

RECENT IMMIGRANTS'  
RECREATION EXPERIENCES  
OF OUTDOOR NATURE-  
BASED SETTINGS IN  
NEW ZEALAND



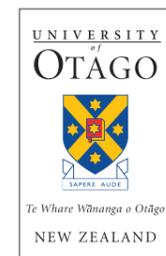
Brent Lovelock  
Kirsten Lovelock  
Carla Jellum  
Anna Thompson

Centre for Recreation Research  
School of Business  
University of Otago  
PO Box 56  
Dunedin 9054  
New Zealand



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# Recent immigrants' recreation experiences of outdoor nature-based settings in New Zealand

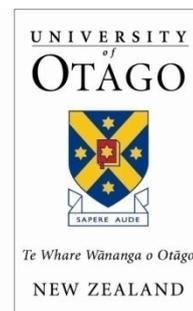
Brent Lovelock, Kirsten Lovelock, Carla Jellum & Anna Thompson

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## Centre for Recreation Research

School of Business  
University of Otago  
PO Box 56  
Dunedin  
New Zealand

Tel 64 3 479 5866  
Fax 64 3 479 9034  
Email [recreation.research@otago.ac.nz](mailto:recreation.research@otago.ac.nz)  
[www.crr.otago.ac.nz](http://www.crr.otago.ac.nz)



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Dunedin  
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Telephone +64 3 479 8520  
Facsimile +64 3 479 9034  
Email: recreation.research@otago.ac.nz  
Website: <http://www.crr.otago.ac.nz>

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## ABSTRACT

This study contributes to the very limited body of research that addresses recreational behaviours of migrants and ethnic minorities in New Zealand – with a focus on nature-based recreation. The study comprised a questionnaire that compared recreational perceptions and behaviours of migrants with New Zealand born citizens. Follow up in-depth interviews with migrants were undertaken to elucidate patterns observed in the survey data. Further interviews were undertaken with recreation professionals planning and/or providing resources and activities in natural areas. The geographical focus for all aspects of the study was Auckland and Wellington because of the spatial concentrations of migrants there.

The survey data (N=433) revealed statistically significant differences based on migrant status, ethnicity and country of birth for a range of recreation-related variables. The key differences, based upon migrant status include: frequency of participation (migrants have higher percentages in both the low and high frequency of participation categories); recreation group size (larger groups for migrants); and recreation group composition (migrants mix outside their own ethnic group more). Significant differences were found by migrant status for all constraints to participation: cost of equipment, cost of transport, not having people to recreate with, distance from recreation areas, lack of knowledge of recreation areas, and lack of experience were all significant constraints to migrant recreation.

Migrants and New Zealand born respondents rated the significant features of natural areas (for recreation) quite similarly, however, statistical differences were noted by ethnicity and country of birth. More Chinese and 'other' ethnicities rated the presence of recreational facilities (e.g. huts, tracks, toilets, picnic areas) as being important than did Europeans or New Zealand Europeans. Chinese respondents rated water amenities as not being important. For the Chinese-born, and those from 'other' countries, the proximity of recreation areas to home was an important feature. Migrants and New Zealand born respondents had similar views on the personal benefits of nature-based recreation. Migrants, however, placed more value on this as a means of spending time with their families, and also socialising and creating contacts. Those of 'other' ethnicity placed high value on natural areas as places for children to recreate.

Childhood use of natural areas was lower for migrants than non-migrants, and lower for Chinese respondents. New Zealand born respondents, however, tended to abandon more outdoor recreation activities than did migrants. Of the migrants, about 20% indicated that they had abandoned nature-based recreational activities since coming to New Zealand. However, just under half of the migrants in the study had participated in new activities since arriving here, tramping being the most common new activity. While few participants overall belonged to outdoor clubs/organisations (around 8%), fewer migrants than non-migrants belonged to an environmental organisation. There were no differences between the environmental attitudes of migrants and non-migrants.

The interviews with migrants reveal that those most likely to engage in outdoor nature based recreation in our regional and national parks are those that have had similar experiences in their countries of origin and where understandings of what constitutes the wild, the natural and the naturally beautiful (aesthetic) have been shaped by similar philosophical traditions. For those whose socialization has ensured little experience of these sites, who have very different philosophical traditions which shape very different perceptions of the natural, the wild and the beautiful, engaging with regional and national parks in New Zealand is unfamiliar and considerably more challenging.

There have always been diverse opinions, perceptions, experiences and values ascribed to outdoor nature based recreation and the venues within which this form of recreation takes place. New migrants merely highlight how different these factors can be. Not all New Zealanders share the same perspectives on the value of wilderness in regional or national parks, understanding different perspectives will enable managers to communicate more effectively with our pluralistic society.

The interviews with recreation professionals demonstrate strong recognition and support for enhancing outdoor recreational opportunities for migrant communities: for the migrants themselves in terms of personal and social outcomes; for integration goals and the host society; and for conservation of the natural resource base. However, participants emphasised that the communication and operational needs of the above are resource intensive in a recreation-provider environment that is already resource-challenged.

Other key points to emerge were the need to find out from migrants *how* best to communicate recreation opportunities, and also the need to be creative in providing low-cost entry opportunities for migrants as key catalysts for ongoing engagement in outdoor recreation. But importantly, we need to know if we can sustainably cope with any increased (and diversified) demand from migrant recreation use - both in terms of the sustainability of the *overall* visitor experience *and* natural resource sustainability.

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# SECTION 1: INTRODUCTION

International research demonstrates that in some societies new immigrants<sup>1</sup> and ethnic minorities<sup>2</sup> have low rates of participation in sport and recreation. Additionally, ethnic minorities have been shown to experience more constraints to leisure and recreation than non-minorities. In New Zealand, recent shifts in immigration policy have ensured that the multicultural composition of our society now incorporates increasing numbers of migrants from non-traditional source countries, for example India and China. Thus, the cultural and ethnic composition of potential recreationists in New Zealand has similarly changed. This will increasingly confront managers of parks and recreation services and points to a need to recognise and incorporate the diverse set of values, perceptions and needs of ethnic minority communities.

This research examines the recreation practices of recent immigrants to New Zealand, with a view to documenting the perceived and actual constraints to recreation participation in nature-based outdoor recreation. To date there is an absence of research that focuses on immigrants and nature based recreation here, while internationally only a limited amount of research explores immigrants and their recreation participation. This study will address the local absence of research and contribute to growing international debates in this field. This research will go beyond a simple analysis of participation, to describe and understand how and why recent immigrants engage or not in nature-based recreation.

The focus on outdoor nature based recreation addresses the management challenges posed by the emergence of new user groups in this field. The study will contribute to policy addressing the recreation needs of immigrants and also to sustainable recreation outcomes in environmentally vulnerable settings.

## 1.1 Background Literature

### 1.1.1 Ethnicity and Recreation Participation

There are significant overlaps in the literature that considers ethnicity and immigration as factors in determining recreation behaviour. Research into the role that these factors play in terms of mediating recreation gained much attention from the 1980s after the publication of McMillen's (1983) seminal work on leisure participation by Mexican-Americans in Texas. McMillen found that the patterns of leisure behaviour were associated with the level of assimilation and that there were culturally specific motivations for participation. Car and Williams' (1993) work in a similar vein found generational status, alongside ethnicity, to be important determinants of outdoor recreation behaviour. Since these early studies, much research has focused on comparing the participation of migrants and ethnic minorities with 'desirable' levels of participation among members of the mainstream (generally Euro-American) population (e.g. Shores et al. 2007; Gomez 2006, 2002; Ho et al. 2005; Wolch and Zhang 2004; Tinsley et al. 2002; Walker et al. 2001; Virden and Walker 1999; Johnson et al. 1998).

One consistent theme to emerge from this research attention is that ethnic minorities have lower participation in recreation and sport than their 'mainstream' counterparts. Most of this research has been conducted in the United States and has focused on African Americans, Hispanic Americans and to a lesser extent Asian Americans (Floyd et al. 1993; West 1989; Chavez 1990; Barro and Rodriguez 1991; Dwyer 1994; McCreedy and O'Leary 1992, Washburne 1978). There is an emerging body of research focusing on Chinese, Filipino,

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<sup>1</sup> Note: The terms immigrant and migrant are used within this research interchangeably.

<sup>2</sup> Note: Race and ethnicity are both social constructs. The concept of race has been the subject of considerable critique, most of which highlights that there is no biological basis to racial differences and that the concept of race is a social construct. Ethnicity is a concept that emerged as a result of the critique of race and emphasises that people may identify with each other as members of a group in terms of cultural practices, a shared history, shared language, shared faith etc and that group membership and social stratification is socially constructed. People are linked by certain ancestries, but ancestral links are not always biological.

Japanese, Korean and Vietnamese perceptions and experiences of outdoor nature based recreation in North America (Jeong and Godbey 2000; Lee, Ivy and Moore 2000; Walker, Deng and Dieser 2001; Hung 2003). Generally the explanations offered for lower rates of participation focus variously on (i) the marginality of ethnic minority groups (socially and economically); ii) lower rates of participation as an outcome of discrimination; iii) level of acculturation or assimilation – where if assimilated participation rate disparities would dissolve, and iv) different values toward outdoor nature based recreation which shape disparities in participation.

A general consensus has been reached among researchers in this field, that ethnic and racial minorities experience more constraints to leisure and outdoor recreation than non-minorities (Shores et al. 2007). A range of constraints has been identified, with some researchers identifying a 'hierarchy of constraints' (Shores et al. 2007). For ethnic minorities, cultural traditions have been identified as significant socio-cultural constraints on recreation, particularly for first generation immigrants - for example by precluding mixed gender participation in some activities and settings (Stodolska 2000b). Religion too, has been conceived as a constraint –in this case for immigrant Muslims in the United States (Stodolska and Livengood 2006). Constraints are thus manifested in different ways for different ethnic groups, due in part to subcultures or ethnic minorities having unique cultural value systems. Different ethnic groups have different perceptions of fun, free time, relaxation and recreation (e.g. Carr and Williams 1993). These perceptions or value systems in turn influence individual recreation behaviour (Walker et al. 2001; Johnson et al. 1998).

### **1.1.2 Immigrants and Recreation**

While the role of immigration in recreation behaviour is largely subsumed within the broader literature addressing the role of ethnicity, there is a small but highly relevant literature focusing specifically on immigrant recreation. As with the ethnicity research, a number of studies demonstrate that immigrants face more and different constraints than long term residents (Stodolska and Livengood 2006; Stodolska and Alexandris 2004; Juniu 2000; Stodolska 2000a; 1998). While the constraints faced by immigrants or ethnic groups may be culturally specific, many fall broadly under the heading of resource constraints, and have been associated with the lower socio-economic-status of such minorities. This has led to some debate among researchers in the field as to the relative importance of ethnicity compared with marginality (Gramann and Allison 1999; Johnson et al. 1998). Marginality theory maintains that minority recreation is 'frustrated' by discriminating and hegemonic factors which are largely beyond the control of minority groups (Johnson et al 1998). Recent work, however, rejects a simple ethnicity/marginality framework, recognising the importance of both, and the way that class and ethnicity interact to produce different recreation patterns (Wolch and Zhang 2004; Stodolska 2000b). This body of work also demonstrates that changes in recreation practices do occur from pre to post migration (Stodolska and Yi 2003; Stodolska 2000a), and that 'assimilation' or 'acculturation' (what we would now refer to as integration) greatly influences post-migration recreation. Conceptual models have been advanced that address the complex relationship between the above factors in terms of public recreation participation. Of the empirically tested models, Gomez (2002, 2006) synthesised a model that usefully considers the roles of socio-economic-status, sub-cultural identity, level of acculturation, perceived benefits of recreation, and perceived discrimination. In a similar way, Wolch and Zhang (2004) recognise the importance of ethnicity, socio-economic status, and assimilation (for immigrants), along with attitudes to nature, knowledge and information use, previous relevant recreation (and work) experiences, and constraints to access, including distance to the recreational setting.

### **1.1.3 Immigrants, Ethnicity and Natural Area Recreation**

While recreation *in general* has been the subject of research with respect to the role of immigration and ethnicity, relatively little attention has been paid specifically to outdoor nature-based recreation. This may be because, as Wolch and Zhang (2004:416) note, "Wilderness areas are perceived as being the purview of White middle-class visitors"; other groups are seen as having less interest in nature, environmental protection or visiting the great outdoors. Indeed, research into organisational constraints to minority participation has revealed negative attitudes on the part of recreation professionals (Allison and Hibbler 2004). In a similar vein to the broader recreation studies described above, the few studies that *have* focused on ethnicity and 'wildland' recreation have also reported lower participation by ethnic minorities and that practices differ between ethnic groups – in terms of group composition (ethnic enclosure being observed), activities and

setting preferences (Wolch and Zhang 2004; Walker et al. 2001; Virden and Walker 1999; Johnson et al. 1998; Carr and Williams 1993).

#### **1.1.4 Immigrants, Ethnicity and Environmental Values**

The above research has also revealed differences for immigrants in terms of the cultural meanings and environmental values associated with outdoor recreation settings. The role of environmental values, while little explored in terms of how they shape immigrants' and ethnic minorities' nature-based recreation practices, are emerging as an important consideration (Wolch and Zhang 2004). The affective meanings attached to natural settings and consequently the recreational activities pursued, have been found to be influenced by ethnicity. Ethnic minorities are generally seen to have more anthropocentric views, and to favour more consumptive recreational use of natural areas (Cordell et al. 2002; Virden and Walker 1999; Carr and Williams 1993; McMillen 1983). Thus research into the association between environmental values and recreation behaviour by ethnic minorities has been highlighted as an important area of future research (Wolch and Zhang 2004; Virden and Walker 1999).

#### **1.1.5 Immigration and Demographic Change in New Zealand**

Immigration has played an important role in building New Zealand society, from Polynesian (Māori) settlement over 1300 years ago, to European dominated settlement from 1840 through to the 1960s - a period when most immigrants came from the UK and Ireland (Spoonley & Taiapa, 2009). From the 1960s, immigration from Polynesia increased substantially, but in the late 1980s, New Zealand immigration policy changed, opening up to more non-traditional source countries – notably Asian countries. New Zealand, after 2000, had the highest rate of immigration per capita in the OECD. This has had a profound impact on the demographics of Auckland (one of our two study sites) in particular, which is described as having 'super diversity' with immigrants comprising 37 percent of its population of 1.3 million (Spoonley & Taiapa, 2009). The figure for New Zealand as a whole is 22.9%.

China and India have become more important as source countries over the last 20 years and now dominate the inflows of Asian immigrants to New Zealand. While Asians are predominant in the Auckland immigrant community (13.5% of migrants), the traditional source countries of UK and Ireland are still the greatest source of migrants for New Zealand overall. However, the *National Ethnic Population Projections: 2006-2026* predict a doubling of the Asian population by 2026 to 788,000 and Pasifika (Polynesian Pacific peoples) increasing by about 60% to 482,000 (the population of New Zealand is only 4.4 million). The effect on cities, especially Auckland, will be more concentrated, with Asian population growth expected to dominate (Spoonley & Taiapa, 2009). Wellington, the second study site has an immigrant population profile more reflective of that of New Zealand as a whole, with a diverse migrant base, but dominated by the UK and Ireland. Just under one quarter (23.3%) of Wellington's population of 180,000 are migrants, with England being the most common birth-place. The Pasifika population is 7% and Asians comprise around 9% (Statistics New Zealand, 2006). Projections for the Asian population in Wellington see it nearly doubling by 2021.

#### **1.1.6 Ethnicity, Environmental Values and Natural Area Recreation in New Zealand**

Despite calls for greater consideration of the diverse set of values, perceptions and needs of immigrants and ethnic minority groups (Sasidharan 2002; Thapa et al. 2002; Juniu 2000) and their incorporation into park and recreation management, little research has been undertaken outside North America. Some exploratory work in Australia (Cortis et al. 2007) has been undertaken, which reveals lower for culturally and linguistically diverse women, but there has been virtually no comparable work undertaken in New Zealand despite this being recognised as a research gap, and particularly for nature based recreation (Booth 2006; Thomas and Dyll 1999; Perkins and Gidlow 1991). The New Zealanders' Sport and Physical Activity Survey potentially offers some data on ethnicity and participation, but is far too broad-brush to provide the detail needed to inform theory or practice in this field, particularly in relation to immigrant experience. A recent report by Spoonley and Taiapa (2009) considers immigrants and ethnic diversity – but primarily in the context of sport participation. In relation to environmental values and their role in outdoor recreation behaviour some research has been undertaken within the context of socially constrained groups (Lovelock 2010) and in the tourism context (Lovelock 2003), but the immigrant aspect remains to be explored.

## **1.2 Research Objectives**

### **1.2.1 Research Goal:**

To explore and document the perceptions and practices of recent immigrants to New Zealand, in relation to outdoor nature-based recreation.

### **1.2.2 Research Objectives**

- Document characteristics of recent immigrant nature-based recreational use (frequency, locale, mode)
- Document the perceptions, attitudes and experiences of recent immigrants in relation to their outdoor nature-based recreation use in New Zealand, including perceived and actual constraints.
- Identify environmental values held by recent immigrants in relation to their outdoor nature-based recreation practices.
- Compare and contrast the above perceptions, attitudes, values and experiences of recent immigrants with settled New Zealanders

## **SECTION 2: RESEARCH METHODS**

The following section discusses the methods undertaken for this research. A mixed method approach included both quantitative survey and qualitative interview components.

### **2.1 Quantitative Survey**

#### **2.1.1 Questionnaire Design**

The aim of this survey was to examine the recreation practices of recent immigrants to New Zealand, with a view to documenting perceived and actual constraints to participation in nature-based outdoor recreation, and to compare these with data from a sample of settled New Zealanders. The questionnaire comprised 34 questions within four sections: Outdoor Recreation (activities and trends), Your Ethnicity and Past Recreation (ethnicity and language), You and The Environment (environmental values), and About You (visitor demographics). Section One primarily focused on frequency of participation, social interactions, constraints to participation and motivational factors. Section Two asked questions about ethnicity and country of birth, length of time in New Zealand, language, and recreation participation trends prior to and after arrival in New Zealand. Section Three asked questions about participant views towards the environment, using the New Ecological Paradigm scale. Finally, Section Four aimed to obtain demographic information about age, family status, employment, and education.

After consultation with informants within key ethnic/migrant groups in New Zealand, two language versions of the questionnaire were developed: English and Chinese (Mandarin). First, vigorous review of the English version was undertaken by academics and pilot tested in an English as a second language class. Afterwards, adjustments were made to the questionnaire following the reviews/evaluations. The English questionnaire was then translated into Chinese. Back-translation to English was conducted by a different professional translation service to ensure accuracy.

The final questionnaire consisted of a 2-sided A3 folded page which was designed to be completed in approximately 10 minutes. All surveys were accompanied with a cover letter which outlined the aims of the study and inviting participation of one household member. Three incentive prizes were included: one \$150 and two \$50 gift vouchers to Kathmandu or Warehouse. Prepaid return envelopes were provided.

#### **2.1.2 Survey Administration**

The survey was administered over a 6 week period from mid-May to 1 July 2009. The sample population was drawn from two study sites: Auckland and Wellington. The geographical focus for all aspects of the study was Auckland and Wellington because of the spatial concentrations of migrants there. Three different distribution methods were used: postal, hand delivery through immigration settlement coordinators, and online advertising.

The first method of distribution required a stratified random sample of 2000 households. English version questionnaires were delivered to a random sample of households to Auckland and Wellington. Due to cost limitations, only one postal distribution was administered to the sample of random households. The intent of distributing postal surveys to a random selection of households was to engage a broad cross-section of both migrants and New Zealand born residents in the study.

The second method of distribution was convenience sampling, in order to increase the representation of migrants in the sample. Settlement coordinators in the greater Auckland and Wellington regions were asked if they would be willing to participate in the distribution of either English or Chinese questionnaires. Fifteen settlement coordinators assisted with this research project, seven in Wellington and eight in Auckland. Each coordinator requested between 30 and 150 questionnaires. Accompanying cover letters, prepaid return envelopes, an advertising poster, and a prepaid return courier bag was sent to each coordinator. The final method, online advertising in a migrant newsletter, allowed potential participants to directly email the researchers and request that a questionnaire be posted to their personal address. Only six requests were made by this method.

## **2.2 Qualitative Interviews**

In-depth interviews were undertaken with a sub-sample of the immigrant cohort in both study locations. Participants were self-selecting, having identified their willingness to take part in either focus group or interview on the survey form. A purposive sample of these participants was used, representative of key immigrant groups. Interviews were digitally recorded and professionally transcribed. Transcripts were available to participants on request. The key subject areas for the interviews were: Pre and post-migration recreation (particularly nature-based); perceptions and experiences of constraints to nature based recreation; and meanings and value of nature-based recreation. Interviews were undertaken in English.

In-depth interviews with a sample of recreation professionals were digitally recorded and transcribed. They were offered for feedback to participants. These interviews also proceeded on a semi-structured basis and key areas explored included: Experiences with recent immigrants in recreation settings; attitudes to immigrant recreation; organisational and personal goals for immigrant recreation; and constraints to immigrant recreation.

## **2.3 Analysis**

### **2.3.1 Quantitative Analysis**

The data entry and analysis was undertaken at the Centre for Recreation Research, University of Otago using SPSS Version 15 and Microsoft Excel. Descriptive statistics are provided for each question. Graphs and tables illustrate the total number of responses for each question; however, non-responses are not included unless otherwise noted. Graphs are primarily used for illustrating statistically significant cases. Percentages and/or raw data are presented in tables. Chi-square, crosstabs, t-test and ANOVA statistical tests were applied where appropriate.

### **2.3.2 Qualitative Analysis**

The process of data analysis is inductive and data-led. The analysis began with coding the emerging data on the interview transcripts. Coding proceeded through examining each line of data and defining actions or events within it. Common themes and sub-categories were noted regarding the impact of immigrant experience on outdoor nature based recreation behaviour. Analysis of the interview data used the constant comparison method (Glaser and Strauss 1967); participants' views, situations, experiences and practices were constantly compared with one another. After all the relevant points have been synthesised from the data, the transcripts were re-read to ensure that all the important aspects of the phenomena were accounted for.

## **2.4 Ethical Considerations**

University of Otago Category B ethics approval was granted. Data were compiled in aggregate form and participant anonymity ensured. Data entry and analysis was conducted only by the named researchers. For the interview participants, anonymity is ensured, pseudonyms are assigned and any data that could lead to participants being identified is treated to prevent this or is removed from the analysis. All returned questionnaires, as well as the interview transcripts and digital recordings remain in secure storage in the Centre for Recreation Research for five years, and then will be destroyed.

## SECTION 3: SURVEY ANALYSIS & RESPONSE RATES

Statistical analysis was conducted for three groups: migrant status (New Zealand born, new migrants [arrived within 5 years], settled migrants [arrived over 5 years ago]; country of birth (New Zealand, Europe, China and Other); and ethnicity (New Zealand/European; European; Chinese; and Other). Descriptive results for each question are presented. Chi-square tests of significance were conducted for all variables where appropriate. All statistically significant results presented comply with the standard that no more than 20% of cells have an expected count of less than five.

With regard to the assignment of two migrant groups <5yrs and > 5yrs: Firstly, it must be recognised that chronological time is not always a good guide to 'settlement', but the practicalities of research create an imperative to create categories, in order to facilitate meaningful data analysis for stakeholders. The two cohorts proposed for this study are based on criteria adopted in previous studies of immigrants in New Zealand. Notably, the FoRST funded New Settlers programme (Trlin and Watts 2004) uses the standard of immigrants having resided in New Zealand for less than five years to define 'recent immigrants' for the purposes of that research.

### 3.1 Response Rates

Table 1 illustrates the questionnaire type and distribution locations. The total response rate for all returned questionnaires was 21.6% (see Table 2).

**Table 1: Questionnaire Distribution Locations**

2009 Questionnaire distribution	Auckland	Wellington	Other Location	Auckland Chinese Version	Wellington Chinese Version	Totals
Households	491*	491*				982
Settlement Coordinators	441*	337*		91*	150	1,019
Other	5		1			6
<b>TOTALS</b>	<b>937</b>	<b>828</b>	<b>1</b>	<b>91</b>	<b>150</b>	<b>2,007</b>

\* Settlement coordinators returned blank questionnaires which were either not distributed or unavailable for distribution, thus, these numbers represent the total number of distributed questionnaires. 9 Auckland/9 Wellington questionnaires not deliverable by post.

Table 2 illustrates the response rates based on migrant status, ethnicity and country of birth. New Zealand born, new migrants (up to 5 years) and settled migrants (more than 5 years) data was obtained from question 15. Please refer to the questionnaire located in this report's Appendix. Only four questionnaires were returned from respondents who identified as Māori; therefore, the sample size was too small for statistical analysis of this group.

The data for ethnicity was obtained from question 11 in the questionnaire. In the questionnaire 11 pre-determined categories for ethnicity were provided and one 'other' category and these categories were designed to match New Zealand Census data. An overwhelming amount of 'Other' ethnic identities were represented, with a total of 42 different ethnicity responses (see section 4.1 and see Appendix). For analysis purposes 4 categories were created for ethnicity (see Table 2). Categorisation for analysis purposes was determined as follows:

- **NZ European** (plus anyone who identified as a 'New Zealander' in the 'other' category.)
- **European** (plus anyone who identified themselves from a European country e.g. German)

- **Chinese**
- **Other** (All other ethnicities, including Asian, African, and from the Americas as well as those who identified multiple ethnicity e.g. NZ/European/Swiss or NZ/European/Māori)

Four categories were also created for analysis purposes for the respondent's country of birth (see section 4.2 and see Table 2). Categories included New Zealand, Europe (i.e. any country within Europe), China, and Other countries (includes Australia, Americas, Asia (non-China), South Pacific, and Africa).

**Table 2: 2009 Questionnaire Respondent Categories**

<b>Group</b>	<b>Returned N</b>	<b>Valid Response Rate</b>	<b>Total Response Rate</b>
<b>Migrant Status Group</b>			
<b>New Zealand Born</b>	190	43.6%	9.5%
<b>New Migrants</b> (<1 year to 5 years)	106	24.5%	5.3%
<b>Settled Migrants</b> (5 years or longer)	137	31.6%	6.8%
<b>Total</b>	<b>433*</b>	<b>100.0%</b>	<b>21.6%</b>
<b>Ethnicity Group</b>			
<b>New Zealand/European</b>	200	46.7%	9.9%
<b>European</b>	33	7.7%	1.6%
<b>Chinese</b>	81	18.9%	4.0%
<b>Other</b>	114	26.6%	5.7%
<b>Total</b>	<b>428</b>	<b>100.0%</b>	<b>21.3%</b>
<b>Country of Birth Group</b>			
<b>New Zealand</b>	190	44.4%	9.5%
<b>Europe</b>	54	12.6%	2.7%
<b>China</b>	66	15.4%	3.3%
<b>Other</b>	118	27.6	5.8%
<b>Total</b>	<b>428</b>	<b>100.0%</b>	<b>21.3%</b>

Note: \* less than 0.1%; 18 return to sender; 2 incomplete questionnaires; 3 missing in system

## SECTION 4: SURVEY DEMOGRAPHICS

The following section presents demographic data for ethnicity, country of birth, age, gender, partner and children in New Zealand, employment status, occupation, personal income and highest level of formal education. See Table 3 for significant findings between socio-demographic variables and migrant status, ethnicity and country of birth groups. Findings are presented for each question and significance tests conducted for migrant status (again, grouped into born in New Zealand, new migrant, or settled migrant), ethnicity (grouped into New Zealander, European, Chinese, and Other), and country of birth (grouped into New Zealand, Europe, China, and Other).

Table 3: Socio-Economic Profile of Sample by Migrant Status

	NZ born		New migrant		Settled migrant		Total	Total percent
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Age								
15-24 yrs	18	9.5%	7	6.6%	2	1.5%	27	6.3%
25-44 yrs	98	51.6%	62	58.5%	53	39.6%	213	49.5%
45-64 yrs	61	32.1%	31	29.2%	54	40.3%	146	34.0%
65+ yrs	13	6.8%	6	5.7%	25	18.7%	44	10.2%
Gender								
Male	65	34.2%	40	37.7%	47	35.3%	152	35.4%
Female	125	65.8%	66	62.3%	86	64.7%	279	64.6%
Partner in New Zealand								
Yes	131	68.9%	83	78.3%	96	72.2%	310	72.3%
No	59	31.1%	23	21.7%	37	27.8%	119	27.7%
Dependent Children								
Yes	65	34.6%	42	40.4%	54	41.2%	161	38.1%
No	123	65.4%	62	59.6%	77	58.8%	262	61.9%
Employment Status								
Full time	101	53.4%	38	35.8%	58	43.0%	197	45.8%
Part time	49	25.9%	19	17.9%	19	14.1%	87	20.2%
Unemployed	8	4.2%	25	23.6%	16	11.9%	49	11.4%
Student	14	7.4%	12	11.3%	6	4.4%	32	7.4%
Retired	13	6.9%	11	10.4%	31	23.0%	55	12.8%
Sickness Beneficiary	4	2.1%	1	0.9%	5	3.7%	10	2.3%
Type of Occupation								
Professional or Manager	108	69.7%	32	49.2%	56	62.9%	196	63.4%
Technician/Trade or Community/Personal Service	24	15.5%	16	24.6%	17	19.1%	57	18.4%
Clerical & Administrative or Sales	22	14.2%	9	13.8%	13	14.6%	44	14.2%
Labourer or Machinery Operators and Drivers	1	0.6%	8	12.3%	3	3.4%	12	3.9%
Personal Income								
\$40,000 or less	56	31.8%	41	55.4%	54	50.0%	151	42.2%
\$40,001 - \$80,000	72	40.9%	27	36.5%	371	34.3%	136	38.0%
More than \$80,000	48	27.3%	6	8.1%	17	15.7%	71	19.8%
Highest level education								
Primary school	0	0%	8	7.7%	5	3.9%	13	3.1%
Secondary school	26	13.8%	8	7.7%	21	16.4%	55	13.1%
Trade certificate or diploma	45	23.8%	18	17.3%	19	14.8%	82	19.5%
University degree or higher	118	62.4%	70	67.3%	83	64.8%	271	64.4%

## 4.1 Ethnicity

Each respondent was asked to indicate their ethnicity. Eleven categories were provided based on Statistics New Zealand categories, with an additional category for 'other'. The categories provided were New Zealand European, Māori, Samoan, Cook Island Māori, Tongan, Niuean, Chinese, Korean, Indian, European, and African. Respondents were primarily New Zealand European (45.6%), followed by Other (22.2%), Chinese (18.8%), European (7.6%), Indian (2.5%), African (1.6%), and less than 1% for Māori and Korean. There were 42 'other' ethnicities provided. For a complete list please see Appendix 2. Of those listed, 14 were mixed ethnic groups (e.g. New Zealand European/Samoan or Malaysian/Chinese). Five respondents indicated New Zealander and were included in the New Zealand European group. Europeans who cited themselves in the 'other' category (e.g. Scottish) were grouped into European category. Mixed ethnic groups were categorised into the 'other' group.

## 4.2 Country of Birth

All respondents were asked if they were born in New Zealand or not. The majority of respondents were not born in New Zealand (56%) whereas 44% were born in New Zealand. A total of 46 countries were represented in the sample (please see Appendix for a complete list of countries). Again, four categories were created for analysis purposes for the country of birth including New Zealand, Europe, China, and Other.

## 4.3 Age

Seven age categories were provided on the questionnaire. Twenty-seven respondents were '15 – 24 years of age' (6.2%); 100 respondents were '25 – 34 years of age' (22.9%); 114 respondents were '35 – 44 years of age' (26.1%); 84 were '45-54 years of age' (19.3%); 63 were '55-64 years of age' (14.4%); 38 were '65-74 years of age' (8.7%); and seven respondents were '75+ years of age' (1.6%).

Chi-square tests show a significant difference in age distribution by migrant status ( $\chi^2 = 42.64$ ;  $df = 12$ ;  $sig. = .000$ ) (see Figure 1). More than expected new migrants fall into the younger age category, '25 – 34 years of age', while settled migrants are more prevalent in the older age categories of '55 – 64' and '65 – 74' years of age than new migrants or New Zealand born respondents.

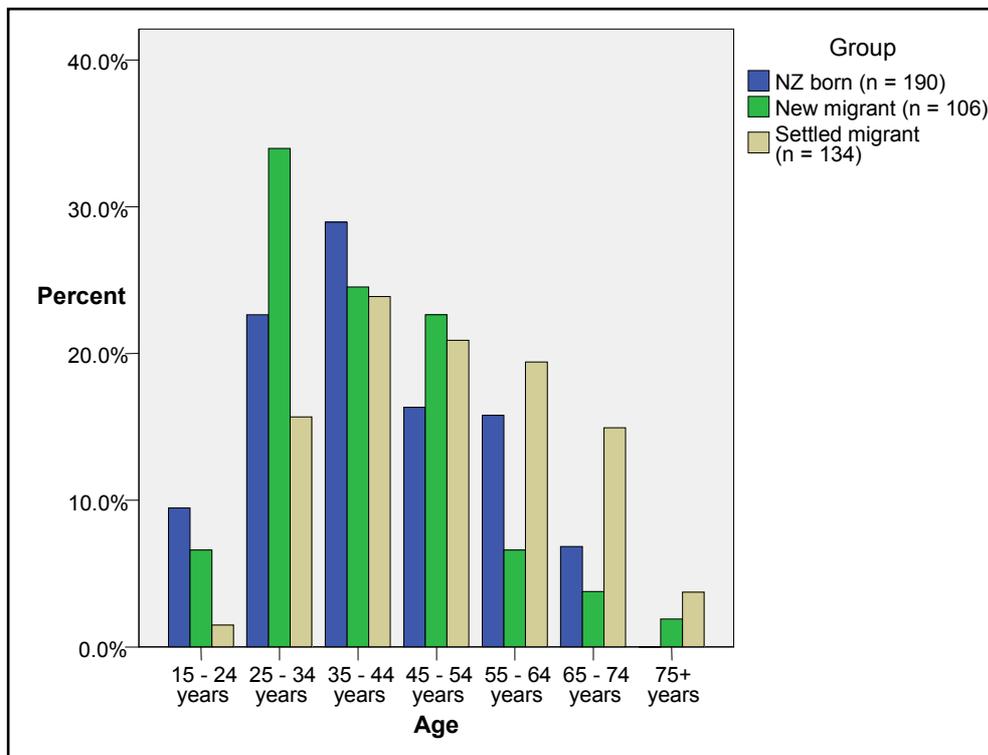


Figure 1: Age and Migrant Status

#### 4.4 Gender

Total response by gender was predominately female with 279 female (64.0%) and 152 male (34.9%) respondents.

#### 4.5 Partner Living in New Zealand

Each respondent was asked if he/she has a partner (e.g. husband, wife) in New Zealand. Respondents could tick 'Yes' or 'No' as an answer. The majority of all respondents (71.6%) indicated 'Yes', their partner lives in New Zealand.

#### 4.6 Children Living in New Zealand

Each respondent was asked if he/she has any children (under 18 years of age) living with him/her in New Zealand. Respondents could only tick 'yes' or 'no' as a response. The majority of all respondents (60.6%) indicated 'No', they did not have children living with them in New Zealand.

#### 4.7 Employment Status

Six categories were provided for respondents to indicate their current employment status including 'Employed full time'; 'Employed part time'; 'Unemployed'; 'Student'; 'Retired'; and 'Beneficiary'. The majority of respondents (45.6%) indicated they were in full-time employment, followed by 20% respondents in part-time employment. Only 12.8% of respondents indicated they were retired, 11.2% were unemployed, and 7.3% were students. Very few respondents (2.3%) were beneficiaries. There was a significant difference for employment status among the different migrant categories ( $\chi^2 = 55.48$ ;  $df = 10$ ;  $sig. = .000$ ) (see Figure 2). New Zealand born respondents (53.4%) are more likely than migrants to be fully employed; similarly so for part-time employment. Settled migrants were more likely to indicate retired status (22.9%) than the other groups.

