

Halswell: A Study of Community Participation in Wake of the 2010- 2011 Canterbury Earthquake Sequence



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1. Executive Summary

1.1 Research Aims and Objectives

- The aim of this research is to investigate community participation in Halswell, with a focus on whether any differences exist between pre- and post-earthquake movers to the suburb
- Thus, we have identified four questions to answer:
 - Why was Halswell chosen as a place to live and do differences exist in the factors influencing residential choice of pre- and post-earthquake residents?
 - Do pre- and post-earthquake movers differ in their levels of local and non-local community involvement?
 - What factors are important in explaining different levels of community participation in Halswell?
 - How do residents find out what is going on in the Halswell community?

1.2 Context for the Research

- Prior to the 2010-2011 Canterbury earthquake sequence the number of households in the Christchurch suburb of Halswell was predicted to double by 2026
- The earthquakes have increased the suburb's rate of growth and there is concern that the rapid increase in population will diminish the sense of local identity within Halswell
- Newcomers to the suburb are already seen as disconnected and less willing to participate within the community than long-term residents
- The Halswell Community Project want to develop a strong sense of community in the suburb and thus are interested in investigating community participation within Halswell

1.3 Summary of Method

- The project made use of a quantitative approach, collecting data via questionnaires
- Questionnaires were distributed by hand using the 'drop and pick-up' method and were also made available online through Survey Monkey
- Data was analysed using Excel and SPSS

1.4 Key Findings

- Both pre- and post-earthquake movers chose Halswell as they ‘liked the feel of the area’
- Pre-earthquake residents were more involved locally than post-earthquake movers to Halswell, with post-earthquake residents having a higher level of non-local involvement
- From our chi-square test the only significant factor found to affect level of community participation was age – those who were over 65 were associated with having a lower level of involvement within the Halswell community
- A third of our sample found out what was going on in Halswell through the emailed community newsletter, with very few respondents making use of the online Halswell community directory

1.5 Limitations

- Our research was primarily limited by our small sample size and the short time-frame we had to carry out our project
- Both our data collection methods also had limitations:
 - The self-completion format of our questionnaires meant we could only ask relatively straight-forward questions, were unable to detect patterned or insincere replies, and had no control over who answered the survey
 - The questionnaires were also biased against those poor at reading and writing, and the online version of our survey was clearly biased against those without access to the internet

1.6 Suggestions for Future Research

- Since we took an entirely quantitative approach, there is an opportunity for focus groups and/or interviews to be conducted within Halswell to explore some of the findings within this research further
- There is also an opportunity to investigate whether the findings of this report could be applied to other satellite towns around Christchurch
- Though this research compares pre- and post-earthquake movers to Halswell, similar research could be carried out comparing those who were pulled (moved out of choice) and pushed (felt forced) to move to Halswell

2. Introduction

Halswell is an outer suburb of Christchurch with a population of roughly 14,000 (Wylie, 2010, p. 3), which, as shown in *Figures 1* and 2, has grown substantially over the years. Prior to the Canterbury earthquake sequence of 2010-2011, the number of households in Halswell was predicted to double by 2026 (Wylie, 2010, p. 3); however, the recent earthquakes have increased the suburb's rate of growth (*Community Profile: Greater Halswell Area*, n.d.). The Halswell Community Project (HCP), a group interested in developing a strong sense of community in Halswell (*The Halswell Community Project*, n.d.), is concerned that the rapid population growth will diminish community connectedness and local identity within the suburb. Indeed, previous studies carried out within Halswell have found that newcomers are often seen as disconnected from the local community as they “don't get involved locally in the same way that longer-stay Halswell residents do” (Wylie, 2010, p. 3). Consequently, this research aims to investigate community participation in Halswell, with a particular focus on pre- and post-earthquake movers to the suburb. We begin with a review of several pieces of literature which have informed our research, moving on to detail our methodology, discuss our results, and then conclude with some of the limitations we have faced in the research process.

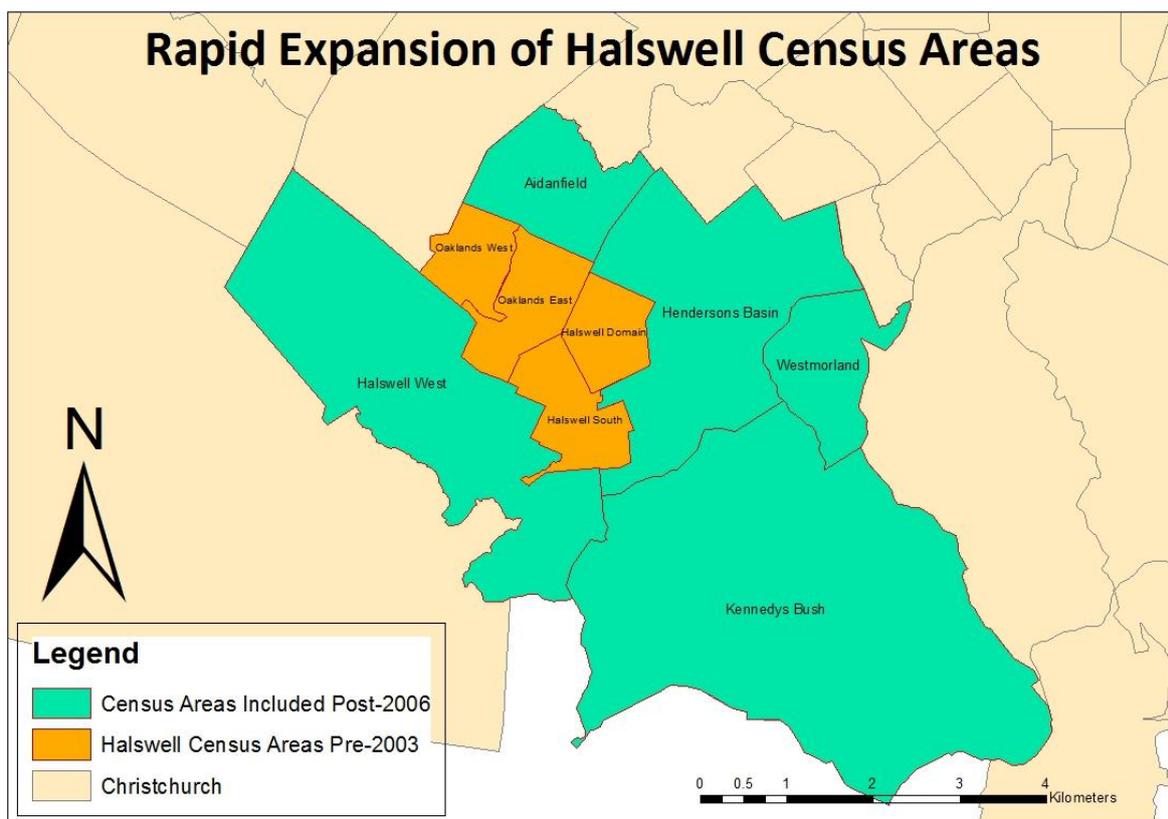


Figure 1. Rapid expansion of the Halswell census area.

