

1.0 Profile of Respondents

Three hundred and sixty-nine people were randomly selected to participate in the survey. A total of 340 completed survey questionnaires were collected, representing 19 geographically distinct villages and settlements, and resulting in a response rate of 92%. Respondents were given the choice to complete the survey in Fijian or English language. 52% of respondents chose to complete the survey in English, while 48% completed the Fijian version. This nearly even split indicates that it was very important to offer the survey in both of the predominant local languages. Our sampling technique successfully captured a fairly even representation of gender, with 54% of respondents reporting female and 46% reporting male. Only adults over the age of 18 were selected to complete the survey, but no upper age limit was imposed. This technique resulted in a broad age representation; respondents ranged in age from 18-80 with a median age of 40. Fewer than 3% of respondents did not complete any formal education, while 47% of respondents completed secondary school, and 11% attended a university or other tertiary school. Education levels in Vatukoula are slightly higher on average, than those in the rest of Fiji according to 1996 census data (Asian Development Bank, 2006). 83% of respondents were ethnically Fijian. Other minority ethnicities which were reported included Rotuman, Indian, or multi-ethnic heredity.

Table 1: Summary of Demographic Characteristics

<u>Characteristic</u>	<u>Range (yrs)</u>	<u>Median (yrs)</u>	<u>Std. Dev. (yrs)</u>	<u>95% Confidence Interval (yrs)</u>
Age (n=330)	18-80	40	12.95	39-42
	<u>Category</u>	<u>Percent by Category</u>		
Gender (n=340)	Male	46.2%		
	Female	53.8%		
Ethnicity (n= 340)	Fijian	82.6%		
	Indo-Fijian	7.6%		
	Rotuman	4.7%		
	Chinese	0.0%		
	Caucasian	0.0%		
	Other	5.0%		
Level of Education (n=334)	No Formal Schooling	2.4%		
	Primary School	21.3%		
	Secondary School	48.2%		
	Vocational School	16.8%		
	University	11.4%		
Current or Former Mine Employee? (n=333)	Yes	57.4%		
	No	42.6%		
Work Location (n=188)	Aboveground	34.6%		
	Belowground	58.0%		
	Both	7.4%		
Born in Vatukoula? (n=337)	Yes	43.4%		
	No	56.7%		
Length of Residence in Vatukoula (n=188)	Less than 5 years	14.9		
	6-10 years	12.2%		
	11-20 yrs	28.2%		
	More than 20 years	44.7%		

2.0 Knowledge of Risks

When asked how they felt about the risks of mining, the majority of the population (80.4%) felt they knew about “some” or “most” of the risks of mining. Approximately 10% felt that they were not aware of any risks, while the remaining 10% felt they knew everything they needed to know about the risks of mining (n= 333).

When asked about specific risks, over one-quarter (27%) of Vatukoula residents reported not knowing whether their drinking water was safe, and 19% did know about the potential risk of a tailings dam leaking or overflowing. 15.5% of residents felt they did not know how the risks of mining had changed since the closure of the mine (n=329). Interviews revealed additional risks that people in the community were not informed of. One resident explained his concern about the lack of community knowledge about the risks of cyanide-related fish kills, *“At times we have cyanide spillages into the river, because of the lack of knowledge in the community, at these times that the fish are dead in the river, we go out there and bring it and cook it and eat it, because we are not aware of that (Romeo Kivi, personal communication, July 6, 2007).”*

Only 37% of people first learned about the risks of mining from the mining company, while a nearly equally important source of risk information was other people their village or town (n= 329). Other sources of information about risks included newspapers (5%), the government (4%), television (4%), and books (4%). Some respondents indicated that they learned about the risks “somewhere else.” Of these respondents, the majority wrote in that they learned about the risks through personal experience. When interview subjects were asked an open-ended question about where they first learned about the risks, several people also indicated that they learned about the risks through personal experience, confirming the survey findings. It is thus likely that if the survey was repeated with an additional response option of “through personal experience,” this option may have been chosen by a higher percentage of respondents.

