living for themselves.

43

Accordingly, a child's difficulties or inability to better themselves can cause great stress to a parent. Respondent #11 shared the story of his mentally challenged 12-year-old daughter and the strain that she has caused for the family. She has had a history of running away from home, and at the time of the interview, she had been missing for three days. In the past she has appeared at the houses of relatives or friends who have returned her to the family. Respondent #11 explained that he feels helpless because he is unable to take significant time off work to go back to the village and help the search for his daughter. When discussing the outlook for his other children, he was pessimistic about the education that the government school in the village was providing for his children and was not confident that they will gain value skills and knowledge from their school.

When asked to compare his life as a child to that of his children, respondent #11 said that his children are in a very similar situation to him when he was growing up since his family was and still is very poor. It is natural for a parent to want their child to be successful and comfortable in their life. Yet, if a child exhibits problematic behavior or does not have an opportunity to better themselves, a parent may feel burdened by the added stress of their children's difficulties. On top of the challenges of pulling a rickshaw and living away from his family, respondent #11 is loaded with the extra anxiety of his son's poor education and his daughter's tendency to run away from home. Due to these pressures, his perception of life satisfaction and well-being may be compromised.

"Insurance Mechanism"

Researchers from the University of Glasgow developed a study to understand poverty and financial status through a lens of subjective well-being in rural Pakistan (Shams, 2015). The

parents will receive in old age.

researchers found that a large family was a vital component for a positive perception of wellbeing. Children were reported to be a source of meaning and motivation for people. People also reported that children act as an "insurance mechanism," as they can add extra income to the household and help with necessary duties when they become of age (Shams, 2015). This sense of security was found to be an important facet for the psychosocial health of participants. Family is a central aspect of an individual's life within the Indian context, and as parents age, they expect their children to provide for them just as they had for them in their younger years. Respondent #5 explained that he gives his parents 1,500 rupees from his earnings each month to help support them. He feels responsible for his parents in the same way that he expects his kids to care for him when he is unable to work. His only expectation for the future is not only for his children to have a good, healthy life and be successful in their work, but to also help support him financially and emotionally when he gets older. Children were often described as a type of investment; the more children one produces, the better education they receive, the healthier and more successful lives they lead, then the better support and more money the

With the same idea, a lack of children, or a child's inability to provide can cause great anxiety for a participant's perception of their security and health in old age. A lack of his own children is a point of concern for respondent #3. Even though he considers his brother's children as his own, he acknowledges that they will be more responsible to his brother than to him in old age. Parents depend on their children for support, he added, and not having his own kids to support him may be challenging when he is unable to work. Moreover, respondent #4 has a very successful son who lives and works in Goa, but since he lives far away, he is earning his

individual income and is not helping his parents with their financial instability. He noted that he hopes that his son comes to his aid when he can no longer earn money on his own.

Similarly, both of respondent #6's sons are earning their own income, but neither his daily earnings, nor his sons', are enough to support one another. They each have to rely on their personal incomes to survive without help from each other. His children's minimal income is a great concern for 65-year-old respondent #6, as he exclaimed that if his sons can barely support themselves now, they may not be able to help support him in the future. He is unsure of the amount of help he will receive from his children when he ceases his work as a rickshaw puller, but he has an expectation that they will take responsibility for his health and nourishment at the end of his life. Although pulling rickshaw is painful for his aging body, he will continue to work until he is physically unable, partly due to the insecurity he feels about his children's ability to provide for him.

The ability, or lack thereof, of children to care for their parents was a strong determinant for a participant's outlook and expectations for his future. Children can act as a safety net and provide financial support for their parents when their father is unable to pull rickshaw and earn an income for himself. Respondents with successful, educated children were optimistic in their ability to receive end-of-life care which served as a source of comfort and pride and was a strong indicator of strong life satisfaction. Likewise, those unable to rely on the income of their children indicated feelings of anxiety towards their future. As a result, a lack of confidence in their children to provide for them may drive participants to pull their rickshaw until they are physically unable, which may create serious health complications.

Social Support

A notable absence within the responses of participants was the presence of support from the "social dimension", such as from friends or acquaintances (White, 2010). Most people talked about the importance of their family as a source of support and not a single respondent extensively discussed relationships with their friends. When prompted, participants did not seem to attach strong importance to their social support system. When asked if he feels a part of a community of cycle rickshaw drivers, respondent #7 said that, just like the unpredictability of his customers, some of his fellow drivers are good people, whereas he avoids others. Some people, he added, are aggressive in nature and he does not like to be around them. Instead, he has formed friendships with other like-minded people in the community.

In addition, it was assumed that respondent #10, as the youngest participant, would attach greater importance to his friendships, especially since he reported the shortest work day. Yet, when asked how often he sees his friends, he explained that most of his friends are also working, and neither he nor his schoolmates can spend significant time together. When probed further about his social support system, he elaborated that when he needs help or a person to talk to, he will seek out his cousin who lives in a neighboring community. This sense of independence, or lack of social support was internalized among many participants. Respondent #3 said that he does not expect or trust anyone, especially the government, to help him.