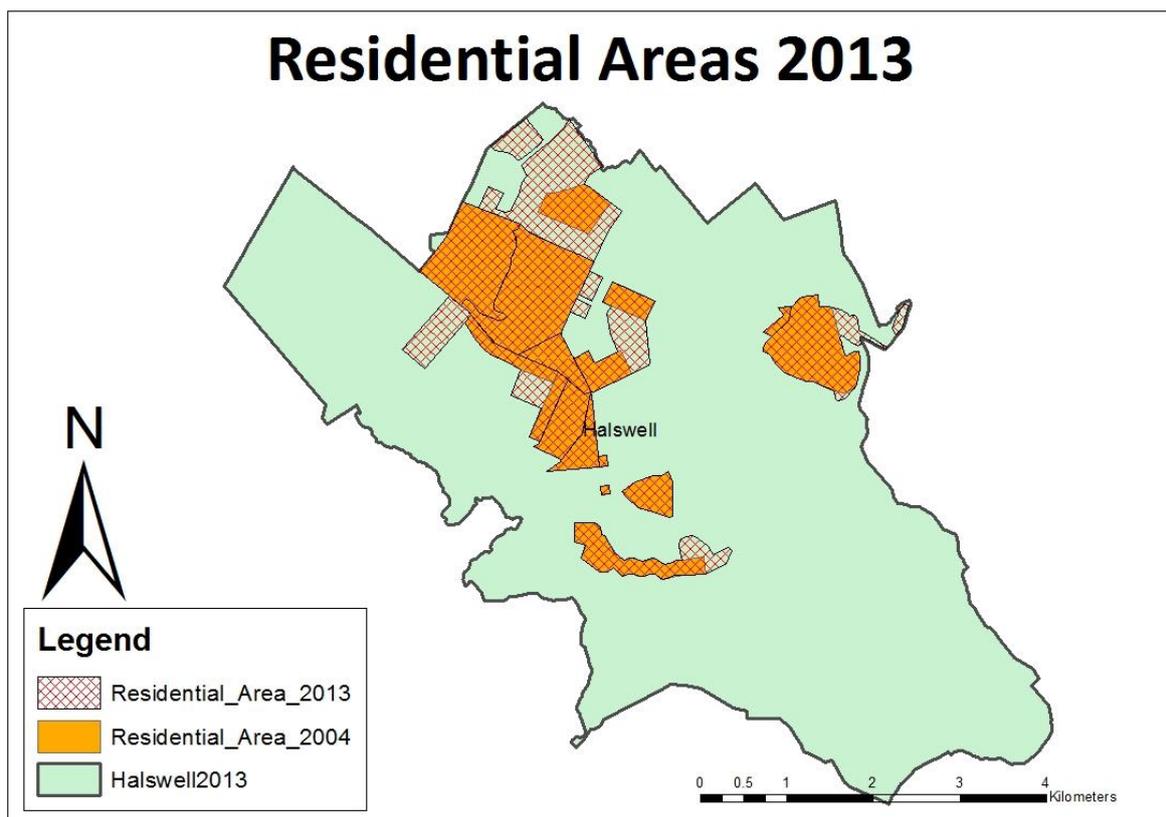


Figure 2. Expansion of Halswell residential areas.

3. Literature Review

Sarah Wylie’s article on community participation and identity in Halswell (2010) has been significant in informing our research. Prior to carrying out her research, Wylie noted that a common theme running through previous qualitative studies was the view that Halswell newcomers are disconnected from the community and “don’t get involved locally in the same way that longer-stay Halswell residents do” (2010, p. 3). However, Wylie’s research did not identify any difference between newcomers and longer-term Halswell residents with regards to their willingness to participate in the community (2010, p. 38).

Wylie instead found that “the biggest predictors of residents’ involvement in local activities was whether the individual had an interest in joining community activities, and whether or not they had ... children” (2010, p. 35). This latter factor is similarly supported by Dewe (2004), Völker et al. (2006) and Wilkinson (2008). Völker et al.’s research on community in Dutch neighbourhoods also found that “investment considerations”, such as whether the resident planned on staying in the community, were important in determining community creation and participation (2006, p. 110).

4. Methodology

Once we had determined the focus of our research project, we developed four sub-questions which encapsulated our theme. The first was based around residents' reasons for choosing Halswell; two and three focussed on community participation; and the fourth, which was requested by our community partner, looked at methods of communication within Halswell.

When refining our research focus and sub-questions one of the articles we studied was Sarah Wylie's "Research into Attitudes to Local Community Identity and Participation Amongst New Residents in Halswell" (2010). Since Wylie's approach was entirely qualitative, making use of interviews and focus groups, and based on a small sample (2010), we decided to take a more quantitative approach, use questionnaires, and gather a larger (and, therefore, hopefully more representative) sample.

To gather our data we made use of two different strategies. For our first method, the 'drop and pick-up questionnaire strategy', we adopted a random sampling approach: dropping off 300 questionnaires in randomly-chosen streets throughout the nine census areas of Halswell. We chose the 'drop and pick-up' approach, which involves "leaving self-administered questionnaires at people's homes and picking the surveys up at a later date", as "[t]he personal contact in dropping off the surveys" generally results in higher response rates than postal questionnaires and is less time-consuming than interviewer-led questionnaires (McLafferty, 2010, p. 83). From 300 questionnaires we received 86 back, a response rate of roughly 28%. Our second approach was to create an online version of our questionnaire using Survey Monkey and post a link to our survey on the HCP Facebook Page and website, and to email a link to those on the Halswell Community Newsletter mailing list. This approach resulted in 79 responses.

In both our methods of data collection we worked with Group 12 (the other research group studying Halswell). In this way we were able to avoid repetition and gather a larger sample than we would have collected by working separately.

Since we utilised two very different approaches, it seemed likely that we would collect two very different samples. However, when comparing both samples in terms of their numbers of pre- and post-earthquake movers to Halswell, we found that they were very similar (see *Figure 3*) and so were able to combine them (creating a sample of 165 Halswell residents). It must be noted that there were many other factors we could have looked at to assess the difference between our two samples, but since we were particularly interested in pre- and post-earthquake movers this factor seemed most significant to examine.