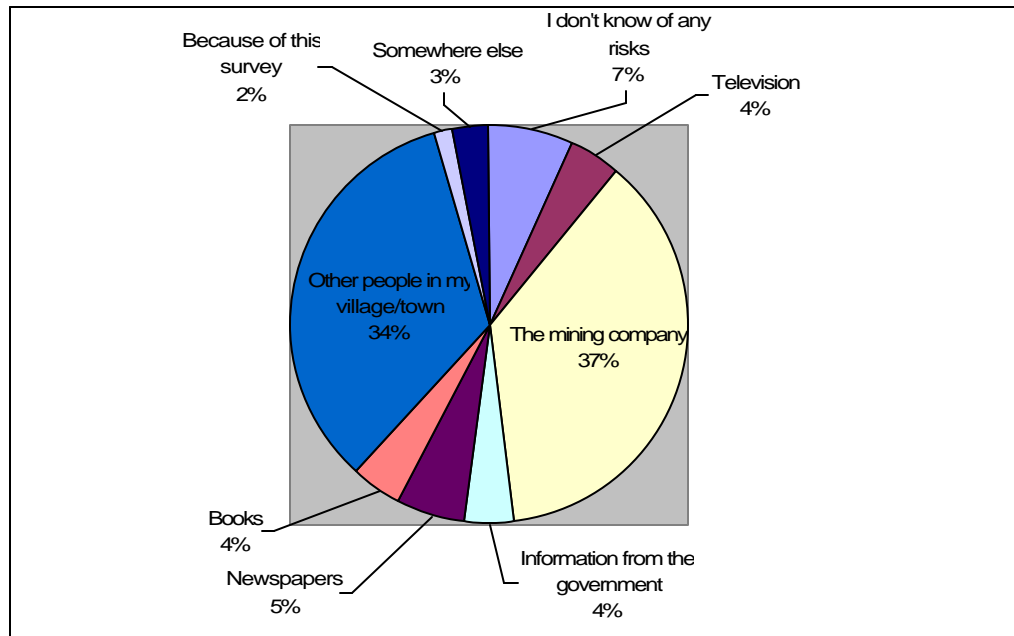


Figure 1: Sources of Risk Information

3.0 Level of Concern

Despite their gaps in risk knowledge, Vatukoula residents feel a consistently high degree of concern across a range of environmental and health risks, and few people question the fact that the risks are impacting their health. Air pollution is the risk which causes the greatest concern among residents, with 74.5% of people feeling “very worried” about the risk. An additional 12.2% feel “somewhat” worried about air pollution. Pollution of rivers and streams, as well as drinking water pollution were of similar concern, with 88.6% of people “somewhat” or “very” worried about the former and 86.7% of people “somewhat” or “very” worried about the latter. Over 80% of people also feel “somewhat” or “very” worried about pollution of their garden vegetables, fish, and land. When asked about their concern for their children’s health, 89.8% of parents reported feeling worried about their children’s health because they

live near the mine. 87% of people feel worried about their own health because they live near the mine. Finally, 85% of people feel worried that environmental damage from gold mining will impact future generations.

Residents were also asked about the likelihood that each of the risks had resulted in health problems for either themselves or their families. Again, people consistently feel that each of the risks is likely to have caused health problems. Air pollution is the risk that residents feel is most likely to have harmed their health, with 85% of residents reporting that air pollution is “somewhat” or “very” likely to have harmed their health, the majority of whom felt it was “very” likely (54.4%) (n= 318).

The level of concern a particular person feels about each of the risks of mining is correlated. For example, if a person feels very worried about air pollution, the same person is also likely to report they are very worried about each of the other risks. Likewise, if a particular person isn't worried about air pollution, they are likely to also not be worried about water pollution, or any of the other risks. Spearman correlation coefficients were calculated for each pair of risks, and results indicated significant positive correlations for every pair of risks tested ($p < 0.001$ for each case).

4.0 Trust in Authorities

While residents are highly concerned about environmental risks and their potential health impacts, they do not necessarily feel comfortable discussing these risks with company officials. Nearly one-third of people reported that prior to the mine closure, they would not have felt comfortable telling someone from the company if they had a concern about their health or the environment (n= 288). Furthermore, 48% of

people who would tell the company about their concern felt that the company would either ignore their concern or do nothing to address it (n= 329). An additional 4% felt that they would be punished for voicing their concern (n=329). One resident explained how the company reacted to his concerns during an interview, “...we have complained a lot at times, but the answer from management doesn’t satisfy us (Romeo Kivi, personal communication, July 6, 2007).”

The lack of trust in authorities at Vatukoula is likely due in part to the fact that information about risks has not been communicated in a timely and open manner in the past. Instead many residents have learned about the risks of mining over a lifetime through personal experience, or by word of mouth. When questioned about drinking water quality, Romeo Kivi the secretary of the Vatukoula Community Consultative Committee explained how the community was not informed about the results of water quality testing in the past, “No, I’m afraid not, the results are sent directly to the Mineral Resources Department. The community was not advised on that (Romeo Kivi, personal communication, July, 6, 2007).” Research has demonstrated that if risks are first discovered by a community, rather than being fully disclosed by the company immediately following their discovery, people will be predisposed to doubt the information given to them (Fessenden-Radon et al., 1987).

5.0 Control

While residents feel a consistently high level of concern about risks, they also feel they have very little control to avoid the risks of mining. The majority of people, 64.1% (n= 334), feel they have “little” or “no” control to avoid the risks of mining.

15.3% of people feel they have “some” control, and 20.7% of people feel they have “enough” or “total” control to avoid the risks of mining. In order for people to feel they have some measure of control over a particular risk, they must feel they have real, actionable, and positive ways of mitigating that risk (Lundgren & McMakin, 2004). For example, a positive message about mitigating a risk would be one that tells a person what to do rather than telling them what actions to avoid. The actions must also be realistic for a person to implement. For example, after the September 11th attacks in the United States, people were told to be “vigilant.” While this message is positive, it is vague and thus difficult to implement on an individual level (Lundgren & McMakin, 2004). Such a message would not help people feel they have control to avoid future attacks. The present survey revealed that 77% of Vatukoula residents reported not having a plan to deal with a potential tailings dam disaster. This striking result reveals one of the possible reasons why the level of control people feel to avoid mining risks is so low; they do not have real, actionable, and positive information about how to mitigate potential risks.