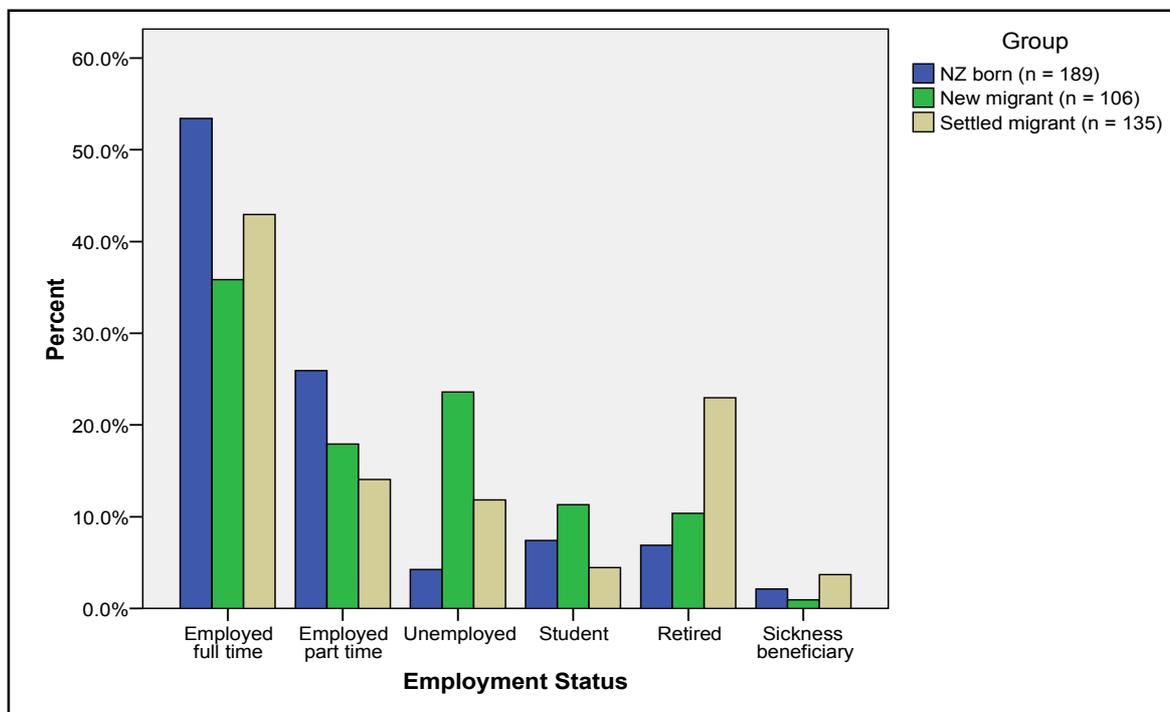


Figure 2: Employment Status and Migrant Status

## 4.8 Occupation

All respondents were asked to indicate their occupation and were provided eight categories which are standard in the New Zealand occupation handbook including 'Manager', 'Professional', 'Technician/Trade', 'Community and Personal Service', 'Clerical and Administrative', 'Sales', 'Machinery Operators and Drivers', and 'Labourer'. Table 4 illustrates the types of occupations for migrant status groups, along with the total number of respondents in each occupation. The majority of respondents (48.2%) claim to be in a professional occupation.

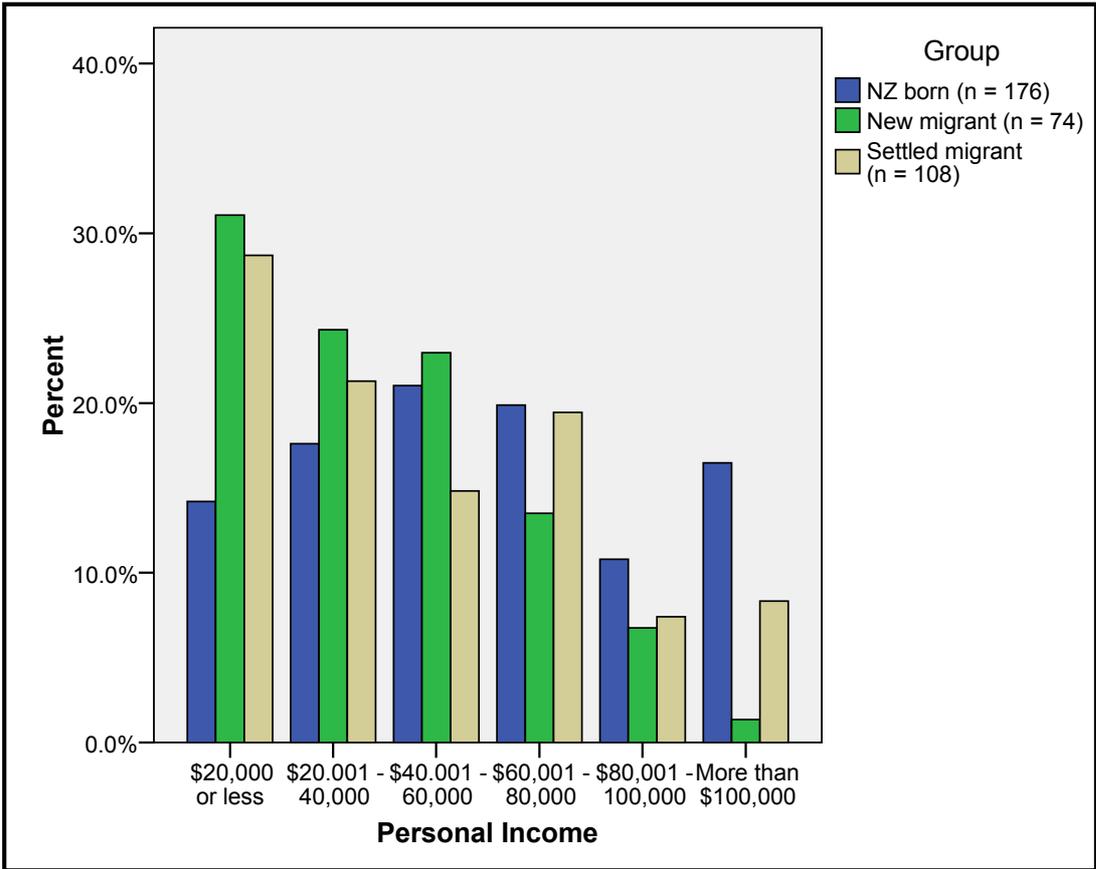
Table 4: Occupation and Migrant Status

Type of Occupation	NZ born	New migrant	Settled migrant	Totals	Total percent
Professional	80	25	44	149	48.2%
Manager	28	7	12	47	15.2%
Community and Personal Service	16	6	10	32	10.5%
Clerical and Administrative	15	6	10	31	10.0%
Technician/Trade	8	10	7	25	8.0%
Sales	7	3	3	13	4.2%
Labourer	0	6	3	9	2.9%
Machinery Operators and Drivers	1	2	0	3	1.0%
Total	155	65	89	309	100%

## 4.9 Personal Income

All respondents were asked to indicate their annual personal income before taxes and six response categories were provided: '\$20,000 or less', '\$20,001 – 40,000', '\$40,001 – 60,000', '\$60,001 – 80,000', '\$80,001 – 100,000', and 'more than \$100,000'. The largest group of respondents (18.1%) indicated that their personal income was less than \$20,000. Those who made \$20,001 – 40,000 (16.5%) and \$40,001 – 60,000 (16.3%) closely followed. Approximately 15.4% of respondents had income levels between \$60,001 – 80,000, followed

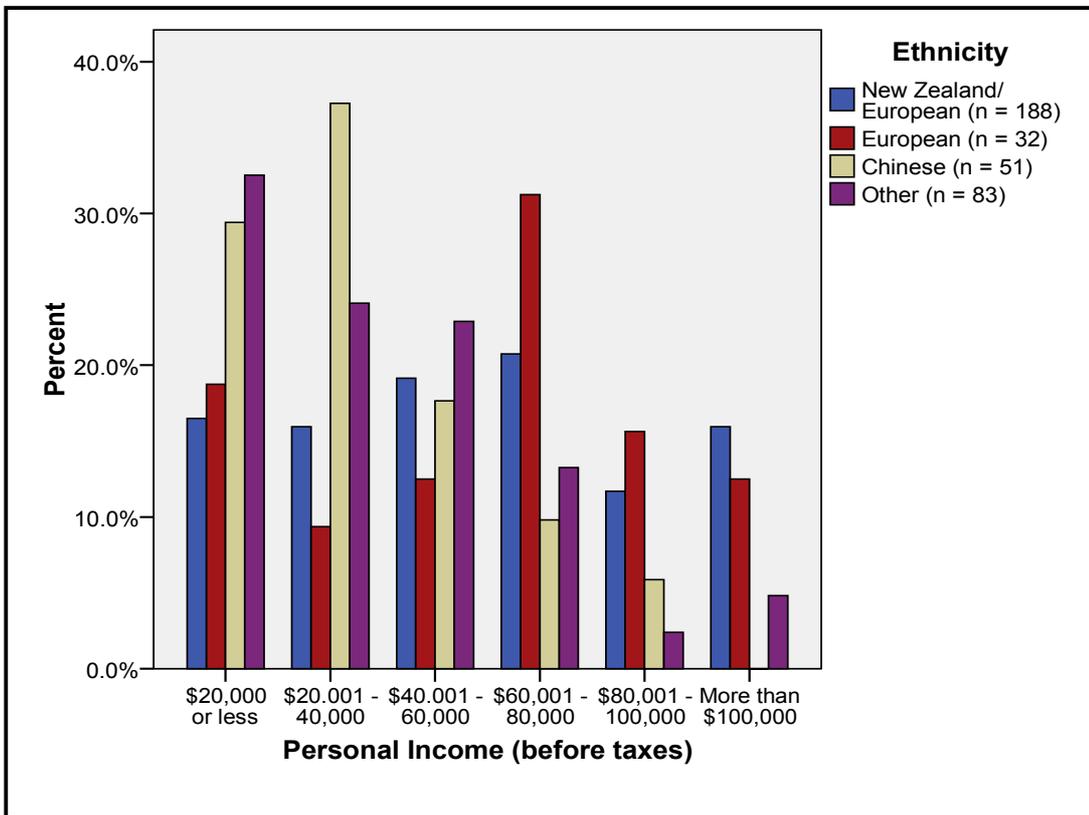
by 7.3% of respondents with an income of \$80,001 – 100,000 and 8.9% of respondents indicating an income of more than \$100,000. Figure 3 illustrates the differences for migrant status groups.



**Figure 3: Personal Income and Migrant Status**

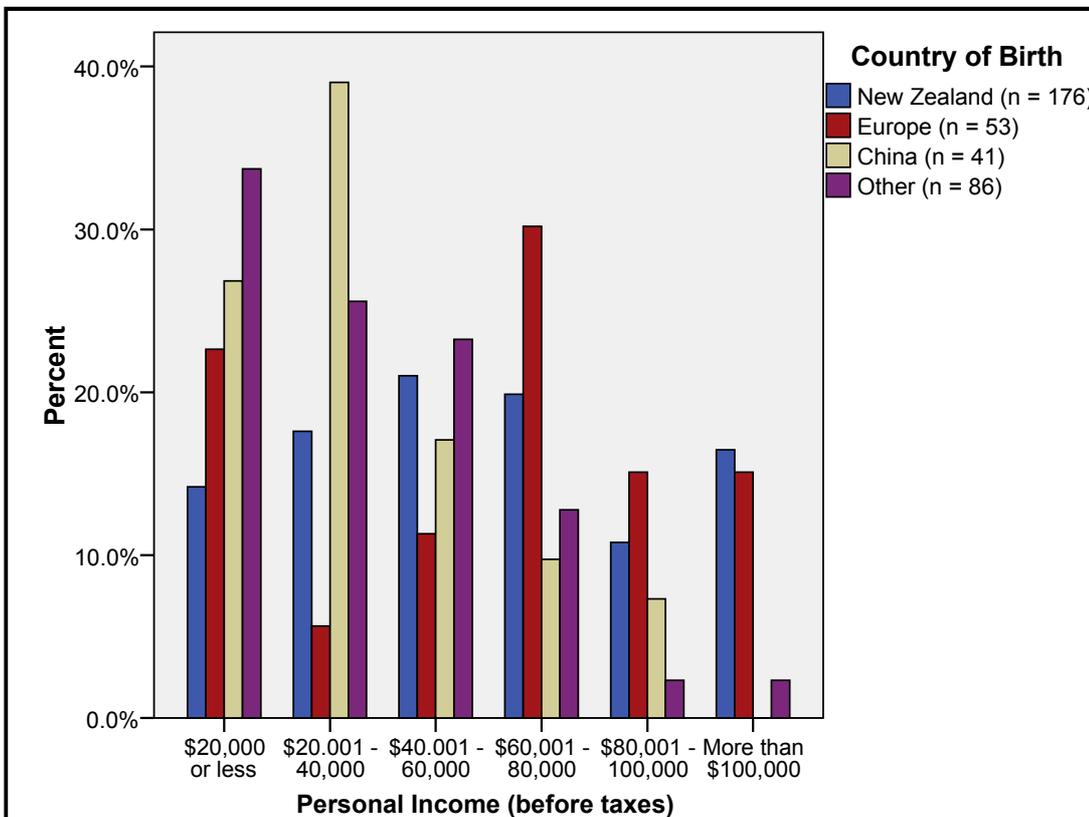
Significant differences were found between income levels by migrant status, ethnicity, and country of birth. A significant difference existed between personal income and migrant status ( $\chi^2 = 27.42$ ;  $df = 10$ ;  $sig. = .002$ ). New and settled migrants were more likely to have a lower income than New Zealand born respondents (refer to Figure 3). The majority of new and settled migrants were in the lowest income bracket, with an income of less than \$20,000. New migrants were typically found in the lower income brackets and less frequently in the higher income brackets. Settled migrants followed a similar pattern, apart from the \$60,001–80,000 bracket where they have a significantly higher frequency than new migrants.

Findings were similar for personal income and ethnicity ( $\chi^2 = 48.24$ ;  $df = 15$ ;  $sig. = .000$ ). Figure 4 illustrates that the largest group of New Zealanders (39.9%) earn between \$40,001 and \$80,000 per year. The largest group of Europeans (31.3%) earn between \$60,001 – 80,000. Chinese respondents generally indicated a lower income with the majority having either an income less than \$20,000 or between \$20,001 – 40,000. No Chinese respondents indicated an income of \$100,000 or more. For the ‘other’ ethnicity category, there are higher numbers of respondents who earn less than \$20,000 per year.



**Figure 4: Personal Income and Ethnicity**

Similar differences were found for personal income by country of birth ( $\chi^2 = 58.68$ ;  $df = 15$ ;  $sig. = .000$ ) Respondents born in New Zealand and Europe tend to have higher incomes than others (see Figure 5). Only 14.2% of respondents born in New Zealand earn \$20,000 or less whereas 16.4% earn more than \$100,000 per year. Most respondents born in China (39.0%) had lower personal income level of \$20,001 – 40,000.

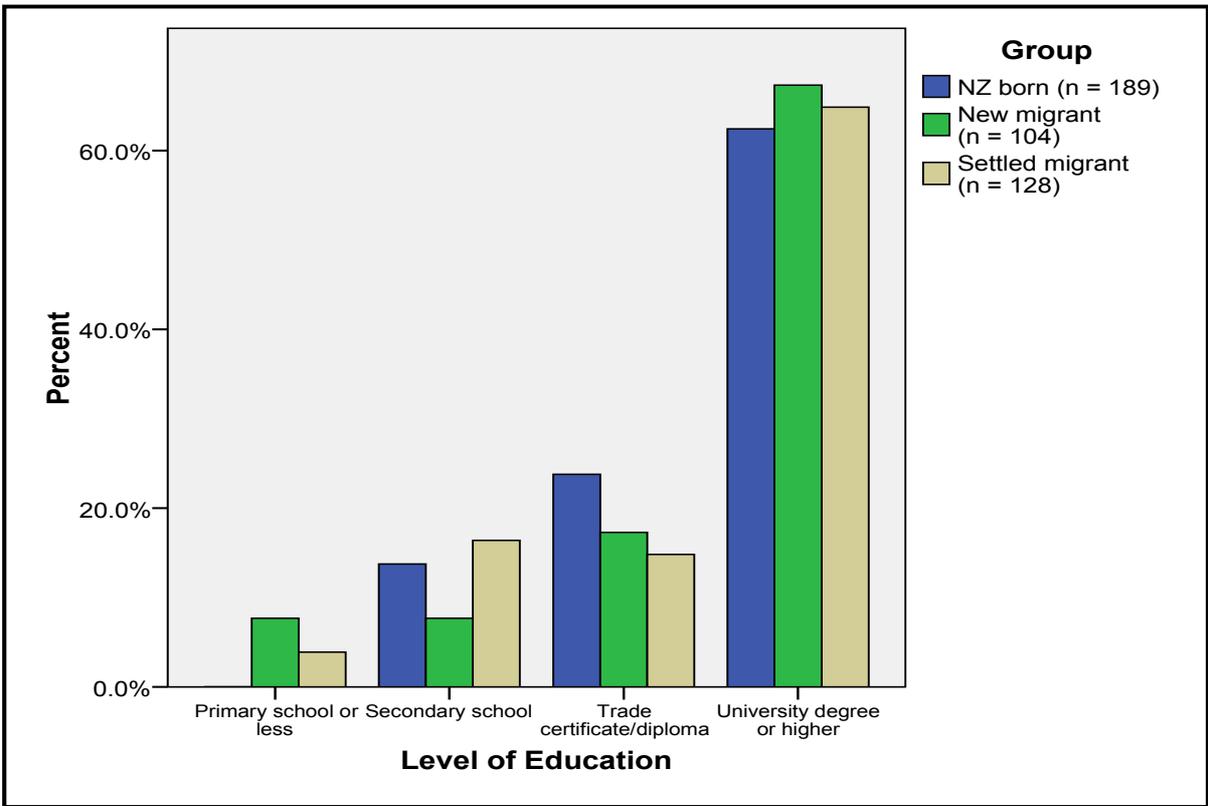


**Figure 5: Personal Income and Country of Birth**

### 4.10 Level of Education

All respondents were asked to indicate their highest level of formal education. Four categories were provided: 'Primary school', 'Secondary school', 'Trade certificate/diploma', and 'University degree or higher'. The majority of respondents (62.6%) indicated having a University degree or higher. The next most common level of education was a Trade certificate/diploma (18.8%) followed by secondary school (12.6%). Only seven respondents indicated primary school as their highest level of education. Six respondents commented in the questionnaire margins that they 'did not have any formal education'. Since a category was not supplied for this response, all six responses were grouped into a combined category re-labelled 'Primary school or less', which results in a total of 3% of the respondents.

Significant differences were found for level of education and migrant status as well as for country of birth. Chi-square tests ( $\chi^2 = 20.45$ ;  $df = 6$ ;  $sig. = .002$ ) indicate that in relation to migrants, more New Zealand born respondents have a trade certificate/diploma (23.8%) and fewer have a University degree or higher (62.4%) (see Figure 6). New migrants are more likely than the other groups to have a University degree (67.3%).



**Figure 6: Level of Education and Migrant Status**

Significant differences were also found between level of education by country of birth ( $\chi^2 = 34.76$ ;  $df = 9$ ;  $sig. = .000$ ). New Zealand born respondents had a higher than expected frequency of trade certificate/diploma education (23.8%) (see Figure 7). Although most respondents in the 'other' Country of Birth category indicated having a University education or higher (66.6%), respondents in the 'other' category also had 9.6% with only primary education or less. Respondents who had a primary education or less were from Nepal (1), Viet Nam (3), and Sudan (2).

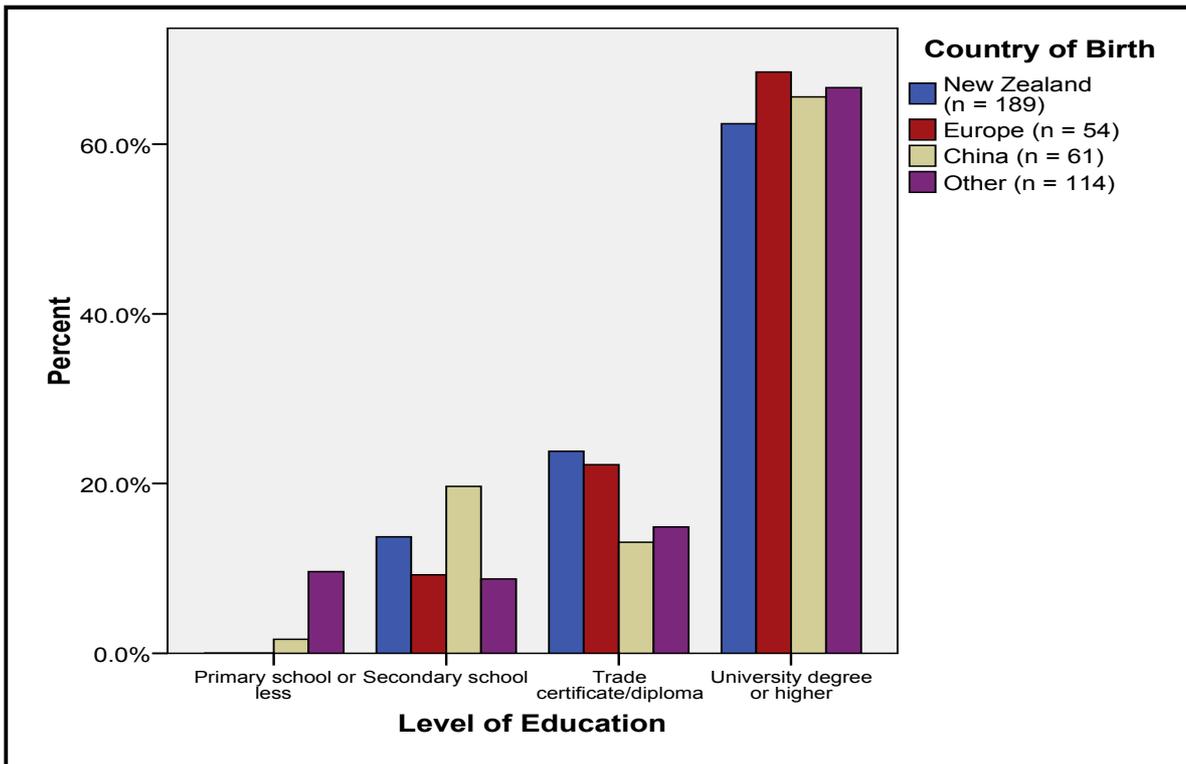


Figure 7: Level of Education and Country of Birth

## SECTION 5: RECREATION USE AND THE OUTDOORS

This next section discusses recreational use of outdoor natural areas in New Zealand (e.g. the bush, forests, lakes, and the coast).

### 5.1 Types of Outdoor Activity Participation

Each respondent was asked to indicate the types of activities they had participated in within the past 12 months. Seventeen categories were provided and one 'other' category. Categories included: tramping/hiking/trekking, short walks, camping, mountaineering/climbing, nature viewing, photographing nature, salt water fishing, fresh water fishing, hunting/shooting, water sports (e.g. kayaking, rafting), ski/snowboarding, off-road/4-wheel driving, motor boating/yachting, diving (snorkel or SCUBA), surfing, collecting forest products (e.g. ferns), and mountain biking. Respondents could select as many activities as they participated in as well as note which activity was the primary outdoor pursuit.

### 5.2 Main Outdoor Activity

The most common outdoor activity was short walks with a response from 380 respondents (89.6%), followed by 249 respondents (58.7%) participating in nature viewing activities, 166 respondents (39.1%) photographing nature, and 158 respondents (37.2%) tramping/hiking/trekking, whereas all other categories had less than 25% of the total respondents participating in the activity (see Figure 8). With regards to the primary outdoor pursuit, most respondents indicated short walks (47.9%), followed by tramping (12.5%). Sixteen of the 17 categories had at least one respondent indicating the activity was a primary pursuit. The exception was off-road/4-wheel driving, with zero responses. Respondents mentioned 37 'other' outdoor activities (please see Appendix).

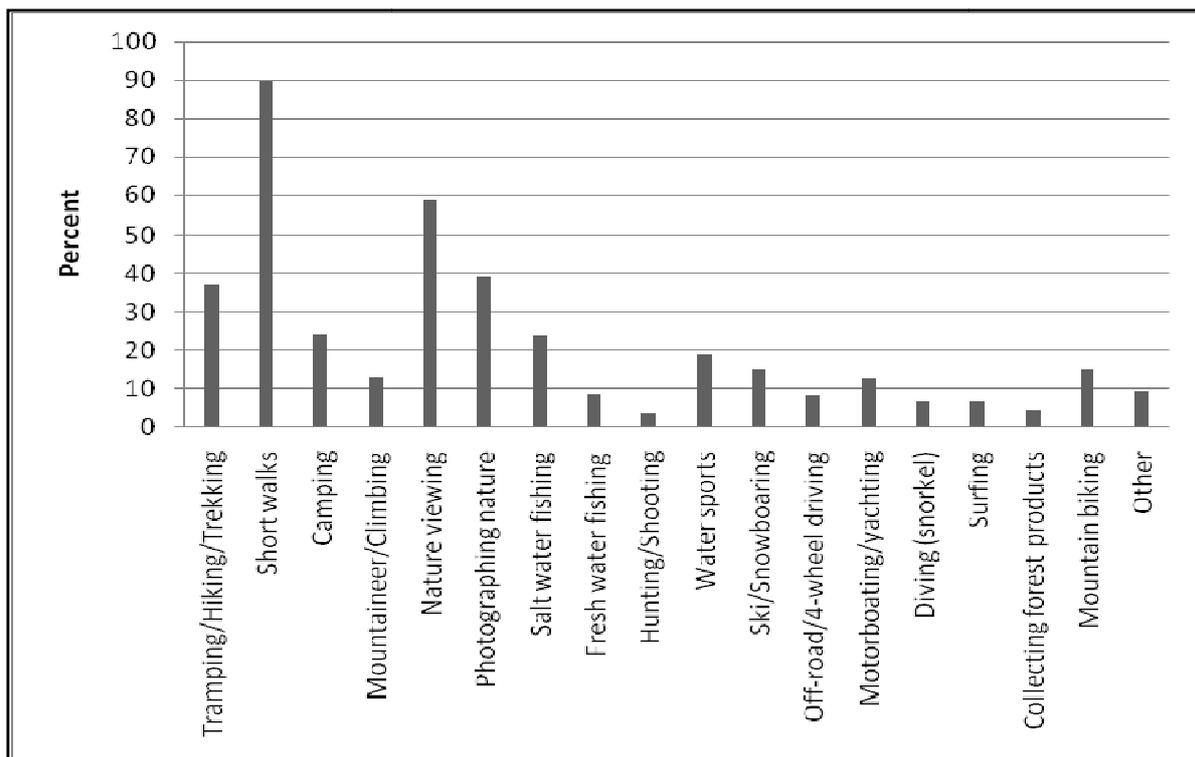


Figure 8: Primary Nature-based Recreation Activity for All Respondents

Due to the large number of outdoor activity categories, statistical tests for difference between migrant categories, ethnicity or country of birth were unable to be conducted for this question. However, New Zealand born respondents tended to have higher participation rates than migrants for all listed activities apart from nature viewing and photographing nature, mountaineering/climbing, and freshwater fishing. New migrants have the highest participation rates for these four activities (although the latter two have very low participation overall). Figure 9 illustrates the primary outdoor activity participation for migrant status groups.

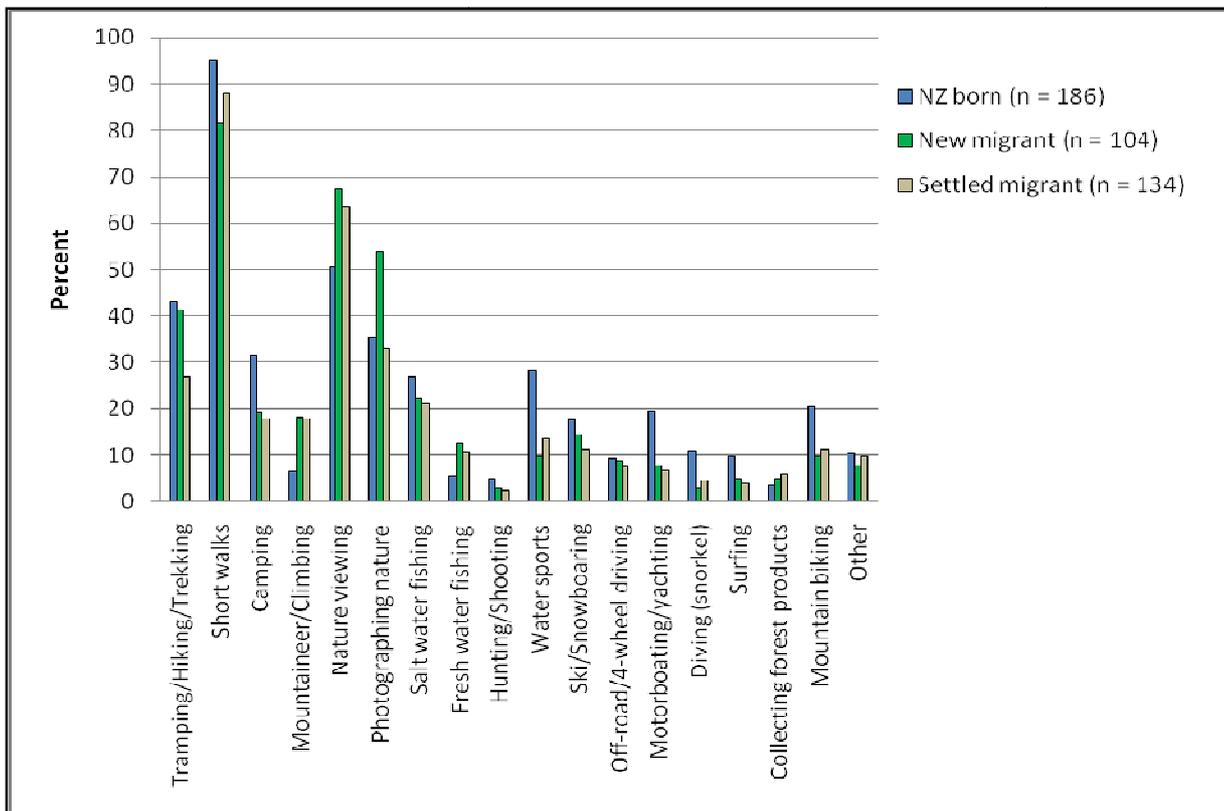
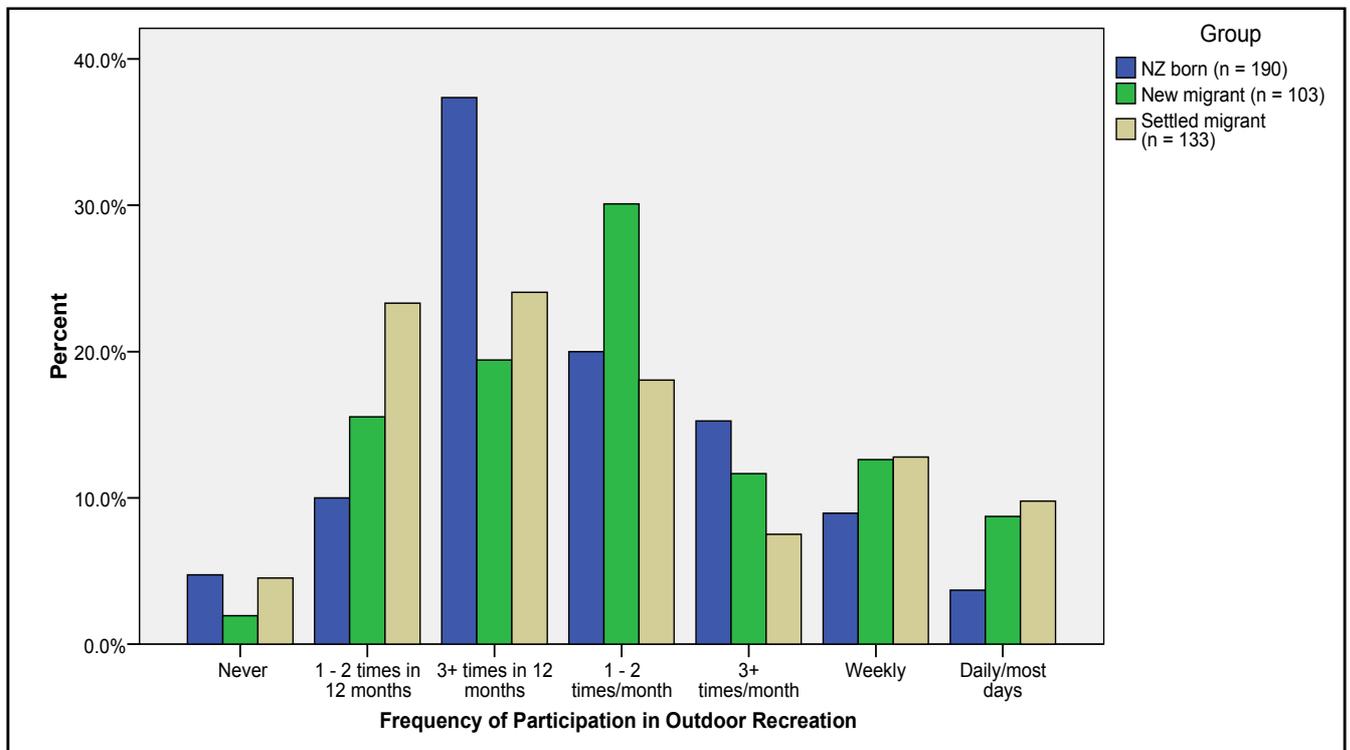


Figure 9: Primary Nature-based Recreation Activity and Migrant Status

### 5.3 Frequency of Participation in Outdoor Recreation

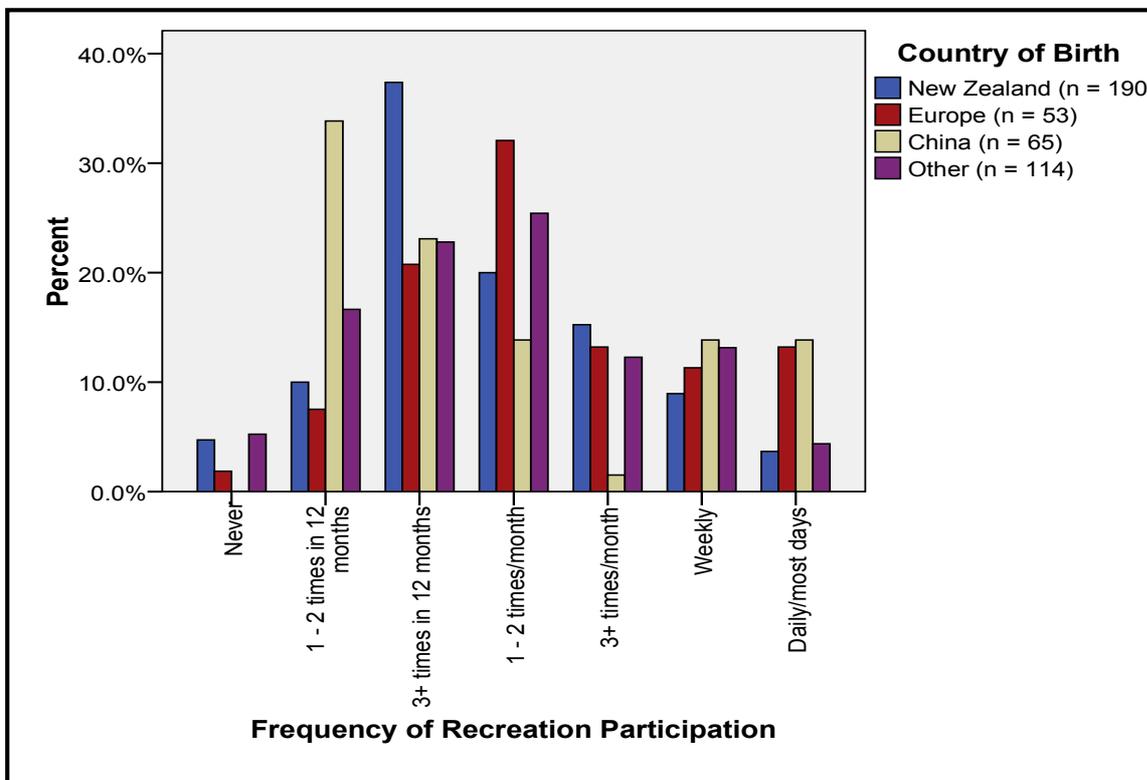
Each respondent was asked how often they visited outdoor natural areas for recreation purposes in the past 12 months. The most common frequency for participation in outdoor recreation was 3+ times in 12 months (28.2%), followed by 1 – 2 times per month (21.3%), then 1 – 2 times in 12 months (15.4%), 3+ times per month (11.9%), weekly (11.0%), daily (6.7%), and never (3.9%).