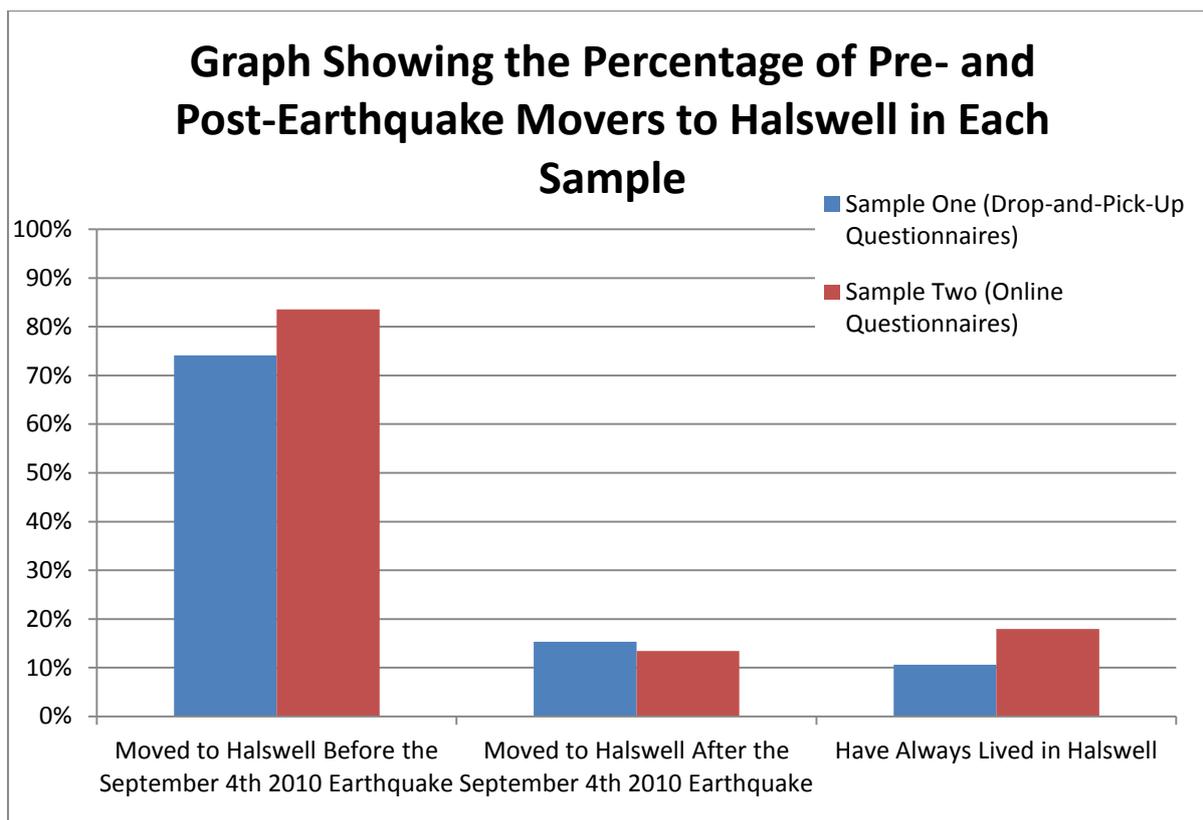


Figure 3. Pre- and post-earthquake movers within the two samples

The majority of our data we analysed using Excel, but to investigate our third sub-question, the factors important in explaining levels of community participation in Halswell, we made use of the chi-square test in SPSS. The test is used “as a means of assessing the relationship between two categorical variables” (Platt, 2004), determining whether an association between the categories in question exists or not. For the test, we assessed ‘level of participation’ based on the number of times over a four-week period the respondent was involved in the Halswell community (whether as a member of a community group, attending a Halswell Residents’ Association meeting or community event, and so on). Those coded as having a high level of participation were those who were involved in the community four or more times over the four-week period and were thus active in the Halswell community at least once a week.

5. Results and Discussion

5.1 Why was Halswell chosen as a place to live and do differences exist in the factors influencing residential choice of pre- and post-earthquake residents?

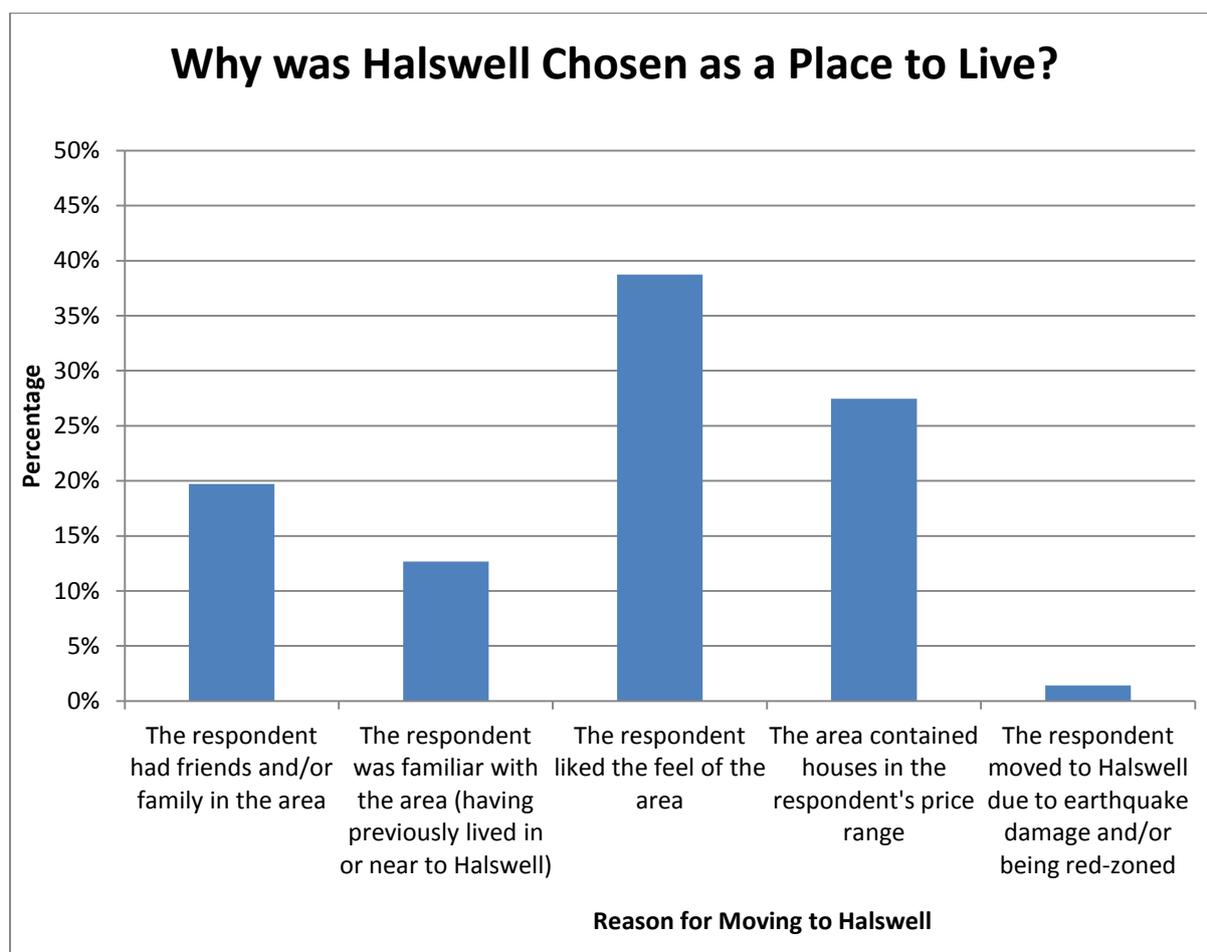


Figure 4. Reason for moving to Halswell, combined sample

Figure 4 shows that most respondents moved to Halswell as they “liked the feel of the area”, with the next most frequently chosen reason being that the area contained houses within their price range. Unsurprisingly, seeing as only 22 people in our 165-strong sample moved to Halswell after the September the 4th earthquake, the reason for moving to Halswell with the lowest frequency was that of having to move due to earthquake damage and/or being red-zoned.

When asked to explain their reasons for moving to Halswell further, the majority of respondents commented on the area’s “good environment”, emphasising Halswell’s many parks and open spaces. Similarly to Sarah Wylie’s research on Halswell, which found that residents liked living in the area due to its “[c]ountry feel with city convenience” (2010, p.