Participants rely on their family structure as a safety net, and may not have the time, energy, or trust to maintain a strong social support system. A lack of strong friendships can have an impact on the social health of an individual and may affect his ability to maintain healthy relationships or relate and engage with others.

Discussion and Recommendations for Further Study

The purpose of this independent study project was to describe a "what" question: what are the determinants that influence the subjective well-being of cycle rickshaw pullers. To understand an individual's situation, one must determine the issues and factors that a participant faces.

The determinants that make up a participant's relationship with their work, religion and family are those that are proximal and identifiable by the respondent at a specific point in time. But those factors are based in a complex and rooted context in which the individual lives. An insight into government, society, and culture can help provide an explanation for the "why" questions. A respondent's answers may be influenced by underlying contextual factors within their situation. In other words, a participant's environment can clarify why a respondent described their subjective well-being in certain terms.

People below the poverty line or those in the unorganized work sector can be perceived as responsible for their situation. Yet, a respondent's experience as a poor, manual laborer is highly contextual and is based on their circumstances. The role of the government is a key figure in the wealth and livelihood of an individual, and, subsequently, how he views his own health and well-being. Without a minimum wage determined by the state, the earnings of cycle rickshaw wallahs relies on the attitude of his customers. A lack of health infrastructure and encompassing policy prevents participants from attaining accessible, quality, and affordable health coverage.

Although a proximal determinant for a respondent may be the "affordability" of prayer, the distal factor of the deficient government health systems for the poor may have a noteworthy

role in a respondent's prioritization of God as a source of good health. Likewise, respondent #7 was the only participant to state that he and his family have a life insurance policy from a bank. The disinterest of Indian banks to help insure the poor may be an underlying factor as to why most of the respondents did not have a civil safety net. Additionally, the hierarchical caste system can have immeasurable consequences on an individual's life satisfaction and subjective well-being. As a member of a lower caste, the available resources and support systems available to a participant may have had a strong influence on their responses.

There is an indistinct line between the importance of agency and contextual factors in determining an individual's subjective well-being. This paper will not be able to identify where an individual's power ends, and the responsibility of the state begins. Yet, it is important to note the overall message and tone that a respondent set during their interview. Some participants described themselves as simply managing with the daily highs and lows. Other respondents viewed themselves as *mast*, or content, happy and easy going. On the opposite end, some participants described their current situation with a sense of despair and hopelessness. A person's attitude, personality and outlook towards life can have noteworthy effects on their subjective well-being. People may deal with a conflict in different manners, and likewise may perceive an event through a wide range of emotions that impact their perception of life satisfaction.

Yet, too much emphasis on a person's agency may lead towards the tendency of blaming a victim for their current situation, or how they respond to their circumstances. Due to neglect from the state towards the poor, rural, unorganized sector, a collective memory could develop that may lead to the internalization of shortcomings and challenges. In certain circumstances, a

perceived sense of responsibility for health and well-being may transfer from the state to the individual. Further research should expand on the descriptions provided in this study and look to determine the underlying distal, contextual determinants that may influence an individual's perception of their subjective well-being.

Study Limitations and Ethical Considerations

There are numerous factors that may have influenced or affected that data collected. Since an interpreter was used to translate responses, nuances and details of answers may have been lost in translation. As participants were asked about potentially sensitive topics, their responses may have been catered to appear more socially desirable. The interviews conducted also raised several ethical challenges. At the end of each interview, the participant was given the opportunity to reverse roles and inquire information from the interviewer. At least three respondents questioned the purpose and intent of the research study. Participants asked the interviewer for the motivation for the study and if he planned to use the information to help them. The interviewer responded that this project is an academic study assignment, and as a student, he did not have the resources to create any programs or initiatives to help the participants in the immediate future. The interviewer stated that the purpose of the study was to learn about the lives of the individuals and inform his professors and teach others about the highs and lows of their livelihood. The researcher was transparent in his motivations in conducting the study.

There may also have been a perceived power imbalance between the interviewer and participant, which could have influenced the answers provided. Two participants expressed an

anxiety to ask a question because they perceived it as a requirement, or they did not have the self confidence to ask anything of the interviewer. Although informed consent was confirmed before the start of each interview, the ethical challenges that emerged could have affected the information collected.

Appendix

Respondent #1 helped to schedule most of the interviews conducted. After the interview with respondent #7, the interviewer and his interpreter decided that they would use the help if this participant for the next two interviews to be conducted. Later that day, respondent #1 contacted the interpreter to convey that respondent #7 is not a "good person" and that he likes to "be a guide" so that he can scam people or make more money. This description was not the impression determined by the researcher and the interpreter. It also is illogical for respondent #1 to set up the researcher with an interview with respondent #7 if he did not think that he was a trust worthy person. It was determined that respondent #1 may have been acting defensively, as he was receiving a stiped for scheduling interviews and he did not want to be replaced.