Significant differences existed for frequency of participation by migrant status ( $\chi^2 = 34.07$ ;  $df = 12$ ;  $sig. = .001$ ). While the largest group of New Zealand born respondents (37.3%) and settled migrants (28%) participated in recreation 3+ times in 12 months, new migrants (30.0%) participated more frequently, at a rate of 1 – 2 times per months. Both new and settled migrants had higher frequencies than New Zealand born respondents for participation weekly and daily/most days (see Figure 10).



**Figure 10: Frequency of Recreation Participation and Migrant Status**

Furthermore, significant differences were found for frequency of recreation participation by country of birth ( $\chi^2 = 59.20$ ;  $df = 18$ ;  $sig. = .000$ ) (see Figure 11). Again, New Zealand born respondents (37.3%) participation peaked at 3+ times in 12 months. European borne respondents and 'other' tended to participate in outdoor activities more frequently, at 1 – 2 times per month. However Chinese borne respondents (33.8%) participated in outdoor recreation less frequently than other groups, at 1 – 2 times in 12 months (see Figure 10). And as above, New Zealand born respondents tended to be under-represented in the higher-frequency participation categories (weekly and daily/most days).



**Figure 11: Frequency of Recreation Participation and Country of Birth**

## 5.4 Member of an Outdoor Club or Organisation

Each respondent was asked if they belong to an outdoor activity club or organised group (i.e. tramping club, bird watching group, etc.). The majority of respondents (86.7%) are not a member of an outdoor club, with only 7.8% indicating they belong to an outdoor club (see Table 5). There were no significant differences for membership to an outdoor club by migrant status, ethnicity, or country of birth.

**Table 5: Belong to an Outdoor Club or Organisation?**

Group	Yes	No
<b><i>Migrant Status</i></b>		
New Zealand Born (n = 185)	8.1%	91.9%
New Migrant (n = 102)	7.8%	92.2%
Settled Migrant (n = 122)	7.4%	92.6%
<b><i>Ethnicity</i></b>		
New Zealand/European (n = 194)	8.8%	91.2%
European (n = 33)	6.0%	94.0%
Chinese (n = 71)	9.9%	90.1%
Other (n = 107)	4.7%	95.3%
<b><i>Country of Birth</i></b>		
New Zealand (n = 185)	8.1%	91.9%
Europe (n = 52)	7.7%	92.3%
China (n = 58)	8.6%	91.4%
Other (n = 113)	7.1%	92.9%

## SECTION 6: OUTDOOR RECREATION & SOCIAL INTERACTION

Respondents were asked how often they recreate solo, with one to two people, with three or more people, and with others from their own ethnic group. Frequency categories that were provided included 'Never', 'Sometimes', and 'Almost Always'. Figure 12 illustrates the frequency of social interaction for all respondents.

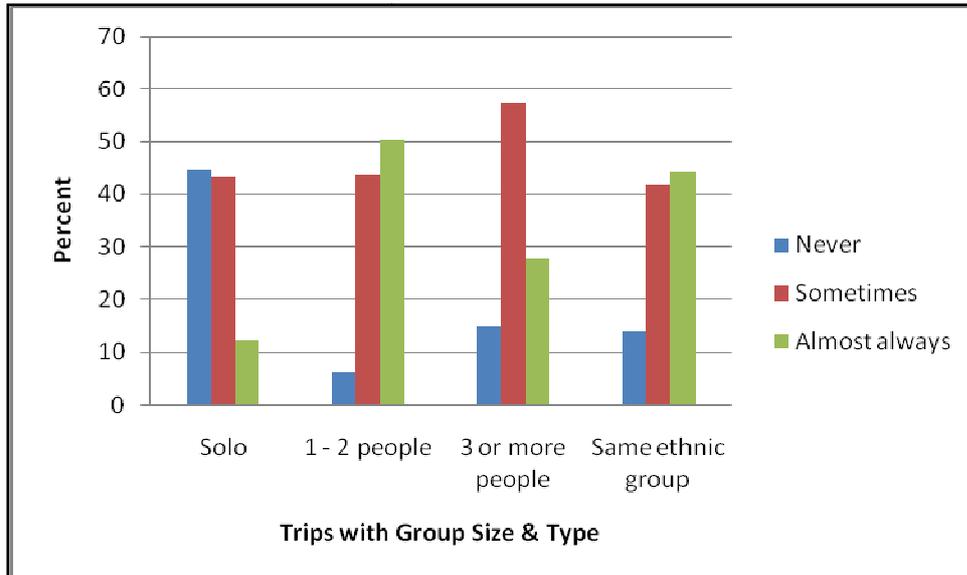


Figure 12: Trips with Group Size and Type: All Respondents

### 6.1 Recreation and Solo Recreation

In general, the largest group of respondents (32.6%) stated they 'never' recreate solo, followed by 31.4% who 'sometimes' recreate solo, and only 8.9% who 'almost always' recreate solo. Significant differences were found for this item by migrant status ( $\chi^2 = 12.95$ ;  $df = 4$ ;  $sig. = .012$ ), migrants (and in particular new migrants) tending to avoid solo recreation more than New Zealand born respondents.

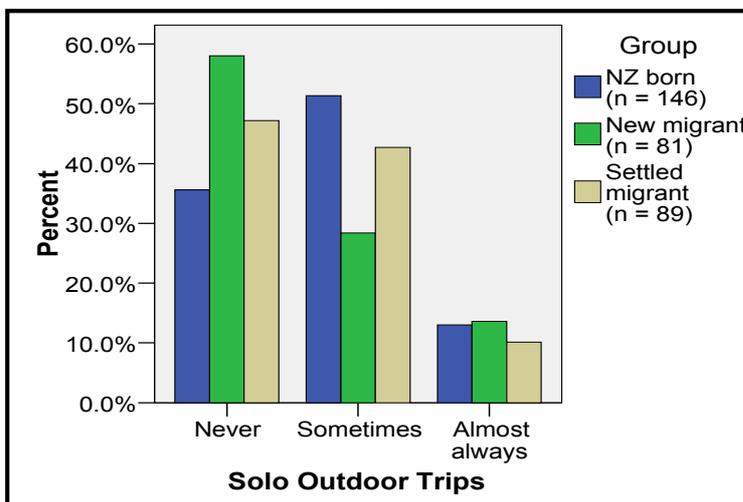


Figure 13: Solo Outdoor Trips and Migrant Status

### 6.2 Recreation with 1 – 2 People

Respondents were asked to indicate their frequency for taking outdoor trips with 1 – 2 people. The majority of respondents (41.1%) 'almost always' recreate in groups with 1 – 2 people, followed by 'sometimes' (35.8%), then 5% 'never' recreate with 1 – 2 people. Significant differences were found for this item by ethnicity ( $\chi^2 = 13.29$ ;  $df = 6$ ;  $sig. = .039$ ). Those falling into 'other' ethnicity tend to be more strongly represented in the 'Never'

recreate with 1-2 people category (and conversely less well represented in the 'Almost always' category). No significant differences were found by migrant status or country of birth.

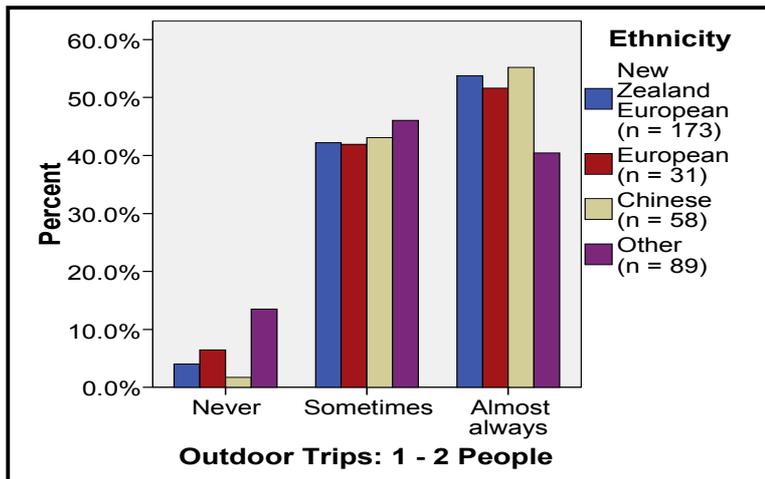


Figure 14: Trips with 1 – 2 People and Ethnicity

### 6.3 Recreation with 3 or More People

The majority of respondents (41.3%) indicated that they 'sometimes' travel in groups of 3 or more, followed by 20% stating they 'almost always' do, and only 10.8% stated they 'never' travel in groups of 3 or more. Significant differences were found for taking outdoor trips with 3 or more people by country of birth ( $\chi^2 = 18.97$ ;  $df = 6$ ;  $sig. = .004$ ). For European born respondents, more than expected (33.3%) responded to 'never' travelling with 3 or more people. At the other extreme, no Chinese born respondents 'never' take outdoor trips with 3 or more people, 68.7% 'sometimes' do, and 31.2% 'almost always' travel in groups of 3 or more.

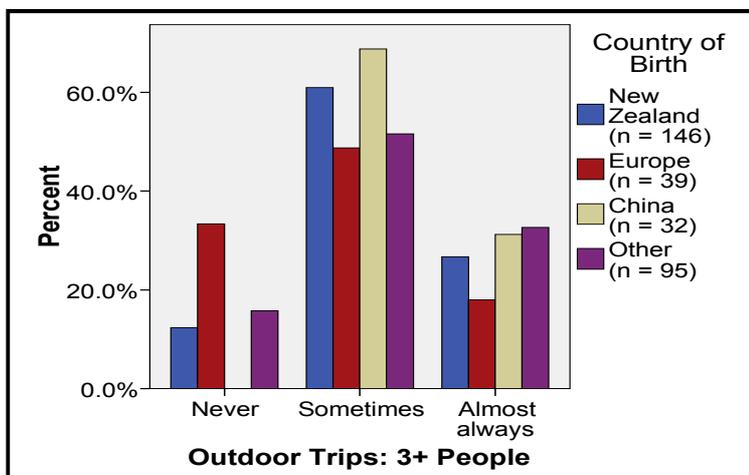


Figure 15: Trips with 3 or More People and Country of Birth

### 6.4 Recreation with Own Ethnic Group

All respondents were asked if they make outdoor trips with 'others from your own ethnic group'. The largest response (30.0%) was 'almost always', followed by 28.4% 'sometimes', with only 9.6% of respondents 'never' taking trips with their own ethnic group. Significant differences were found for this item by ethnicity ( $\chi^2 = 18.35$ ;  $df = 6$ ;  $sig. = .005$ ) and country of birth ( $\chi^2 = 14.90$ ;  $df = 6$ ;  $sig. = .021$ ). More than expected respondents (24.1%) who were grouped into the 'other' ethnicity category 'never' travel with their own ethnic group. New Zealand/Europeans had the highest percentage out of all ethnicities for 'almost always' recreating with their own ethnic group. Those in the 'other' ethnicity category were least likely to recreate just with their own ethnic group.

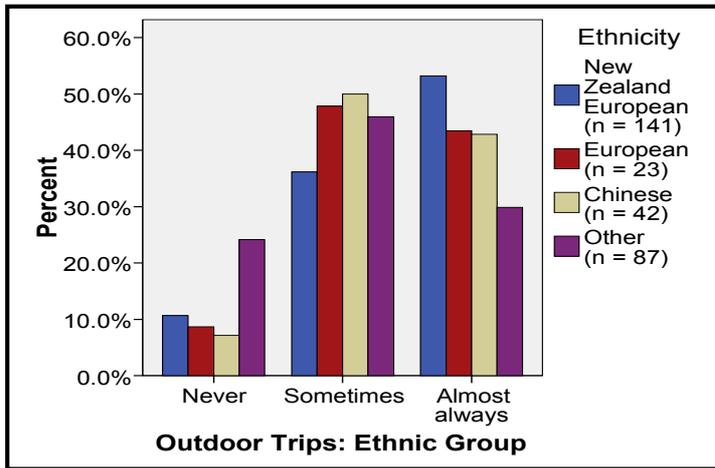


Figure 16: Outdoor Trips with Same Ethnic Group and Ethnicity

Similar patterns were shown for country of birth – with New Zealanders and Europeans more likely to recreate with their own ethnic group than the Chinese respondents do, and those of ‘other’ ethnicity least likely to recreate just with their own ethnic group.

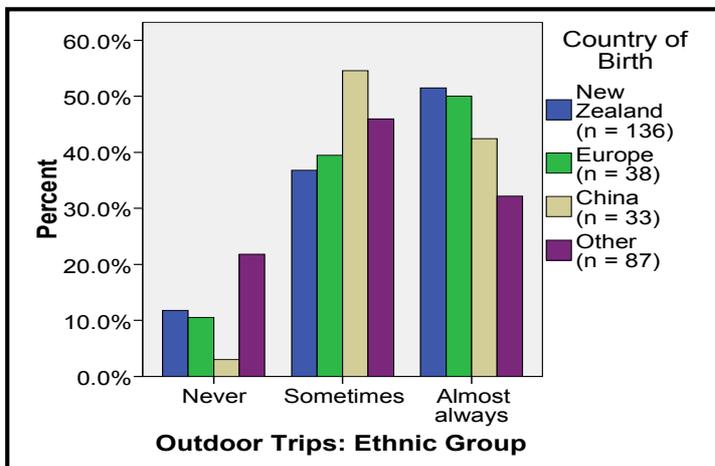


Figure 17: Outdoor Trips with Same Ethnic Group and Country of Birth

## SECTION 7: CONSTRAINTS

Eleven constraint categories were provided (as well as an open 'other' category) for all respondents to indicate how important each constraint might be in preventing participation in outdoor recreation activities. Respondents were given three ranking categories for each possible constraint to participation: 'very important', 'somewhat important', and 'not at all important'.

### 7.1 Constraints to Participation

The most common constraint to participation in outdoor recreation, which was ranked as 'very important', for all respondents (26.8%) was the high cost of equipment (for number of total responses see Table 6). The next most commonly reported constraint to participation was not having time (24.8%), followed by cost of transport too high (22.8%), not having people to go with (18.7%), parks and recreation areas being too far away (15.1%), lacking necessary outdoor experience (12.4%), poor health (9.0%), not speaking English well enough (8.5%), afraid of getting hurt (8.4%), and lastly, not being interested in outdoor recreation activities (4.8%). Nineteen other constraints to participation were also entered in the open question. The most common other constraint was poor/bad weather (n = 8), followed by having small children (n = 5) and then lack of funds (n = 4). Mentioned twice each was safety and security, lack of public transport, and being too lazy. Mentioned once each was no car, lack of food facilities, lack of parking, access to land, confidence, other people to go with are too busy, doing other things, school holidays, age, unfamiliar with area, have a family and only one car, children's sports, and not driving.

**Table 6: Summary for Constraints to Participation: All Respondents**

Constraints*	Very Important	Somewhat Important	Not at all Important
	<i>Percentages</i>		
The cost of equipment is too high (n = 381)	28.6%	35.4%	40%
I don't have time/ I am too busy (n = 394)	24.9%	51.3%	23.8%
The cost of transport is too high (n = 389)	22.9%	40.1%	37%
I don't have people to go with (n = 389)	18.8%	32.1%	49.1%
Parks and recreation areas are too far away (n = 390)	15.1%	48.5%	36.4%
I don't know where the parks and recreation areas are (n = 383)	13%	33.2%	53.8%
I lack the necessary experience (n = 378)	12.4%	33.6%	54%
I (or family members) have been in poor health (n = 377)	9%	22.3%	68.7%
I don't speak English well enough (n = 388)	8.5%	8%	83.5%
I am afraid of getting hurt (n = 379)	8.4%	22.7%	68.9%
I am not interested in outdoor recreation activities (n = 375)	4.8%	18.9%	76.3%

\*Ranked in order of importance (based on 'Very Important' category)

Table 7 presents significant chi-square statistics for the constraints to participation by migrant status, ethnicity, and country of birth. For the 33 chi-square tests conducted on the constraints to participation, 30 were found to be significant. It should be noted, however, that the majority of all responses suggest that constraints provided on the questionnaire were 'Not at all Important'. However, the 'Very Important' responses to constraints to recreation participation are listed in order of priority and discussed below. Statistically significant results were found for 11 constraints for migrant status; ten constraints for ethnicity; and nine constraints found significant for country of birth (see Table 7).

**Table 7: Summary of Chi-Square Significant Tests for Constraints to Participation**

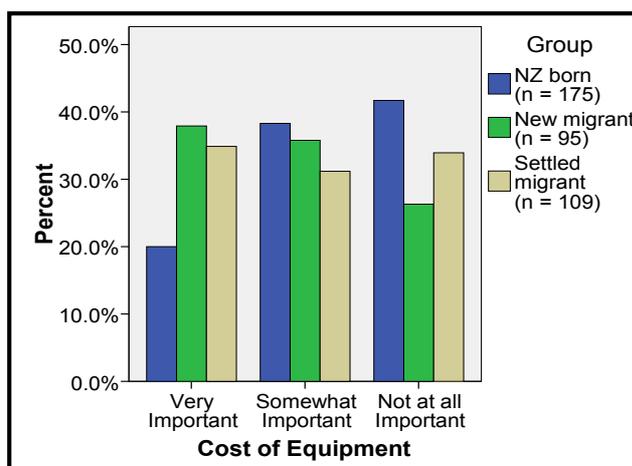
Constraints*	Migrant Status	Ethnicity	Country of Birth
<i>Significant Chi-Square Results</i>			
The cost of equipment is too high (n = 381)	✓	✓	✓
I don't have time/ I am too busy (n = 394)	✓	✓	✓
The cost of transport is too high (n = 389)	✓	✓	✓
I don't have people to go with (n = 389)	✓	✓	✓
Parks and recreation areas are too far away (n = 390)	✓	✓	✓
I don't know where the parks and recreation areas are (n = 383)	✓	✓	✓
I lack the necessary experience (n = 378)	✓	✓	✓
I (or family members) have been in poor health (n = 377)	✓	✓	✓
I don't speak English well enough (n = 388)	✓	✓	-----
I am afraid of getting hurt (n = 379)	✓	✓	✓
I am not interested in outdoor recreation activities (n = 375)	✓	-----	-----

\*Ranked in order of importance as indicated by all respondents

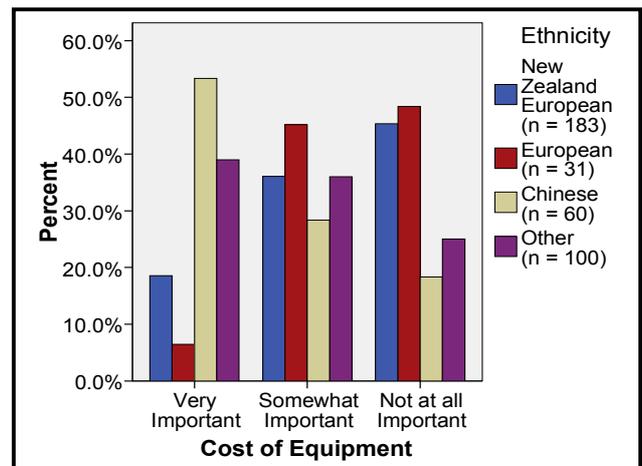
✓ Statistically significant difference in frequencies (Chi-square  $p \leq 0.01$ )

### 7.1.1 High cost of equipment

Significant differences were found for the constraint 'high cost of equipment' by migrant status, ethnicity, and country of birth (see Figures 18, 19 and 20). New Zealand born respondents tended to not find cost as an important constraint as did migrants – in particular new migrants. Nearly 40% of new migrants felt that the cost of equipment was a constraint to nature-based recreation. Similarly, when considered by ethnicity, only 18.5% of the New Zealand/European ethnic group felt that the high cost of equipment was a 'very important' constraint – compared with over half (53.3%) of Chinese respondents and 39% in the group 'other' finding the high cost of equipment to be a 'very important' constraint to participation.



**Figure 18: Cost of Equipment and Migrant Status**



**Figure 19: Cost of Equipment and Ethnicity**

The same patterns hold for country of birth, with Europeans the least concerned about the costs of equipment as a constraint. The majority of respondents born in China, (56.2%) and many born in 'other' countries (39.2%) indicated that the high cost of outdoor equipment was a 'very important' constraint to participation.

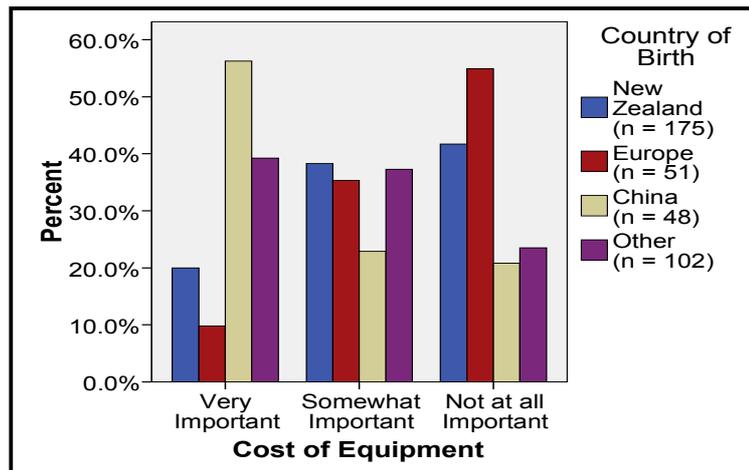


Figure 20: Cost of Equipment and Country of Birth

### 7.1.2 Too busy or lack of time

Significant differences were found between respondents by migrant status, ethnicity, and country of birth, for the constraint 'being too busy or lacking time' to recreate (see Figures 21, 22 and 23). Fewer New Zealand born respondents found this constraint to be unimportant, compared with the migrant respondents. Settled migrants were the least concerned about lack of time as a constraint – this may, however reflect the higher proportion of this group being of retired status.

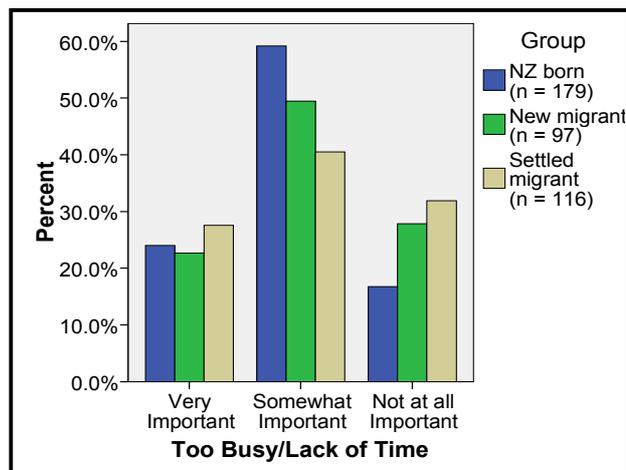


Figure 21: Too Busy/Lack of Time and Migrant Status

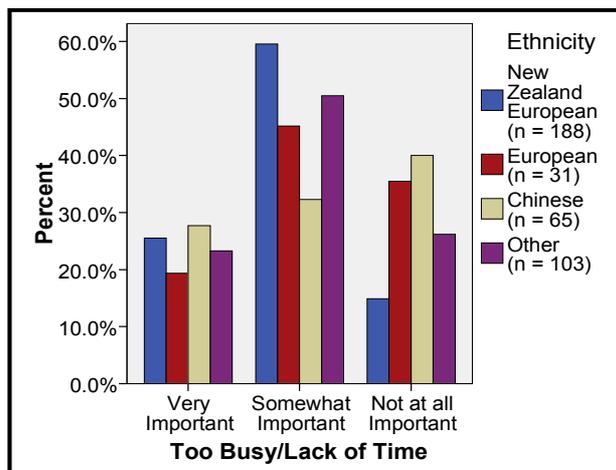


Figure 22: Too Busy/Lack of Time and Ethnicity

By country of birth, Chinese respondents were the most likely to indicate that lack of time was a 'very important' constraint – but paradoxically, Chinese respondents were also the most likely to report this constraint as being 'not at all important'.

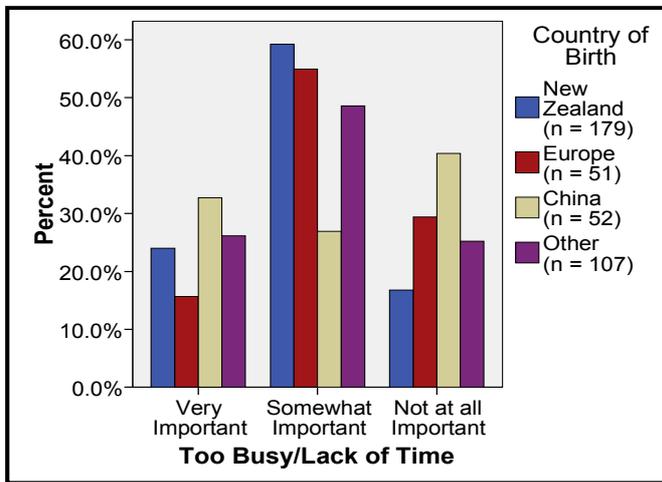


Figure 23: Too Busy/Lack of Time and Country of Birth

### 7.1.3 Cost of transport

Significant differences were found for the cost of transport as a constraint - by migrant status, ethnicity, and country of birth (see Figures 24, 25 and 26). Few New Zealand born respondents (12.5%) felt that the cost of transport was a 'very important' constraint; whereas 35.7% of new migrants and 28.0% of settled migrants indicated that the cost of transport was a 'very important' constraint. When ethnicity is considered, no Europeans indicated transport costs as an important constraint; whereas a high percentage of Chinese respondents (46.8%) and those of 'other' ethnicity (32.6%) found transport costs to be a 'very important' constraint.

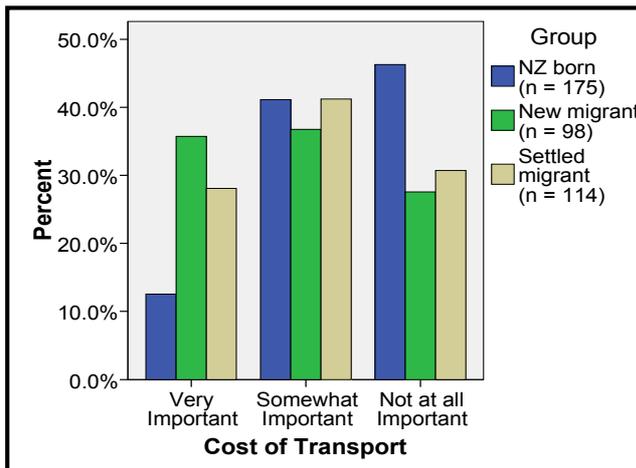


Figure 24: Cost of Transport and Migrant Status

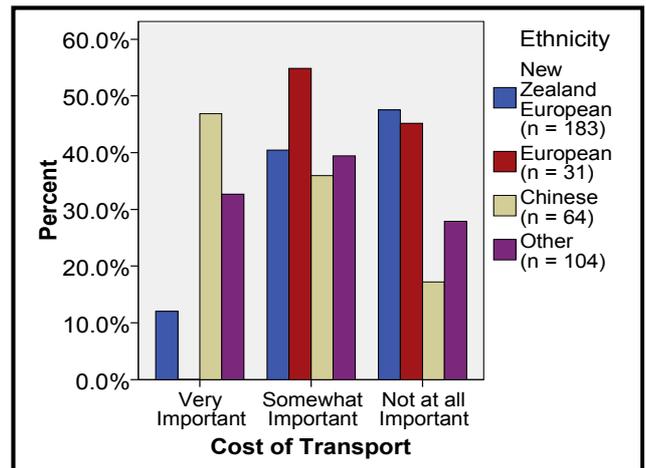


Figure 25: Cost of Transport and Ethnicity

The country of birth findings are similar, with New Zealanders and Europeans least concerned about transport costs and Chinese and 'other' ethnicities more concerned. Half (50%) of respondents born in China and over one-third (34.2%) of those born in 'other' countries indicated that transport cost was a 'very important' constraint to their nature-based recreation.

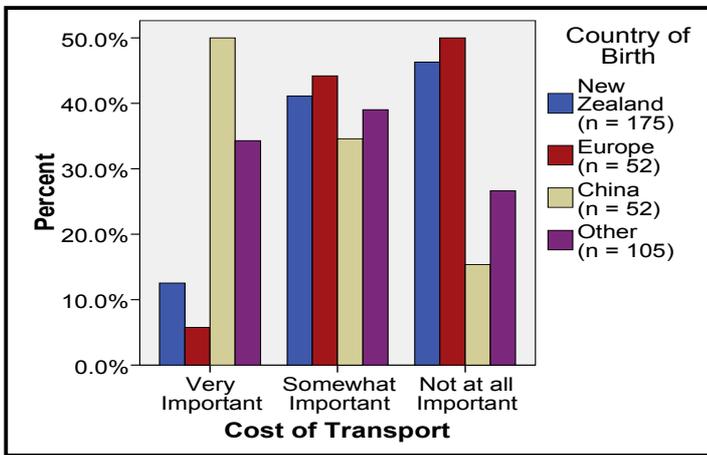


Figure 26: Cost of Transport and Country of Birth

### 7.1.4 Don't have people to go with

Again, significant differences existed for the constraint 'don't have companions' to recreate with - by migrant status, ethnicity, and country of birth (see Figures 27, 28 and 29). Few New Zealand born respondents (6.9%) felt that lacking recreation companions was a 'very important' constraint; whereas 23.4% of new migrants and 32.7% of settled migrants indicated that a lack of a companions is a 'very important' constraint. Those of the New Zealand/European and European ethnic groups generally found lack of companions not to be a constraint. A high proportion of Chinese respondents (37.5%) and those of 'other' ethnicity (28.8%) found the lack of companions to recreate with to be a very important constraint.

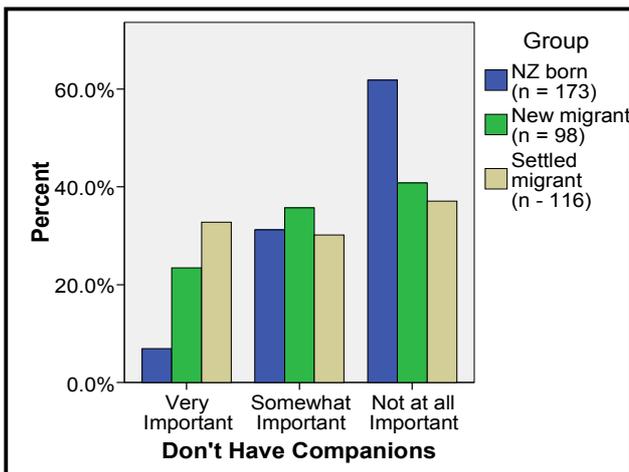


Figure 27: Don't Have Companions & Migrant Status

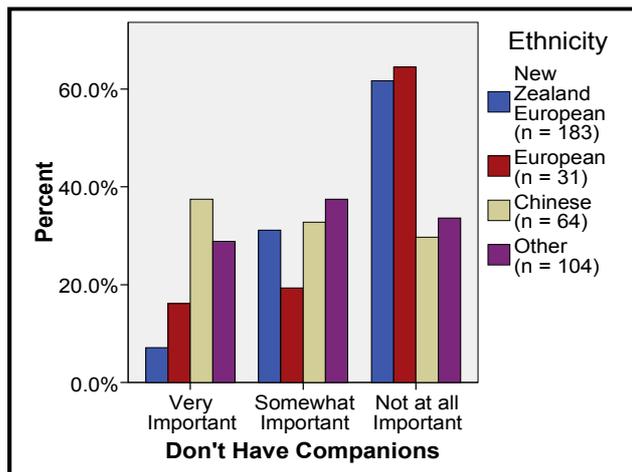


Figure 28: Don't Have Companions & Ethnicity

Country of birth analysis revealed the same patterns, with those born in China and other countries the most concerned about lack of companions to recreate with and New Zealand and European born respondents the least concerned.

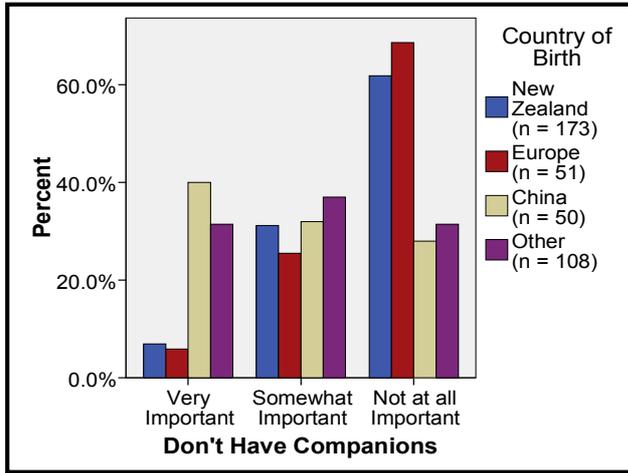


Figure 29: Don't Have Companions and Country of Birth

### 7.1.5 Parks and recreation areas too far away

'Parks and recreation areas being too far away' was found to have significant differences as a constraint when considered by migrant status, ethnicity, and country of birth (see Figures 30, 31 and 32). Only 9% of New Zealand born respondent felt that parks and recreation areas being too far away was a 'very important' constraint; whereas 17.5% of new migrants and 22.6% of settled migrants indicated that it was a 'very important' constraint. By ethnicity and country of birth, Chinese and 'other' respondents (22.4% and 23.3% respectively) indicated that the distances to parks and recreation areas was a 'very important' constraint to participation.