33), respondents also commented on Halswell’s semi-rural quality and location only a “short drive [from the] CBD”. Others pointed out the “[g]ood primary school options” available and wrote that they moved to Halswell to be in the school zones. One parent noted Oaklands School’s decile nine rating and “after school care programme” and another that the school had a good reputation for looking after children with disabilities. A further frequently cited reason was that of moving for work-related reasons: one respondent wrote that he/she moved to Halswell as the suburb is halfway between his/her place of work in Lincoln “and the town [Christchurch]”.

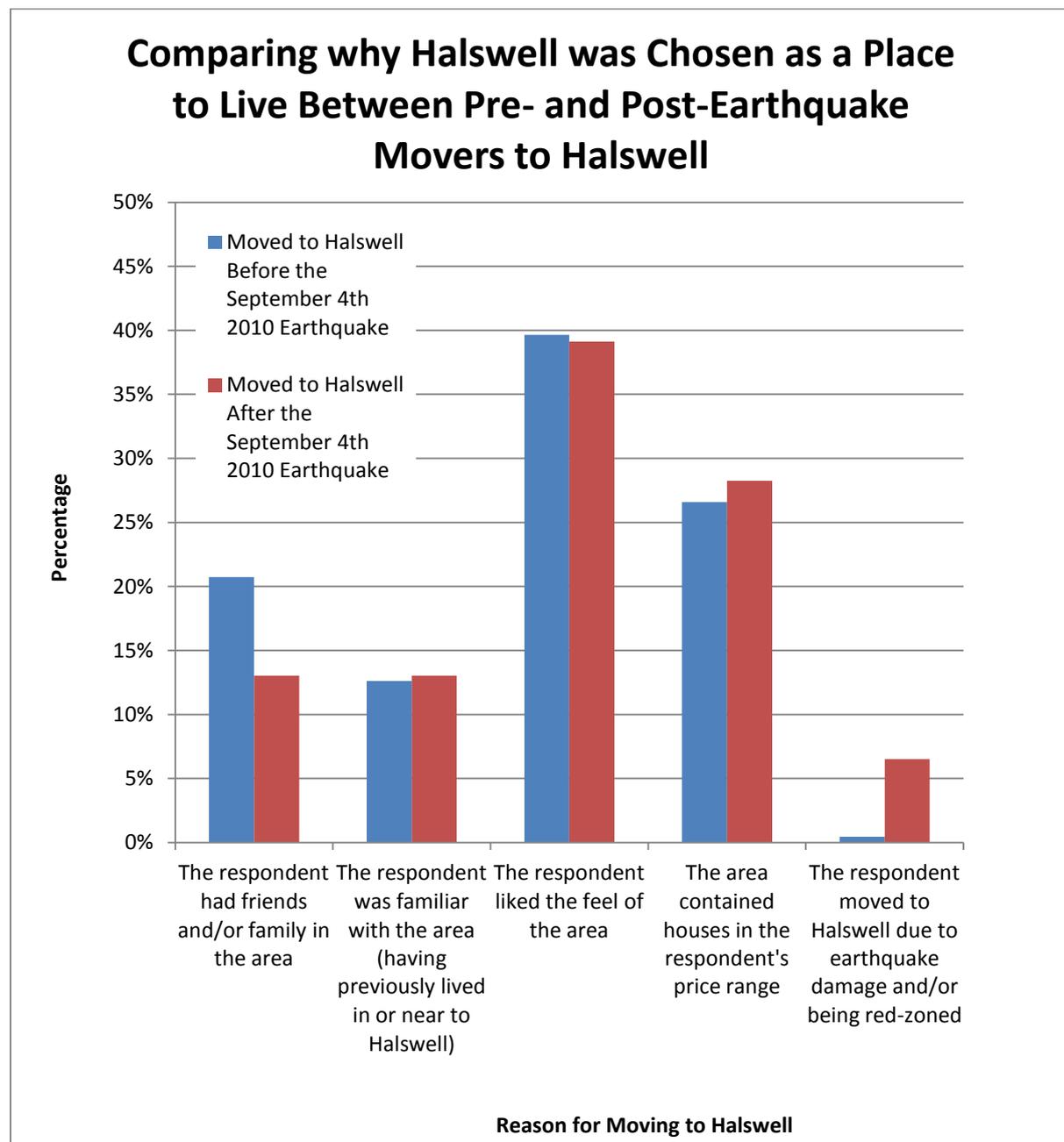


Figure 5. Reason for moving to Halswell, comparing pre- and post-earthquake movers’ responses

Comparing reasons for moving to Halswell between pre- and post-earthquake residents did not yield many differences: the two groups were very similar. However, *Figure 5* shows that pre-earthquake residents were more likely to move to Halswell due to having friends and/or family in the area. The only other significant difference between the two groups is that post-earthquake residents were more likely to move to Halswell due to earthquake damage and/or being red-zoned. This is not a surprising result; however, what is surprising is that a small, less than one, percentage of pre-earthquake movers noted their reason for moving to Halswell as having to move due to earthquake damage. The assumption is that these respondents made a mistake in filling out the questionnaire.