6.0 Ability

Another dimension of risk perception is reflected in a person’s ability to seek out and find information about risks when they would like to learn more. When asked about their ability to find additional information about risks, 15.9% of residents felt they would not know where to go if they wanted to find out more about a particular mining risk (n=327). 40% of people disagreed with the following statement, “If I have a question about the risks of gold mining, it is usually easy to find the answer (n=

275).” These results indicate that although people may feel they have some knowledge about mining risks, they do not necessarily feel comfortable searching for additional information. If residents do not feel comfortable telling the company about their concerns, this clearly hinders their ability to seek out further information about risks. Thus, one way that a company can increase the flow of information about risks is by creating a more open, transparent, and welcoming relationship between company officials, employees, and community members.

7.0 Weighing Risks and Benefits

Some may argue that by choosing to live and work in Vatukoula, residents are making a conscious decision to accept the risks of mining in light of the economic benefits of employment at the mine. However, the results of this study highlight the underlying complexity of such risk/benefit decisions. Over half of the people of Vatukoula (52.7%) reported that they are *not* willing to accept most of the risks of mining because the benefits are worth it (n= 311). Interviews offered additional insight into this surprising result. Kereni Marama explained why she continues to live in Vatukoula, and spoke about the feeling of community that was important to her,

“We like living here because the life is easy...when we go to Suva or Lautoka we have to pay for everything, here we can plant. Here we know each other, when we don't have anything we just go to another house and we can borrow it.”

She explained the importance of the cultural connection that Fijians feel to their land. After generations of mining, families now consider Vatukoula to be their home and feel connected through a sense of place. She also emphasized the difficulties of

gaining employment in other industries. For example at Fiji Water, *“You know...you have to know somebody there so he can get you in....it’s very hard (Kereni Marama, personal communication, August 3, 2007).”*

Additional insights come from the comments offered at the end of the survey. Several people chose to write about the highly limited options for employment that many of the men in the area face. *“Where else can my husband find work to support us, this is the only place he can work as he does not have any other experience elsewhere.”*

Others wrote about their personal and cultural connections to the Vatukoula community and area,

- *“I was born and bred here in Vatukoula and so were my parents and their parents before them. When the mine closed we were lost....we have nowhere else to go and there are no jobs available to miners in Fiji.”*
- *“My ancestors died here...so here we stay.”*

It is clear that cultural and personal connections to Vatukoula play an important role in the analysis of risks and the decision-making process. Additionally, the lack of alternative economic opportunities, particularly for those without higher education or specialized training, limits the choices available to miners and their families.

These limited economic options, strong personal and cultural influences, a lack of trust in company and government officials, and a lack of knowledge about many of the risks of mining, combine to result in a highly complex and imperfect decision-making process. The results of this survey can contribute to more informed decision-

making by creating a transparent foundation of knowledge which may be used to build better risk communication and management strategies, specifically tailored for Vatukoula.

8.0 Gender and Risk Perception

A closer analysis of the responses of men and women revealed that gender is an important variable in risk perception at Vatukoula. First, the survey revealed that women and men differ significantly how much they feel they know about mining risks. Women feel they have less knowledge about the risks of mining compared to men ($p < 0.001$). More specifically, women are significantly more likely to feel that they know about some or none of the risks, while men are significantly more likely to indicate that they know about most or all of the risks.

Table 2: Respondents Knowledge of Risks: Cross-tabulation According to Gender

Question	Response	Gender		Total	
		Male	Female		
Knowledge of Risks	None	Count	11	21	32
		% within Gender	7.1%	11.8%	9.6%
		% of Total	3.3%	6.3%	9.6%
	Some	Count	53	102	155
		% within Gender	34.2%	57.3%	46.5%
		% of Total	15.9%	30.6%	46.5%
	Most	Count	68	45	113
		% within Gender	43.9%	25.3%	33.9%
		% of Total	20.4%	13.5%	33.9%
	All	Count	23	10	33
		% within Gender	14.8%	5.6%	9.9%
		% of Total	6.9%	3.0%	9.9%
Total	Count	155	178	333	
	% within Gender	100.0%	100.0%	100.0%	
	% of Total	46.5%	53.5%	100.0%	

Just as importantly, women and men also reported receiving risk information from different sources. As presented earlier, approximately 37% of all respondents reported first learning about mining risks from the mining company, and approximately 34% of all respondents reported learning about the risks from other people in their village or town. However, women were half as likely as men to receive risk information from the company, and almost twice as likely as men to receive information from other people ($p < 0.001$).