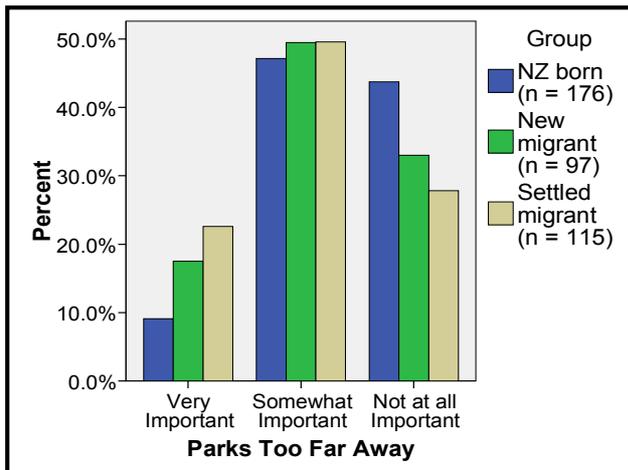


Figure 30: Parks Too Far Away and Migrant Status

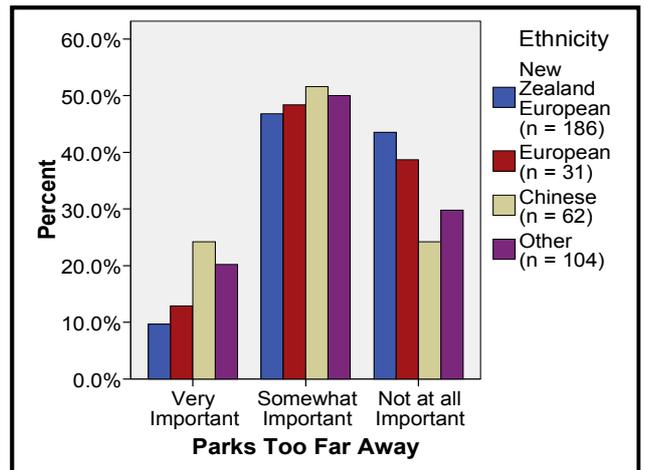


Figure 31: Parks Too Far Away and Ethnicity

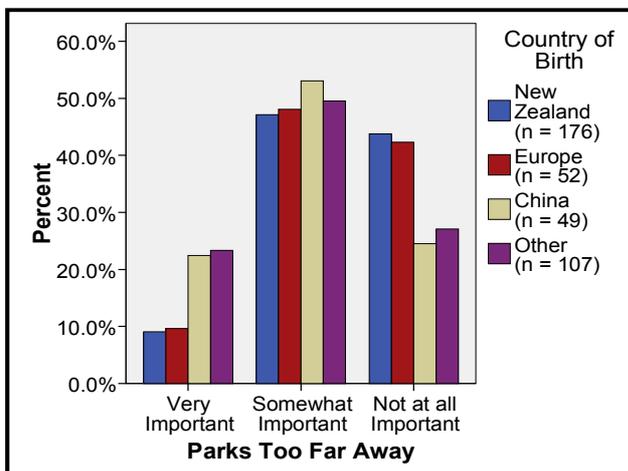


Figure 32: Parks Too Far Away and Country of Birth

### 7.1.6 Don't know where the parks and recreation areas are

There were significant differences in the importance of 'Not knowing where parks and recreation areas are' as a constraint, by migrant status, ethnicity, and country of birth. Few New Zealand born respondents (5.2%) felt that not knowing where parks and recreation areas are was a 'very important' constraint; whereas 18.3% of new migrants and 20.3% of settled migrants felt it was a 'very important' constraint. Similarly, very few respondents in the New Zealand/European ethnic group (5.0%) and no Europeans felt that being unfamiliar with the area was a 'very important' constraint. Of the Chinese respondents (21.8%) and 24.2% of the group 'other' found lack of knowledge of the area to be a very important constraint.

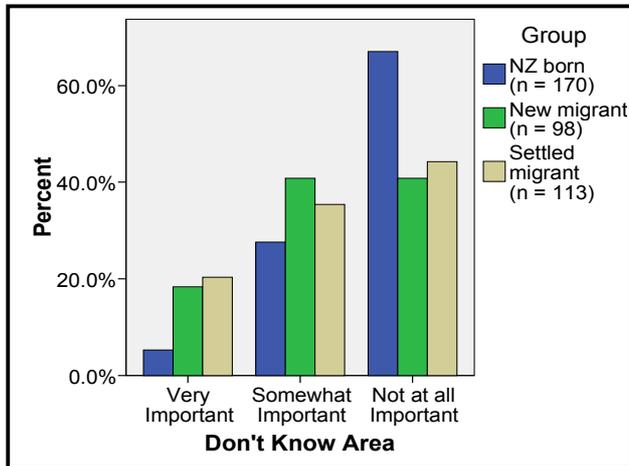


Figure 33: Don't Know Area and Migrant Status

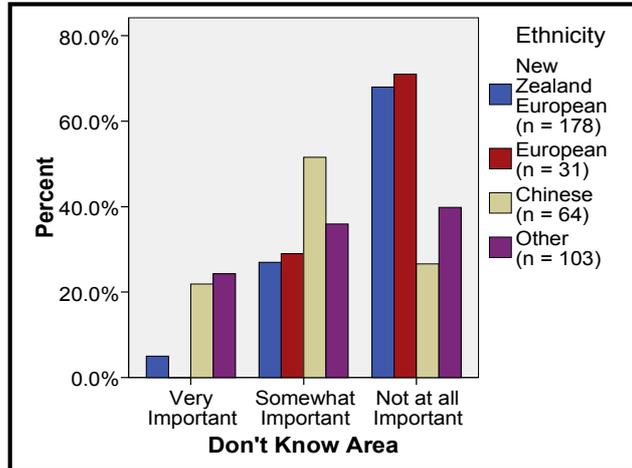


Figure 34: Don't Know Area and Ethnicity

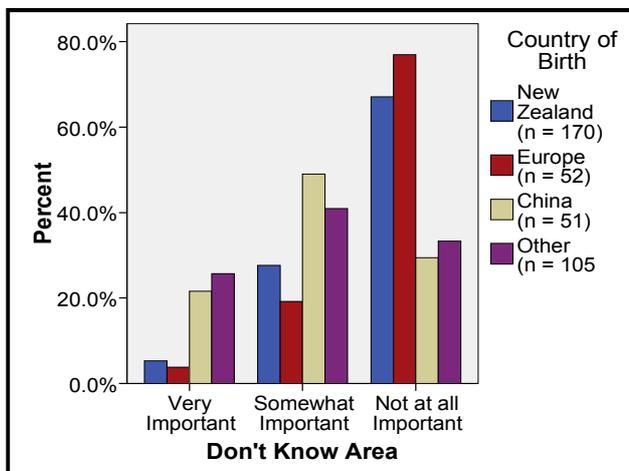


Figure 35: Don't Know Area and Country of Birth

### 7.1.7 Lack necessary experience

Generally 'lack of experience' was not considered an important constraint, however significant differences were found for this factor by migrant status, ethnicity, and country of birth (see Figures 36, 37 and 38). Only 4.7% of New Zealand born respondents felt that lacking experience was a 'very important' constraint; whereas 18.0% of new migrants and 19.6% of settled migrants felt it was 'very important'. Those New Zealand born and those of European birth or ethnicity were the least likely to find lack of experience a constraint.

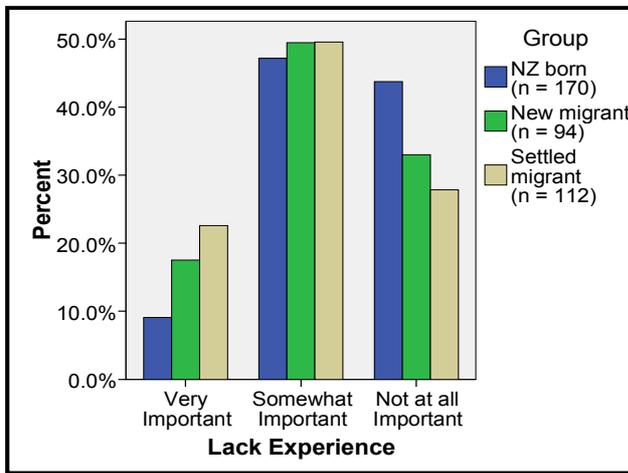


Figure 36: Lack Experience and Migrant Status

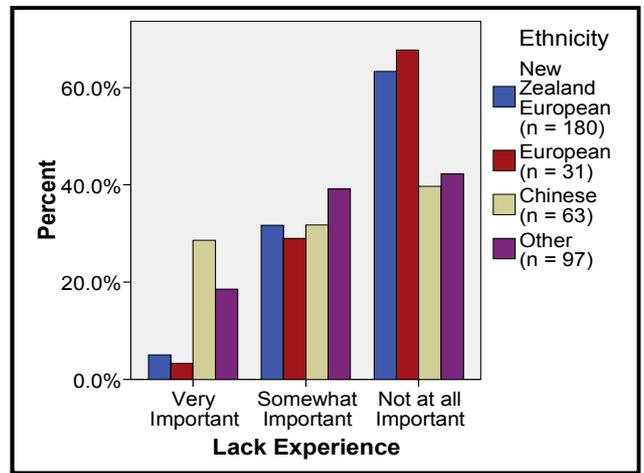


Figure 37: Lack Experience and Ethnicity

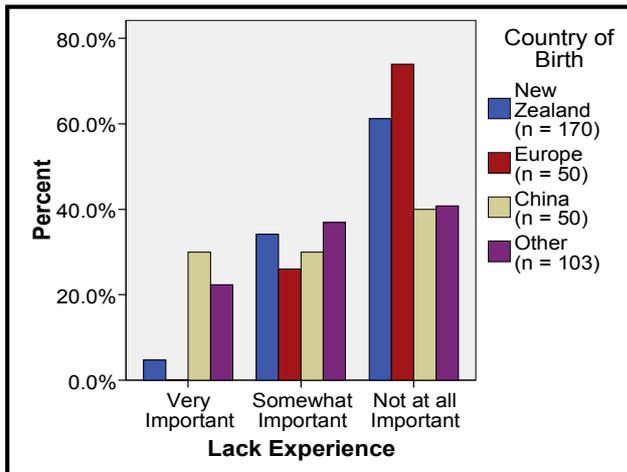


Figure 38: Lack Experience and Country of Birth

### 7.1.8 Poor health

There were significant differences in the importance of 'poor health' (either personal or a family member) as a constraint, by migrant status, ethnicity, and country of birth groups (see Figures 39, 40 & 41). While not a very important constraint overall, only 3.4% of New Zealand born respondents indicated that poor health was a 'very important' constraint; whereas 17.0% of new migrants and 11.0% of settled migrants indicated that it was a 'very important' constraint. Few respondents in the New Zealand/European ethnic group (3.8%) felt poor health was a 'very important' constraint. Only 6.4% of Europeans felt that poor health is a constraint, compared with 13.3% of Chinese respondents and 16.3% from the group 'other'.

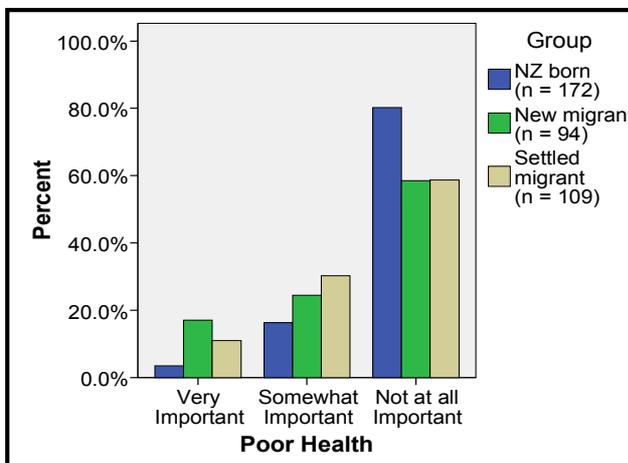


Figure 39: Poor Health and Migrant Status

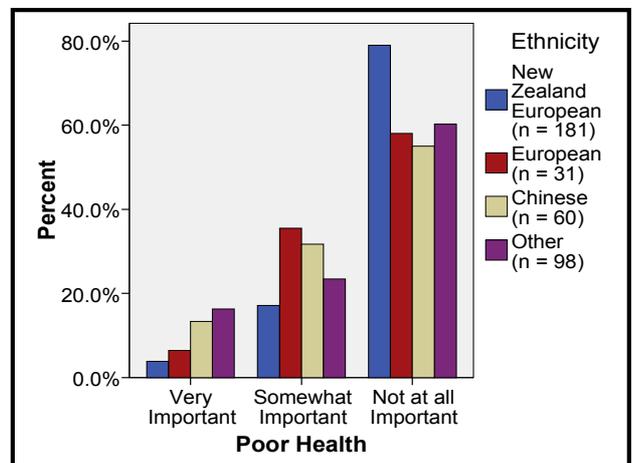


Figure 40: Poor Health and Ethnicity

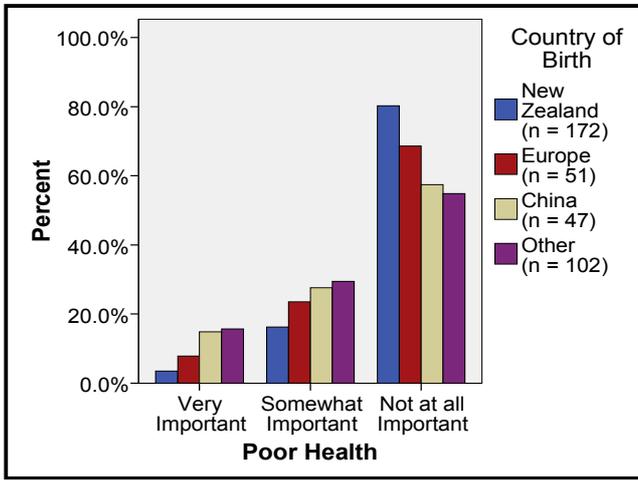


Figure 41: Poor Health and Country of Birth

### 7.1.9 Lack of English skills

Lack of English skills was found to be a slightly more important constraint for migrants, but overall not a major constraint. Significant differences were found for this constraint by migrant status and ethnicity (see Figures 42, 43 & 44). 12.2% of new migrants and 17.0% of settled migrants indicated that this was a 'very important' constraint. About one-quarter of Chinese-born respondents found lack of English to be a constraint to their nature based recreation.

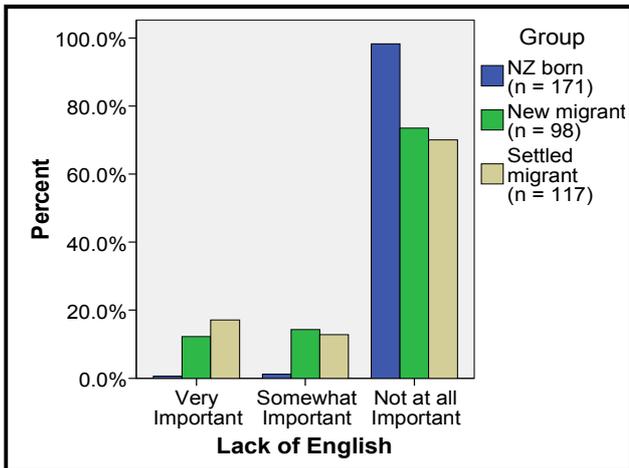


Figure 42: Lack of English Skills & Migrant Status

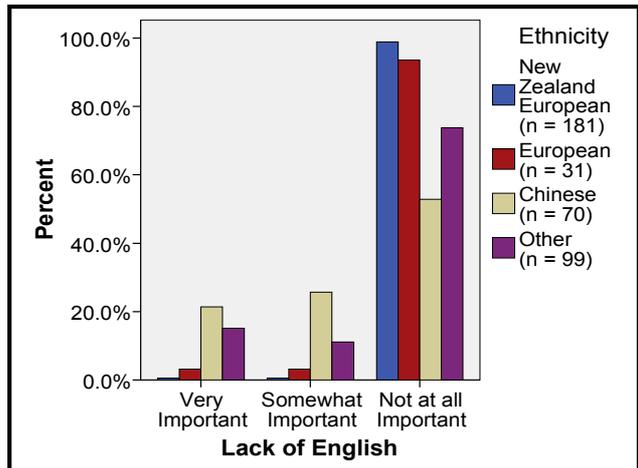


Figure 43: Lack of English Skills & Ethnicity

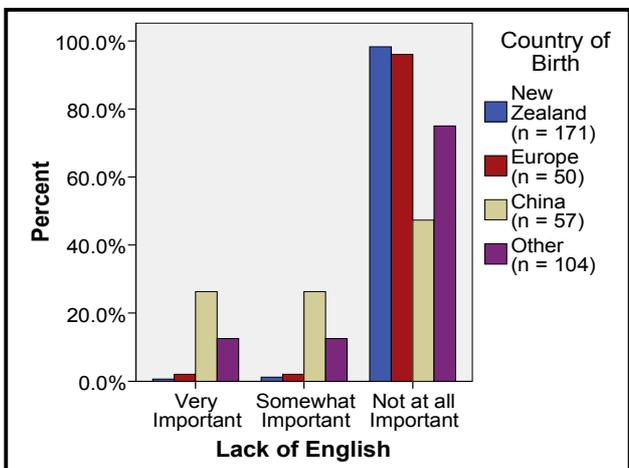


Figure 44: Lack of English Skills & Country of Birth

### 7.1.10 Afraid of getting hurt

Being 'afraid of getting hurt' was a constraint that was not important overall, but there were found to be significant differences in terms of its importance, by migrant status, ethnicity, and country of birth (see Figures 45, 46 and 47). Only 1.7% of New Zealand born respondents indicated their fear for getting hurt was a 'very important' constraint to participating in recreation; whereas 13.6% of new migrants and 14.5% of settled migrants indicated that it was a 'very important' constraint. Few respondents in the New Zealand/European ethnic group (1.6%) felt fear of injury was a 'very important' constraint. Only 6.4% of Europeans felt that this is a constraint; compared with Chinese respondents (12.9%) and the group 'other' (18.1%).

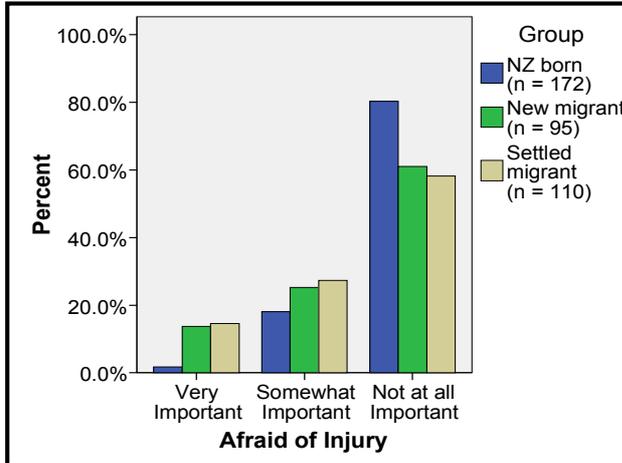


Figure 45: Afraid of Injury and Migrant Status

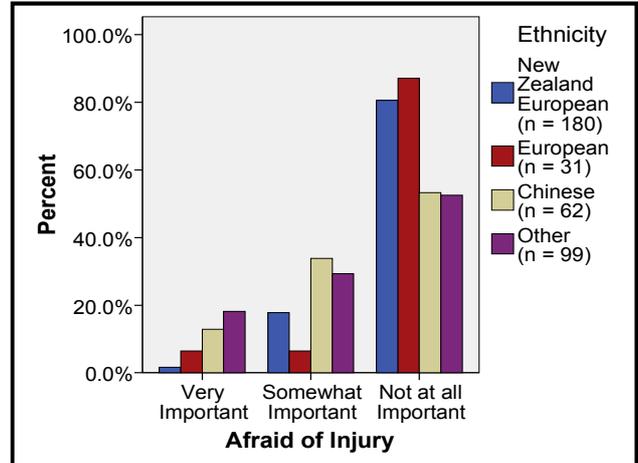


Figure 46: Afraid of Injury and Ethnicity

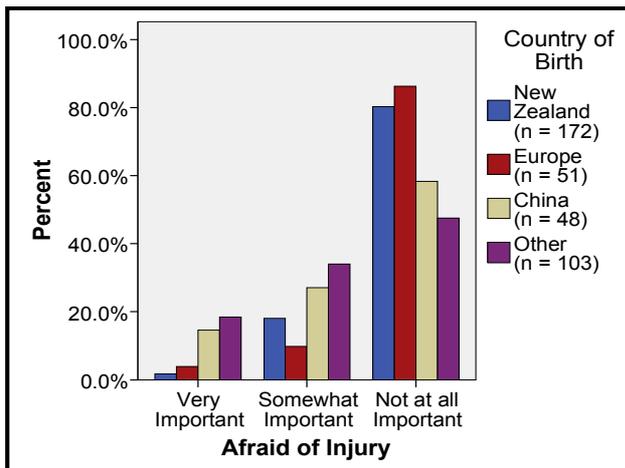


Figure 47: Afraid of Injury and Country of Birth

### 7.1.11 Not interested in recreation activities

Lack of interest in participation in outdoor recreation activities was overall, not an important constraint - very few overall respondents indicated a lack of interest in outdoor recreation participation. Significant differences were found by migrant status (see Figures 48, 49 and 50). New Zealand born respondents were more likely to report lack of interest in the outdoors as being 'not at all important' as a constraint.

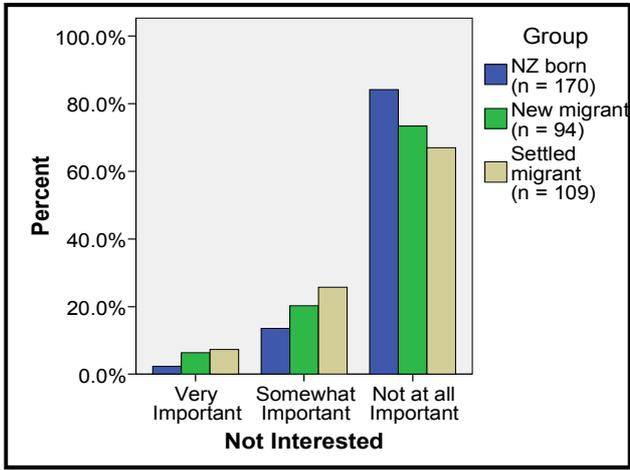


Figure 48: Not Interested & Migrant Status

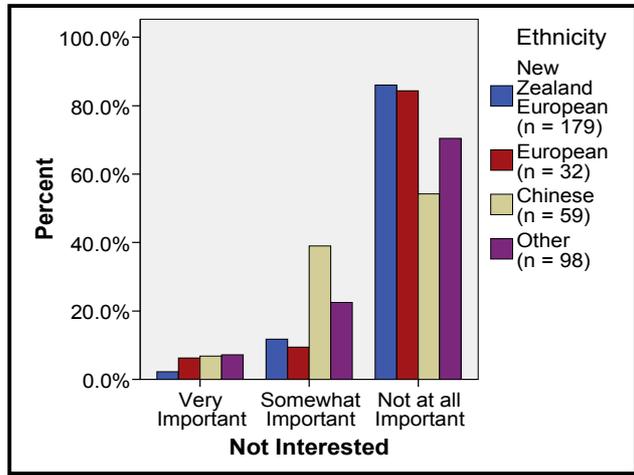


Figure 49: Not Interested & Ethnicity

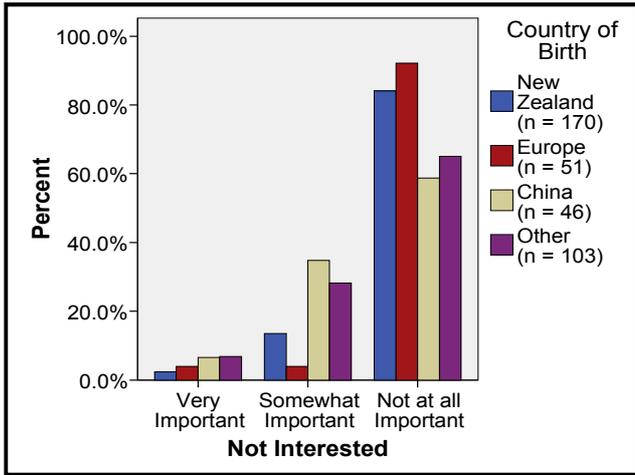


Figure 50: Not Interested in Recreation and Country of Birth

## SECTION 8: BENEFITS OF VISITING NATURAL AREAS

Each respondent was asked how important certain features were when visiting a natural area. Features included recreation facilities, scenic landscapes, wildlife abundance, water amenities, proximity to home and information in native language. Respondents had the option to indicate 'very important', 'somewhat important', or 'not at all important'.

### 8.1 Important Features of Natural Areas

When visiting a natural area, the most significant features for all respondents were scenic landscapes (64.5%) and facilities (62.4%), (based upon their ranking as 'very important') (see Table 8). Other features that ranked as moderately significant were water amenities (38.7%), wildlife abundance (29.3%), information in native language (21.6%), and proximity to home (18.8%).

**Table 8: Summary for Important Features of Natural Areas: All Respondents**

Features* Ranked in order of importance	Very Important	Somewhat Important	Not at all Important
	Percentages		
Scenic landscapes (n = 411)	64.5%	32.5%	3%
Recreation facilities (n = 423)	62.5%	32.5%	5%
Water amenities (n = 395)	38.5%	51.5%	10%
Wildlife abundance (n = 399)	29.5%	53/5%	17%
Information in native language (n = 402)	21.5%	27%	51.5%
Proximity to home (n = 405)	19%	59%	22%

Table 9 presents the findings of chi-square tests for the important features of natural areas as indicated by migrant status, ethnicity and country of birth. Of the eighteen chi-square tests conducted 4 were found to be significant; recreation facilities and water amenities by ethnicity; and recreation facilities and proximity to home by country of birth. No significant differences were found for important features of natural areas by migrant status.

**Table 9: Summary of Chi-Square Significant Tests for Important Features**

Features* Ranked in order of importance	Migrant Status	Ethnicity	Country of Birth
	Significant Chi-Square Results		
Scenic landscapes (n = 411)	-----	-----	-----
Recreation facilities (n = 423)	-----	✓	✓
Water amenities (n = 395)	-----	✓	-----
Wildlife abundance (n = 399)	-----	-----	-----
Information in native language (n = 402)	-----	-----	-----
Proximity to home (n = 405)	-----	-----	✓

✓ Statistically significant difference in frequencies (Chi-square  $p \leq 0.01$ )

### 8.1.1 Scenic landscapes

For scenic landscape features, no significant differences were found among respondents by migrant status, ethnicity, or country of birth. The majority of all respondents (64.5%) felt that scenic landscapes were very important features for visiting natural areas, 32.4% felt they were somewhat important, whereas only 3.2% felt scenic landscapes were not at all important. Figures 51, 52 and 53 show the importance of scenic landscapes by migrant status, ethnicity and country of birth.

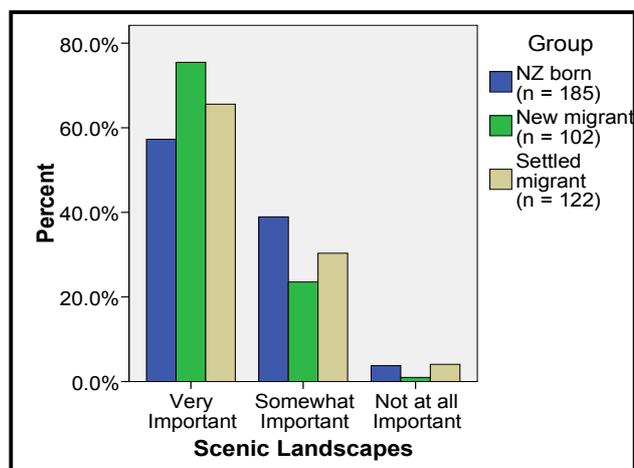


Figure 51: Scenic Landscapes and Migrant Status

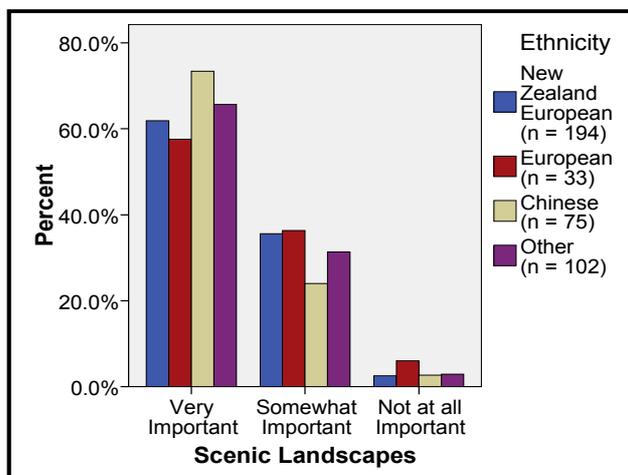


Figure 52: Scenic Landscapes and Ethnicity

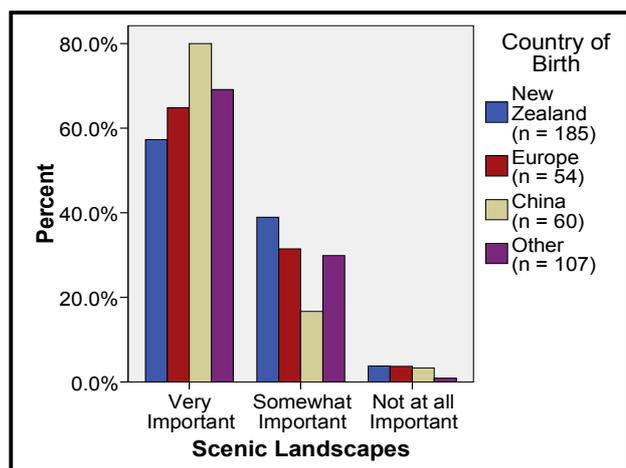


Figure 53: Scenic Landscapes and Country of Birth

### 8.1.2 Recreation facilities

For the importance of recreation facilities, for example toilets, car parks, huts, and tracks, significant differences were found by ethnicity ( $\chi^2 = 29.61$ ;  $df = 6$ ;  $sig. = .000$ ) and country of birth ( $\chi^2 = 26.07$ ;  $df = 6$ ;  $sig. = .000$ ) but not by migrant status. The majority of all respondents (62.4%) felt that recreation facilities were very important features for visiting natural areas, 32.4% felt they were somewhat important, whereas only 5.2% felt recreation facilities were not at all important. Figures 54, 55 and 56 show the importance of recreation facilities by migrant status, ethnicity and country of birth.

While New Zealand/Europeans (56.8%) and Europeans (37.5%) felt recreation facilities to be 'very important', a higher proportion of Chinese respondents (67.5%) and those from the group 'other' (76.3%) considered these aspects to be a 'very important' feature.

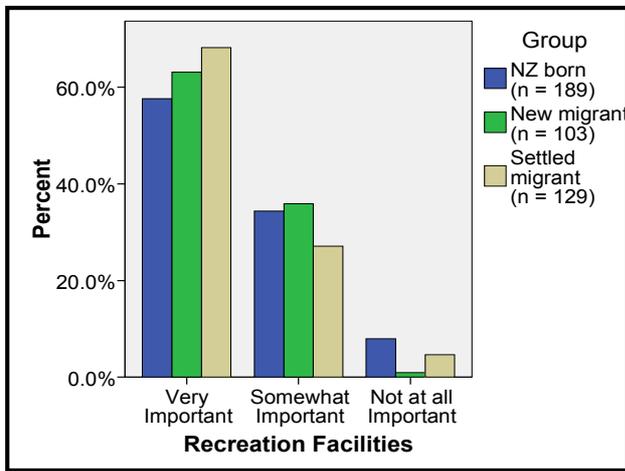


Figure 54: Recreation Facilities and Migrant Status

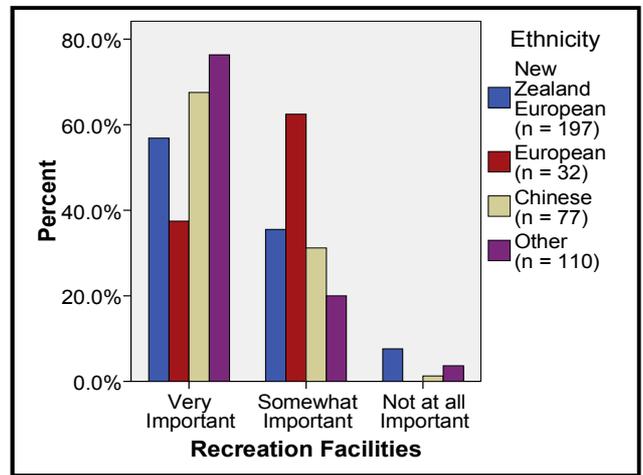


Figure 55: Recreation Facilities and Ethnicity

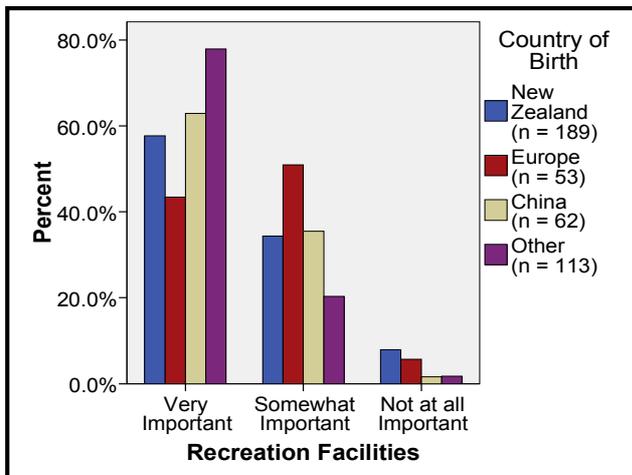


Figure 56: Recreation Facilities and Country of Birth

### 8.1.3 Water amenities

Overall, many respondents (38.7%) felt that water amenities were very important features for recreating in natural areas, however 51.4% felt they were only somewhat important, and 9.9% felt water amenities were not at all important. There were significant differences between respondents for this item by ethnicity ( $\chi^2 = 18.91$ ;  $df = 6$ ;  $sig. = .004$ ). No significant differences were found by migrant status or country of birth (see Figures 57, 58 and 59). 39.5% of New Zealand/Europeans and 47% of respondents from the 'Other' ethnic group felt water amenities are a 'very important' feature, whereas European (32.2%) and from Chinese (23.8%) respondents felt water features to be less important.

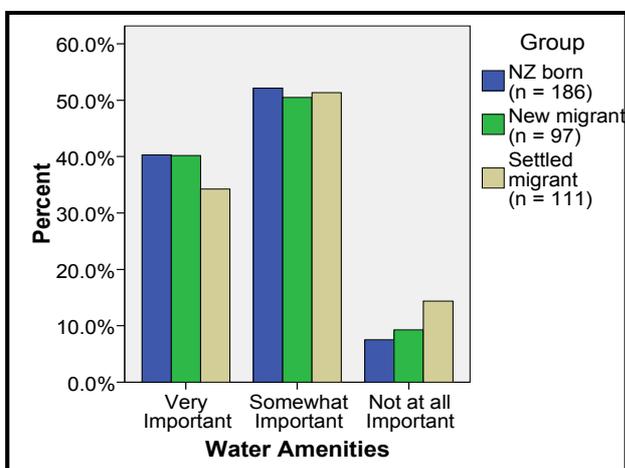


Figure 57: Water Amenities and Migrant Status

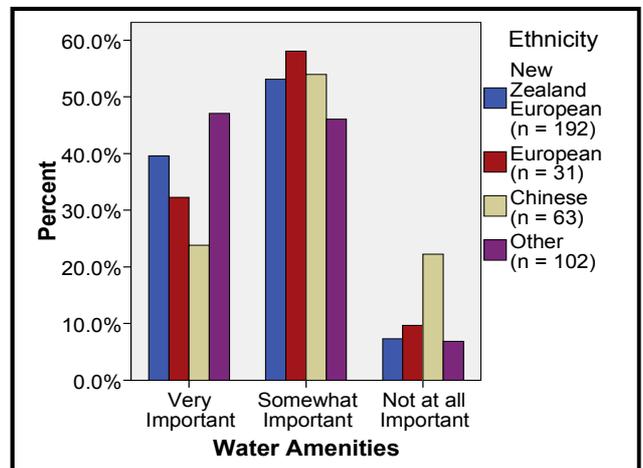


Figure 58: Water Amenities and Ethnicity

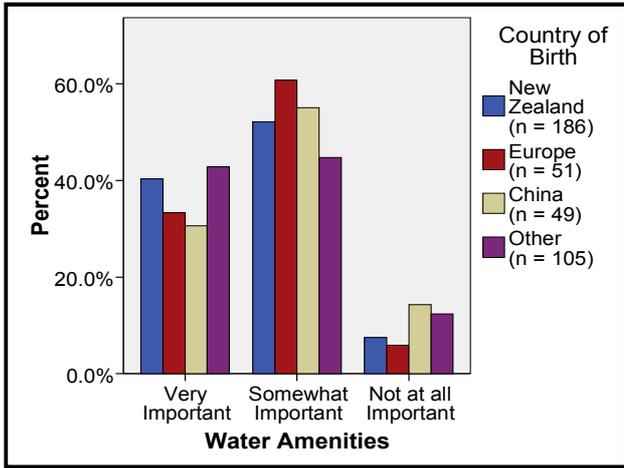


Figure 59: Water Amenities and Country of Birth

### 8.1.4 Wildlife abundance

For the importance of 'wildlife abundance' as a feature of natural areas, no significant differences were found by migrant status, ethnicity, or country of birth. Of all respondents, less than one-third (29.3%) felt that wildlife is very important for visiting natural areas, over half (53.6%) felt this to be somewhat important, whereas only 17% felt wildlife abundance was not at all important. Figures 60, 61 and 62 show the importance of wildlife abundance by migrant status, ethnicity and country of birth.