5.2 Do pre- and post-earthquake movers differ in their levels of local and non-local community involvement?

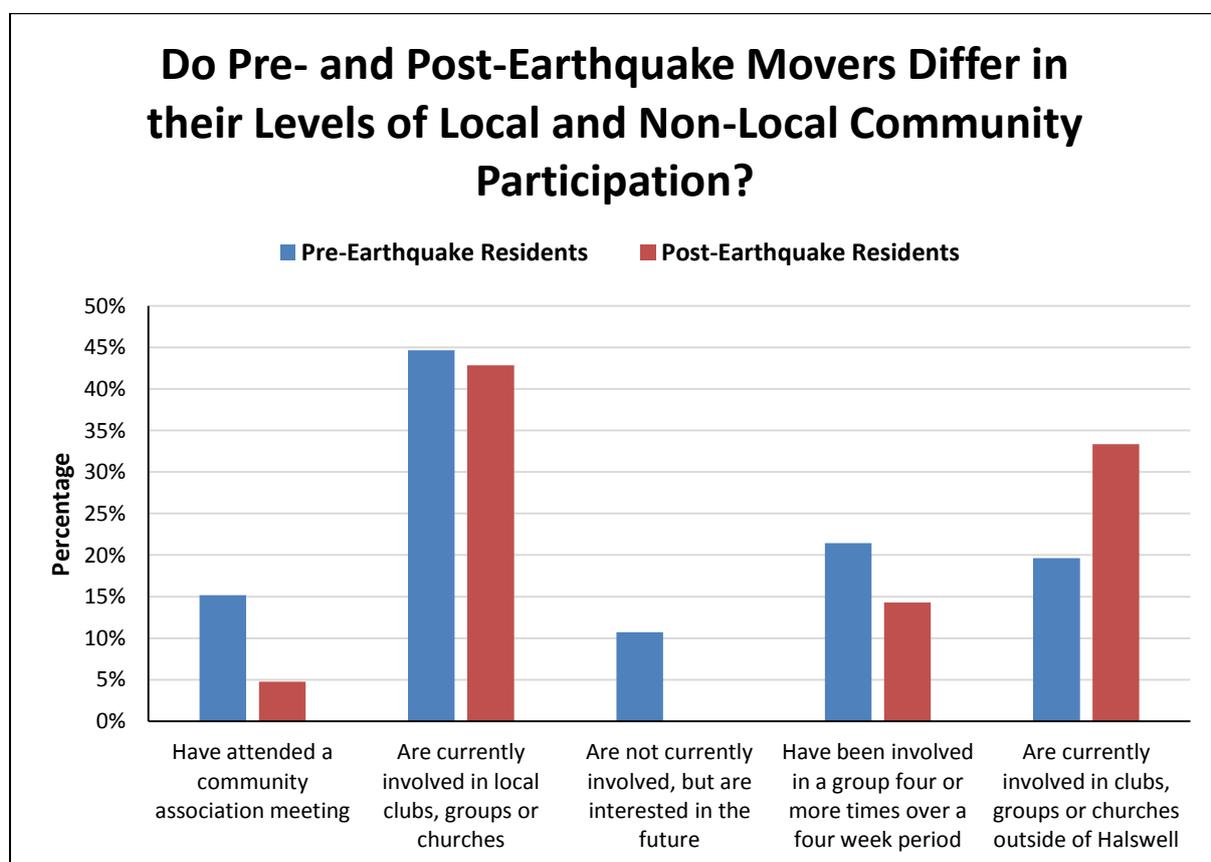


Figure 6. Comparison of pre- and post-earthquake movers' levels of local and non-local community involvement

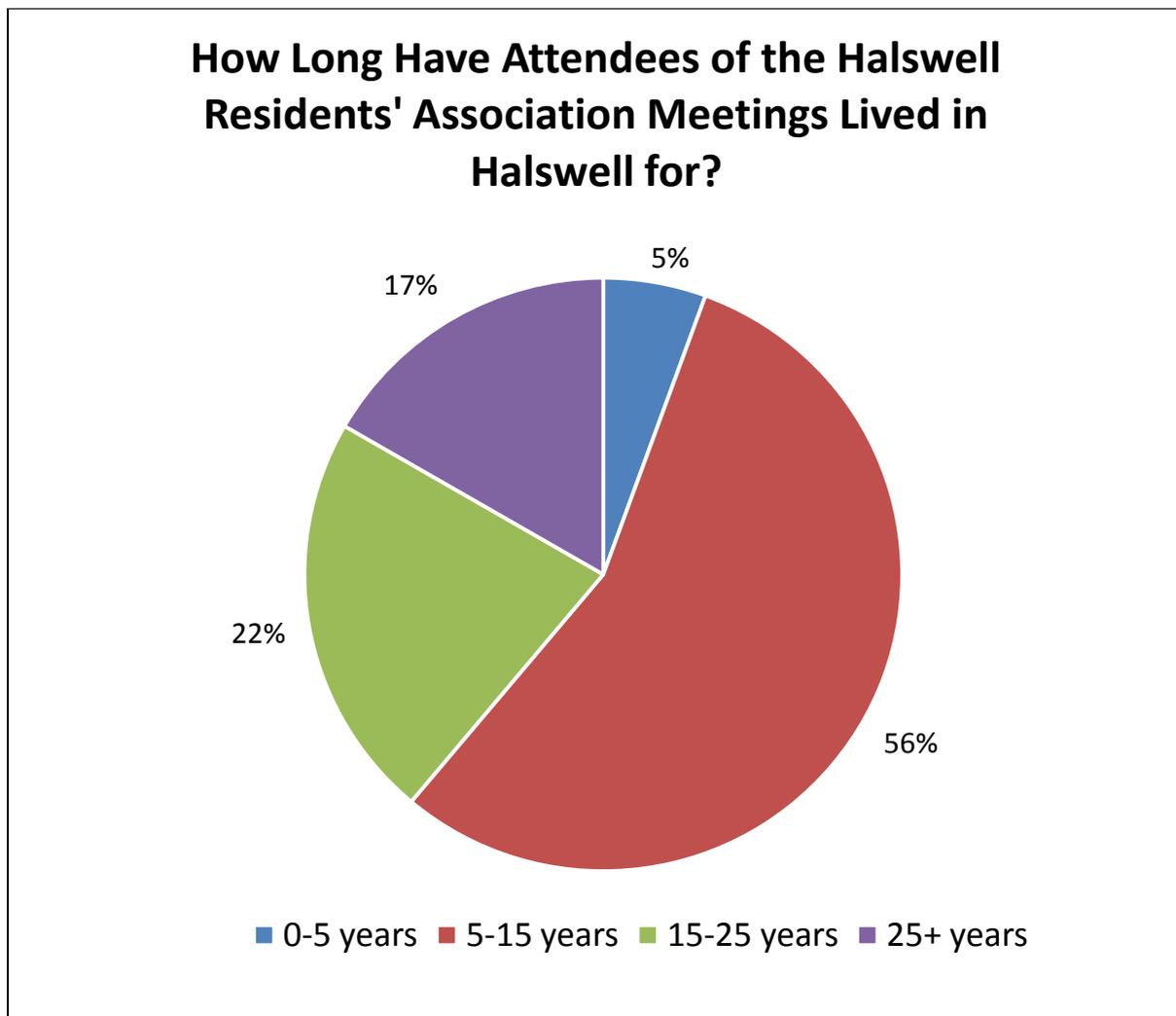


Figure 7. Length of Halswell residency of attendees of the Halswell Residents' Association

As part of our investigation into whether pre- and post-earthquake movers differ in their levels of community involvement, we asked respondents if they had ever been to a Halswell Residents' Association meeting. From *Figure 6* it can be seen that only one of the 22 respondents who had moved to Halswell post the September the 4th earthquake had ever attended a meeting and only 14% of our entire sample said that they had been to one of the meetings before. When looking at the length of residency in Halswell of those respondents who had attended a residents' association meeting, *Figure 7* shows that 56% had lived in Halswell for 5 to 15 years with 39% having lived in Halswell for over 15 years. Only 5% of the respondents in our sample who had lived in Halswell for less than 5 years had ever attended a Halswell Residents' Association meeting. Our findings thus suggest that it takes a while for new residents to find out about the residents' association. Indeed, in Sarah Wylie's focus group involving residents who had lived in Halswell for 5 years or more, the group "wanted to see the Residents['] Association promote itself more locally so that those who want to can get involved"; "[a]t present, the Association [i]s seen as hard to access and not as approachable as it could be" (2010, p. 10). Alternatively, it may be that it takes a number of years for new residents to feel a strong enough connection to the community to join the Residents' Association.

Figure 6 compares pre- and post-earthquake movers to Halswell over a number of different categories to assess whether differences exist in their level of local and non-local community involvement. From *Figure 6* it can be seen that in our sample pre-earthquake residents were more involved in the Halswell community than post-earthquake residents: a higher percentage of pre-earthquake residents had attended a Halswell Residents' Association meeting and were involved in local clubs, groups, or churches than post-earthquake residents. Furthermore, pre-earthquake residents had a higher frequency of involvement in the community over a 4 week period than post-earthquake residents. However, post-earthquake residents were more involved in groups outside of Halswell than pre-earthquake residents.