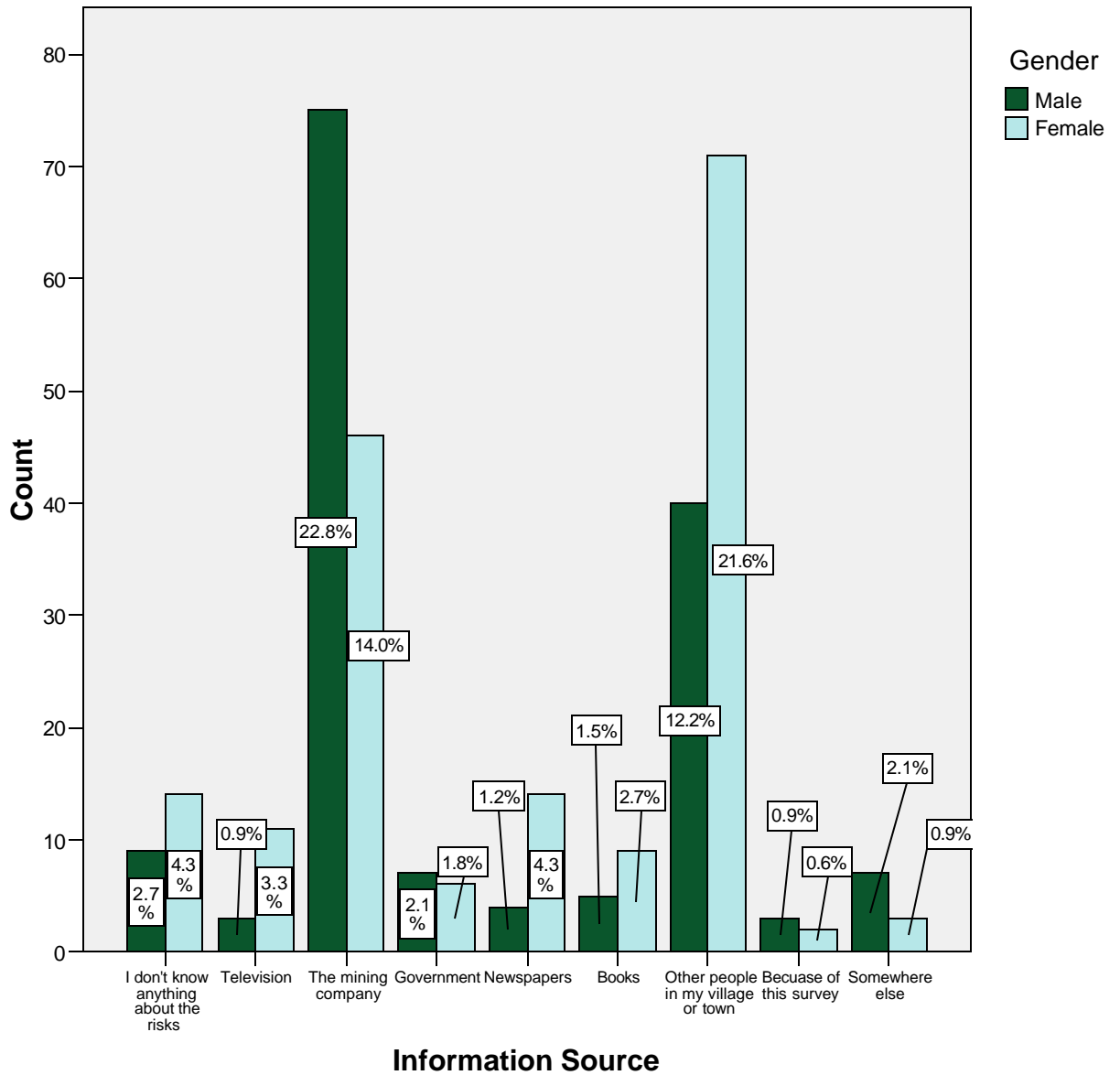


Figure 2: Risk Information Source According to Gender

While some Vatakoula residents do receive at least a portion of their risk information from the company, such risk messages are being less effectively received by women. One possible explanation for this finding is that women are less likely to work at the mine, and thus do not have access to on-the-job health and safety training,

where risk messages are often communicated. Indeed, the present study confirms that men are much more likely than women to have been employed at the mine (Fischer's Exact Test $p < 0.001$). Although the Fiji government has adopted Equal Opportunity Employment (EEO) policies for civil service, these policies have not been realized in the industrial sector. Powerful forces of occupational discrimination and segregation by gender persist throughout many industries in Fiji (Asian Development Bank, 2006). Despite the fact that there is no difference in education levels between men and women, survey results indicate that women have significantly less access to employment opportunities at Vatukoula. Additionally, women at Vatukoula are not permitted to work underground. A PLUM ordinal regression test was performed to assess how influential the variables of gender and employment at the mine were on the dependent variable knowledge of risks. The results indicated that both variables had a similar and significant degree of influence on respondent's knowledge of risks; the gender variable had a parameter effect of 0.633 and employment at the mine had a parameter effect of 0.641. Thus, it cannot be concluded from this survey that the difference in knowledge of risks and source of information were due solely to gender, and not also due in part to whether or not a person ever worked at the mine. However, the importance of these findings should not be underestimated; it is clear that both women *and* people who have not been employed by the mine have a much lower awareness of mining risks and tend to receive risk information from second-hand sources rather than from the mining company. This may be because the information is not readily available from the company or because they prefer alternate sources of information. Most of the interviews conducted with women supported the former conclusion. For example,

when asked if she ever received any information about risks from the company, Elenoa Bunulau from New Town replied, “No, maybe to my husband, but us gang staying at home, no (Elenoa Bunulau, personal communication, July, 5, 2007).”