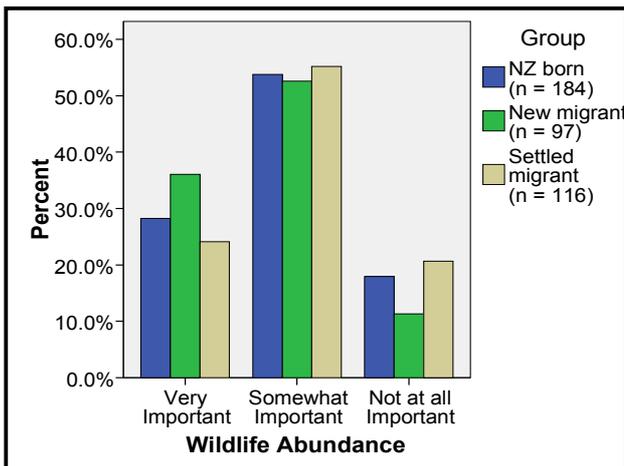


Figure 60: Wildlife Abundance and Migrant Status

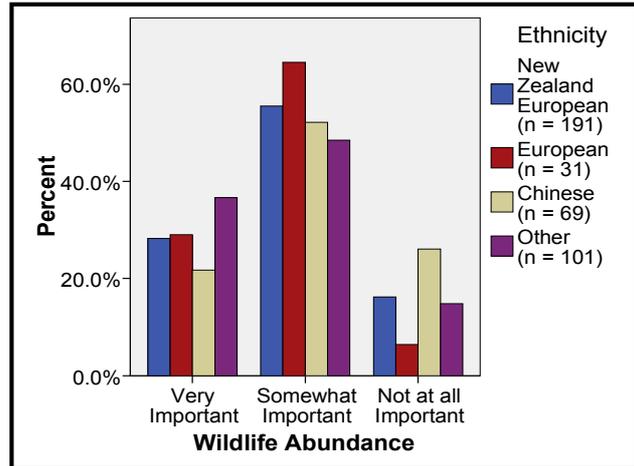


Figure 61: Wildlife Abundance and Ethnicity

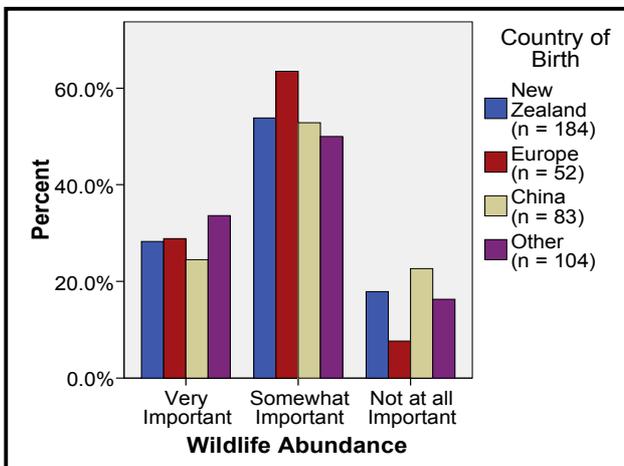


Figure 62: Wildlife Abundance and Country of Birth

### 8.1.5 Information in native language

With regards to the availability of information in respondents' native language, no significant differences were found for the importance of this item by migrant status, ethnicity, or country of birth. The majority of all respondents (51.7%) felt information in their native language was not at all important. This applied for both New Zealand born respondents as well as migrants, and for all ethnicities. While Chinese and 'other' ethnicity respondents rated information in their native language as being slightly more important than New Zealand/Europeans and Europeans, the difference was not statistically significant (see Figures 63, 64 and 65).

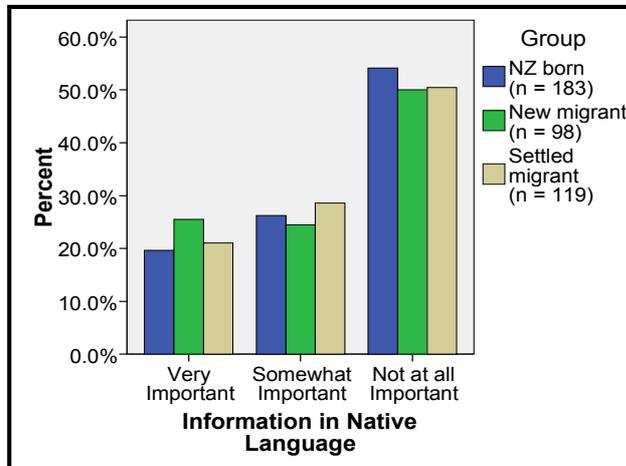


Figure 63: Info Native Language & Migrant Status

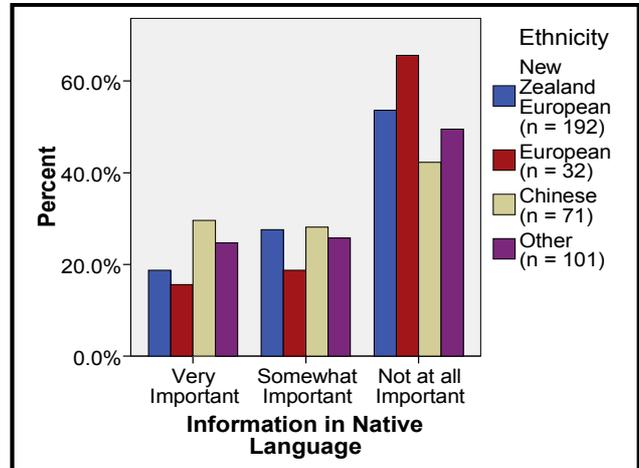


Figure 64: Information Native Language & Ethnicity

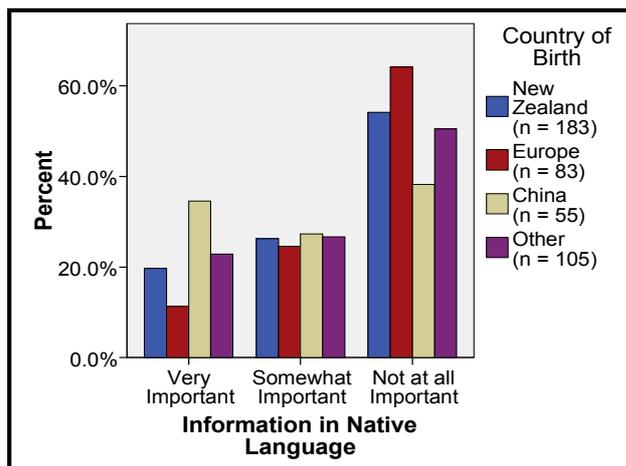


Figure 65: Information Native Language and Country of Birth

### 8.1.6 Parks and natural area proximity to home

For proximity to home, significant differences existed among respondents by country of birth ( $\chi^2 = 17.54$ ;  $df = 6$ ;  $sig. = .007$ ). No significant differences existed by migrant status and ethnicity. The majority of all respondents (59%) felt that a natural area's proximity to home is 'somewhat important' for visiting natural areas (see Figures 66, 67 and 68). Respondents who were born in China (19.6%) or in 'Other' countries (28.8%) whom indicated that proximity to home was 'very important'.

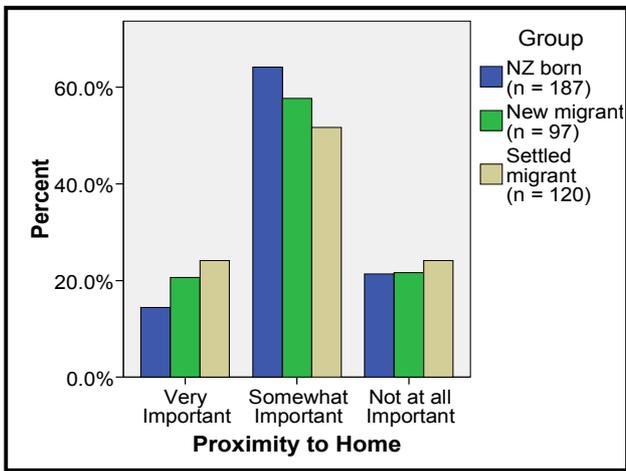


Figure 66: Proximity to Home and Migrant Status

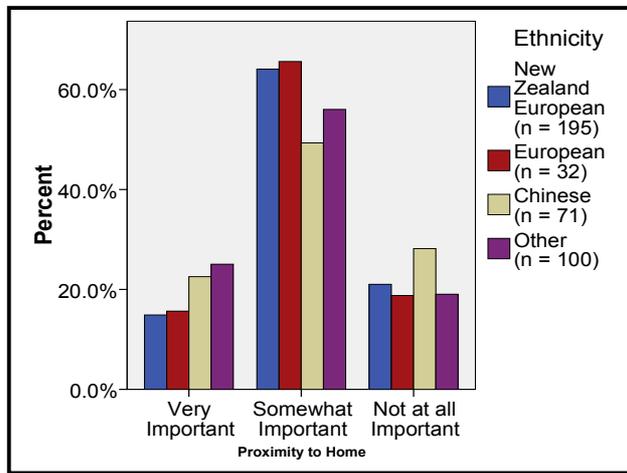


Figure 67: Proximity to Home and Ethnicity

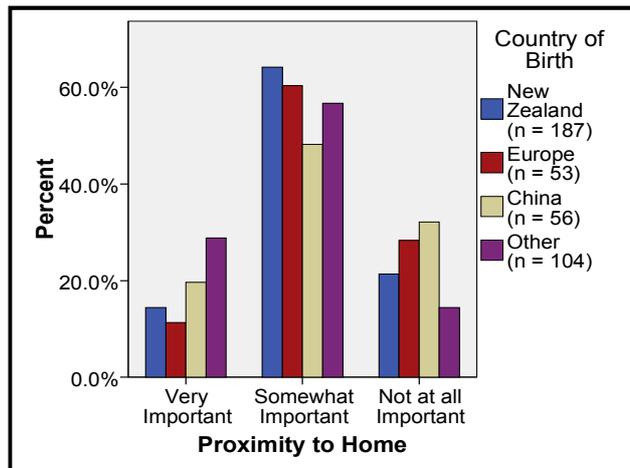


Figure 68: Proximity to Home and Country of Birth

## 8.2 Personal Benefits of Visiting Natural Areas

Each respondent was asked how important certain personal benefits are for visiting outdoor natural areas. Eight benefits were listed including to 'enjoy nature', 'escape', 'socialise', 'exercise', 'spend time with family', 'place with open space', 'place for kids to go', and 'gather/collect food'. A five-point scale was used ranging from 'very important' to 'not at all important'.

The most significant personal benefit for visiting natural areas for all respondents was to enjoy nature (69.8%) followed by exercise (52.7%) (see Table 10). Other features that were 'very important' in ranking order were spend time with family (48%), escape (47%), a place with lots of open space (45%), a place for kids to go (33.3%), to socialise/create contacts (19.6%), and to gather/collect food (5.8%).

**Table 10: Summary of Personal Benefits for Visiting Natural Areas: All Respondents**

Benefits*	Very Important	2	Neither important or unimportant	4	Not at all Important
Enjoy nature (n = 414)	69.8%	20.8%	8%	1%	0.4%
Exercise (n = 412)	52.7%	31.3%	12.6%	2.7%	0.7%
Spend time with family (n = 408)	48%	28.7%	14%	3.4%	5.9%
Allows escape (n = 398)	47%	29.1%	16.8%	2.3%	4.8%
A place with lots of open space (n = 398)	45%	31.2%	17.8%	3.5%	2.5%
A place for kids to go (n = 396)	33.3%	17.7%	17.9%	4.5%	26.5%
Socialise/create contacts (n = 398)	19.6	20.4%	31.4%	13.3%	15.3%
Gather/collect food (n = 395)	5.8%	7.6%	16.7%	6.3%	63.6%

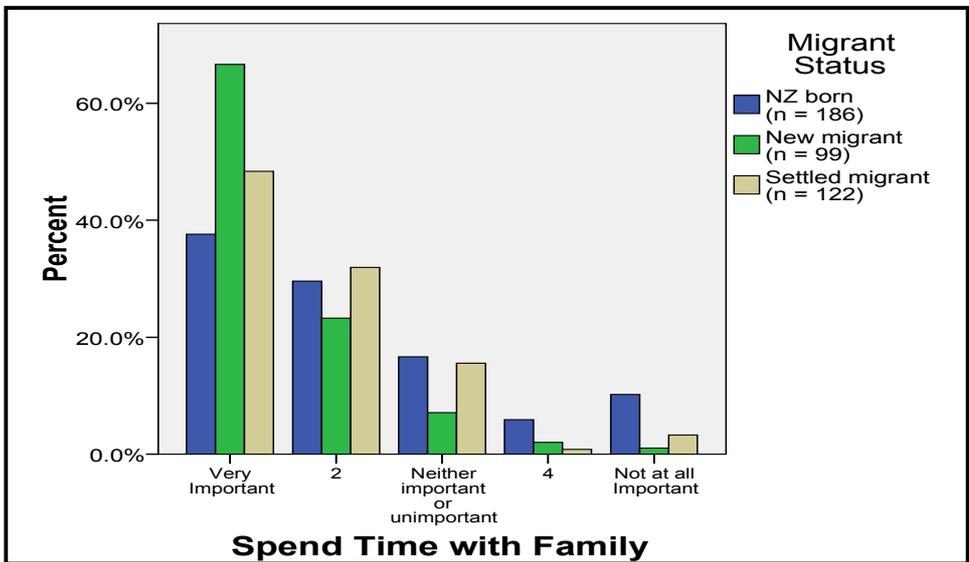
\*Ranked in order of importance (based on responses in 'Very Important' category)

Table 11 presents significant chi-square statistics for the benefit to visiting natural areas as indicated by migrant status, ethnicity and country of birth. Of the twenty four chi-square tests conducted 5 were found to be significant; spending time with family and friends and socialising and creating contacts for migrant status; a place for kids to go and socialising and creating contacts for ethnicity; and socialising and creating contacts for country of birth.

**Table 11: Summary of Chi-Square Significant Tests for Benefits**

Features*	Migrant Status	Ethnicity	Country of Birth
<i>Significant Chi-Square Results</i>			
Enjoy nature (n = 414)	-----	-----	-----
Exercise (n = 412)	-----	-----	-----
Spend time with family (n = 408)	✓	-----	-----
Allows escape (n = 398)	-----	-----	-----
A place with lots of open space (n = 398)	-----	-----	-----
A place for kids to go (n = 396)	-----	✓	-----
Socialise/create contacts (n = 398)	✓	✓	✓
Gather/collect food (n = 395)	-----	-----	-----

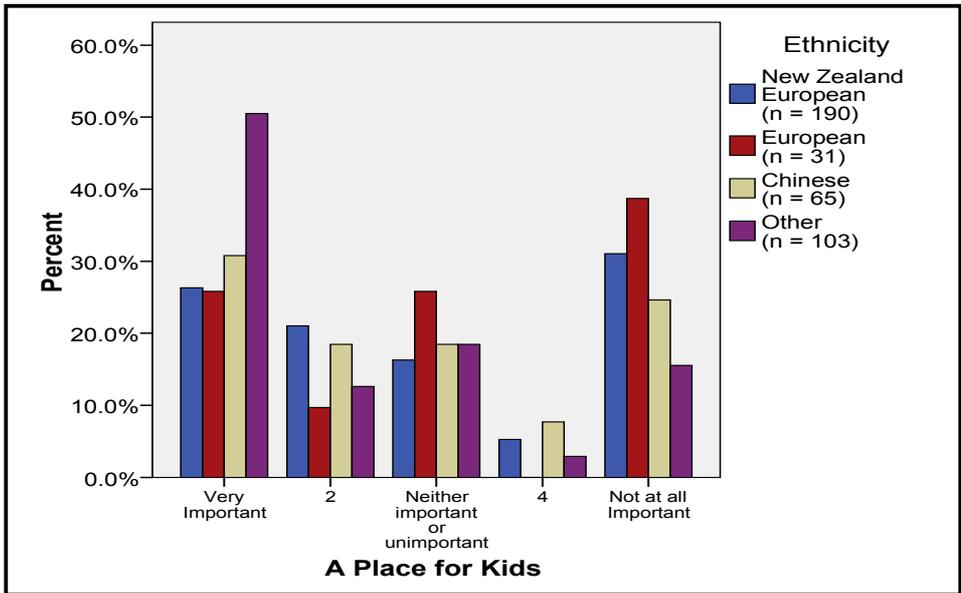
For the most important benefits of 'enjoying nature' and 'exercise', no significant differences existed among respondents by migrant status, ethnicity, or country of birth. Significant differences were found for the benefit of 'spending time with family' by migrant status ( $\chi^2 = 35.09$ ;  $df = 8$ ;  $sig. = .000$ ). More new migrants (66.6%) and settled migrants (48.3%) considered spending time with family to be very important, than did New Zealand born respondents (37.6%) (see Figure 69).



**Figure 69: Benefit of Spending Time with Family and Migrant Status**

The benefits 'for escape' and 'a place with lots of open space' did not have significant differences among respondents by migrant status, ethnicity, or country of birth.

'A place for kids to go' as a benefit was found to have significant differences among respondents when analysed by ethnicity ( $\chi^2 = 29.35$ ;  $df = 12$ ;  $sig. = .003$ ). Three ethnic groups, New Zealand/Europeans, Europeans and Chinese respondents felt a place for kids to go is a 'very important' benefit of natural areas (25-30% range). However those respondents in the 'other' ethnic group rated this benefit more highly, with over half of that group (50.4%) considering this to be a 'very important' benefit (see Figure 70).



**Figure 70: Benefit of Having a Place for Kids and Ethnicity**

The benefit 'for socialising/creating contacts' was found to be more important for new migrants than settled migrants and New Zealand born respondents ( $\chi^2 = 16.39$ ;  $df = 8$ ;  $sig. = .037$ ), those of Chinese and 'other' ethnicity ( $\chi^2 = 30.97$ ;  $df = 12$ ;  $sig. = .002$ ), and those born in China and 'other' countries ( $\chi^2 = 25.08$ ;  $df = 12$ ;  $sig. = .014$ ). Only 13.6% of New Zealand born respondents indicated socialising was a 'very important' benefit for visiting outdoor natural areas; whereas 31.3% of new migrants and 19.1% of settled migrants indicated that it was a 'very important' benefit (see Figure 71).

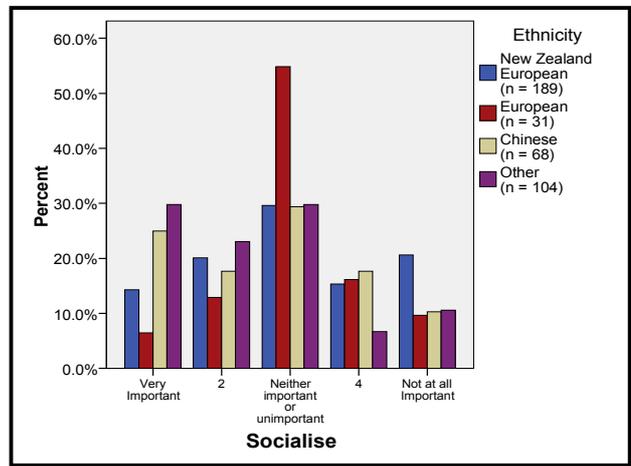
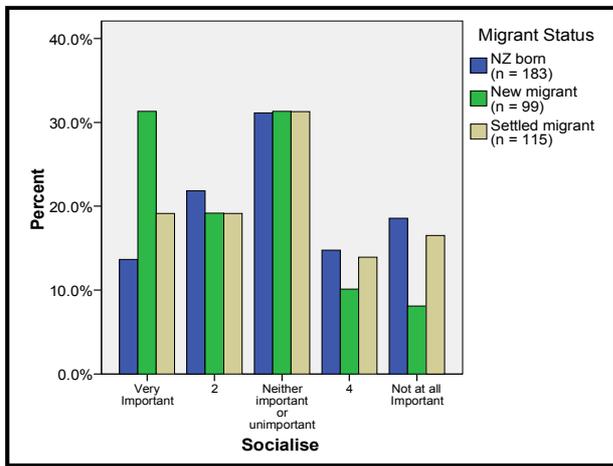


Figure 71: Benefit of Socialising and Migrant Status      Figure 72: Benefit of Socialising and Ethnicity

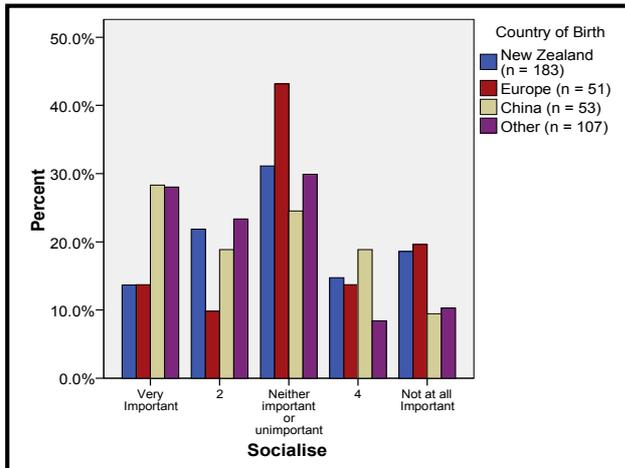


Figure 73: Benefit of Socialising and Country of Birth

The benefit 'gathering and collecting food' in natural areas was the least important benefit for all respondents, regardless of migrant status, ethnicity, or country of birth, with no statistically significant differences within these categories.

## SECTION 9: TRENDS IN VISITING NATURAL AREAS

Each respondent was asked to describe their recreational use of outdoor natural areas including their current, past (adult), and childhood use. Three categories for frequency of use were provided including 'regular user', 'occasional user', and 'never used'.

### 9.1 Personal Use of Natural Areas

For current recreation use of outdoor natural areas, most respondents indicated they were an occasional user (63.4%), followed by regular user (34%), and then never use (2.6%) (see Figure 74). Past use (adult) of outdoor natural areas followed a similar pattern with most respondents indicating occasional use (57.9%), followed by regular use (38.7%), and never used (3.4%) (see Figure 75). For childhood recreational use, the majority of respondents indicated occasional use (47.5%), followed by regular use (40.2%), and then never (12.3%) (see Figure 76). For both current use and past (adult) use of recreation areas there were no significant differences by migrant status, ethnicity, or country of birth.

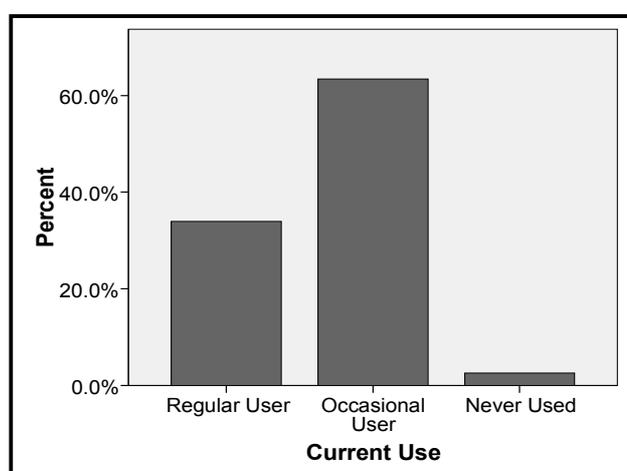


Figure 74: Current Recreation Use

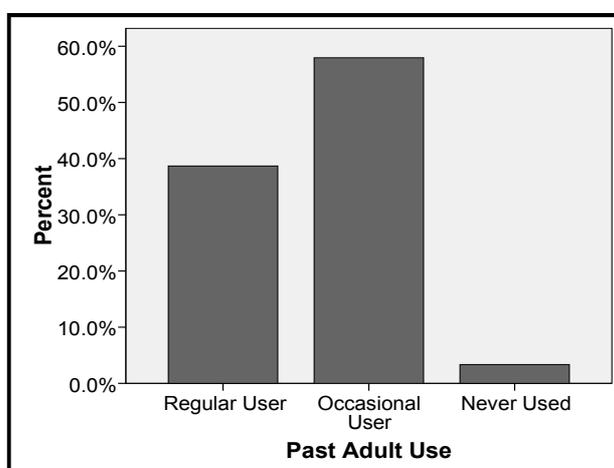


Figure 75: Past Adult Recreation Use

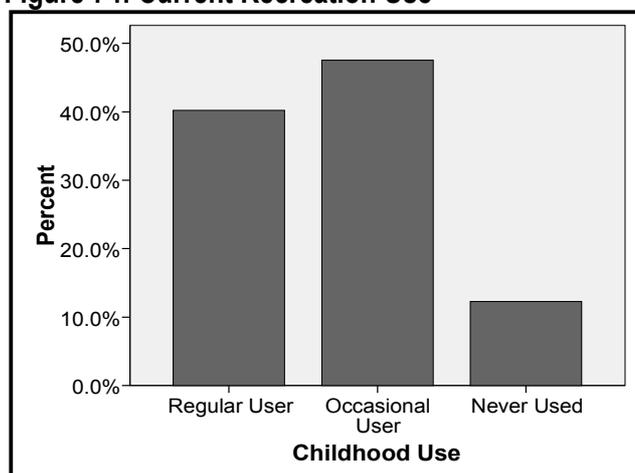


Figure 76: Childhood Recreation Use

For frequency of use for childhood recreation use of the outdoors, significant differences existed within migrant status, ethnicity, and by country of birth. For childhood use of the outdoors and migrant status, New Zealand born respondents had higher frequency (47.0%) of regular use (in childhood) than new migrants (39.5%) and settled migrants (28.8%) ( $\chi^2 = 11.85$ ;  $df = 4$ ;  $sig. = .019$ ).

For ethnicity ( $\chi^2 = 17.16$ ;  $df = 6$ ;  $sig. = .009$ ), those in the New Zealand/European ethnic group (44.0%) Europeans and Europeans (54.5%) had more frequently recreated in natural areas when children, than did Chinese or those in the 'other' ethnic group. The Chinese respondents were the most likely (23.3%) to have never used natural areas for recreation when children. The same patterns hold for country of birth ( $\chi^2 = 25.91$ ;  $df = 6$ ;  $sig. = .000$ ) with over a quarter of those born in China stating that they 'never' recreated during childhood in natural areas.

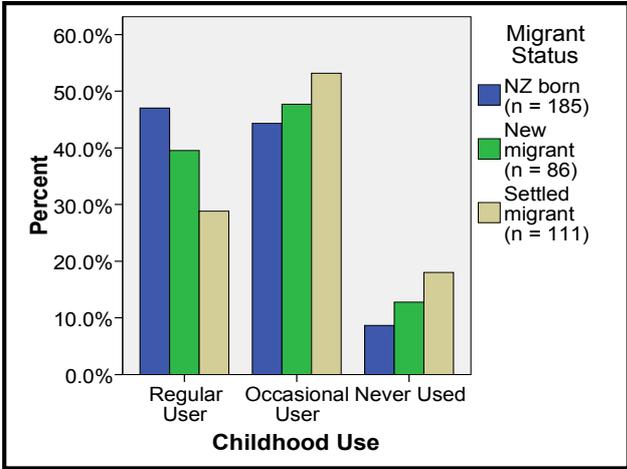


Figure 77: Childhood Use and Migrant Status

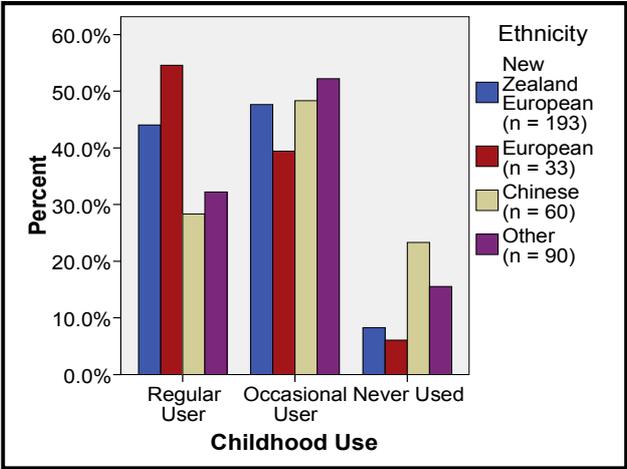


Figure 78: Childhood Use and Ethnicity

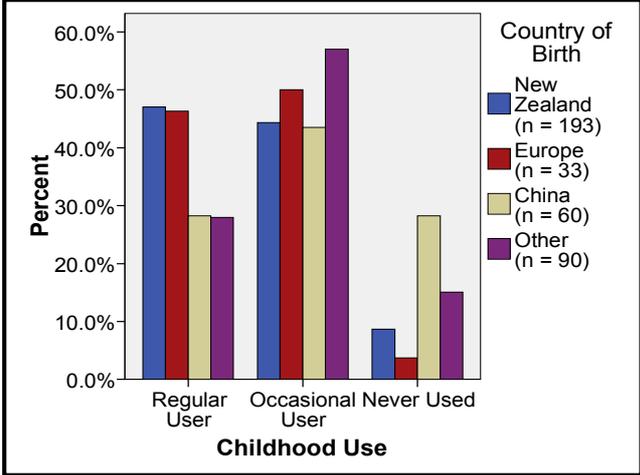


Figure 79: Childhood Use and Country of Birth

## 9.2 Past and New Recreation Activities

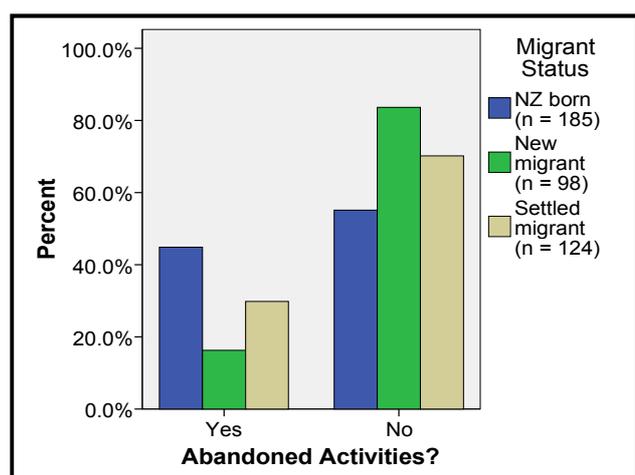
Each respondent was asked if there are any outdoor nature-based recreational activities that they 'used to' participate in regularly that they no longer participate in. The time associated with the term 'used to' was interpreted by the respondent. The respondent could indicate either 'yes' or 'no' to abandoning activities, and if 'yes', respondents were asked to list prior activities which they no longer participate in. The majority of respondents (66.4%) stated 'no' there were not any outdoor nature-based recreational activities that they no longer participate in, and 33.6% stated 'yes' (see Table 12).

**Table 12: Abandoned Recreation Activities**

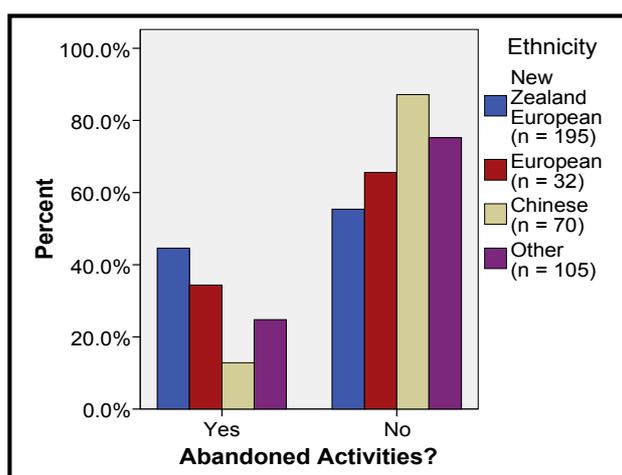
ACTIVITY	TOTAL	ACTIVITY	TOTAL
Tramping	43	Boogie boarding	1
Skiing	23	Canoeing	1
Camping	12	Caving	1
Climbing	11	Chinese style traditional exercise	1
Swimming	10	Collecting forest products	1
Fishing	9	Cross country skiing	1
Cycling	6	Game park visits	1
Mountain biking	6	Gardening	1
Running	5	Golf	1
Sailing	5	Mountain biking	1
Saltwater fishing	5	Orienteering	1
Beach visits	4	Outdoor pursuit courses	1
Kayaking	4	Ping Pong	1
Mountaineering	4	Quad biking	1
Boating/Yachting	3	Rowing	1
Horse riding	3	Skateboarding	1
Hunting	3	Snorkelling	1
Scuba diving	3	Surfing	1
4WD	2	Tarzan swing	1
Scenery Viewing	2	Tai Qui	1
Tennis	2	Wildlife Viewing	1
Water Sports	2		

Data reflects multiple responses from participants

Significant differences existed for abandoned activities by migrant status and ethnicity. When considered by migrant status, New Zealand born respondents (44.8%) tended to have abandoned more outdoor nature-based recreational activities than new (16.3%) or settled migrants (29.8%) ( $\chi^2 = 24.47$ ;  $df = 2$ ;  $sig. = .000$ ). For ethnicity, more New Zealand/European and Europeans had abandoned activities than did Chinese or those in the 'other' ethnic group ( $\chi^2 = 27.95$ ;  $df = 3$ ;  $sig. = .000$ ) (see Figure 80).



**Figure 80: Activities Abandoned & Migrant Status**



**Figure 81: Activities Abandoned & Ethnicity**

## SECTION 10: IMMIGRATION AND RECREATION PARTICIPATION

Only respondents who were NOT born in New Zealand responded to questions about migration and recreation participation. A total of 243 respondents were not born in New Zealand. Statistical analysis was conducted between the two migrant groups: new migrants (living in New Zealand for up to 5 years) and settled migrants (more than 5 years); 137 respondents, were settled migrants (56.4%) and 106 respondents were new migrants (43.6%).

### 10.1 Age when Settled in New Zealand

Migrant respondents were asked to indicate their age upon moving to New Zealand. Seven age categories were provided including '0 – 5', '6 – 15', '16 – 24', '25 – 34', '35 – 49', '50 – 64', '65+ years'. Data indicate that the majority of respondents migrated to New Zealand between 35 and 49 years of age (33.3%), followed by 25 – 34 years of age (28%), 50 – 64 years of age (15.2%), 16-24 years of age (11.1%), 6 – 15 years of age (5.3%), and 5 years or under (2.9%) (see Figure 82).