Our sample thus suggests that pre-earthquake movers to Halswell have a higher level of local involvement than post-earthquake movers. This may be because post-earthquake residents have not yet had time to find out what is on offer locally or, due to their high level of involvement outside of the Halswell community, do not have the time to be similarly involved in Halswell. Post-earthquake residents have also only recently moved into Halswell and so it may be that they are more involved non-locally (in their previous community) than locally because they still identify with, and feel a sense of belonging to, their old community. Alternatively, in the wake of moving into a new area, these residents may not have prioritised finding and joining community activities. Indeed, in Guest and Stamm's research on paths of community integration in King County, U.S.A, only 13.3% of their 400-strong sample of new residents devoted a 'great deal' of effort to finding a church or community group to join; the respondents' main priority was on getting established in a job (1993, p. 584). Our post-earthquake group may thus indicate something similar to the findings of Guest and Stamm – their priority after moving to Halswell may have been settling into a new job.

While the post-earthquake residents may have prioritised other activities ahead of participating in community groups or events, and this may be the reason for their low level of involvement in the Halswell community, this does not sufficiently explain why only pre-earthquake residents were interested in participating in Halswell if they were not already active in the community. At this point, the effect the recent earthquakes may have had on our research must be noted. Australian psychologist Rob Gordon, an expert on psychological recovery from disaster, believes that the third year after a major event is often the most difficult (*Red Cross continues its support for people of Christchurch*, 2013): though initially people have the energy and resilience to cope with the disruption to their daily routine caused by the disaster/s, by the third year people have often "run out of energy" and are "feel[ing] massively exhausted" (*Canterbury stress levels expected to rise – expert*, 2013). Despite the fact that the majority of our sample, both pre- and post-earthquake residents, will have gone through the 2010-2011 Canterbury earthquake sequence, and so the experience of the disaster alone cannot explain the difference between the two groups, the post-earthquake movers to Halswell will have had the additional stress of finding a new place to live. This, coupled with it being the third year after a major disaster, may explain why the post-earthquake residents in our sample who were not involved in the Halswell community were not interested in becoming involved.

5.3 What factors are important in explaining different levels of community participation in Halswell?

Table 1. Chi-square test of association: what factors are important in explaining level of community participation?

<u>Factor</u>	<u>Chi-Square Value</u>	<u>Degrees of Freedom</u>	<u>p-value</u>	<u>Can the Null Hypothesis be Rejected? (at $\alpha = 0.05$)</u>	<u>Is the Test Reliable?</u>
Moved to Halswell before the September the 4 th 2010 earthquake	0.263	2	0.877	No	No – over 20% of expected cell counts are less than 5
Has lived in Halswell for over 10 years	5.624	2	0.060	Almost	Yes
Had friends/family in Halswell before moving to the area	3.550	2	0.170	No	Yes
Was familiar with Halswell before moving to the area	3.845	2	0.146	No	Yes
Owens his/her property	3.066	2	0.547	No	No – over 20% of expected cell counts are less than 5
Finds it easy to access information	2.395	2	0.302	No	No – over 20% of expected cell counts are less than 5
Plans to remain in Halswell for a number of years	0.888	2	0.641	No	No – over 20% of expected cell counts are less than 5
Is involved in clubs, etc., outside Halswell	5.625	2	0.060	Almost	Yes
Is over 65 years old	9.082	2	0.011	Yes	Yes
Has children under 18	0.335	2	0.846	No	Yes

From *Table 1* it can be seen that there was only one significant result from the test: in the case of ‘being over 65’ our test had a low enough p -value ($p = 0.01 < 0.05$) to suggest that we could reject the null hypothesis of ‘no association’ and assume that an association exists between ‘being over 65’ and level of participation in the community. On closer investigation we found that those over 65 are likely to be less involved in the Halswell community. Indeed, when respondents with a low level of participation in the community were invited to comment on reasons for their lack of involvement within Halswell, many wrote that they were “too old” or had “done their time”. Thus, our chi-square test shows that age is an important factor in explaining level of community participation.

Although ‘being over 65’ was the only factor that led to a significant result, two others were very close to being significant (at $\alpha = 0.05$). The first of these was ‘having lived in Halswell for over 10 years’ – we found that those respondents who had lived a long time in Halswell were associated with having a high level of participation in the community. The other was ‘being involved in clubs, etc., outside of Halswell’: those who indicated their involvement in groups outside of Halswell were associated, unsurprisingly, with a low level of involvement in the Halswell community.

Though our chi-square test yielded one significant result and two others very close to being significant, there were several other associations we expected to find. Sarah Wylie’s research into Halswell residents’ attitudes to community participation found that those least engaged in the community were adults without children or whose children had grown up and left home (2010, p. 35). Thus, we expected to find an association between ‘having children under 18’ and community participation, with those who had children under 18 being associated with a high level of involvement in Halswell. However, this association did not emerge. Two other factors we expected to be associated with a high level of community participation were those that indicated residents’ investment in the Halswell community: ‘owning, as opposed to renting, property’ and ‘planning to remain in Halswell for a number of years’. Research carried out by Völker et al. on community in Dutch neighbourhoods found that “investment considerations, i.e. the intention to stay in the neighbourhood” are important for the creation of community (2006, p. 110). Hence, we expected to find that residents who owned their property and/or who were expecting to stay in Halswell for a number of years were associated with a high level of community participation. But, again, this was not the case. Our small sample size was most likely responsible for the non-emergence of these associations.

As a result of our analysis of our second sub-question we also expected to find an association between ‘having moved to Halswell before the September the 4th 2010 earthquake’ and community participation, with pre-earthquake movers being associated with a high level of community involvement. Indeed, *Figure 6* seemed to suggest that pre-earthquake movers had a higher frequency of local involvement than post-earthquake residents: 21% of pre-earthquake residents, compared to 14% of post-earthquake movers, were involved four or more times over a four-week period in the Halswell community. However, our chi-square test did not reveal such an association. Again, our small sample size is likely to be responsible for this outcome, but another caveat must here be taken into account: in the case of ‘moving to

Halswell before the September the 4th 2010 earthquake’, ‘owning property’, ‘finding it easy to access information’, and ‘planning to remain in Halswell for a number of years’ over 20% of the expected cell counts were less than five. When this occurs the chi-square test may not be reliable – indeed, “[a] standard ... rule of thumb ... is to avoid using the chi-square test ... when more than 20% of the contingency table cells have expected cell frequencies less than 5” (*PROPHET StatGuide Do your data violate contingency table analysis assumptions?*, 1997). Thus, in the case of the four factors mentioned above, our chi-square test is not reliable.