Respondent #7 helped schedule only the next two interviews, and respondent #1 eventually retracted his statements.

References

- Air Quality Index on May 03, 2018 @ 4 PM [Central Pollution Control Board's daily report of Air Quality Index]. (2018, May 4). Varanasi, India.
- Choudhury, G. (2015). Demystifying India's poverty line: Here's everything you need to know.

 Retrieved May 9, 2018, from https://www.hindustantimes.com/business/demystifying-india-s-poverty-line-here-s-everything-you-need-to-know/story-43vy1sQ7LrCZuezTakDnkM.html
- Dasa, G. P. (2012). The 33 Million Gods of Hinduism. Retrieved May 8, 2018, from https://www.huffingtonpost.com/gadadhara-pandit-dasa/the-33-million-demigods-o_b_1737207.html
- Gumbiner, J. (2011). History of Cannabis in India. Retrieved May 8, 2018, from https://www.psychologytoday.com/us/blog/the-teenage-mind/201106/history-cannabis-in-india
- History of Cycle Rickshaw. (2012). Retrieved May 9, 2018, from http://ecocabs.org/museum/readings.php?ID=15
- Kumar, A., Thomas, J., Wadhwa, S. S., Mishra, A., & Dasgupta, S. (2016). Health and Social Security Needs of Rickshaw Pullers in Ranchi. *Social Work in Public Health, 31*(4), 246-254. doi:10.1080/19371918.2015.1125323
- Meena, S., Barwar, N., Rastogi, D., & Sharma, V. (2014). Injuries associated with cycle rickshaws accidents. *Journal of Emergencies, Trauma, and Shock, 7*(2), 73. doi:10.4103/0974-2700.130874
- Nandhi, M. A. (n.d.). The Poor and their Money: Rickshaw Pullers in Delhi. Retrieved March 16, 2018, from https://www.imtfi.uci.edu/research/2009/nandhi.php
- Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, *3*(2), 137-152.
- Police opinion on plying of cycle-rickshaws irks Court. (2009). Retrieved May 8, 2018, from http://www.thehindu.com/todays-paper/tp-national/tp-newdelhi/Police-opinion-on-plying-of-cycle-rickshaws-irks-Court/article16823336.ece
- Rajvanshi, A. K. (2002). Electric and improved cycle rickshaw as a sustainable transport system for India. *Current Science*,83(6), 703-707. Retrieved May 9, 2018.
- Ramadurai, C. (2017). The intoxicating drug of an Indian god. Retrieved May 8, 2018, from http://www.bbc.com/travel/story/20170307-the-intoxicating-drug-of-an-indian-god
- Rao, C. S. (2017). Cycle rickshaw pullers not keen to give up their daily grind, even though it's gruelling & tough *Times of India*. Retrieved March 16, 2018, from https://timesofindia.indiatimes.com/city/hyderabad/cycle-rickshaw-pullers-not-keen-to-give-up-their-daily-grind-even-though-its-gruelling-tough/articleshow/59537442.cms

- Replace Cycle Rickshaws With E-ricks. (2017). Retrieved May 8, 2018, from http://www.thehindu.com/news/cities/Delhi/replace-cycle-rickshaws-with-e-ricks/article19964281.ece
- Rickshaw Pullers in Delhi. (n.d.). Retrieved March 16, 2018, from http://www.maitriindia.org/focus-areas/migrant-workers/rickshaw-pullers-in-delhi/
- Risks of paan, betel, bidi and shisha. (2016). Retrieved May 8, 2018, from https://www.nhs.uk/Livewell/SouthAsianhealth/Pages/Smokingandpaan.aspx
- Safi, M. (2016). Air quality in holy city of Varanasi 'most toxic in India'. Retrieved May 8, 2018, from https://www.theguardian.com/world/2016/dec/12/air-quality-holy-city-varanasi-most-toxic-in-india-report
- Sapru, G. (2016). Bhang, A Story Of Divine Intoxication. Retrieved May 8, 2018, from https://theculturetrip.com/asia/india/articles/bhang-a-story-of-divine-intoxication/
- Shams, K. (2016). Developments in the measurement of subjective well-being and poverty: an economic perspective. *Journal of Happiness Studies*, 17(6), 2213-2236
- Sharma, S. (2017). The top 10 causes of death in India. Retrieved May 8, 2018, from https://www.hindustantimes.com/health/the-top-10-causes-of-death-in-india/story-IFLxCFVHmF7svw2RKCl70K.html
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: a systematic review of the literature. *Psychotherapy and psychosomatics*, *84*(3), 167-176.
- Tripathi, B. (2017). Varanasi chokes as air quality 20 times above safe levels, worse than Delhi. Retrieved May 8, 2018, from http://www.business-standard.com/article/current-affairs/varanasi-chokes-as-air-quality-20-times-above-safe-levels-worse-than-delhi-117122200129 1.html
- White, S. C. (2010). Analysing well-being: a framework for development practice. *Development in Practice*, 20(2)