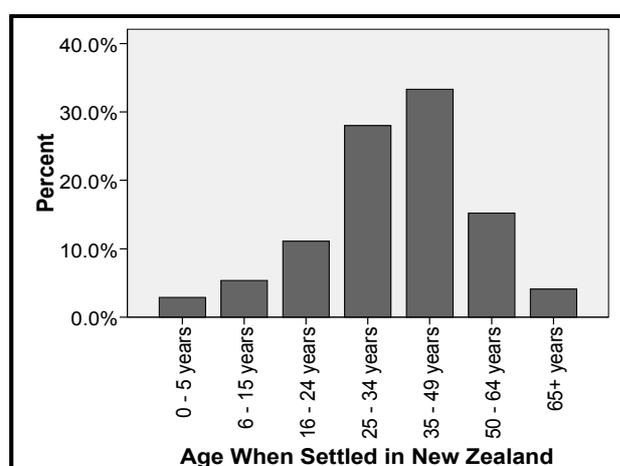


Figure 82: Age When Settled in New Zealand

### 10.2 Length of Time in New Zealand

Length of time in New Zealand was a key question for determining whether or not a migrant was new or settled. Five categories were provided for length of time: 'less than 1 year', '1 – 2 years', '3 – 5 years', '6 – 10 years', and '10+ years'. The majority of migrant respondents had spent 10+ years in New Zealand (36.2%) followed by 6 – 10 years (20.2%), less than 1 year (16%), 3 – 5 years (17.3%), and then 1 – 2 years (10.3%) (see Figure 83).

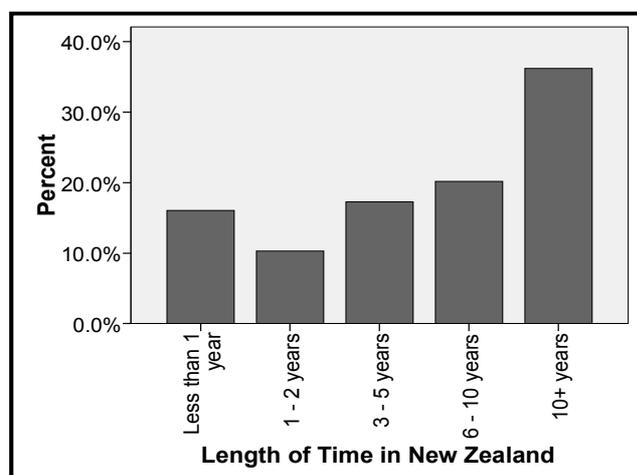


Figure 83: Length of Time Living in New Zealand

## 10.3 Immigration purpose

All migrant respondents were asked under which immigration category they moved to New Zealand under. Six options were provided based on Statistics New Zealand categories: work to residence, business, family, humanitarian, skilled migrant, or student. The majority of migrants moved to New Zealand under the family immigration category (40.7%), followed by skilled migrant (31.8%), work to residence (16.5%), student (5.5%), humanitarian (3.4%), and business (2.1%) purposes (see Figure 84).

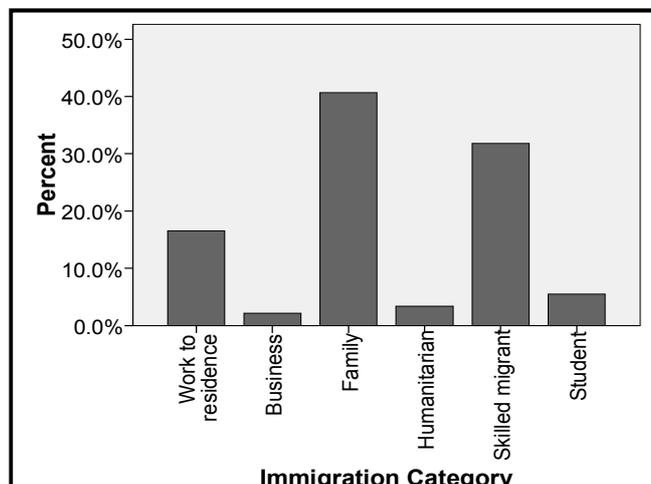
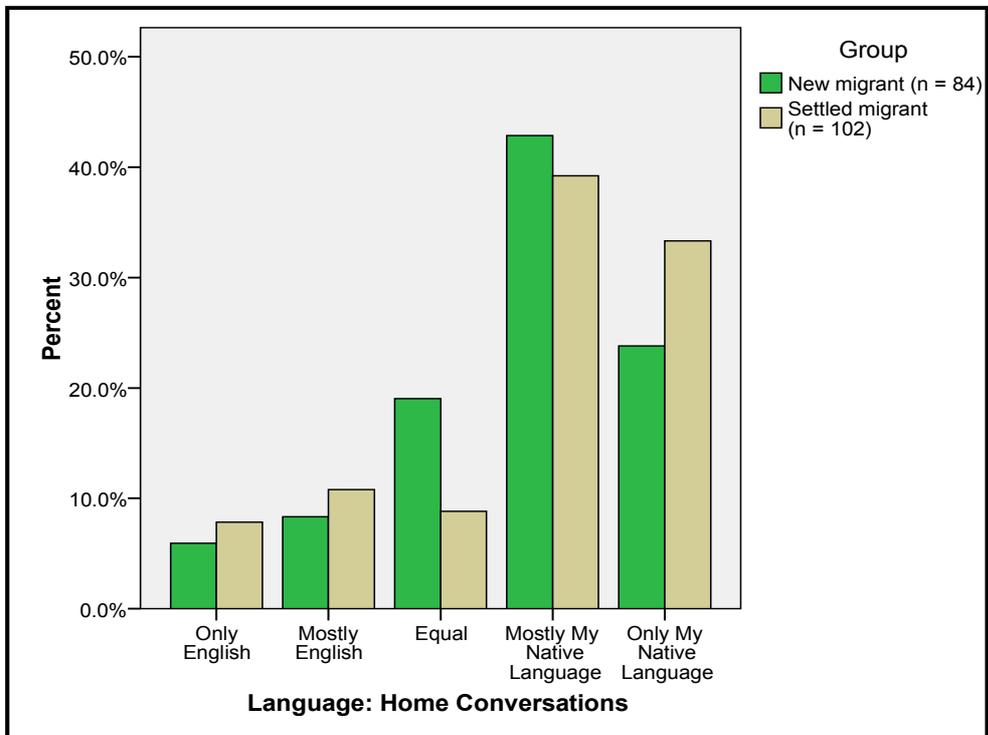


Figure 84: Immigration Category upon Arrival to New Zealand

## 10.4 Language

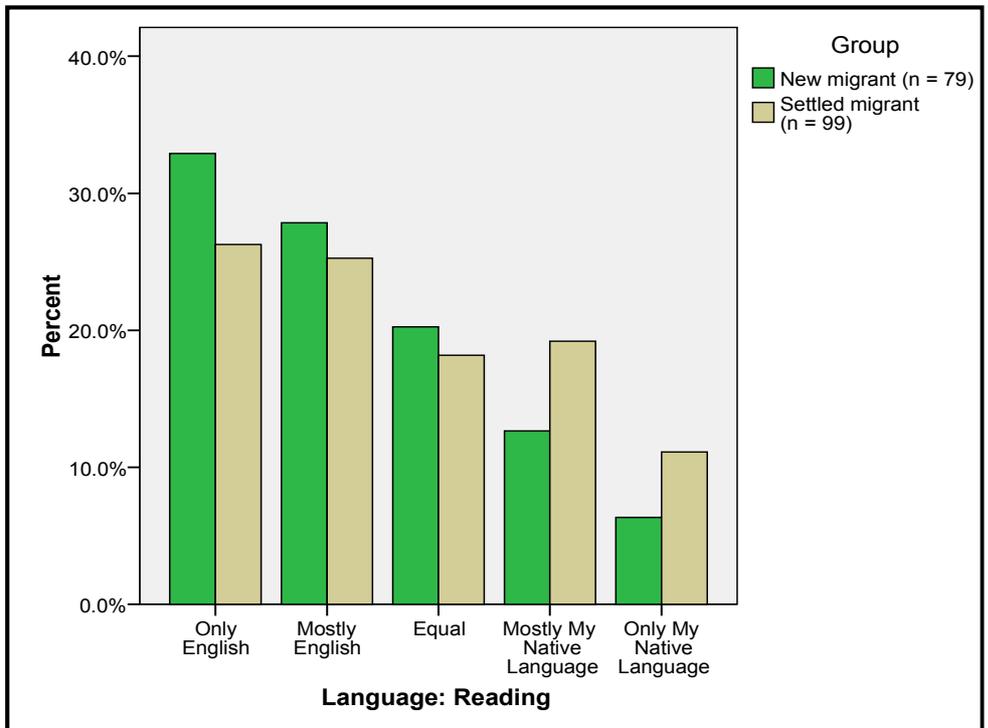
All migrants were asked whether or not English was their first language. For migrants, the majority of respondents (74.6%) stated the English was not their first language with only 25.4% indicating that English was their native language. No significant differences existed between new and settled migrants in terms of their use of English as a first language. Migrants whose first language is not English were asked to indicate the frequency of using English versus their native language for three situations: while conversing at home, reading magazines and newspapers, and during conversation with close friends. Five categories were provided for frequency of English language use for each social situation: only English, mostly English, equal, mostly native language, only native language.

The majority of respondents indicated that at home they speak mostly in their native language (40.9%) followed by only speaking in their native language (29%), equal use of English and native language (13.4%), mostly English (9.7%), and only English (7.0%). No significant differences were found between new and settled migrants in their use of English language at home (see Figure 85).



**Figure 85: Language Used at Home**

The majority of respondents indicated that they use only English (29.2%) while reading magazines and newspapers, followed by mostly reading in English (26.4%), equal use of English and native language (19.1%), mostly native language (16.3%), and only native language (9.0%). Again, no significant differences existed between new and settled migrants for language use while reading magazines and newspapers (see Figure 86).



**Figure 86: Language Used When Reading**

For language use with close friends, the majority of respondents indicated using mostly their native language (27.9%) followed by equal use of English and their native language (25.7%), mostly English (21.9%), only their native language (13.7%), and only English (10.9%). Significant differences ( $\chi^2 = 13.09$ ;  $df = 4$ ;  $sig. = .011$ ) were found between new and settled migrant status for language use with close friends (see Figure 87). New migrants were more likely than settled migrants to speak mainly in English with their close friends. Settled

migrants were more likely to speak mostly in their native language or only in their native language, than were new migrants.

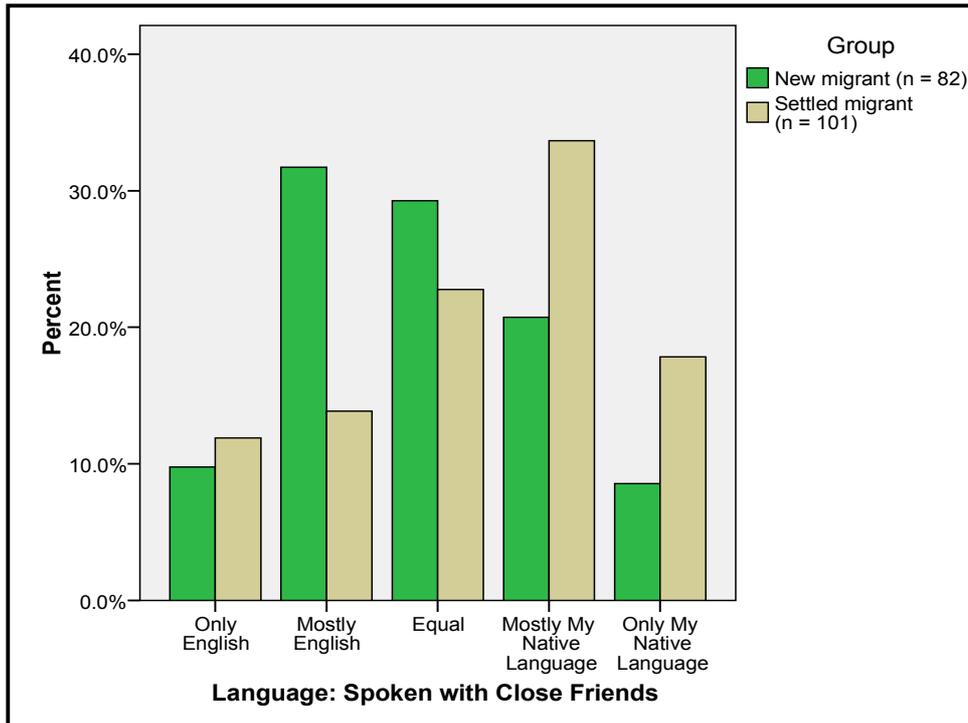


Figure 87: Language Used When with Close Friends

## 10.5 Friendship and Ethnicity

All migrant respondents were asked to best describe the ethnicity of their close friends. Respondents could select from the following statements: 'almost all my close friends are of my ethnic group'; 'some of my close friends are of my ethnic group'; or 'almost all my close friends are outside my ethnic group'. The most common response was 'some of my close friends are of my ethnic group' (46.8%), closely followed by 'almost all my close friends are of my ethnic group' (39.2%), then 'almost all my close friends are outside my ethnic group' (13.9%) (see Figure 88). No significant differences were found between new and settled migrants for ethnicity of close friends.

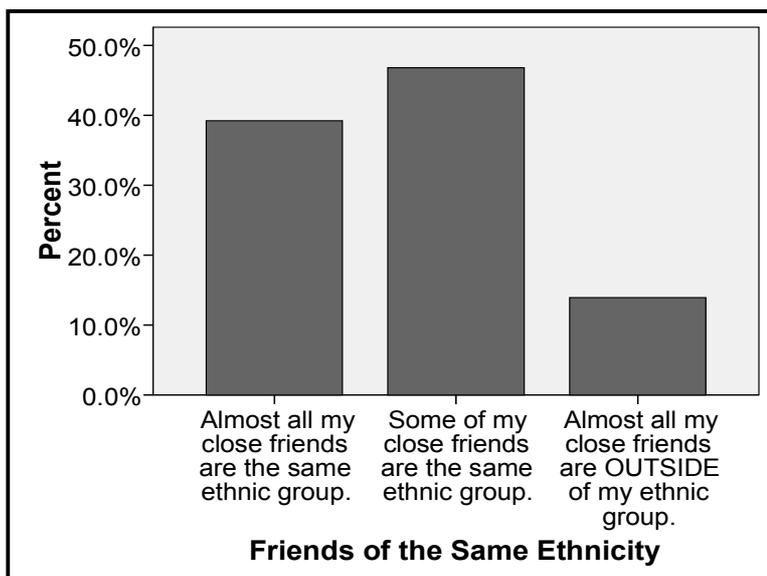


Figure 88: Friends of the Same Ethnicity

## 10.6 Recreation Before Arrival to New Zealand

Migrant respondents were asked to describe their recreational use of outdoor natural areas BEFORE their arrival in New Zealand under three categories: regular user, occasional user, and never used. The majority of respondents stated they were an occasional user (63.2%), then regular user (28%), and very few indicating never using (8.8%). No significant differences were found between new and settled migrants for their recreational use of natural areas before arrival to New Zealand.

Migrant respondents were also asked if there were any outdoor nature-based recreational activities that they participated in regularly before arriving to New Zealand that they no longer participate in. The majority of migrants indicated 'no' (80.8%). No significant differences were found between new and settled migrants in terms of abandoning activities upon arrival to New Zealand. The 19.2% of respondents who had abandoned activities post-migration were asked to list up to 2 to 3 activities and provide a reason why the activity was abandoned. A list complete list of activities and the associated reasons for abandonment can be found in Appendix 4.

## 10.7 Recreation After Arrival in New Zealand

Migrant respondents were asked if there were any new outdoor nature-based recreational activities that they now participate in since arriving in New Zealand. Responses were fairly equal with 51.1% of respondents stating that they do not participate in new activities and 48.9% indicating that there are new activities. No significant differences existed between new and settled migrants for this item. Migrant respondents who participate in new outdoor recreation activities were asked to list up to three activities (see Table 13). The most common new activity for migrants in New Zealand is hiking/tramping followed by skiing, short walks, and climbing.

**Table 13: New Activity Participation After Arrival to New Zealand**

<b>Activity</b>	<b>N</b>	<b>Activity (continued...)</b>	<b>N</b>
Hiking/Tramping	36	Horse riding	2
Skiing	22	Hunting	2
Short walks	13	Sailing	2
Climbing	10	Snorkelling	2
Fishing	9	Surfing	2
Beaches	8	Travelling	2
Camping	8	Badminton	1
Kayaking	7	Bird watching	1
Nature walks	6	Black water rafting	1
Nature viewing	5	Boogie boarding	1
Photographing nature	5	Bungee jumping	1
Salt water fishing	5	Camp fires	1
Running	4	Gardening	1
Bicycling	3	Motor biking	1
Collecting forest products	3	Mountaineering	1
Golfing	3	Picnics	1
Mountain biking	3	Snowboarding	1
Scuba diving	3	Social gatherings in parks	1
Swimming	3	Stand up paddle boarding	1
Boating	2	Visiting forests	1
Exercise	2	Visiting parks	1
Fresh water fishing	2	Wind surfing	1

Data reflects multiple responses from participants

## SECTION 11: ENVIRONMENTAL VALUES

### 11.1 Belong to conservation organisation

The majority of respondents (85.9%) indicated that they did not belong to a conservation organisation. Significant differences for membership were found by migrant status, ethnicity, and country of birth ( $\chi^2 = 9.65$ ;  $df = 2$ ;  $sig. = .008$ ). About one fifth (19.4%) of New Zealand born respondents belong to a conservation organisation; whereas only 11.6% of new migrants and 7.6% of settled migrants indicated that they belong to a conservation organisation (see Figure 89).

For ethnicity ( $\chi^2 = 12.34$ ;  $df = 3$ ;  $sig. = .006$ ), respondents in the New Zealand/European (19.0%) and European (18.1%) ethnic groups were more likely to belong to a conservation organisation than Chinese respondents or those from the 'other' ethnic group (see Figure 91). Similarly so for country of birth ( $\chi^2 = 12.76$ ;  $df = 3$ ;  $sig. = .005$ ) (see Figure 91).

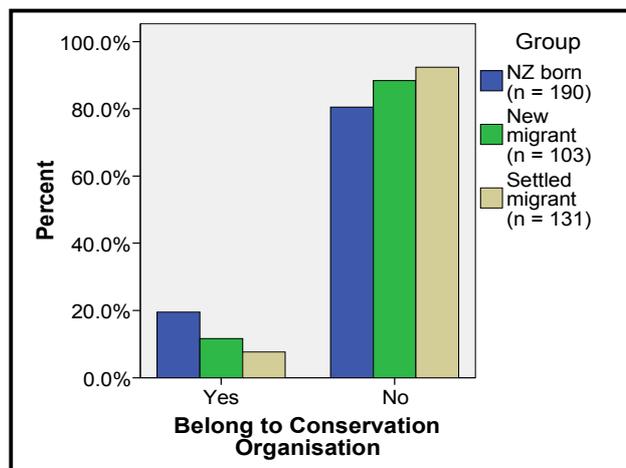


Figure 89: Conservation Organisation & Migrant Status

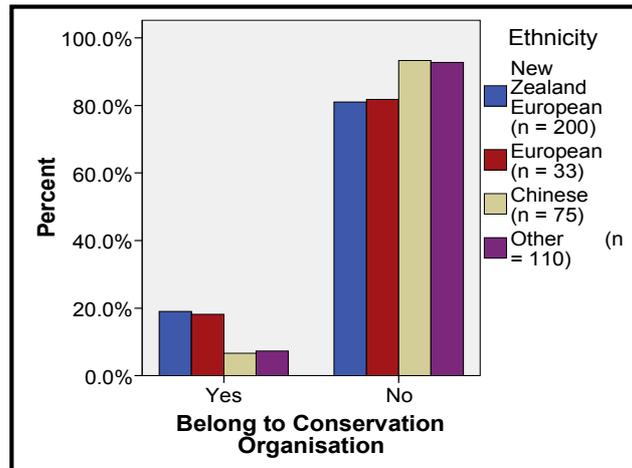


Figure 90: Conservation Organisation & Ethnicity

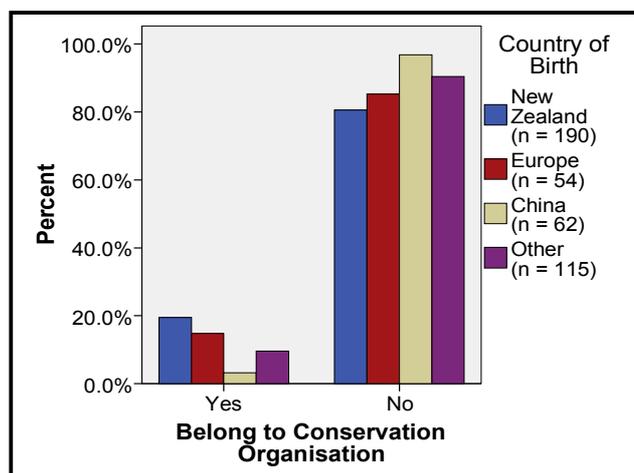


Figure 91: Conservation Organisation & Country of Birth

### 11.2 New Ecological Paradigm

All respondents were asked to respond to a set of 15 statements concerning the environment. These statements are a standardised set, known as the Revised New Ecological Paradigm (Dunlap et al. 2000) and widely used to gauge attitudes towards the environment, from anthropocentric to ecocentric. For each statement the respondent was required to indicate their level of agreement on a five point Likert-type scale. For analysis, the 15 items were treated as a homogenous scale with internal consistency. Grand means were calculated for respondents by major socio-demographic unit and by migrant status, ethnicity and country of

birth. Means were compared by ANOVA (Tables 14-16) and t-tests (where appropriate). Incomplete responses to this question were excluded from analysis. A higher score indicates a more ecocentric worldview, and a low score indicates a more anthropocentric worldview. The overall mean NEP score (all respondents) was 3.5857 (mildly ecocentric).

**Table 14:** NEP Score by Migrant Status

Migrant Status	NZ Born	Not NZ Born	New Migrant	Settled Migrant
N	181	199	86	133
NEP mean	3.6302	3.5474	3.6047	3.5038

**Table 15:** NEP Score by Ethnicity

Ethnicity	New Zealand European	European	Chinese	Other
N	188	30	66	96
NEP mean	3.6216	3.6400	3.6202	3.4819

**Table 16:** NEP Score by Length of Time in New Zealand (Migrants Only)

Length of time in New Zealand	0-5 years	6-10 years	> 10 years
N	86	41	72
NEP mean	3.6047	3.4179	3.5528

Statistical tests revealed a difference in NEP mean score by gender alone ( $t=2.025$ ,  $p=0.044$ ) with females having a more ecocentric worldview than males. No further significant differences were found – including by migrant status, ethnicity, or length of time migrants have been in New Zealand.

This question was included in the study to address concerns that migrants in New Zealand relate to the natural environment differently than non-migrants. This could impact upon their recreation behaviours in the natural environment. The results provide an indication of the general relationship of respondents to the environment (on a global level), responses revealing that New Zealand born respondents *and* migrants have similar worldviews (mildly ecocentric), as do the respondents across different ethnicities. These results, however, do not elucidate the relationship on a personal level, nor with specific aspects of the outdoor natural environment that may be utilised for recreation. Nor does they explain why a certain attitude to the outdoors and recreation may be present. These aspects (among others) are addressed in the next section, which reports on the interviews with migrants.

## SECTION 12: INTERVIEWS WITH MIGRANTS

The second stage of this study involved follow-up interviews with 25 migrants in Auckland and Wellington. The twenty five participants volunteered to take part in a face to face follow up interview, having identified themselves through this option on the questionnaire. The main purpose of the face to face interviews was to examine more fully migrant perceptions and experiences of outdoor nature based recreation with some emphasis on New Zealand's regional and national parks, along with other sites. While the survey clearly demonstrated that some migrant groups wanted specific amenities (e.g. seats, shelter and interpretation), the face to face interviews allowed the researchers to explore the phenomenological basis of these recommendations<sup>3</sup> and to consider what the implications might be with respect to the participation of migrants in this form of recreation.

### 12.1 Literature and Method

The qualitative component of this study commences with the understanding that "Parks are very much the products of the culture that creates them: they are social institutions in the truest sense of the word" (Eagles and McCool 2002). As such they are subject to change over time, where values shift and where these shifts are reflected in the nature of their composition and the activities that take place within them. As social institutions they are perceived differently by different social groups in our society and these variable perceptions shape participation and anticipation of what these venues offer with respect to recreation. Additionally access to these social institutions is variably shaped by socio-economic status, gender, age, cultural identification, ethnicity and proximity. The face to face interviews allowed the researchers to explore how various migrants perceive New Zealand's regional and national parks and other natural areas, and where they stand in relation to these sites for recreation.

Semi-structured face to face interviews were conducted in Auckland and Wellington by the principal researcher and research associate. Interviews varied in length from 30 minutes to 80 minutes and participants were encouraged to reflect on their responses and to explain their perspective to the researcher. All interviews were digitally recorded and transcribed for analysis. The key themes were elucidated and analysis was aided through reference to ethnographic research focusing on outdoor nature based recreation in the migrant's country of origin (when possible). The intention here was to situate the interview material culturally and socially. For the purposes of this report the key overall themes will be outlined and discussed, followed by a closer consideration of the cultural specifics of some of the issues raised by migrants in this study.

There were a number of shared experiences and perceptions amongst all of the migrants interviewed, reflecting general integration issues for those undergoing the process of settlement. For example, all of the migrants faced the issue of gaining employment, securing employment commensurate with their level of education, re-training, English language training, for those with children - settling children in school, finding a home and becoming familiar with the new city and local community. However, while these issues are not peculiar to a person's cultural background, a migrant's ability to address these issues is shaped by their cultural background, their ethnicity and can be particularly challenging for those where English is their second language. As importantly, negotiating settlement issues is shaped by the host society's response to cultural difference. Indeed the host society is not a passive recipient of migrants, it is a dominant actor (Lovelock and Trlin 2007).

New Zealand has since the 1990s embraced the concept of integration, where settlement and incorporation of a new settler is considered an interactive process and where interactive mutual respect and adjustment is central to a civil society (Lovelock and Trlin 2007). Parks and natural areas are just one form of social institution that new settlers engage with. This project seeks to generate greater understanding their

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<sup>3</sup> Phenomenological enquiry is enquiry that is concerned with uncovering meaning and the point at which being and consciousness intersect. Phenomenological enquiry focuses on human experience – with respect to this study the objective is to describe the experience and meaning of outdoor nature based recreation from the worldview of the migrant (Polkinghorne 1989; Kvale 1996).

perspectives and experiences of nature and outdoor nature based recreation and to generate knowledge that will assist in the interactive process of engagement that is necessary for new settlers to feel integrated into New Zealand society. In understanding how new comers to New Zealand perceive and experience parks we are also able to reflect on what these perceptions and experiences tell us about the nature of these significant social institutions.

We know from the migration literature that economic integration is a significant issue for migrants in New Zealand. Research has consistently demonstrated that immigrants are more likely to have higher rates of unemployment, underemployment and to experience a significant post-migration drop in socio-economic status that is seldom recovered (Boyd 2003). There is also evidence that many migrants experience discrimination in the labour market (New Zealand Immigration Service 2004). We also know that there are social and psychological outcomes of failed socio-economic integration and that central to these are stress, lowered self-esteem and social isolation (Pernice et al. 2000; Ward Bochner and Furnham 2001).

The international literature demonstrates that ethnic minorities have low rates of participation in sports and recreation and low rates of participation in outdoor nature based recreation (refer to page 9 for an overview of this literature). While various studies highlight differences between the aforementioned ethnic minority groups, the research conducted amongst Chinese Canadians has the most relevance to the New Zealand context (Hung 2003). Three main reasons for lower participation rates amongst Chinese immigrants have been identified as: 1) they hold different views of nature 2) they have limited experience of outdoor recreation 3) they have different attitudes toward recreation. Furthermore, these three reasons become self-perpetuating, thus, migrants remain less experienced users and prefer to engage with more developed and managed park experiences as a consequence (Hung 2003). Finally, previous research tends to treat ethnic minority groups as homogeneous populations. This is obviously problematic as with any population ethnic minority groups are heterogeneous and differences within groups can be as great as those between groups. For minority groups in settler societies, disparities within groups tend to become more distinct when there have been successive waves of migration and where there are 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> generation descendents. With respect to this study there was a degree of homogeneity which appeared to hinge on their recent status as migrants. The relative degree of homogeneity also arguably reflects the immigration criteria that determined selection to migrate and settle in New Zealand. Most of the recent migrants qualified under the skills category for migration, sharing similar educational and economic backgrounds prior to migration and on arrival.

Economic integration was for all of the participants in this study a significant constraint to engaging in recreation generally as well as outdoor nature based recreation and to varying degrees all of the issues raised in the North American literature also shape participation in outdoor-nature based recreation for migrants in New Zealand.

## 12.2 Economic Constraints and free nature

All of the migrants stated that the first years of settlement were very much guided by the need to establish some kind of economic security. Gaining employment was a slow process for many of the participants and for some gaining employment that was commensurate with their level of education had proved impossible. For the latter this had meant not being able to work and having to undertake further training. For all of these participants this impacted on their ability to recreate. Firstly, travelling any distance to recreate was prohibitive, some did not own cars and many worked in occupations that made weekend recreation impossible, e.g. shift work or working in more than one position and working six or seven days a week. Five migrants describe their situations:

*It is a struggle to live in New Zealand because, so far, even with a good background of education and work experience, we can't find a good job here. So we just work in low paid jobs...we have a limit for recreation, limited time and limited income. (Male, Indonesia)*

*First two years, most of my time spent studying, I did a little bit of sports, played table tennis with my friend at university, in the last year I checked my body and my GP said I have to control my sugar, so I do a lot of, do more than years ago.. I've joined a badminton club. (Male, China)*

*But for us, it is a struggle to survive here, we just...[it is] like 100 years ago when the European came, they had to work hard, to improve their life [and now with] the economic downturn, people just want to keep their jobs and keep their money. (Male, China)*

*I lived in Wellington [when she first arrived], I use to commute to Palmerston North [to study] and I used to work here full time...Monday to Friday 8 to 5, and then I did an evening job from 5.30 to 8.30 and then I'd study from 9pm to 1am, and my only day off was a Saturday.. and I did that for three years. (Female, Zimbabwe)*

*It's always the cost and when we want to do activities well, I love to do a lot of activities with them indoors and or outdoors, but the trouble is funding (Female, Philippines via Iran)*

Some actively sought to engage with anything 'New Zealand', one participant found herself a mentor, who happened to be interested in outdoor nature based recreation and as a consequence she experienced a range of recreational activities within months of arriving:

*I got myself a mentor to help me settle into New Zealand..the lifestyle, the study etc. ..accessed through Business Porirua...and he was quite an outdoor kind of person and loved tramping, sailing, fishing, biking and the lot and I'd never been on the ocean, never been on a yacht and he said "Well I am taking you down to the Marlborough Sounds". So we got a group of friends and we all went down to the Sounds, so half way down the Cook Strait, he got me to steer the yacht which was pretty exciting, but kind of nervous cause of all these people. I'm thinking their safety's all my responsibility... and we are half way down and he says "Let's stop and have a look and just enjoy the beautiful scenery from here, so we did, not realizing that they had plotted to throw me into the ocean... so I was just standing on deck and just admiring the jellyfish. I'd never seen jellyfish in my life and someone just pushed me in and I went all the way down to the bottom and I was just like, am I ever going to get up. I was freaking, I was under the water, eventually I managed to get up, and yeah it was an experience I'll never forget. (Female, Zimbabwe).*

For many, in the second or third year of settlement they are more likely to join a formal sport activity and often this is an indoor sport near their home or workplace.

### **12.2.1 Compressing outdoor nature based recreation in terms of time and space**

While many do not go to regional or national parks in the early years of settlement, this does not mean that they do not participate in outdoor nature based recreation. Outdoor nature based recreation is compressed both in terms of time and space. Recreation tends to involve a short amount of time – an hour or maybe two hours and they tend to recreate 'close to home'. For many this means that they use the city parks and beaches (the latter particularly in Auckland), both of which are accessible using public transport and/ or for many they can walk. The economic advantage in terms of both of these sites is clearly stated by many – they are free and close (cost virtually nothing to get there). Free access to parks and beaches for some of these migrants is novel:

*We don't have to pay to visit these places. Because in my country if you want to visit some places... we have to pay for that... if you want to visit a waterfall, you have to pay for that. Nothing is free in my country. (Male, Indonesia)*

*We just go to the beach. I enjoy, it is refreshing, the salt and just so natural. I enjoy the natural...if you are going to the beach in Korea it takes a long time to get there and even when you do, there are heaps of people. (Female, Korea)*

### **12.2.2 And time (going to a regional park)**

Time and cost are the most significant constraints to visiting regional or national parks. Many work more than five days a week and to organize a family to travel to a park takes time that they do not have.

*If you are organizing the whole family, it is a big deal, you need a whole day. (Female, England)*

*We went to national parks when we had our vacations. The problem is...time. You have to have the whole day, driving out, or stay there, relaxed. And to prepare the food..it's too costly. I think that is for retired people, or semi-retired. They have the time to do that, but for working people, because my husband, sometimes he works seven days a week. (Female, China)*

### **12.2.3 Familiarity and the Family**

Recreating close to home was also more than an economic necessity, for many of the migrants it was also about going to a site that was in some way familiar to them. Most of the migrants had recreated in city parks in their countries and city of origin. They were familiar with botanical gardens, parks that comprised ponds and trees and specially planted areas. They were familiar with parks that provided space to do different things: eat, places for children to play, places for adults to sit, places for adults to exercise, places to walk dogs. Many felt comfortable with areas that provided open spaces, sealed pathways, places to sit, places to find shelter and importantly places where other people were and could be seen. City parks for many were places to recreate in, were free, were places where they felt more comfortable and for women, places where (at least during the day) they felt safe. The other emergent issue is that these sites were more likely to be accessible for elderly members of their families or communities and the very young. City parks were for many the first place they ventured to for outdoor nature based recreation and were considered accessible for 'all the family'.

*Yeah, I rented a flat in a small house near to the botanical gardens, so currently I live near the botanical gardens. I have the ability to visit these gardens with my daughter every weekend and even during our evening activity, because I like to play with my daughter... and currently I can spend 20 minutes walking to the botanical gardens from Wellington City to the botanical gardens, to Kilbourne where I live, and I can go through the botanical gardens, and it's the additional ability to breathe fresh air. (Male, Russia)*

## **12.3 Feeling Safe**

### **12.3.1 The familiar and feeling safe**

Travelling to a regional or national park, for many it is not just a day trip, it also involves having to stay the night somewhere. For most, staying in the park was not even considered, nor would it be something that they would feel safe doing. It is not simply a case of the need for amenities, it is also about engaging in an unfamiliar activity – staying in the bush.

*[have never stayed in a park overnight] just been somewhere where there is a camping ground, power service, cooking, never been some place where there is no service...just for us, we are not so brave as you... yeah not so brave, it is easier for people who are Western... our parents give us the idea it is not safe, be careful, limit our experience outside the home. So we didn't go, we don't want to go, say like you said to a national park, because yeah we would get lost, we couldn't find where to go. (Male, China)*

Feeling safe was a significant theme for women who participated in the follow up interviews. New Zealand's regional parks were not places that they felt were safe. Indeed they thought New Zealand bush was variously 'scary', 'strange', 'closed in' and not something they were familiar with. These perceptions were common to all of the women interviewed, irrespective of their cultural background or country of origin.

For those who had visited regional and national parks it was not always a positive experience:

*I was very scared... like feeling, like how can I say... like in a movie (shudders and wraps arms around herself). I was scared something goes after me because we don't have any experience about the bush, because Korea doesn't have that much bush or heaps of trees like this. (Female, Korea)*

*I was very frightened. We are not use to your bushes (Female, China)*

*I'd say safety. Safety is the biggest thing. I mean if you're out in the woods by yourself and some guy comes along and attacks you, who are they going to blame? What was she doing out there on her*

*own? So I feel that there's kind of a feminine curfew that stops me from just getting in my car, driving off to a forest and going for a run. I'd love to do that. I would have done that, but I am y myself. I don't know who's out there. Why put myself at risk? (Female, England)*

### **12.3.2 And there are a range of risks:**

Not all migrants settle here with their partners, for some women they do not go outside of their neighbourhood, that is, beyond getting their children to and from school and shopping for food.

