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26 **Title:**

27 Testing the waters on the South Island: Insights from a pilot study

28

29 **Abstract**

30 ***Objectives:*** We report on field methods used to test the feasibility of the content and
31 administration of an on-line survey measuring associations between transport and well-being
32 among older teenagers.

33 ***Methods:*** We conducted an on-line pilot survey with a sample of n = 55 teenagers, using two
34 delivery methods, 'in class' and 'at home'. Built into both surveys were components that
35 allowed for assessment of survey viability in terms of respondent orientation and
36 engagement, question understanding, survey process and resource management.

37 ***Results:*** Pilot study results effectively advised the large-scale main survey to follow.
38 Response rate was 82%, and was higher among those completing the survey during class
39 compared to those completing it at home, and higher among females, indicating matters to
40 address during the main survey. Survey questions were identified that were not operating as
41 intended, and were amended.

42 ***Discussion and conclusions:*** Respondent orientation should be an over-riding principle of
43 survey strategies. "Practising" field research, such as piloting a survey prior to larger and
44 costly studies, is an essential approach to ensuring good science and to avoid missed
45 opportunities and ensure the collection of quality data.

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47 **Key words:** mixed methods, participant access, questionnaires, adolescents, Māori youth

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50

51 **Introduction**

52 It is rational to assess feasibility of large studies by way of smaller pilot studies,
53 especially in new areas of research, prior to more costly main studies (Thabane, Ma et al.
54 2010, North N and Park E 2014). Piloting a project enhances the likelihood of success of the
55 main study, but pilots commonly receive little attention (Moher, Schulz et al. 2001, Van
56 Teijlingen, Rennie et al. 2001, Lancaster, Dodd et al. 2004, Thabane, Ma et al. 2010). Often,
57 pilot studies are mislabelled as such, and merely report on a project with a small sample size,
58 with no plan for a main study (Thabane, Ma et al. 2010).

59 As reported by Thabane et al (Thabane, Ma et al. 2010), a pilot study is defined as an
60 *experimental, exploratory, test, preliminary, trial or try out* investigation. Other similar
61 definitions include *a test of the methods and procedures to be used on a larger scale if the*
62 *pilot study demonstrates that the methods and procedures can work, and an investigation*
63 *designed to test the feasibility of methods and procedures for relater use on a large scale or*
64 *to search for possible effects and associations that may be worth following up on in a*
65 *subsequent larger study* (Everitt B 2006).

66 This pilot study was intended for participants in Years 12 and 13 (aged 16-19 years)
67 at Southland, New Zealand secondary schools. The topic the study addresses, transport and
68 well-being, is a relatively new area of research, and while a few studies have assessed this
69 relationship in adults and children, none have looked at the issue in older teenagers. As no
70 existing survey could be sourced, the motivation for initiating this pilot was the need to assess
71 the overall feasibility of an original online survey measuring associations between transport
72 and well-being among older teenagers.

73 One specific aim was to write respondent-oriented questions that elicited data that was
74 truly valuable – in other words, responses that made it clear respondents understood
75 instructions and that questions asked produced the information sought (Dillman DA 2007,

76 Gendall P, Hoek J et al. 2009). A second aim was to plan appropriately for resources, with
77 regard to the time burden on survey respondents and the staff at participating schools, as well
78 as with regard to financial budgeting. Thirdly, the aim of testing various methods of survey
79 delivery was to assess the best way to maximise response rate, allowing evaluation of the role
80 of the survey environment.

81 The focus of this article is on the benefits of pilot studies with regard to our aims. Any
82 discussion of the topic (transport and well-being) is utilized only as a vehicle to illustrate
83 decisions with regard to design and procedures, and to explain the pilot survey findings from
84 a methodological standpoint.

85

86 **Methods**

87 *Participants and recruitment*

88 Recruitment of participants was done via convenience sampling, as desired
89 respondents were age-specific and geographically diverse (Fan and Zheng 2010). Two
90 schools were chosen to participate in the pilot that reflected the types of schools invited to
91 participate in the main study. School principals were contacted first via email, to schedule
92 face-to-face meetings, at which time they were interviewed and logistics were discussed.
93 Teachers of the Information Technology classes were contacted by the principals, and put in
94 touch with the main researcher. Those teachers then suggested classes of students to survey
95 for the pilot study.

96 One school was an urban school with a total roll of 797 (Education Review Office
97 2013). The other was rural, with a total roll of 159 (Education Review Office 2014). The New
98 Zealand decile levels of the schools were eight and seven, respectively, indicating both were
99 located in areas of moderate socio-economic advantage (Ministry of Education 2014). Both
100 schools were co-educational and included Year levels 7-13. In order to avoid “contaminating”

101 class samples for the future main survey, classes were deliberately chosen that would not be
102 participating in the main study, therefore avoiding problems associated with multiplicity
103 (Thabane, Ma et al. 2010). Sampling only senior secondary students (Years 12 and 13, aged
104 16-19 years) was purposeful, in order to include only those old enough to obtain some level
105 of license, and therefore were theoretical able to use all modes of transport.

106 *Survey design and measures*

107 Ethical approval was obtained from University of Otago Ethics Committee (reference
108 numbers 14/062 and 14/163), and consultation was completed with and subsequent approval
109 received from the Ngāi Tahu Research Consultation Committee.