5.4 How do residents find out what is going on in the Halswell community?

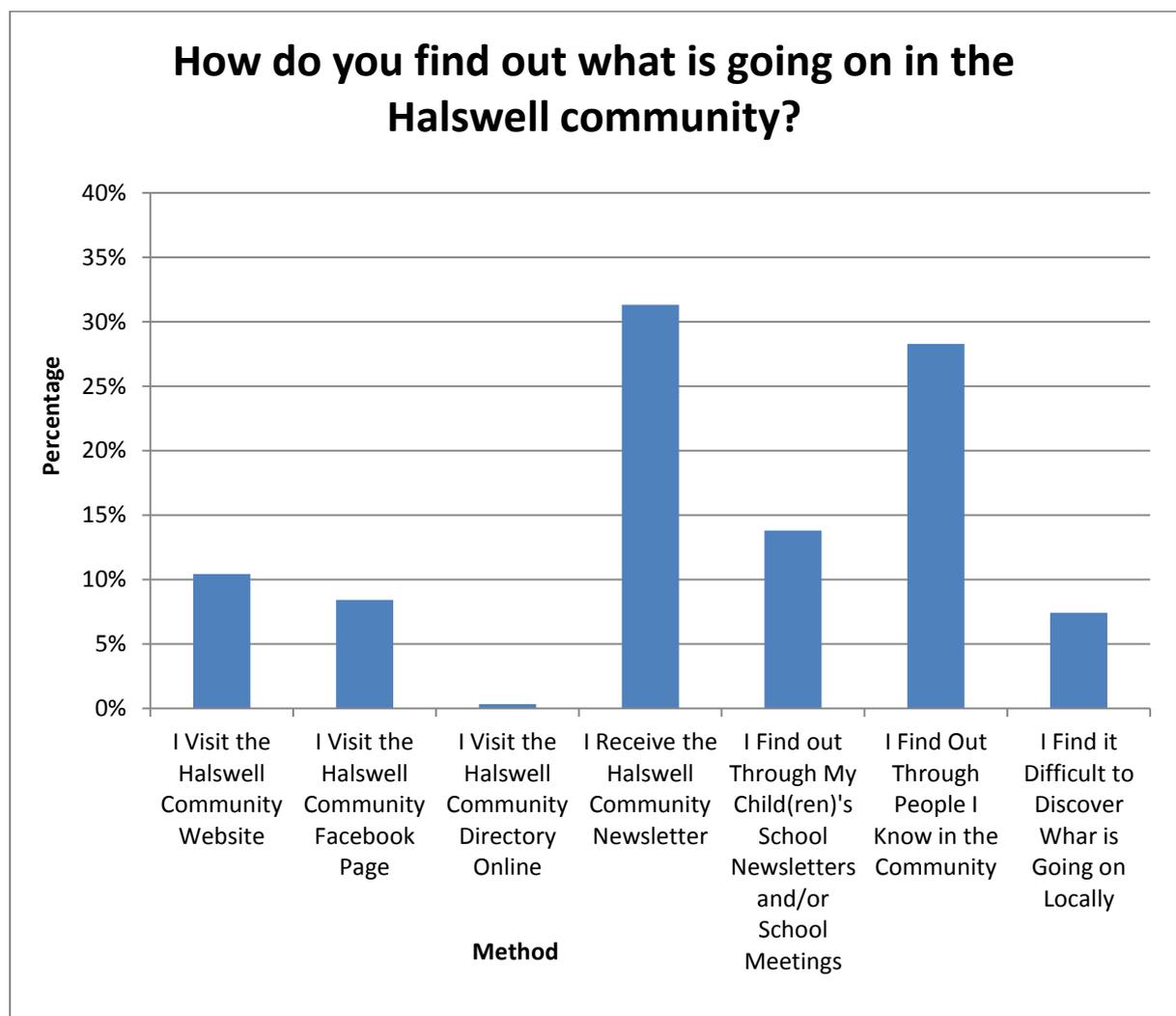


Figure 8. How residents find out what is going on in Halswell, combined sample

Although our chi-square test did not indicate an association between finding it easy to access information about community groups and events in Halswell and level of participation in the self-same groups and events, the criteria was another of those we expected to turn up a statistically significant result. Sarah Wylie’s research in Halswell noted that newcomers

found it difficult to access information on what was available locally and that this in turn inhibited their involvement in community events and/or utilisation of community facilities. Thus, we asked respondents how they found out what Halswell has to offer. *Figure 8* shows that most respondents, over 30%, find out about Halswell groups and events through the emailed community newsletter, with gathering information via word of mouth a close second at roughly 28%. Although, after Sarah Wylie's research indicated the need for a local Halswell directory (2010, p. 35), an online directory has been created, less than 1% of respondents said that this was what they used to find out what Halswell has to offer. Seeing as the online directory was only created in August 2011 (Christchurch City Council, 2011) it is likely that, little more than two years after this date, most residents are not yet aware of its existence.

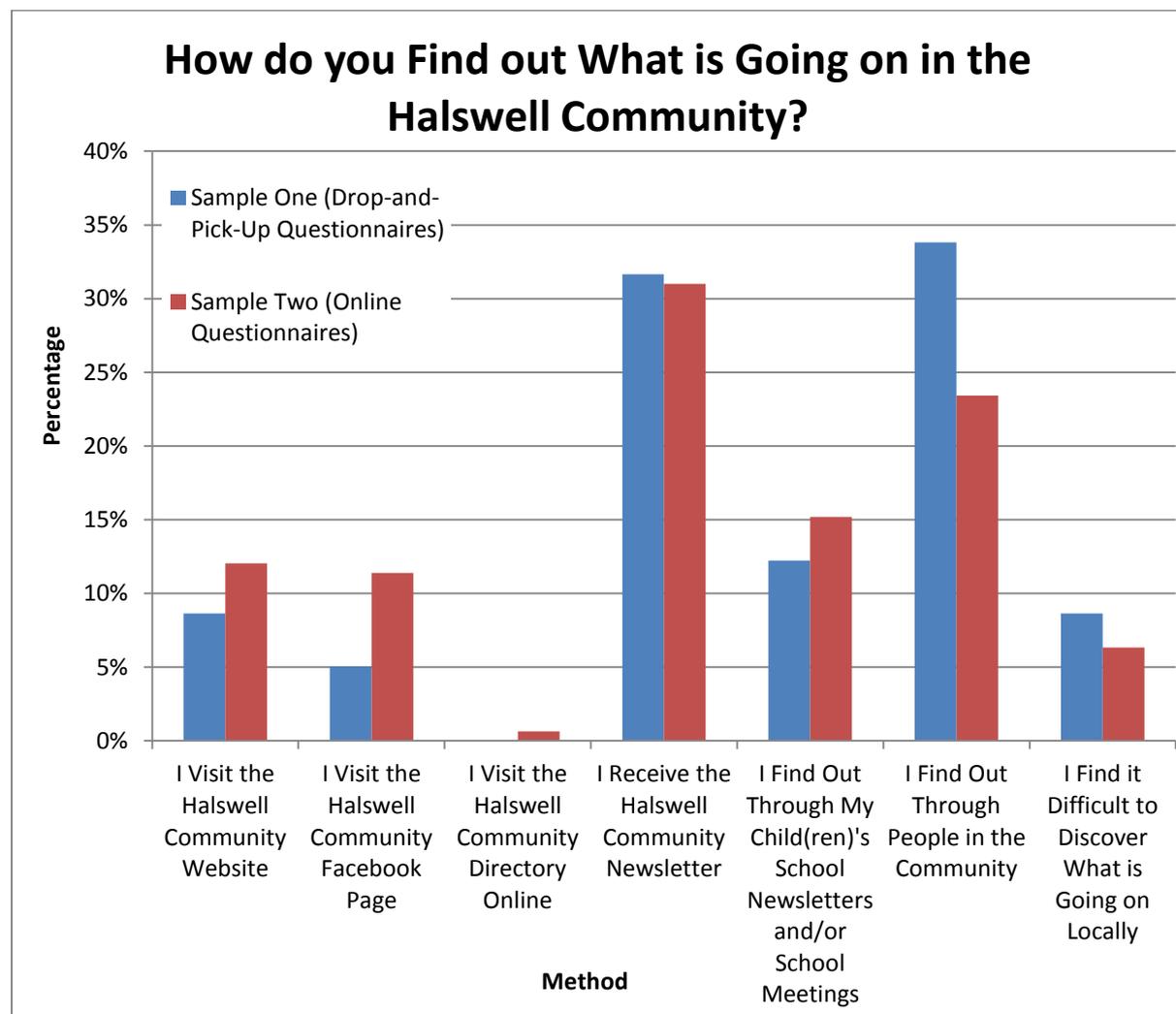


Figure 9. Comparing Sample One and Sample Two with regards to methods of gathering community information

Figure 9 compares our two samples in terms of how they find out what Halswell has to offer. In Sample One, the two most frequently cited sources of information were: the Halswell Community Newsletter (32%) and people in the community (34%). Similarly, in Sample Two, most residents made use of the newsletter and word of mouth, with 31% citing the

former and 23% the latter. Unsurprisingly, seeing as the respondents in Sample Two completed our questionnaire online, a higher percentage of these respondents visit the Halswell Community Website and Facebook Page than Sample One. Though a similar percentage of Sample One and Sample Two receive the Halswell Community Newsletter, respondents from Sample One (the drop-and-pick-up questionnaires) were more likely to get information on community activities and events through word of mouth than Sample Two.