*...you know the Korean people, especially guys, they're not happy with women going out without them. (Female, Korea)*

For some the risks involve injury and there are variable perceptions about what constitutes a serious injury:

*I work in an emergency department and we see many children from migrant families, from China, Korea, Taiwan, children with grazed knees and where the parents think it is a major injury, they do not know how to cope with this environment. (Female, England)*

### **12.3.3 The risk (and fear) of the unknown:**

*You don't just want to just drive out to some place and think gosh I hope something's nice out there. You want to kind of know ...we are in a guarantee age. Can you guarantee I am going to enjoy this? You want to know before you go...because we are busy. So if I see pictures of something that makes me think yeah I definitely want to go there, then, I'll go. (Female, Australia)*

And for those who dared to try something different, it was not always a positive experience:

*[tried sky diving] yeah, I didn't enjoy it, I was scared. (Male, China)*

For some migrants outdoor recreation was something they had done prior to migrating, but once in New Zealand they tended to 'play' indoors. As one participant from China observed:

*We like computer games, sit at home, I do not want to do a lot of sports because I am a little bit afraid..I want to practice yeah...and studying and learning in New Zealand, there are not so many friends, so you just stay at home, do computer, work and games. (Male, China)*

And sometimes it about learning what to fear in a new country:

*Now I enjoy the outdoors and I enjoy it more than I did back home because there's no snakes and I'm happy to go out camping and do all sorts of things now, because I know there are 1 or 2 things I have to worry about. (Female, Zimbabwe)*

And for others the landscape offers an escape from a previous fear – living on landmass at sea level:

*It's knowing I am safe, you know. If there is a tsunami any day, I'm safe (Female, Tokelau)*

### **12.3.4 Managed spaces, nature and monuments**

Early recreational experiences for migrants from Central Asia, South East Asia and south Asia, invariably involved indoor sports when from large cities and for some outdoor-nature-based recreation invariably involved visiting sites of national significance. Sites that were set up for national and international visitors and where there were a range of amenities for a range of consumptive practices. Walking or hiking involved walking on sealed paths, with sealed steps and visiting both 'nature and monuments'. However, It should be noted while this was common to the aforementioned areas of origin, it was also the case for those from the United Kingdom.

*In England you visit monuments and historic places, here you do an activity (Female, England)*

*The outdoors is more accessible here, New Zealanders are much more outdoorsy. (Female, Canada)*

And yet for some they became less 'outdoorsy' once they came to New Zealand. For many from the Pacific Islands and for others from warmer regions, outdoor recreation in New Zealand was not attractive as the weather was considered inhospitable and it was too cold to go out for most of the year.

Early recreational experiences were also for some gendered.

*When I was young, well I am a girl, so nothing much about sports..I needed to do the basics for school...table tennis and skating (outdoor)..but we are not under that much focus for sports, we mainly study and most of the time learn one kind of musical instrument (Female, Korea)*

### **12.3.5 Getting information**

Some of the participants felt it was difficult to get information on what to do when they arrived in New Zealand. Yet for others, they thought that it was easy.

*Everywhere in New Zealand, it is possible to get information about recreation activities because for example, it is possible to visit any tourist centre and take a brochure with a description of outdoor activities, with walking paths or parks, maps and everything. (Male, Russia)*

*We have lots of materials, about sky diving, bungying, outside walking, climbing, yeah all so exciting. (male, China)*

*There are a lot of migrants here who have no idea of where to go...how to, lots of people from Asia here, ...most of them just know walking, know little about sport, or something outdoors, especially outdoors.... For most of us the barrier is a language problem. (Male, China)*

The relative ease for some appeared to be connected to the ease with which they looked for things on the internet and or sought things out independently. For those who would not typically venture out independently, finding the information was seemingly more difficult. More often these people were women with school aged children from cultural backgrounds that did not encourage them to venture out independently and or where they would only visit a regional or national park if a member of a group on an organized trip. This appeared to be more of an issue for Chinese, Korean, Japanese and Pacific Island women. It is also possible that for some they sought information that they considered relevant to themselves, and that information on national or regional parks for various reasons was less relevant than information on local amenities.

### **12.3.6 Food and 'the picnic' and the family**

For those migrants that come from countries where there is a well established park system heading off for a day to visit a regional or national park and packing a picnic was part of their socialization. Picnics are a cultural tradition and are not a universal practice. Some culinary traditions are better suited to 'packing a lunch' than others. Not all cultures eat sandwiches for lunch. Nor do some cultures think that a cup of tea and a handful of scroggin are sufficient. For some sitting on the grass to eat lunch is normative, for others it is distasteful. For the migrants from Asia and for those who identified as Chinese one of the biggest issues was their inability to prepare the kind of food they would expect for lunch. As one participant said:

*At the very least we need hot water. We need somewhere to prepare our food if there is no restaurant. We do not just have one thing, often our lunch will four or five dishes. (Female, China).*

And, eating is not just about - 're-fuelling', it is a social activity and a psychological experience – it can and often does transport the person back to childhood memories and enables some continuity to be established between the past and the present in space. Eating a meal is at the centre of the outdoor nature based outing and it is about truly being with those that you are out with, it is about communing with nature while simultaneously communing with what is culturally and socially important to you. It is about enhancing the enjoyment of being out in nature. The inability to do this properly for many Chinese takes away a significant motivation for going to a park in the first place.

### 12.3.7 The Family

A number of migrants from the Pacific thought that our regional and national parks were not places where they could go with extended family. The terrain and lay out was not suitable for the very young, nor did they think it was suitable for the elderly. This was given as a significant reason behind not going to regional and national parks and only visiting local urban parks. With respect to the latter they thought these were wanting in terms of facilities for the young and old in their communities. Outdoor recreation was also a family or group activity, not something to do alone or with only one or two people.

### 12.3.8 The need for shelter, keeping out of the wind, rain and sun

The absence of appropriate shelter was raised by a number of migrants from Asia, particularly women. They wanted a covered area to sit and to keep out of the rain, wind and sun. The emphasis placed on the importance of structures is not just a pragmatic request these structures address a number of cultural needs. Being able to shelter prevents a woman getting burnt and for Asian women this is important, being suntanned is associated with being 'less civilised' and/or of lower class, of peasant class (Hung 2003). This is doubly problematic when a 'wilderness area' is also considered uncivilized and a place that the uncivilized inhabit (Hung 2003).

### 12.3.9 Structures are not just about escaping the elements

Structures also address an aesthetic tradition for the Chinese, they provide balance, where 'man' made structures allow 'nature' to be set off to its greatest advantage. In the words of one participant:

*When we went there [Waiheke Island] I was a little bit disappointed. Because when you hear the name, it should be very beautiful, lovely. When we went there it was quite simple, very basic. [can you explain what you mean?]*

*I mean for example, you see not many plants, trees, very natural grass. Everywhere is grass [do you mean farmland, pasture?] Yeah very natural...and also I heard from people in my community, when they went to the Waitakere Ranges they say "oh it's too simple"*

*[What does your community expect to see?]*

*They want to see something. I mean have some design... to go with the natural landscape. You see like a picture frame and people can take their pictures there. In China you can go to any sight-seeing spot and you can see those man-made [moves to hand over her head to form an arch]... You know to go with the natural landscape*

*[Do you mean that you need to see manmade objects in the environment?]*

*Yes! This makes it beautiful. (Female, China)*

From this perspective, shelter, seats, tables and buildings were all important structures, in terms of the aesthetic need that they met, in terms of the comfort and enjoyment they can provide and because they allow a person to be part of nature. The typical visitors centre found in New Zealand national parks is a functional structure, not typically designed for the aforementioned reasons.

For the Chinese and for other migrants from Asia there are different values and different understandings of what constitutes outdoor nature based recreation, what is beautiful and what is natural. For the Chinese their philosophical traditions have ensured a perspective where nature needs to be cultivated in order for it to be truly beautiful or at least shown to its best advantage. The absence of cultivation in our regional and national parks is for those from this tradition often disappointing, sometimes a let-down, because nature's beauty has not been shown to its best advantage. There are clear differences in the understanding of what constitutes natural as well. Pasture and/or farmland from this perspective is natural, uncultivated and could be enhanced by the planting of trees or the addition of some physical structures. In New Zealand a pastoral landscape would be generally considered altered, unnatural, cultivated and would stand in contrast with a native bush clad landscape. And, there are also different kinds of 'grass'. Grass in parks is of a different order to grass in the countryside:

*Grass in China is only for decoration. You do not walk on it. If millions of people walked on it there would be no grass. And Chinese people do not sit on grass [pulls a face showing distaste].*

There are different perspectives on what the nature of the relationship between humans and nature should be. The western tradition which has shaped New Zealand parks and their management tends to follow a subject object divide, where humans observe and view and are in some sense outside of nature. The Chinese tradition in contrast is humanistic, where humans are a part of nature and where it is a given that nature is a social construct.

#### **12.3.10 Selecting New Zealand**

All of the migrants contrasted outdoor recreation in New Zealand with their country of origin and this contrast invariably highlighted the smaller population and what they perceived to be a better environment, socially and ecologically.

*The main points of selecting New Zealand...was the low crime rate, good nature, good environment, no nuclear stations, um interesting landscapes (Male, Russia)*

Yet, while some felt that nature needed to be a little more cultivated, ironically all shared the view that living in New Zealand offered them an opportunity to live in a less crowded and polluted environment.

#### **12.3.11 Compared with Home**

All of the participants compared their experiences in New Zealand with what their experiences had been in their country of origin.

Describing outdoor nature based recreation and obstacles to participation in Russia:

*...it is too difficult to get information about walking paths, for example you can ask some natives about where to go but the popular places are sometimes dirty, because a lot of rubbish can be there as a result of camping... for example my wife is a photographer and sometimes it is difficult to find a good place to take photos because of empty bottles, broken glass and there is stuff lying around. Sometimes it is difficult to get to these places in Russia, for example during weekends, not too many travel buses can get here or there and sometimes these places are not well prepared to handle tourist activities. There are no toilets, nothing, and I was surprised that every park in New Zealand and England has free toilets. (Male, Russia).*

#### **12.3.12 Nature and mental health**

For many being in the outdoors was considered good for wellbeing, in particular mental wellbeing. The following quotes illustrate this:

*Outdoor activity is actually really good for improving people's health and to prevent some medical problems [do you have particular medical problems in mind?] ... I feel some people have got mental health problems [migrants?] yes, because they are so isolated and they get depressed. (Female, China)*

*Some of my earliest memories are... oh my God we had this huge adjustment when you are a teenager, you know, you have lost all your friends. Your whole world is turned upside down. But we had these fantastic ranges to walk in and the picnics that we could have. So for a weekend or part of a weekend when we went, we were surrounded in beauty. And that touches your spirit. So when you are amongst the trees it's hard to see your problems. When you've got the sound of the water and the trees and the greenery and the beach, and that just maybe takes you back to childhood, simple things, and yeah it is nice to be able to do those things. I think it was a balm on the soul with those early experiences. (Female, England)*

*A day on the beach, feet in the sand, the sound of water, swimming in the sea, is a childhood memory for me, because I was near a beach when I grew up. So when I'm on a beach again it takes me back to that fun time. (Female, Australia)*

The last two quotes highlight how people seek to recreate or re-experience situations that they have positive associations with and situations that they are familiar with. This is an important point of sameness, what is

different is not what they seek but the experience they seek to replicate. Being able to link a past positive outdoor nature based recreation experience with a present outdoor nature experience is important to the process of integration, in both a material (actual) and psychological sense.

### **12.3.13 Nature and integration**

For some of the participants engaging with nature was something that they felt enhanced their integration and or something they sought to do, to enhance their integration. While economic realities shaped where they engaged with nature, it is also the case that there appears to be gradient of experiences sought. Where some seek a 'wilderness' or close to 'wilderness' experience; others seek a managed, cultivated park experience. Migrants from Australia, the United Kingdom, South Africa, Zimbabwe and Indonesia were more likely to seek or to have at least experienced regional and national parks and to have sought and experienced 'the wild'. Migrants from the Pacific and Asia were less likely to seek this and if they had, the experience was commonly alien, frightening, disappointing and or merely served to highlight their difference and sense of a lack of place in New Zealand.

### **12.3.14 Discussion**

While there are differences between the various migrant groups that are readily identifiable, there are also strong points of commonality. For all of the participants in this study their relationship with the landscape, to outdoor nature based recreation, is mediated by their socialization and settlement experience. Those most likely to engage in outdoor nature based recreation in our regional and national parks are those that have had similar experiences in their countries of origin and where understandings of what constitutes the wild, the natural and the naturally beautiful (aesthetic) have been shaped by similar philosophical traditions. For those whose socialization has ensured little experience of these sites, who have very different philosophical traditions which shape very different perceptions of the natural, the wild and the beautiful, engaging with regional and national parks in New Zealand is unfamiliar and considerably more challenging.

The Chinese participants' perceptions and experiences in this study paralleled the observations made in Canada. The participants in this study had 1) different views of nature 2) had limited experience of outdoor recreation 3) and had different attitudes toward recreation. As with the Canadian Chinese, these three reasons become self-perpetuating, they remain less experienced users and prefer to engage with more developed and managed park experiences as a consequence (Hung 2003).

The dominant western notion of what constitutes a park, what a park should comprise of and what value the park has to society is not the only tradition globally. National and regional parks are a relatively recent phenomenon in China with the first nature reserve being established in 1956. While there are now 1,270 reserves in China, 7.6 million people live in these reserves, the habitat is not protected as people still forage from these reserves in order to survive (Hung 2003). Historically and culturally Chinese views of nature and what is beautiful have been shaped by Confucianism and Daoism. Researchers have described the dominant view as hedonistic when compared to western traditions and it is also clear that artistic rebuilt nature is considered more beautiful than untouched nature (Han 2006; Hung 2003). Others have noted that ecology and botany did not develop as fields of enquiry within China and this is explained by their relationship with animals and plants. From a Chinese perspective they are interested in how they can enjoy animals and plants, not in terms of what they are in themselves. The example is given, if you explain a fish in a scientific way a Chinese person will feel uncomfortable, they will be thinking "what does it taste like", all plants and animals are potential food and food (taste) is central to the ecological tour (Lin 1998:46 cited in Han 2006). An uncultivated place – the wilderness – is also linked to being uncivilized, no place for the civilized and a place for those of lower status – peasants who need to forage there (Hung 2003). This can serve as a major disincentive to engage in outdoor nature based recreation in New Zealand regional and national parks. Particularly when the 'wilderness' experience is central to notions of what New Zealand national parks should comprise, constitute and therefore offer as an experience for New Zealanders.

For some migrants when they visit regional and national parks they see what is missing, what is missing is defined by their socialization. The interviews with participants in this project suggest that for migrants from Asia it is hard for them to find points of connection as there are too many missing elements. If we accept that parks are social institutions and they are very much products of cultural traditions then the perception that things are missing tells us about the integration experience of new settlers more generally. The list of missing

elements includes: nowhere to rest, nowhere to take shelter, nowhere to buy food, nowhere to prepare hot food, nowhere to sit and all of these absences create a sense of imbalance. This list also speaks of the imbalance they experience as new migrants, their inability to locate themselves in this new landscape. All landscapes are also people-scapes. There are clearly a range of factors that impede full participation in outdoor nature based recreation and arguably all of these factors tell us about what it is like to be integrated/or not, into New Zealand society.

For all of the participants in the qualitative component of this study describing their relationship to nature based settings in New Zealand is also about describing their integration experiences. For those that can find the familiar, living in New Zealand can more quickly become meaningful. Finding the familiar in our regional and national parks is as important as finding the familiar in any other social institution. For many it is easier to find the familiar in educational institutions or institutions that parallel those they had in their country of origin. It would be unrealistic to expect that all groups in any society are going to equally participate in outdoor nature based recreation and for migrants this participation competes with a range of other pressing settlement issues in their first few years of residency. But once these other issues have been addressed greater participation and understanding of nature based recreational opportunities would arguably be facilitated by *interactive interpretation*. That is, interpretation that embraces a number of cultural perspectives, interpretation which assumes a heterogeneous audience and interpretation that attempts to engage with a person's worldview and to make the new experience meaningful for them. This would serve multiple purposes: it would assist migrants to integrate, it would demonstrate the multiple values that can be ascribed value to this new landscape and why some are prioritized over others; it would allow them to understand why they see what they see and arguably allow those who manage these sites to be more reflective about what they are presenting. Finally an interactive interpretation is intrinsically an inclusive dialogue which would be beneficial to sustaining New Zealand's regional and national parks ecologically and socially in the long term.

## SECTION 13: INTERVIEWS WITH RECREATION PROFESSIONALS

### 13.1 Method

Interviews were conducted with eleven recreation professionals employed with the Department of Conservation, Auckland Regional Council, Greater Wellington Regional Council and Wellington City Council. In addition, interviews with community advisors in two local authorities were drawn on in support of the recreation professional interviews. A profile of the participants is shown in Table 1. Most of the participants were New Zealand-born, apart from the community advisors, who themselves were migrants. Collectively, the participants bring over eighty years of experience in the parks and recreation planning field to this study.

**Table 17:** Interview Participants

Pseudonym	Area of practice	Organisation
Charlie	Recreation planning and policy	Regional Council
Bronwyn	Parks Management	Regional Council
Susan	Recreation/visitor management	DOC
Wendy	Recreation planning and policy	DOC
Henry	Recreation planning and policy	DOC
David	Recreation and parks planning	City Council
Petra	Parks management	City Council
Brian	Recreation programming	City Council
Samantha	Recreation/visitor planning and policy	DOC
Colin	Recreation/visitor planning and policy	DOC
Reece	Recreation/visitor planning and policy	DOC
Hamish	Community advisor	City Council
Victor	Community advisor	City Council

The interviews were generally conducted individually although two group interviews were conducted. Email correspondence was entered into with additional informants who could not attend an interview, and was a useful source of documented material (e.g. policies, plans, visitor surveys).

The interview material is addressed under the following headings, with themes developed under each heading:

- **“What we know”**: How migrants use our nature-based recreation resources
- **“What we are doing about it”**: Policies and planning for migrant nature-based recreation
- **“Obstacles and opportunities”**: How to enhance migrant nature-based recreation

### 13.2 “What We Know”

#### 13.2.1 What we don’t know

The level of knowledge about migrant use of nature based recreational sites was limited across most participants. Similarly, knowledge of use based upon ethnicity was limited. Knowledge in this case refers to ‘hard data’ based upon empirical research. Consequently, although most participants had some impression of how migrants or ethnic minorities use recreational resources, this is based upon *ad hoc* personal observation or informal feedback from frontline staff on site. Participants *do* acknowledge that more information on migrant use (or non-use) of recreational resources is needed:

*But I think we've felt quite, well I've certainly um, lacking in information. ...At the moment I feel like well we say well we know that they're there we just don't know what difference um it is, how we should respond to that (Samantha).*

They also acknowledge the problem with relying upon the appearance of park users and placing them into categories, and that this may not be accurate; as Susan notes:

*We have no information as to where those people of that ethnicity are coming from, whether they're international tourists or [migrants] and it's very hard to identify them by sight...*

### 13.2.2 What we think we know

Most participants have some pre-conception of how migrants recreate (or not) in outdoors New Zealand. Generally, migrants are thought to have lower participation rates than mainstream New Zealanders. As Petra notes:

*I'm more likely to come across your general New Zealand Pākehā walking a track than I am a migrant basically.*

However one DOC participant noted the growth of usage by ethnic minorities for the more accessible (urban periphery and 'front country') sites. Migrants are also perceived to recreate more commonly in large groups, that may be associated with extended families, church groups or (less commonly) workplace groups.

*We find that Pacific Island groups for example tend to recreate in larger groups and they don't go out for long walks like European you know Western Europeans would go off for a big tramp... Pacific Islanders might come in church groups and so they'd have a great big picnic... From very young to very old (Charlie)*

They are also more likely to include food as a major aspect of their visit to a natural area. Migrants are also perceived to engage with the outdoors differently from mainstream visitors – that is, they prefer different activities. To some participants, these activities seem quite strange in the natural settings concerned, although there is a clear cautioning against stereotyping behaviour by ethnicity:

*... [the Ranger] would tell you stories of people coming up and Iranians playing bongo drums ... for an hour and half and you're going 'what, oh what?' but not every Iranian does that... (Charlie)*

There is a common perception, however, that migrants tend to engage less frequently in the more strenuous activities that are available in natural outdoor settings. For example, tramping, or strenuous bush walks are observed to be less popular with migrants. As one participant notes "in a general sense they tend to not be quite into the same physical stuff I suppose" (Bronwyn). Another participant laments the problems associated with their regional parks having steep hills – which tends to discourage participation of Pasifika as they are "not great spaces for family groups" (Charlie). Faced with this type of terrain, and considering the social composition of the 'typical' Pasifika visitor group (multigenerational - from young children to seniors), they are more likely to seek more suitable spaces for recreation, for example in the beach parks.

Another perception revolves around camping – which is observed to be less popular with migrants. One participant offered an observation on this, linking this antipathy to camping with the background of the group of migrants who have come to New Zealand as refugees, and may have spent some time in a refugee camp – under canvas – and associate camping with poverty and deprivation. As Bronwyn notes, there "was a relationship there between [camping] and what they perceived as being the thing they're getting away from...". But there is also a wider perception that other (non-refugee) categories of migrants also do not prefer camping – Chinese in particular – and a desire to learn more about why this may be the case. Whether such preferences are driven by an uneasiness in the natural environment, or simply a desire for comfort remain in question. However participants do demonstrate a sensitivity to this, reporting anecdotally, for example that

there is evidence that members of some migrant communities, particularly from mainland Asia, and notably from megacities such as Hong Kong, feel less secure in the outdoors.

The type of clothing worn by migrants in natural spaces was an issue noted by a number of participants. Generally migrants are observed to don clothing that is not suited to the environment.

*...theirs [clothing] is far far far more... um, it's not inappropriate that's the wrong word, well it is inappropriate for the environment. You know you don't come in... the average New Zealand person doesn't go to the park in their brand new white sneakers...Where the average Asian probably does. Those sorts of differences... that's just something that we see...(Bronwyn).*

In pointing out that migrants, or Asians in particular wear different clothing in parks to other New Zealanders may seem trite. However, the manager in raising this issue was attempting to draw some connexion between clothing, preparedness, or level of knowledge about the resource and the activity, and ultimately willingness of the migrant to engage with a particular outdoor nature-based activity because of this potential disconnexion.

And while the above observations tend to reinforce our stereotypes about migrant use of the outdoors - and in fact lends weight to evidence from other parts of the world on ethnic minority use of natural areas, the managers in this study perceived that changes in patterns of use were occurring. Some managers had been working in the recreation field for twenty years or more, long enough to witness a transition in usage to a new generation, children of migrants from the Pacific in the 1970s, and from North East and South East Asia in the 1980s.

*... [They] carry out the activities in a more traditional New Zealand way..*  
Interviewer: *so when you say in more traditional way, that would be?*  
*Like the family coming along, you know a couple of families coming along for a picnic instead of a larger group type thing...um so more ah more New Zealand way I suppose [laugh]... (Bronwyn)*

The large group phenomenon is less strong for this group, who may be more 'main stream' in their behaviour:

### **13.2.3 Addressing Data Poverty**

Most participants, while expressing a desire for more information (e.g. through *this* study) cite resource restrictions as the reason for their relative 'data poverty'. And while in general participants were enthusiastic about learning more about the use their resources and facilities by migrants, in some cases there was a concern that greater knowledge may not necessarily lead to positive outcomes for migrants, simply due to resource limitations:

*...well we don't have the resources to manage what we've got really [laugh] to go and find more to do (Bronwyn)*

One regional council does collect park usage data that includes ethnicity – however a participant from another organisation had had difficulty gathering data on ethnicity and this had been avoided from that point due to "hostility" around the ethnicity question. And while there is an evident need for actual visitor data, there is also a stated need to gather data on latent demand – that is, demand that is not being expressed through active use of natural recreation areas. About 10 years ago some research had been undertaken by DOC regarding expectations of Aucklanders (this work involved one focus group of Pasifika (James 2001) – but this work does not focus on migrants, and its existence and findings are little known.

### **13.2.4 What we are doing about it**

This section addresses policy and practice regarding actively addressing demand for outdoor recreation by migrant groups, communicating with migrants about recreation opportunities and involving them in consultative processes. Most participants personally and professionally saw value in enhancing migrant use of the outdoors, some observing links between participation and integration within the wider community.

*Well it probably would help integrate people a bit more and you know coz especially when you met each other and outdoors or camping you tend to interact a bit more as well. You know it's like with the trampers and mountain bikers usually hate each other but it's made them stay in place and they realise oh....They're actually really nice people.... (Henry)*

There is a strong awareness among participants that the market is changing for the 'products' they provide. Wendy points to the changing demographics of the Auckland region, the relative decline of Pākehā or European New Zealand and growth of new New Zealanders.

*That it is really to me it's a kind of a relevance thing..., that if we're going to build these facilities that have got a life span of twenty or fifty years...Then we need to really think about who we're providing that for...And where that demand is coming from (Wendy)*

But few of the organisations they worked for had specific policies addressing this issue. Among some DOC participants there was a perception that DOC visitor policy at the national level does refer in some way to the challenge of increased ethnic diversity. But DOC participants note that there is no national policy concerning 'under' use by migrants, however, and implicitly they are included in the DOC 'General Policy'. Within one of the conservancies, a focus on new New Zealanders is acknowledged, both in terms of enhancing awareness of conservation values and enhancing participation (interlinked goals).

For some participants, particularly those that have a role in managing coastal and marine resources, compliance with resource regulations has been an issue in the past and still provides some impetus to continue engaging with migrant communities. Fostering use may also enhance awareness of natural values "you appreciate what you've got and you may be much more likely to look after it". It is acknowledged, however, that the environmental plundering reported in the media, with a focus upon recent Asian migrants has improved considerably. This is no doubt associated with specific conservation messages regarding marine resources, but also to general relationship and capacity building with migrant groups. The Chinese Conservation Trust in Auckland is an excellent example of this in practice, through its partnerships with ARC and DOC - contributing not only to resource monitoring, but also spreading resource protection and advocacy messages within its ethnic community.

Local government participants were aware of their responsibilities under the Local Government Act regarding health and life style benefits, and were the most pro-active in terms of programmes to involve migrants in recreation *per se* but not necessarily nature-based recreation.

### **13.2.5 Addressing demand within current goals and constraints**

Despite enthusiasm among participants for getting migrants out there 'doing things', there is also a reticence about raising expectations within the community and among stakeholders. As noted above this reticence originates from resourcing issues at all levels of government, but it also is linked with the limitations of current recreation/visitor policy. One participant, from a regional council, would only be willing to explore developing new products/opportunities for migrants in regional parks if this fits into current goals for the park system:

*....you know if you want that urban high density type experience and high infrastructure, you know completely formed paths and paved paths and all of those sorts of things and lots of seats and all of that, that's just not our business for regional parks you need to go to this park to to deliver um... Likewise if we allow the creep of visitors if you like and their expectations to go to the other levels of park... (Bronwyn)*

A DOC participant noted that the organisation is increasingly focused on being demand driven, and being able to respond to what people want and need. They acknowledge that cultural diversity is clearly a component of that, but that demand in that area needs to be balanced with other users' needs and desires:

*I mean it's...kind of numbers do still count... And a small number of migrants who want something particularly different might actually find that they might not get what they want (Samantha)*

So, while fostering growth is a goal of agencies, the desire “to accommodate as many different uses of the parks as we can”, and ultimately provide for the recreational needs of migrant groups have to be “within what we deliver...”. For example, Petra is supportive of meeting migrant recreational needs, “...as long as it was in existing sport and infrastructure we’ve got, absolutely”. Many participants negotiated this issue by advocating enhanced use for all, that would then also meet the needs of specific segments of society, including migrants. As Henry notes:

*....I think it's more the message is get who you can, you know get your numbers up ....no specific 'oh yeah we want more new migrant groups... And so I don't really care where someone's from or what their ethnicity is as long as they get out there and use the outdoors'*

In terms of co-operation and resource sharing that could help to address some of these resourcing issues, this did not seem to be occurring among the agencies involved in this research - in terms of shared knowledge, staff, resources, research or initiatives involving migrants. However, some agencies work very well with community organisations (e.g. Auckland Regional Council) and adopt a conscious approach of building capacity within groups such as migrant and ethnic organisations. As Bronwyn notes, “...we can facilitate those sorts of things, what we can't do though is be that person that takes the walk all the time”.

## 13.3 Obstacles and Opportunities

### 13.3.1 Communicating with migrants

Lack of resourcing also impacts upon agencies' capacities to provide information tailored to migrants needs – for example walking opportunities in parks, published in migrants' first language.

However the language issue was interesting and attracted variable responses from participants. While agreeing that multiple language resources *could* be valuable in enhancing migrant recreation, some participants had had negative experiences. One spoke of a major language initiative being less utilised than expected:

*...we got all excited and printed off I think in about ten different languages, our ...generic Regional Parks brochure...We had um these and they were in Chinese and Mandarin I think...And like I said we had boxes of them... we didn't have one of those brochures used... Well that was a waste of money because nobody used them (Bronwyn)*

Others note a limited capacity (resources) to communicate through printed material in various languages: “we haven't got a big budget either [laugh] so it pretty much stops at English yeah”. Others are aware that their communication could be better with a number of segments, including migrant groups.

*I mean it's a daily struggle to get, to get that information out to people... that you know things... you know tracks are nearby and so accessible and it's easy and it's free. It's just breaking that barrier down (Brian)*

Interestingly, the community advisors did not identify language as an important issue – rather the accessibility of information – getting it in the right place at the right time in the right format. They call for more material for migrants being placed on recreation providers' websites. However limitations do exist in these areas too:

*...we don't have buckets of money to go to every source of information and you know so to a certain extent unless migrants search out the information, the trick is knowing where to find it you know (Charlie)*

Similarly participants report a limited capacity to engage specifically with migrant groups in planning and policy processes, choosing to focus on user or activity groups, and citing the hundreds of such groups that they currently engage with as being resource intensive.

DOC participants did talk of the imperative for staff to engage as many kinds of relevant stake holders as possible - and trying to expand that beyond the regular people they talk to. They do note however that this is very much a mindset issue of individual staff : “I’m not sure we’ve moved a lot in that space yet” (Samantha). None of the organisations represented in the study provided specialist training or staff to address migrant-related recreation issues.

### **13.3.2 Getting migrants into the outdoors**

While communication is identified as the key to fostering awareness and ultimately, use of the outdoors, participants also identify other catalysts. Educational programmes are one of these. However, again lack of resources is an issue for some agencies. Participants talk of being “...just so under resourced that we’ve put a stop on all education stuff because we don’t have the staff to do it”. This is unfortunate as subsidised recreational programmes are seen as one means of providing an introduction to outdoor recreation. As Petra notes,

*in the few walks that we’ve done through [the Council’s] festivals and stuff, when there’s been new migrants there and taking them through... it’s always been yeah really rewarding to just introduce them to it, and then they’re away....They’ll only need to see the first twenty metres and know it’s safe and they’re OK and then they’re away*

Some participants noted the constraint of price for a substantial sector of the migrant community, noting for example, that on ‘Free Bus’ day, regional parks received many migrant visitors, motivated simply by affordability. Regional and city councils, and DOC all provide such subsidised programmes to varying degrees, with one council providing over sixty events that are either free or very cheap. Wellington City Council’s Push Play Outdoor Festival and its Fun for Five Bucks programme are both seen to provide important introductions for migrants to new recreational activities.

On the supply side, however, one manager notes that track standards would need to be improved in many parks, both to foster and cope with increased usage – and is cautious that his organisation would simply not be able to cope with extra demand (from migrants).

## SECTION 14: CONCLUSION

This study contributes to the very limited body of research that addresses recreational behaviours of migrants and ethnic minorities in New Zealand – with a focus on nature-based recreation. The study comprised a survey questionnaire that compared recreational perceptions and behaviours of migrants with New Zealand born citizens. Follow up in-depth interviews with migrants were undertaken to elucidate patterns observed in the survey data. Further interviews were undertaken with recreation professionals planning and/or providing resources and activities in natural areas. The geographical focus for all aspects of the study was Auckland and Wellington because of the spatial concentrations of migrants in those locations.

The study will help inform current debate, theory and practice around recreational constraints, broadly, and in particular as it applies to immigrant and ethnic minority groups. Very little research has considered together the variables of immigrant status, ethnicity and environmental values and examined how they interact in relation to recreation practice. This study contributes to literature on environmental values and recreation practices in nature-based settings, and to the very limited literature on organisational constraints to the inclusion of recent immigrants and ethnic minorities – from the supply-side perspective of the recreation professional.

The survey data (N=433) revealed statistically significant differences based on migrant status, ethnicity and country of birth for a range of recreation-related variables. The key differences, based upon migrant status include: frequency of participation (migrants have higher percentages in both the low and high frequency of participation categories); recreation group size (larger groups for migrants); and recreation group composition (migrants mix outside their own ethnic group more). Significant differences were found by migrant status for all constraints to participation: cost of equipment, cost of transport, not having people to recreate with, distance from recreation areas, lack of knowledge of recreation areas, and lack of experience were all significant constraints to migrant recreation. For the Chinese-born, and those from 'other' countries, the proximity of recreation areas to home was an important feature. Given the income data for the migrants from this study (low relative to New Zealand-born respondents), and from previous work, these economic constraints to participation were somewhat predictable. However, as revealed from the interviews with migrants, prioritising outdoor nature based recreation for migrants is shaped not only by economic considerations but also by cultural perceptions of the 'value' that the experience will bring.

Migrants and New Zealand born respondents had quite similar views about what the key requirements of natural areas are, for them to be attractive for recreation. However, statistical differences were noted by ethnicity and country of birth. For example, more Chinese and 'other' ethnicities rated the presence of recreational facilities (e.g. huts, tracks, toilets, picnic areas) as being important than did Europeans or New Zealand Europeans. Chinese respondents rated water amenities as not being important. Within any society, there are always diverse opinions, perceptions and values ascribed to outdoor nature based recreation and the venues within which this form of recreation takes place. New migrants merely highlight how different these factors can be. Difference also highlights the normative notions underpinning outdoor nature based recreation in regional and national parks in New Zealand. As noted from the migrant interviews, for some migrants when they visit regional and national parks, what they see is *what is missing*; and what is missing is defined by their socialization. The interviews with participants in this project suggest that for migrants from Asia it is hard for them to find points of connection as there are too many missing elements. The list of missing elements includes: nowhere to rest, nowhere to take shelter, nowhere to buy food, nowhere to prepare hot food, nowhere to sit and all of these absences create a sense of imbalance. This list also reflects the imbalance they experience as new migrants, and the challenges involved in locating themselves in this new landscape.

Migrants and New Zealand born respondents had similar views on the personal benefits of nature-based recreation. Migrants, however, placed more value on this as a means of spending time with their families, and also socialising and creating contacts. Those of 'other' ethnicity placed high value on natural areas as places for kids to recreate. A number of migrants from the Pacific thought that our regional and national parks were not places where they could go with extended family - the terrain and lay out not being suitable for the very young or the very old. This was given as a significant reason behind not going to regional and national parks and only visiting local urban parks. For many migrants, outdoor recreation was a family or group activity, not something to do alone or with only one or two people.

Childhood use of natural areas was lower for migrants than non-migrants, and lower for Chinese respondents. The interviews with migrants reveal that those most likely to engage in outdoor nature based recreation in our regional and national parks are those that have had similar experiences in their countries of origin – either as children or as adults. Also, those most likely to engage were from cultures where understandings of what constitutes the wild, the natural and the naturally beautiful have been shaped by similar philosophical traditions. For those whose socialization has ensured little experience of these sites, who have very different philosophical traditions which shape very different perceptions of the natural, the wild and the beautiful, engaging with regional and national parks in New Zealand is unfamiliar and considerably more challenging.