Just as women are less likely to receive risk information from the company, they are also less likely than their male counterparts to tell the company if they have a concern about environmental or health risks. Women are more than twice as likely as men to report that they would not tell the company if they had a concern about the environment or their health.

Table 3: Company Reaction to Concern: Cross-Tabulation According to Gender

			Gender		Total
			Male	Female	
Company Reaction to Concerns	Listen and try to help	Count	59	59	118
		% within Gender	38.8%	33.3%	35.9%
	Listen and do nothing	Count	36	30	66
		% within Gender	23.7%	16.9%	20.1%
	Ignore my concern	Count	38	53	91
		% within Gender	25.0%	29.9%	27.7%
	Punish me	Count	7	6	13
		% within Gender	4.6%	3.4%	4.0%
	Would not tell company	Count	12	29	41
		% within Gender	7.9%	16.4%	12.5%
Total	Count	152	177	329	
	% within Gender	100.0%	100.0%	100.0%	

Men and women also differ significantly in the level of control they feel they have to avoid the risks of mining. Survey results revealed that women feel they have significantly less control to avoid the risks of mining compared to men (p=0.023). Women are more likely to feel they have “no” control to avoid the risks of mining, while men are more likely to feel they have “some” or “enough” control to avoid the risks of mining.

Table 4: Control to Avoid Mining Risks
Cross-Tabulation of Responses According to Gender

Response:		Gender		Total
		Male	Female	
No control	Count	57	88	145
	% within Gender	36.8%	49.2%	43.4%
	% of Total	17.1%	26.3%	43.4%
Little control	Count	32	37	69
	% within Gender	20.6%	20.7%	20.7%
	% of Total	9.6%	11.1%	20.7%
Some control	Count	29	22	51
	% within Gender	18.7%	12.3%	15.3%
	% of Total	8.7%	6.6%	15.3%
Enough control	Count	27	17	44
	% within Gender	17.4%	9.5%	13.2%
	% of Total	8.1%	5.1%	13.2%
Total control	Count	10	15	25
	% within Gender	6.5%	8.4%	7.5%
	% of Total	3.0%	4.5%	7.5%
Total	Count	155	179	334
	% within Gender	100.0%	100.0%	100.0%
	% of Total	46.4%	53.6%	100.0%

It is likely that women's lack of perceived control and their lack of knowledge about risks go hand-in-hand. As discussed previously, the control a person feels over a risk is related to whether or not they are educated and prepared to mitigate that risk (Lundgren & McMakin, 2004). This study found that approximately half as many women living in Vatukoula have a plan for a potential tailings dam release or failure, compared to men ($p=0.003$). Not only do women feel they know less about the risks of mining, but they are also less prepared to deal with potential risks than their male counterparts. This result was also obtained for people who had been employed at the mine vs. those who had not. Those who had never been employed at the mine were also approximately half as likely to have a plan for a potential tailings dam release or failure ($p=0.002$).

It has been widely demonstrated throughout risk perception literature that men and women perceive the same risks in different ways (Gustafson, 1998). In particular, studies have consistently shown that women tend to be more concerned about environmental risks than their male counterparts (Gustafson, 1998). Another study found that men were more concerned about health risks, while women were more concerned about environmental risks (Fischer et al., 1991). This study, conducted in a differing cultural context, did not find any gender differences in respondent's level of concern about environmental or health risks at Vautkoula. This may be due in part to the fact that all respondents had such consistently high levels of concern about all of the risks; because there was so little variation across responses overall, less variation may also be present between the responses of men and women.

Women were also found to be almost half as likely as men to have personally made the decision to move to Vautkoula ($p < 0.001$; $n = 188$). Instead many women reported that their husbands had made the decision to move to Vautkoula for them.