6. Limitations

6.1 Sample Size

The main limitation of our project is our small sample size. With Halswell's population at roughly 14,000 (Wylie, 2010, p. 3), our sample of 165 Halswell residents comprises little over 1% of the suburb's population. Thus, our sample is likely to be affected by sampling bias, which occurs "when the sample size is not large enough [to] accurately ... represent the study population or subgroups within it" (McLafferty, 2010, 86); our sample is most likely unrepresentative of the Halswell population. Our small sample size is also most likely the reason why so few significant associations emerged from our chi-square test.

6.2 Time

Also limiting our project was time: we had little over twelve weeks to collect and analyse our data and write up our results. With a longer project time-frame we would likely have been able to collect a larger, and thus more representative, sample of residents and would have been able to analyse our data further.

6.3 Data Collection Methods

Another limitation of our project regards our methods of data collection. As noted by Parfitt, the self-completion format of our 'drop and pick-up questionnaire' meant that we were only able to ask "simple and straightforward questions" and were unable "to weed out insincere or patterned responses"; moreover, we had "no control over who answer[ed] the questionnaire within the unit sampled" (2005, p. 103). Furthermore, since "respondents [we]re required to read the questionnaire and to write down their responses" the questionnaire was immediately biased "against people who, for whatever reason, are poor at reading and writing" (Parfitt, 2005, p. 103). Although similar limitations surrounded our internet survey, Parfitt notes that the approach is also clearly biased against those without access to the internet (2005, p. 101).

6.4 Non-Response Error

Though the self-completion format of our questionnaires meant that we avoided response error, our data is likely subject to a small amount of non-response error as with each of our questions there were a few respondents who did not answer.

7. Conclusions

The aim of this study was to investigate community participation in Halswell, with a particular focus on the differences between pre- and post-earthquake movers to the suburb. Using the research methods mentioned, we identified that the most common reason in choosing Halswell as a place to live was because the respondent liked the feel of the area. This was the case for both pre- and post-earthquake residents and thus, very little difference exists between the factors influencing the two groups' residential choice. The study also examined whether pre- and post-earthquake residents differ in their levels of local and non-local community involvement. Our results suggest that pre-earthquake residents are more involved locally, whereas post-earthquake residents are more active outside of the Halswell community. Further to this, it was found that pre-earthquake residents were the only respondents interested in becoming involved in the community should they not be involved already. Although we expected to find that our chi-square corroborated the analysis of our second sub-question and that there would exist an association between 'having moved to Halswell before the September the 4th 2010 earthquake' and level of community participation, with pre-earthquake movers being associated with a high level of community involvement, this did not happen. The only factor that emerged as being significant was age – those who were over 65 were associated with having a low level of involvement within Halswell. Lastly, just under a third of our sample found out what was going on in Halswell through the emailed community newsletter, with only one respondent making use of the online Halswell community directory.

8. Acknowledgements

Our appreciation goes to a number of people involved in this project for the time and guidance they have given us. We would especially like to thank our community partner Chrys Horn at the Halswell Community Project and our tutor Ross Barnett.

Thanks also go to Group 12 (Kirsty Owen, Kirsty Curry, Kevin Hinge, Stephen Roberts, and Corinna Wells) for their assistance in creating and distributing questionnaires.

9. References

- Canterbury stress levels expected to rise – expert.* (2013). Retrieved from <http://tvnz.co.nz/national-news/canterbury-stress-levels-expected-rise-expert-5367141>
- Christchurch City Council. *New Halswell community directory now available.* (2011). Retrieved from <http://www.ccc.govt.nz/thecouncil/newsmedia/mediareleases/2011/201108291.aspx>
- Community Profile: Greater Halswell Area.* (n.d.). Retrieved from <http://resources.ccc.govt.nz/files/CityLeisure/statsfacts/statistics/CommunityProfiles/2012/RiccartonWigram/GREATERHALSWELLPOSTER12.pdf>
- Dewe, S. (2004). A Profile of Halswell. Retrieved from <http://www.halswellcommunity.net.nz/images/planningdocs/halswell%20profile%20sue%20dewe%202004.pdf>
- Guest, Avery M., & Stamm, Keith R. (1993). Paths of Community Integration. *The Sociological Quarterly*, 34 (4), 581-595. Retrieved from <http://www.jstor.org/stable/4121369>
- McLafferty, Sara L. (2010). Conducting Questionnaire Surveys. In Nicholas Clifford, Shaun French & Gill Valentine (Eds.), *Key Methods in Geography* (2nd ed.) (77-88). London: Sage.
- Parfitt, Julia. (2005). Questionnaire Design and Sampling. In Robin Flowerdew & David Martin (Eds.), *Methods in Human Geography: A Guide for Students Doing a Research Project* (2nd ed.) (78-109). Glasgow: Pearson Education Limited.
- Platt, Lucinda. (2004). *CHI-Square Test*. Retrieved from <http://srmo.sagepub.com/view/the-sage-encyclopedia-of-social-science-research-methods/n116.xml>
- PROPHET StatGuide: Do your data violate contingency table analysis assumptions?* (1997). Retrieved from http://www.basic.northwestern.edu/statguidefiles/conting_anal_ass_viol.html
- Red Cross continues its support for people of Christchurch.* (2013). Retrieved from <http://www.scoop.co.nz/stories/PO1302/S00195/red-cross-continues-its-support-for-people-of-christchurch.htm>
- The Halswell Community Project.* (n.d.). Retrieved from <http://www.halswellcommunity.net.nz/index.php/hcp>
- Völker, Beate, Flap, Henk, & Lindenberg, Siegwart. (2006). When Are Neighbourhoods Communities? Community in Dutch Neighbourhoods. *European Sociological Review*, 23(1), 99-114. doi: 10.1093/esr/jcl022

- Wilkinson, D. (2008) Individual and Community Factors Affecting Psychological Sense of Community, Attraction, and Neighboring in Rural Communities. *Canadian Review of Sociology*, 45(3), 305-329.
- Wylie, Sarah. (2010). Research into Attitudes to Local Community Identity and Participation Amongst New Residents in Halswell. Retrieved from <http://www.halswellcommunity.net.nz/images/planningdocs/halswell%20community%20identity%20and%20participation%20sarah%20wylie%202010.pdf>