Many migrants change their recreation behaviour post-migration. Of the migrants in this study, about 20% indicated that they had abandoned nature-based recreational activities that they had previously pursued in their country of origin, after coming to New Zealand. However, New Zealand born respondents, too, abandon certain recreational pursuits – this study revealing that they did so more frequently than migrants. This may be reflective of the fact that New Zealanders have a relatively high engagement with a range of outdoor recreational activities, and that this may change over the life course. Encouragingly, just under half of the migrants in the study had participated in new activities since arriving here, tramping being the most common new activity.

While few participants overall belonged to outdoor clubs/organisations (around 8%), fewer migrants than non-migrants belonged to an environmental organisation. Interviews with migrants reveal language issues and a lack of confidence as a reason for not joining such clubs, but also the absence of such organisations in their countries of origin. The study also considered environmental values – partly in response to accusations of migrants lacking an environmental ethic – which potentially could impact upon their recreational preferences and behaviours. However, there were no differences between the environmental attitudes of migrants and non-migrants.

The interviews with recreation professionals demonstrate an awareness among this group that not all New Zealanders share the same perspectives on the value of wilderness in regional or national parks, and that there is room for difference. There was a desire for greater understanding of the different perspectives associated with migrant status and ethnicity. There was thus a strong recognition and support among this group for enhancing outdoor recreational opportunities for migrants: for the migrants themselves in terms of personal and social outcomes; for integration goals and the host society; and for conservation of the natural resource base. However, participants emphasised that interventions to address migrant recreation aspirations need to align with recreational goals as dictated by existing organizational policy. Also, the point was made that the operational needs of addressing migrant recreational aspirations are resource intensive in a recreation-provider environment that is already resource-challenged.

Other key points to emerge were the need to find out from migrants *how* best to communicate recreation opportunities, and also the need to be creative in providing low-cost entry opportunities for migrants as key catalysts for ongoing engagement in outdoor recreation. But importantly, we need to know if we can sustainably cope with any increased (and diversified) demand from migrant recreation use - both in terms of the sustainability of the *overall* visitor experience *and* natural resource sustainability.

In terms of future research, there is a need to generate and share more 'hard' data on migrant use and aspirations for recreation. We also need to learn more about *optimising* migrant use of the outdoors c.f. maximising use. Furthermore, we need to know if we can sustainably cope with any increased (and diversified) demand from migrant use - both in terms of the sustainability of the *overall* visitor experience *and* natural resource sustainability.

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## APPENDICES

### APPENDIX 1: Other Outdoor Activities in New Zealand

Activity	Frequency	Percent	Valid Percent	Cumulative Percent
Bicycling	2	.5	5.4	5.4
Beaches	3	.7	8.1	13.5
Swimming in rivers/ocean	9	2.1	24.3	37.8
Horse riding	1	.2	2.7	40.5
Soccer	2	.5	5.4	45.9
Car Rallying	1	.2	2.7	48.6
Jet skiing	1	.2	2.7	51.4
Golf	2	.5	5.4	56.8
Bowling	1	.2	2.7	59.5
Windsurfing	1	.2	2.7	62.2
Running	3	.7	8.1	70.3
Bird watching	3	.7	8.1	78.4
Collecting shellfish	1	.2	2.7	81.1
Sled dog racing	1	.2	2.7	83.8
Boogie boarding	1	.2	2.7	86.5
Tour guide	1	.2	2.7	89.2
Picnic	1	.2	2.7	91.9
Exercise	1	.2	2.7	94.6
Picking berries	1	.2	2.7	97.3
Shopping	1	.2	2.7	100.0
<b>Total</b>	<b>37</b>	<b>8.5</b>	<b>100.0</b>	
<b>System</b>	<b>399</b>	<b>91.5</b>		
<b>Total</b>	<b>436</b>	<b>100.0</b>		

## APPENDIX 2: Responses to Ethnicity

Ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
New Zealander	5	1.1	5.4	5.4
Japanese	6	1.4	6.5	11.8
Cambodian	3	.7	3.2	15.1
Indonesian	2	.5	2.2	17.2
Cook Island Māori/Dutch	1	.2	1.1	18.3
New Zealand European/Samoan	2	.5	2.2	20.4
New Zealand European/Māori	7	1.6	7.5	28.0
Southeast Asian	1	.2	1.1	29.0
Malaysian	2	.5	2.2	31.2
Nepalese/Sherpa	2	.5	2.2	33.3
Scottish	1	.2	1.1	34.4
Afrikaner	1	.2	1.1	35.5
Filipino	15	3.4	16.1	51.6
Latin American	2	.5	2.2	53.8
Burmese	5	1.1	5.4	59.1
Canadian	2	.5	2.2	61.3
Russian	1	.2	1.1	62.4
Asian	2	.5	2.2	64.5
New Caledonian	1	.2	1.1	65.6
New Zealand European/Samoan/Tongan	1	.2	1.1	66.7
New Zealand European/Russian	1	.2	1.1	67.7
Mixed	1	.2	1.1	68.8
Indian-Fijian	2	.5	2.2	71.0
Sri Lankan	2	.5	2.2	73.1
Malaysian/Chinese	1	.2	1.1	74.2
New Zealand European/Swiss	1	.2	1.1	75.3
Australian	1	.2	1.1	76.3
Chinese/Cambodian	1	.2	1.1	77.4
Malaysian/Indian	1	.2	1.1	78.5
Māori/Samoan	1	.2	1.1	79.6
Asian/Filipino	1	.2	1.1	80.6
Vietnamese	5	1.1	5.4	86.0
Thai	3	.7	3.2	89.2
South African	1	.2	1.1	90.3
New Zealand European/Malaysian	1	.2	1.1	91.4
New Zealand European/Korean	1	.2	1.1	92.5
Colombian	1	.2	1.1	93.5
South American	1	.2	1.1	94.6
Chinese/Indian/Malaysian	1	.2	1.1	95.7
Pakistani	1	.2	1.1	96.8
Brazilian	1	.2	1.1	97.8
Iraqi	1	.2	1.1	98.9
Taiwanese	1	.2	1.1	100.0
<b>Total</b>	93	21.3	100.0	
<b>Missing System</b>	343	78.7		
<b>TOTAL</b>	436	100.0		

## APPENDIX 3: Responses to Country of Birth

Country of Birth	Frequency	Percent	Valid Percent	Cumulative Percent
Australia	10	2.3	4.2	51.3
Austria	2	0.5	0.8	85.3
Brazil	1	0.2	0.4	98.7
Bulgaria	1	0.2	0.4	43.7
Cambodia	3	0.7	1.3	22.7
Canada	2	0.5	0.8	52.1
China	66	15.1	27.7	80.7
Colombia	3	0.7	1.3	43.3
Colombia	1	0.2	0.4	97.1
Denmark	1	0.2	0.4	4.2
Ethiopia	1	0.2	0.4	100
Fiji	3	0.7	1.3	87
Hong Kong	6	1.4	2.5	34.5
Germany	9	2.1	3.8	3.8
Iceland	1	0.2	0.4	89.1
India	7	1.6	2.9	84.5
Indonesia	3	0.7	1.3	21.4
Iraq	1	0.2	0.4	99.6
Ireland	1	0.2	0.4	92
Japan	6	1.4	2.5	20.2
Korea	2	0.5	0.8	96.6
Kyrgyz Republic	1	0.2	0.4	85.7
Malaysia	14	3.2	5.9	28.6
Myanmar/Burma	5	1.1	2.1	47.1
Nepal	2	0.5	0.8	30.3
Netherlands	2	0.5	0.8	88.7
New Caledonia	1	0.2	0.4	81.5
Northern Ireland	2	0.5	0.8	89.9
Pakistan	1	0.2	0.4	97.5
Philippines	18	4.1	7.6	42
Romania	1	0.2	0.4	99.2
Russia	2	0.5	0.8	52.9
Somalia	1	0.2	0.4	94.5
South Africa	4	0.9	1.7	31.9
Sri Lanka	3	0.7	1.3	45
Sudan	2	0.5	0.8	95.4
Switzerland	2	0.5	0.8	87.8
Taiwan	2	0.5	0.8	98.3
Thailand	4	0.9	1.7	17.6
Uganda	1	0.2	0.4	81.1
UK	28	6.4	11.8	16
United States	3	0.7	1.3	91.6
Viet Nam	5	1.1	2.1	94.1
Wales	1	0.2	0.4	90.3
Yugoslavia	2	0.5	0.8	29.4
Zimbabwe	1	0.2	0.4	95.8
<b>Total</b>	<b>238</b>	<b>54.6</b>	<b>100.0</b>	
<b>Missing System</b>	<b>198</b>	<b>45.4</b>		
<b>Total</b>	<b>436</b>	<b>100.0</b>		

## APPENDIX 4: Activities and Reasons for Abandonment

Activity	Reason for Abandonment
Beach volleyball	Wellington too windy, NZ sun too strong
Boating	No rivers close by
Camp fires	Restriction in NZ. People complains too much
Camping (x3)	Cost
	Migration
	No one to go with, no equipment
Climbing (x4)	Health
	Lack of time
	Too far away
Cross country skiing	Cold weather related outdoor activity
Cycling (x7)	Bicycles cost money
	Don't feel safe biking here.
	Health
	No bike and too expensive
	not safe
	Too Many hills in Auckland and have family now
Dancing	No where to dance
Diving	My husband (dive buddy) is now disabled so it became more difficult to find the time.
Family Beach Party	NZ is too strict. No freedom
Fishing	Have no time
Fresh water fishing	Different fishing method
Game park visits	No game parks
Guiding tourists - trekking	most tourists don't need a guide
Horse riding	No longer own a horse
Ice skating	Cold weather related outdoor activity.
Long distance skiing	No permanent snow.
Mountaineering (x2)	No close friends like it
	Proximity and health.
Paragliding	No car to travel
Photography	Leaving for NZ
Playing ball (x2)	Health
	Played basketball and volleyball but lack of place to play, costs, financial problem.
Playing cards	No partners
Rowing (x2)	Left the Uni squad
	No boat
Running	Time
Sailing (x2)	Children
	Sold boat
Shooting (x3)	Too expensive

	Too expensive
	Too expensive
<b>Short walks (x2)</b>	
<b>Skiing/mountainneering (x3)</b>	Live in Auckland
	Mountains/snow too far away
	Too far away
<b>Sun bath</b>	Sun burn
<b>Swimming (x9)</b>	Because of sharks
	I gave it up in NZ because of sharks
	sharks and no car
	Time
	Too cold
	Too cold
	Water in New Zealand too cold
<b>Tennis</b>	Lack of time
<b>Tramping (x7)</b>	Leaving for NZ
	Migration
	Moved to New Zealand
	No close friend liking that
	No friends to go with.
	No one to go with, no equipment
	Partner not interested.
<b>Travelling</b>	Economic disadvantage
<b>Visiting parks (x2)</b>	No place to visit
	No transport and no one to go with me.
<b>Visiting wildlife parks</b>	Hardly any wildlife parks in NZ.
<b>Water sports</b>	Health
<b>Winter sports</b>	Not enough snow/facilities are poor
<b>**Not activity indicated</b>	Don't know where
	Socialising and health
	Too busy to participate

# APPENDIX 5: Questionnaire Cover Letter (English Version)

May 2009

To the Participant

## OUTDOOR RECREATION STUDY

The Centre for Recreation Research, University of Otago, is undertaking a study on the use of the great outdoors for recreation by New Zealanders. The main objective of the study is to look at how members of our society use outdoor natural areas (e.g. the bush, forests, mountains, rivers, lakes, and the coast) for recreation.

By “outdoor natural areas” – we mean wild and natural areas, such as those found in forest parks, national parks, conservation parks, regional parks and reserves. This also includes beaches and the coastline, but away from the city centre. We do NOT mean local parks, gardens or playing fields found within your city or suburb.

It would greatly help planning for New Zealanders’ future recreation, if you could spend 5-10 minutes of your time completing this questionnaire, and returning it in the postage-paid envelope.

COMPLETED AND RETURNED QUESTIONNAIRES GO INTO A PRIZE DRAW FOR \$250 WORTH OF KATHMANDU OR WAREHOUSE GIFT VOUCHERS (1<sup>st</sup> prize \$150, plus 2 x \$50 prizes).

The questionnaire is anonymous – you will not be identified when these results are analysed. All the questionnaires will be analysed together, and the results treated confidentially. If you have any questions about this questionnaire or our research, please contact us – our details are below.

Many thanks for your help!

**“The team”**

**Centre for Recreation Research**

----- cut along here

**PRIZE DRAW FOR \$250 WORTH OF KATHMANDU or WAREHOUSE GIFT VOUCHERS  
(1<sup>st</sup> prize \$150, plus 2 x \$50 prizes)**

Please return completed questionnaire before 1<sup>st</sup> July 2009 to be entered into the Prize Draw

**To enter the PRIZE DRAW please fill in the following details, detach and post with completed questionnaire:**

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

## APPENDIX 6: Questionnaire (English Version)

# OUTDOOR NATURE-BASED RECREATION SURVEY

## Centre for Recreation Research, University of Otago

### SECTION 1: OUTDOOR RECREATION

THIS SECTION ASKS YOU QUESTIONS ABOUT YOUR RECREATIONAL USE OF OUTDOOR NATURAL AREAS IN NEW ZEALAND (e.g. the bush, forests, mountains, rivers, lakes, and the coast).

1) Which of these outdoor activities have you participated in **within the past 12 months**? (tick all boxes that apply).

- |                          |                            |   |                             |
|--------------------------|----------------------------|---|-----------------------------|
| Tramping/hiking/trekking | <input type="checkbox"/> 1 | Water sports (e.g. kayaking, rafting)   | <input type="checkbox"/> 10 |
| Short walks              | <input type="checkbox"/> 2 | Ski/Snowboarding                        | <input type="checkbox"/> 11 |
| Camping                  | <input type="checkbox"/> 3 | Off-road/4 Wheel Driving                | <input type="checkbox"/> 12 |
| Mountaineering/Climbing  | <input type="checkbox"/> 4 | Motor boating/Yachting                  | <input type="checkbox"/> 13 |
| Nature viewing           | <input type="checkbox"/> 5 | Diving (snorkel or SCUBA)               | <input type="checkbox"/> 14 |
| Photographing nature     | <input type="checkbox"/> 6 | Surfing                                 | <input type="checkbox"/> 15 |
| Salt water fishing       | <input type="checkbox"/> 7 | Collecting forest products (e.g. ferns) | <input type="checkbox"/> 16 |
| Fresh water fishing      | <input type="checkbox"/> 8 | Mountain biking                         | <input type="checkbox"/> 17 |
| Hunting / Shooting       | <input type="checkbox"/> 9 | Other, please specify _____             | <input type="checkbox"/> 18 |

2) For the question above (Q.1) please CIRCLE your MAIN outdoor natural area activity.

3) How often have you visited outdoor natural areas for recreation purposes **in the last 12 months**? (please tick one box)

- |                            |                            |                      |                            |                     |                            |
|----------------------------|----------------------------|----------------------|----------------------------|---------------------|----------------------------|
| Never .....                | <input type="checkbox"/> 1 | 1 – 2 times/month... | <input type="checkbox"/> 4 | Weekly.....         | <input type="checkbox"/> 6 |
| 1 – 2 times in 12 months   | <input type="checkbox"/> 2 | 3+ times/month.....  | <input type="checkbox"/> 5 | Daily/most days.... | <input type="checkbox"/> 7 |
| 3+ times in 12 months .... | <input type="checkbox"/> 3 |                      |                            |                     |                            |

4) Do you belong to an outdoor activity club or organised group (i.e. tramping club, birdwatching, etc.)? Yes 1 No 2

5) When you make your outdoor trips, are you usually (tick only one box per row)

	Never	Sometimes	Almost always
(a) Alone?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) With 1 to 2 people?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) With 3 or more people?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(d) With others from your own ethnic group?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

6) Are any of the factors below important in preventing you from participating in outdoor recreation? (tick one box per row)

	Very Important	Somewhat Important	Not at all Important
(a) Parks and recreation areas are too far away	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) The cost of transport is too high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) The cost of equipment is too high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(d) I don't know where the parks and recreation areas are	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(e) I don't have time/ I am too busy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(f) I don't have people to go with	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(g) I am afraid of getting hurt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(h) I (or family members) have been in poor health	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(i) I am not interested in outdoor recreational activities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(j) I don't speak English well enough	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(k) I lack the necessary experience	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(l) Other (please name) _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3





26) Please note how strongly you agree or disagree with the following statements. (Circle one number for each statement)

	Strongly Disagree	Strongly Agree
(a) We are approaching the limit of the number of people the Earth can support	1.....2.....3.....4.....5	
(b) Humans have the right to modify the natural environment to suit their needs	1.....2.....3.....4.....5	
(c) When humans interfere with nature it often produces disastrous consequences	1.....2.....3.....4.....5	
(d) Human ingenuity will ensure that we do NOT make the Earth unliveable	1.....2.....3.....4.....5	
(e) Humans are severely abusing the environment	1.....2.....3.....4.....5	
(f) The Earth has plenty of natural resources if we just learn how to develop them	1.....2.....3.....4.....5	
(g) Plants and animals have as much right as humans to exist	1.....2.....3.....4.....5	
(h) The balance of nature is strong enough to cope with the impacts of modern industrial nations	1.....2.....3.....4.....5	
(i) Despite our special abilities, humans are still subject to the laws of nature	1.....2.....3.....4.....5	
(j) The so-called 'ecological crisis' facing humankind has been greatly exaggerated	1.....2.....3.....4.....5	
(k) The Earth is like a spaceship with very limited room and resources	1.....2.....3.....4.....5	
(l) Humans were meant to rule over the rest of nature	1.....2.....3.....4.....5	
(m) The balance of nature is very fragile and easily upset	1.....2.....3.....4.....5	
(n) Humans will eventually learn enough about how nature works to be able to control it	1.....2.....3.....4.....5	
(o) If things continue on their present course, we will soon experience a major ecological catastrophe	1.....2.....3.....4.....5	

### SECTION 4: ABOUT YOU

- 27) How old are you?
- 15 – 24 yrs ..... 1                      45 – 54 yrs                      4                      65 – 74 yrs..... 6  
 25 – 34 yrs ..... 2                      55 – 64 yrs                      5                      75+ years ..... 7  
 35 – 44 yrs ..... 3
- 28) Your Gender:                      Female 1                      Male 2
- 29) Do you have a partner (e.g. husband, wife) in New Zealand? Yes 1                      No 2
- 30) Do you have any children (under 18 years of age) living with you in New Zealand? Yes 1                      No 2
- 31) What is your current employment status? (please tick one box)
- Employed full time.....1                      Unemployed..... 3                      Retired..... 5  
 Employed part time.....2                      Student..... 4                      Sickness beneficiary 6
- 32) If employed, what type of occupation do you have? (please tick one box)
- Manager..... 1                      Clerical and Administrative..... 5  
 Professional..... 2                      Sales..... 6  
 Technician/Trade..... 3                      Machinery Operators and Drivers..... 7  
 Community and Personal Service..... 4                      Labourer..... 8
- 33) What is your annual personal income before taxes?
- \$20,000 or less                      1                      \$40,001-60,000                      3                      \$80,001-100,000                      5  
 \$20,001 – 40,000                      2                      \$60,001-80,000                      4                      More than \$100,000                      6
- 34) What is your highest level of formal education?
- Primary school                      1                      Trade certificate/diploma                      3  
 Secondary school                      2                      University degree or higher                      4

You can help us learn more about recreational use of New Zealand's great outdoors. If you would like to assist with our research, you can participate in a short interview or focus group. Please tick the box and we will be in touch with you. THANK YOU!

P.S. Remember to include your entry form for the PRIZE DRAW

# APPENDIX 7: Questionnaire Cover Letter (Chinese Version)

2009年5月

至参与调查的朋友

## 户外休闲调查

奥塔哥大学休闲研究中心正在对人们如何利用新西兰户外场所进行休闲活动作一项研究。这项研究的目的是为了了解我们的社会成员如何利用新西兰的户外自然区（比如：灌木丛，森林，山，河流，湖泊，还有海岸）进行休闲活动的。

对于“户外自然区”——我们指野生和自然区域，比如森林公园，国家公园，被列为保护单位的公园，区域性的公园等。当然也包括那些离市中心很远的海滩及海岸线。那些在您的市区可以找到的中心公园，花园或者玩耍的地方并不算在我们这里所说的自然区。

如果您可以用5-10分钟的时间来填写这份问卷，并将这份问卷放在我们为您准备好的已经包含邮费的信封里寄给我们的话，那么您将给与新西兰未来的休闲活动的计划提供极大的帮助。

如果您完成问卷并寄回给我们，那么您就可以参加我们的抽奖活动并有机会获得总价值\$250的KATHMANDU礼券。（一等奖1名，价值\$150，二等奖2名，各价值\$50）

调查将是匿名的——当我们对结果进行分析的时候，我们不会单独辨认您的身份。所有的问卷信息都会被作为一个整体进行分析，同时对于调查的结果我们会保密。如果您对于我们的问卷或者我们的研究有任何疑问，请联系我们——问卷下方有我们的联系方式。

感谢您的帮助！

**“研究小组”**

**休闲研究中心**

----- 请从这里裁剪

参与并赢取价值\$250的KATHMANDU或WAREHOUSE的礼券

(一等奖1名，价值\$150，二等奖2名，各价值\$50)

请与2009年7月1日前将问卷寄给我们并参与抽奖

欲参与抽奖活动，请填写以下信息，并将此栏裁剪后与填写完的问卷一起邮寄给我们

姓名：\_\_\_\_\_

地址：\_\_\_\_\_

电子邮箱：\_\_\_\_\_ 电话：\_\_\_\_\_

# APPENDIX 8: Questionnaire (Chinese Version)

SITE A  / W

## 自然区户外休闲活动调查

奥塔哥大学 休闲研究中心

### 第 1 部分：户外休闲活动

这一部分将调查您进行户外休闲活动时对于新西兰自然区的使用情况（比如：灌木丛，森林，山，河流，湖泊，以及海岸）

- 1) 您在过去的 12 个月内参加过以下哪一些户外活动？（请勾选所有您参加过的活动）
- |                 |                          |   |                  |                          |    |
|-----------------|--------------------------|---|------------------|--------------------------|----|
| 徒步/远足/长途跋涉..... | <input type="checkbox"/> | 1 | 水上运动 (比如：划艇, 筏子) | <input type="checkbox"/> | 10 |
| 短途行走 .....      | <input type="checkbox"/> | 2 | 滑雪/滑雪板 .....     | <input type="checkbox"/> | 11 |
| 露营 .....        | <input type="checkbox"/> | 3 | 越野/驾驶四轮驱动        | <input type="checkbox"/> | 12 |
| 爬山 .....        | <input type="checkbox"/> | 4 | 摩托艇/快艇 .....     | <input type="checkbox"/> | 13 |
| 自然景色观光 .....    | <input type="checkbox"/> | 5 | 潜水 (潜泳或者使用水肺)    | <input type="checkbox"/> | 14 |
| 自然景观摄影 .....    | <input type="checkbox"/> | 6 | 冲浪 .....         | <input type="checkbox"/> | 15 |
| 盐水钓鱼 .....      | <input type="checkbox"/> | 7 | 采集森林产物 (比如：蕨类植物) | <input type="checkbox"/> | 16 |
| 淡水钓鱼 .....      | <input type="checkbox"/> | 8 | 山地骑自行车 .....     | <input type="checkbox"/> | 17 |
| 捕猎 / 射击 .....   | <input type="checkbox"/> | 9 | 其他, 请注明 _____    | <input type="checkbox"/> | 18 |

2) 对于以上问题 (第 1 题) 请圈出对您来说最主要的户外自然区活动。

3) 在过去的 12 个月中出于休闲活动的目的，您多久会参加一次户外自然区的活动？（请仅选择 1 项）

- |               |                          |   |               |                          |   |               |                          |   |
|---------------|--------------------------|---|---------------|--------------------------|---|---------------|--------------------------|---|
| 从不 .....      | <input type="checkbox"/> | 1 | 1-2 次/月 ..... | <input type="checkbox"/> | 4 | 1 次/周 .....   | <input type="checkbox"/> | 6 |
| 1-2 次/年 ..... | <input type="checkbox"/> | 2 | 3 次以上/月 ..... | <input type="checkbox"/> | 5 | 每天/一直会去 ..... | <input type="checkbox"/> | 7 |
| 3 次以上/年 ..... | <input type="checkbox"/> | 3 |               |                          |   |               |                          |   |

4) 您是否有参加一些户外活动的俱乐部或组织？（比如：徒步/鸟类观赏俱乐部，等等）？ 是  否

5) 当您进行户外旅行时，您经常：（请仅选择 1 项）

	从不	有时	几乎总是
(a) 独自一人?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) 和 1、2 个人一起?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) 和 3 人以上一起?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) 和与您同民族的人一起	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6) 以下所列的因素对于妨碍您参加户外休闲活动的重要度是？（请在每一行仅选择 1 项）

	非常 重要	一般 重要	完全不 重要
(a) 公园或者休闲活动地点太远	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) 交通费用太贵	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) 装备太贵	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) 我不知道公园或者休闲活动地点在哪里	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) 我没有时间/我太忙了	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) 没有人和我一起去	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) 我害怕受伤	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) 我(或者家庭成员) 身体不好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) 我对于户外活动没有兴趣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) 我的英语不够好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) 我没有必需的经验	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) 其他 (请注明) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7) 当您到达一个自然区，以下所列的这些自然区特征的重要度如何？(请在每一行仅选择1项)

	非常 重要	一般 重要	完全不 重要
(a) 休闲娱乐设施(比如：厕所, 停车场, 木屋, 小径)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) 自然景色、风光	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) 野生动物	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(d) 水上设施(比如：海岸, 河流, 湖泊)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(e) 离家的距离	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(f) 以我第一语言表述的信息	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

8) 对于您来说，游览户外自然区会给您带来哪些收益？(请在每一行仅选择1项)

	非常 重要	并非重要， 也并非不重要	完全不 重要
(a) 使我可以享受自然	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) 使我可以从日常生活中解脱	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) 使我可以社交/建立关系	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(d) 使我可以锻炼身体	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(e) 使我得以和家人共度时光	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(f) 给我一个有很多开放空间的地方	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(g) 提供了一个供孩子们游览的地方	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(h) 使我可以收集食物	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

9) 您如何描述您进行休闲活动时对于户外自然区的使用情况？

	经常使用	偶尔使用	从不使用
(a) 您现在的使用情况？	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(b) 您过去(成人)的使用情况？	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
(c) 您孩童时期的使用情况？	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

10) 是否有一些过去您经常会参加的自然区户外休闲活动而您现在已经不参加了？

是 1 否 2

10a) 如果您选择是，请您填写那些您过去主要参加过的休闲活动：\_\_\_\_\_

## 第 2 部分：您的民族以及过去的休闲活动

这个部分将会调查您的民族以及您是否是移民，同时还将调查您过去参加过的休闲活动

11) 您的民族？

新西兰 <input type="checkbox"/> 1	汤加..... <input type="checkbox"/> 5	印度..... <input type="checkbox"/> 9
毛利..... <input type="checkbox"/> 2	纽谟文..... <input type="checkbox"/> 6	欧洲..... <input type="checkbox"/> 10
萨摩亚..... <input type="checkbox"/> 3	中国..... <input type="checkbox"/> 7	非洲..... <input type="checkbox"/> 11
库克岛毛利人..... <input type="checkbox"/> 4	韩国..... <input type="checkbox"/> 8	其他..... <input type="checkbox"/> 12

如果选择“其他”，请注明\_\_\_\_\_

12) 您在新西兰出生吗? 是 1 请跳跃至第 3 部分

否 2 请回答第 13 题

13) 您在哪个国家出生? \_\_\_\_\_

14) 您几岁的时候来到新西兰?

0 - 5 岁 ..... 1                      25 - 34 岁 ..... 4                      50 - 64 岁 ..... 6  
6 - 15 岁 ..... 2                      35 - 49 岁 ..... 5                      65 + 岁 ..... 7  
16 - 24 岁 ..... 3

15) 您在新西兰生活了多久?

不到 1 年 ..... 1                      3 - 5 年 ..... 3                      10 年以上 ..... 5  
1 - 2 年 ..... 2                      6 - 10 年 ..... 4

16) 您属于哪一类移民? (请仅选择 1 项)

工作移民 ..... 1                      家庭 ..... 3                      技术移民... 5  
生意 ..... 2                      人道主义 ..... 4                      学生 ..... 6

17) 英语是您的第一语言吗? 是 1 如果选择是, 请跳跃至第 19 题

否 2 如果选择否, 请继续回答第 18 题

18) 当您在新西兰时, 在以下情况下您会使用哪一种语言?

	只使用 英语	主要使用 英语	相等	主要使用 我的第一语言	只适用 我的第一语言
(a) 在家	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(b) 阅读杂志和报纸	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(c) 和我亲近的朋友对话	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 5

19) 以下哪一种表述最适合您的情况?

请仅选择 1 项

几乎所有我的朋友都和我是同一个民族。 1  
有一些和我很亲近的朋友和我是同一民族。 2  
几乎所有我的朋友都和我不是同一民族。 3

20) 在您来新西兰之前, 您如何描述您进行休闲活动时对于户外自然区的使用情况? (请仅选择 1 个选项)

经常使用 1                      偶尔使用 2                      从不使用 3

21) 有没有一些在您来新西兰之前经常会参加的户外自然区休闲活动, 而您来了新西兰之后就不再参加了?

是 1                      否 2

22) 如果对于第 21 题您回答“是”, 请填写 3 项您来了新西兰之后就不参加的户外活动, 并请填写您不参加的原因。(可能的话请用英语回答)

活动 1 \_\_\_\_\_ 放弃参加的原因 \_\_\_\_\_

活动 2 \_\_\_\_\_ 放弃参加的原因 \_\_\_\_\_

活动 3 \_\_\_\_\_ 放弃参加的原因 \_\_\_\_\_

23) 自从您来了新西兰之后，您有没有开始参加一些新的户外自然区休闲活动？

是 1

否 2

24) 如果您对于第 23 题选择“是”，请您列举您在新西兰参加的 3 项新的活动。(可能的话请用英语回答)

活动 1 \_\_\_\_\_

活动 2 \_\_\_\_\_

活动 3 \_\_\_\_\_

## 第 3 部分：您和环境

这个部分将调查您如何看待环境

25) 您是否有参加一些环境保护组织？

是 1 否 2

26) 您对于以下表述的认同程度如何？(对于每项表述，请仅选择 1 个选项)

	强烈 不认同	强烈 认同
(a) 我们正在接近地球所能承载人数的极限	1.....2.....3.....4.....5	
(b) 人类有权改变自然以符合他们的需求	1.....2.....3.....4.....5	
(c) 当人们侵犯了自然时，经常会产生灾难性的后果	1.....2.....3.....4.....5	
(d) 人类的聪明才智不会使得地球变的让他们无法生存	1.....2.....3.....4.....5	
(e) 人类正严重的滥用自然	1.....2.....3.....4.....5	
(f) 地球有着大量的自然资源，只要我们能够学会开发	1.....2.....3.....4.....5	
(g) 植物和动物有权与人类一起生存	1.....2.....3.....4.....5	
(h) 大自然的自我平衡能力强大到足以和现代国家工业化所产生的影响所抗衡	1.....2.....3.....4.....5	
(i) 尽管人类有特殊的才能，我们还是因该遵守自然法则	1.....2.....3.....4.....5	
(j) 所谓的“生态危机”其实是被严重的夸大了的	1.....2.....3.....4.....5	
(k) 其实地球就像一艘宇宙飞船，其空间和资源都是有限的	1.....2.....3.....4.....5	
(l) 人类就应该统治自然	1.....2.....3.....4.....5	
(m) 大自然的平衡是脆弱而易受伤的	1.....2.....3.....4.....5	
(n) 人类最终会认识大自然是如何运作的，并将成功的控制自然	1.....2.....3.....4.....5	
(o) 如果一切还是照现在的情况发展下去，我们不久就会经历一场严重的生态危机	1.....2.....3.....4.....5	

## 第 4 部分：您的个人信息

27) 请问您的年龄?

- 15-24 岁 ..... 1                      45-54 岁                      4                      65-74 岁 ..... 6  
25-34 岁 ..... 2                      55-64 岁                      5                      75 岁以上 ..... 7  
35-44 岁 ..... 3

28) 您的性别：                      女 1                      男 2

29) 您在新西兰有伴侣吗? (比如：丈夫，妻子) 是 1 否 2

30) 您在新西兰有孩子 (18 岁以下) 和您一起住吗? 是 1 否 2

31) 现在您的就业情况怎样? (请仅选择 1 个选项)

- 全职工作 ..... 1                      失业 ..... 3                      退休 ..... 5  
兼职工作 ..... 2                      学生 ..... 4                      生病救济 ... 6

32) 如果您有工作，请问你的工作属于以下哪一类? (请仅选择 1 个选项)

- 经理 ..... 1                      职员/行政工作 ..... 5  
专业人才 ..... 2                      销售 ..... 6  
技术/技工 ..... 3                      机械操作员或司机 ..... 7  
大众或个人服务业 ..... 4                      工人 ..... 8  
其他 (请注明) ..... 9

33) 您的税前年薪是?

- 低于 \$20,000                      1                      \$40,001-60,000                      3                      \$80,001-100,000                      5  
\$20,001-40,000                      2                      \$60,001-80,000                      4                      \$100,000 以上                      6

34) 您的最高学历是?

- 小学                      1                      技工证书/文凭                      3  
中学                      2                      大学本科学历或更高                      4

### 感谢您的参与!

请不要忘记在 2009 年 7 月 1 日之前，将兑奖券与您填写完的问卷一起寄给我们；在这个信封里已经包含了邮费！

您可以帮助我们了解更多休闲活动对于新西兰户外区的使用情况。  
如果您愿意为我们的研究提供更多帮助，您可以参加我们的采访或选择成为我们主要的调查对象。

## APPENDIX 9: Dissemination, Consultation and Research Capability

### 1. Dissemination Plan and Consultation with Stakeholders:

- (i) Report provide to SPARC April 2010
- (ii) Preliminary findings presented to stakeholders at the Centre for Recreation, *Recreation Values and Natural Areas* Symposium, March 18<sup>th</sup>-19<sup>th</sup> 2010, St Margaret's College, University Of Otago, Dunedin.
- (iii) Presentation to SPARC and recreation and migration stakeholders by Dr Brent Lovelock and Dr Kirsten Lovelock, Friday 21<sup>st</sup> May 2pm (at SPARC Office, Wellington). Invitees include: Department of Conservation; Greater Wellington Regional Council; Wellington City Council; Lower Hutt City Council; Upper Hutt City Council; Porirua City Council; Mountain Safety Council; Outdoors New Zealand; New Zealand Recreation Association; migrant/ethnic associations.
- (iv) A complete report of the findings will be published as a University of Otago Centre for Recreation Research working paper, and will be hosted on the CRR website (in Pdf format). Stakeholders will be notified by email.
- (v) Academic publications that arise from this study will be forwarded to SPARC for listing on the SPARC website. On the CRR website, details and URLs will be provided for the relevant journals/articles arising from the study.
- (vi) Copies of the complete report will be made available through public libraries in main centres and at university libraries in New Zealand.

### 2. Research Capability Development

- (i) Development of post-graduate research expertise in migration/recreation research: This project involved the employment of a PhD student for approximately 600 hours of research assistance in the quantitative component of the research. Key areas of development for the students were in questionnaire design and survey administration, and statistical analysis.
- (ii) For the primary investigator and associate researcher, the project enhanced their research strengths in both the fields of migration and recreation, and fostered a collaborative partnership addressing both fields.
- (iii) The research fostered the creation of an informal research-oriented network involving migrant and settlement coordinators and community and recreation advisors in local authorities in both Auckland and Wellington. Research connections with the Auckland Regional Council and Greater Wellington Regional Council were established, and enhanced with the Department of Conservation and the Mountain Safety Council.