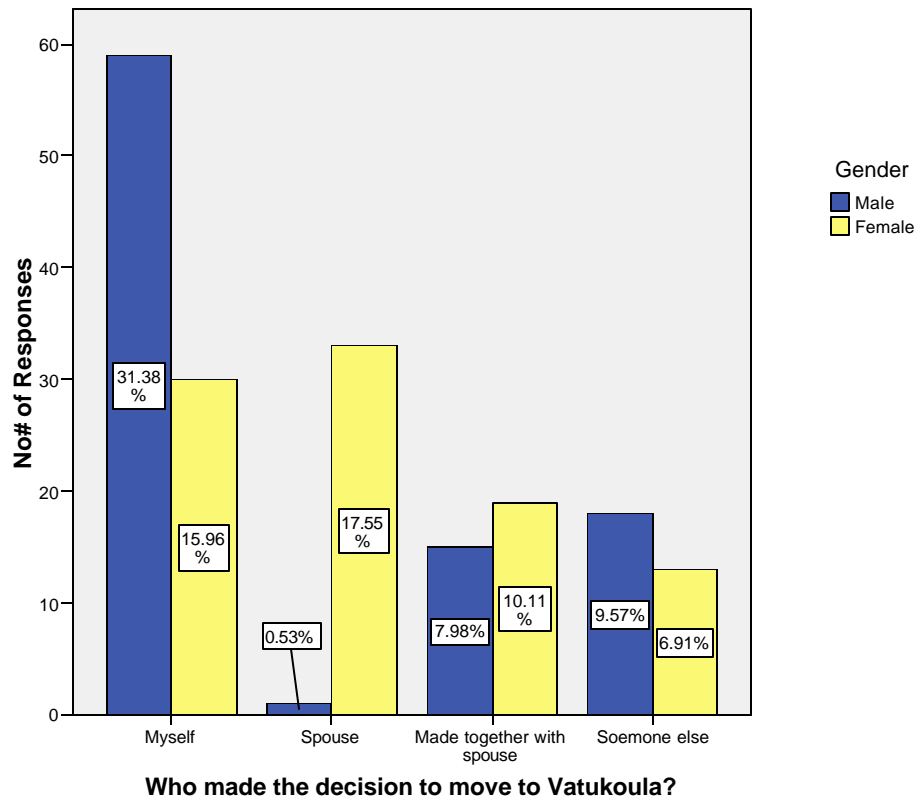


Figure 3: Decision-making According to Gender

Almost half (48%) of residents reported that they had considered moving away from Vatukoula because they were concerned about the environment or their health. Among those who had considered moving, women were more than twice as likely as men to report that the reason they decided to stay was because it ultimately wasn't their decision ($p=0.008$). Men were more likely to report that the reason they stayed was because the money they earned working at the mine was worth the risk ($p=0.008$). This result appears to be consistent with a previous risk perception study conducted in Oregon that found that women are less likely to view risks as counterbalanced by economic benefits (MacGregor et al., 1994). However, it is impossible to tell from this

study if women had equal access to employment opportunities and decision-making power, whether they would also view risks as counter-balanced by economic benefits.

It is critical that women are given an opportunity to become involved in the decision-making process, precisely because they do perceive risks in different ways. Until they are allowed to fully participate in the process of evaluating the risks and benefits of mining, the perceptions and opinions of women will continue to be marginalized. The connection between women's involvement in the decision-making process and women's empowerment is recognized in the Women's Plan of Action (1998-2008) (WPA) adopted by the Fiji government, and in the United Nations MDGs (Asian Development Bank, 2006). In Fiji, the important factors disempowering women include their minimal participation in political and other forms of decision-making, their lack of property rights, and the prevalence of family violence against women (Asian Development Bank, 2006).

Such barriers to women's empowerment are perhaps most intense in mining communities. Recently, several workshops and conferences that were organized in the Pacific region revealed some of the major concerns and barriers facing women in mining communities. The Pacific Regional International Women in Mining Network Meeting, held in Papua New Guinea in 2007, was attended by two representatives from Vatukoula (*Statement of the Pacific International Women and Mining Network Meeting*, 2007). One major concern laid out by the women at this meeting arises from the transition to a cash economy, which disrupts traditional gender roles. Women become economically dependent on men and the importance of their traditional work is diminished. Furthermore, men discontinue their traditional work at home, thus

increasing the burden of household duties for women. A lack of traditional societal controls also often results in social decay, such as increased alcohol and substance abuse, domestic violence, sexually-transmitted diseases (STD's), and prostitution (Oxfam Australia, 2008). Pollution of waterways, air, and land also undermine a women's ability to provide a safe home and healthy environment for her family (*Statement of the Pacific International Women and Mining Network Meeting*, 2007). Finally, women are often left out of the decision-making process, including negotiations about access to land and compensation (Oxfam Australia, 2008).

9.0 Health Data

The proportion of deaths due to cancer in Fiji in 2005 was 8.8% (World Health Organization, 2006). Only 3% of Vatukoula residents reported having been diagnosed with cancer (n= 337), indicating that it is unlikely that there is elevated incidence of cancer in the Vatukoula community relative to the rest of Fiji. Additional health data obtained from the district health office in Tavua indicated that a total of four deaths occurred in Zone 1 and Zone 2 (which encompass the Vatukoula area) during the 2nd quarter of 2007, and none of these deaths were caused by cancer.

The most commonly experienced health symptom in Vatukoula is muscle or joint pain, with 69.6% of people experiencing the symptom at least once during the past month. Severe cough (63.6% experiencing at least once during the past month) and severe headaches (59.6% experiencing at least once during the past month) were the second and third most commonly experienced symptoms, respectively. People who

had never worked at the mine were more likely to experience severe headaches more often than people who had worked at the mine ($n=332$; $p=0.010$).

Approximately 23% of people reported experiencing hearing loss. People who reported having worked at the mine were more likely to also report experiencing hearing loss, however this result was not statistically significant ($n=339$; $p=0.039$). Finally, age was positively correlated with both hearing loss and memory or concentration problems ($p=0.003$ and $p=0.022$, respectively). Older residents were more likely to experience both of these symptoms, which are symptoms commonly experienced more often by people later in life.

10.0 Other Demographic Variables

Correlations were also identified between age and risk perception and level of education and risk perception. Besides being correlated with certain health symptoms, age was also positively correlated with how likely a person felt that pollution in their garden vegetables or pollution in their drinking water had harmed their health ($p=0.016$ and $p=0.027$, respectively). Older residents felt it was more likely that each of these environmental risks had harmed their health. Age also had an effect on where residents would look for additional information regarding environmental or health risks. Older residents were also more likely to search for risk information in a book, while younger residents were more likely to search for risk information using a computer ($n=327$, Bonferroni test significance, $p=0.015$).

A person's level of education was positively correlated with how worried they were about their own health ($n=328$, $p=0.004$), and how worried they were about

pollution in their rivers and streams (n=323, p=0.048). Residents who had completed a higher level of education were more worried about their health and surface water pollution. This may be because they learned about the potential health impacts of mining risks during their education. Additionally, level of education was also related to whether or not a person had considered moving away from Vatukoula due to environmental or health risks (n=327, p<0.001). People who had completed a higher level of education were more likely to have considered moving away than those who were less educated.

34) Have you ever considered moving away from Vatukoula because you were concerned about your health or the environment?

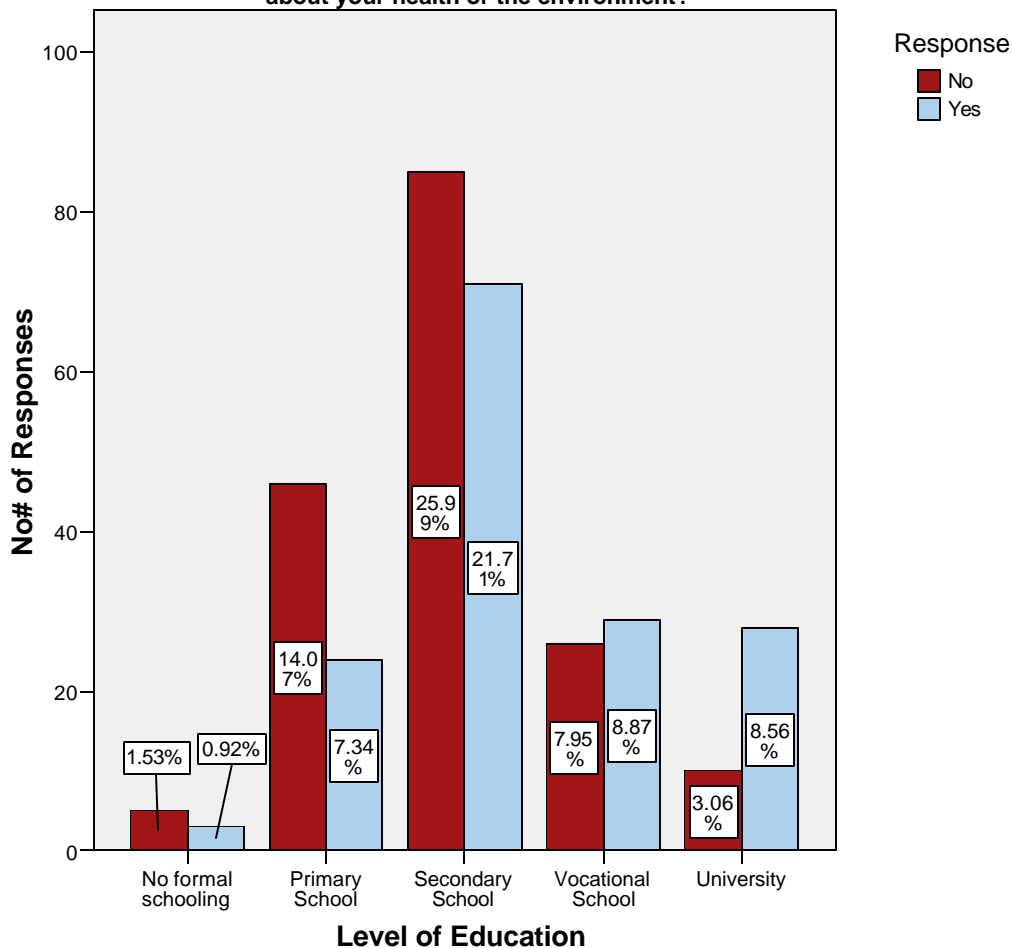


Figure 4: Considered Moving Away?: Response According to Level of Education

Because 83% of respondents were ethnically Fijian, conclusions about the relationship between ethnicity and risk perception could not be drawn from this study. Further inquiry into ethnicity and risk perception through qualitative research or quantitative research using stratified sampling techniques (if demographic data can be obtained) is thus warranted.

In most cases, the variables that were dependent upon age and/or level of education (described above) were different from those that depended upon gender. To further test the validity of gender variations in risk perception, age was held constant in a partial correlation test between gender and the variable *knowledge of risks*. Results indicated that women knew less about mining risks compared to men, even with the age and level of education variables held constant ($p < 0.001$). Additionally, there is no significant difference in the level of education of men and women at Vatukoula, so it is unlikely that a person's level of education influenced gender differences in risk perception.

11.0 Open-Ended Responses

Many quantitative studies have shown that women and men perceive the *same* risks differently (Fischer et al., 1991; Gustafson, 1998), however, qualitative research using open-ended questions and interviews has shown and men and women also perceive *different* risks altogether (Gustafson, 1998). Analysis of open-ended responses in the present study suggests that women have differing concerns than men; however, the word *risk* was not specifically used in this case. In the Fijian version of

the one open-ended question, respondents were asked to list the three *issues* that concern them most, in decreasing order. Importantly, the Fijian-language version of this question did not limit responses to concerns related to the environment or health and thus offers insight into the relative importance of these issues. Confirming that environmental and health issues are of great concern, concerns related to the environment and health accounted for 59.4% of all responses in the Fijian version and 95.2% of all responses in the English version. More specifically, issues related to poor water and air quality were most common in both versions, with 46 (14.7%) and 37 (11.9%) responses respectively in the Fijian language version and 103 (33.0%) and 87 (28%) responses respectively in the English language version. The English language version was more specific and asked respondents to list the three environmental or health issues that concerned them most. As a result, Fijian language responses were far less homogenous and a variety of other issues were identified. In decreasing order of frequency, financial problems, low wages and poor housing conditions were also of concern to residents. Societal problems accounted for 18.6% of responses in the Fijian version. Concerns about family problems, such as “broken home,” and “family problems everyday” were cited 12 times, with three-quarters of these respondents being female. Although the number of people citing family problems as a major concern was relatively small, these open-ended responses offer a more detailed look the wide variety of social and environmental impacts that exist in mining communities, and also suggest that women may be more concerned than men about impacts related to family life. As mentioned earlier, concerns about domestic violence and social problems were also

voiced by women at the Pacific Regional International Women and Mining Network Meeting.

Table 5: Open-Ended Response Coding Categories and Relative Frequency of Occurrence

Fijian Language Survey (n=312)		English Language Survey (n=312)	
100 Environment (43.0%)		100 Environment (76.3%)	
110 Water Quality (14.7%)		110 Water Quality (33.0%)	
120 Air Quality (11.9%)		120 Air Quality (28.0%)	
130 Housing (10.9%)		130 Housing (4.5%)	
131 Poor housing conditions (9.0%)		131 Poor housing conditions (2.6%)	
132 Housing located too close to the mine (1.9%)		132 Housing too close to the mine (0.6%)	
140 General Pollution (2.6%)		133 Road condition (1.3%)	
150 Garbage (1.9%)		140 Pollution (8.4%)	
160 Tailings Dam Collapse (1.0%)		141 Specific chemicals (cyanide, sulfuric acid etc.) (4.2%)	
		142 Pollution of land (2.6%)	
200 Employment & Workplace Safety (22.1%)		143 Signs of pollution (dying leaves, acid rain) (1.6%)	
210 Low Wages (8.9%)		150 Sewage (1.0%)	
220 Mine Closure (No work) (6.7%)		160 Garbage (0.6%)	
230 Unsafe working conditions (3.5%)		170 Collapse of land over mine (0.6%)	
240 Complaints about the company or compensation for injuries (2.9%)		180 Tailings Dam Collapse (0.3%)	
300 Societal (18.6%)		200 Health (18.9%)	
310 Financial Problems (school fees, electricity, food, bus fare) (9.6%)		210 Food Safety (fish, farm, vegetables) (11.2%)	
320 Family Problems (broken home, domestic violence) (4.2%)		220 Concerns about specific symptoms (7.1%)	
330 Quality of Education (1.6%)		230 Lack of Medical Services (0.6%)	
340 Religious/Spiritual Life (1.3%)			
350 Discrimination against Indigenous Fijians (0.6%)		300 Employment & Workplace Safety (3.9%)	
360 Daily Hardships of Life (0.6%)		310 Working conditions (4.0%)	
370 Feeling Helpless (no assistance after mine closure) (0.6%)		311 Unsafe working conditions (1.9%)	
		312 Noise in workplace (1.9%)	
400 Health (16.4%)		400 Societal (0.9%)	
410 General Health Concerns (8.0%)		410 Financial problems (0.6%)	
420 Food safety (fish, farm, vegetables) (4.8%)		411 Electricity bills too high (0.6%)	
430 Request for Health Official (OHS, Ministry of Health) (2.2%)			
440 Health/Well-Being of Children (1.3%)		420 Lack of awareness of risks (0.3%)	