110 A web-based survey was utilized, which has many advantages, including lower
111 delivery cost, more design options, less data entry time, and its suitability for convenience
112 samples (Fricker and Rand 2002, Fan and Zheng 2010). The Qualtrics on-line survey tool
113 was utilised(2013). The pilot survey was informed in part by a photovoice project conducted
114 previously by the research team (Ward, Freeman et al. 2015).

115 The intention was to include existing and validated measures. Questions about
116 transport behaviour, license status, and transport modes utilised were adapted from other
117 surveys (Kamargianni M, Polydoropoulou A et al. 2012, Schoettle and Sivak 2013).
118 Measures of attachment originated from the ‘Peer and Parent Attachment Survey’ (Raja,
119 Mcgee et al. 1992). Happiness was measured by the ‘Life Satisfaction Scale’ (Olsson, Mcgee
120 et al. 2012). Personal competencies were measured by the ‘Strength Questionnaire’ (McGee,
121 Marsh et al. 2011). Questions about TV and internet use were included, as screen time has
122 been found to be inversely associated with mental health indicators (Trinh, Wong et al.
123 2015), and came from the ‘New Zealand 2012 Youth Insights Survey’ (White J 2013). A
124 single-question activity query was included to address physical health (Milton, Bull et al.
125 2011, Richards, Jiang et al. 2015).

126 Questions about demographic information (including age, gender, school, home
127 address, ethnicity, etc) were included. Collecting the participants' home addresses as part of
128 the survey demographic data allowed for the possibility to explore where participants lived in
129 relation to their school and city centre, to assess the distance they travelled and any impact
130 that may have on their transport habits and well-being (Villanueva, Giles-Corti et al. 2012).
131 The ethnicity query was identical to that used by the NZ Census (Statistics New Zealand
132 2013).

133 As this is a new research area, some survey questions were written by the first author.
134 These included inquiries about future plans regarding licensure, key destinations outside of
135 the school trip, attitudes and beliefs about chosen transport modes, feelings about how
136 mobility affects independence, as well as barriers.

137 The survey was opt-in and voluntary. It was designed to be completed in less than 30
138 minutes. It consisted of 43 questions, 31 of which were offered to all respondents, and 12
139 supplementary questions which were offered based on answers to some of the previous
140 questions by way of skip pattern automation. Questions were purposely unthreatening,
141 phrased in ways that would encourage rather than discourage meaningful responses; this
142 helped to decrease non-response, which could adversely influence data quality (Fricker and
143 Rand 2002).

144 Taking into account that respondents tend to favour responses at the beginning and at
145 the end of response lists, and that first items are often chosen by respondents to save time, the
146 order of question response choices was randomised to address this concern of order bias
147 (Fricker and Rand 2002). Various question formats, both closed-ended and open-ended, were
148 used to maintain interest. Many of the questions included a free-text response option, for
149 which the literature reports web-based surveys are particularly well-suited (Fricker and Rand
150 2002). Jargon was minimised. A free-text question at the end of the survey was included,

151 asking for additional input regarding process and content, which was unique to the pilot to
152 gain feedback, and was not planned for the main study.

153 Research suggests that both personalised invitations and incentives increase response
154 rate, so these were built into both the pilot, with no plan for assessment of these techniques
155 (Bosnjak and Tuten 2003, Heerwegh and Loosveldt 2007, Porter and Whitcomb 2007,
156 Klofstad, Boulianne et al. 2008, Fan and Zheng 2010, Perez, Nie et al. 2013, Singer and Cong
157 2013). However, the pilot study intended to assess the effect of reminder emails on response
158 rate (Fan and Zheng 2010), as it is estimated that the response rate for online surveys is about
159 11% lower than that of other survey modes (Fan and Zheng 2010).

160 All of these decisions related to survey design allowed for the minimization of
161 measurement errors, the maximization of the likelihood of collecting reliable data of good
162 quality, and the reduction of the cognitive burden put upon survey respondents.

163 *Procedures*

164 The information, consent and survey processes were all designed and ethically
165 approved to be paperless. However, as a paper consent process was planned to be made
166 available to schools requiring it during the main study, it was trialled during the pilot. Thus,
167 two methods of delivery were trialled to gauge response rates for each. These are referred to
168 here as the “in-class” and “at-home” methods.

169 Participates were advised of incentives (one \$25 gift voucher per school) during the
170 consent process (Fricker and Rand 2002, Heerwegh and Loosveldt 2007, Fan and Zheng
171 2010, Singer and Cong 2013). Both delivery methods were designed to keep the burden on
172 school staff to a minimum. Students were invited to participate in the online survey via
173 personalised email in both methods. For the “in-class” method, student emails were gathered
174 from staff in advance, and invitations emailed to 35 potential respondents. An introduction
175 was presented in-class, consisting of the information provided in the online survey

176 information section of the survey (survey purpose, expected completion time, and description
177 of incentives). Complete survey information was given and consent was obtained on-line.
178 Students then completed the survey during class time. A debriefing session after the survey
179 was audiotaped by the researcher.

180 The “at-home” method was designed for completion at home, in anticipation that
181 some schools in the main study may be reluctant to dedicate class time to the survey, and was
182 therefore potentially seen as more attractive to those schools. Hard-copy information sheets
183 and consent forms were distributed during class, and invitations were later emailed to
184 potential participants’ preferred email addresses as indicated (n=20). Participants were asked
185 during the survey to comment on any questions in the survey that were ambiguous, difficult
186 to answer or did not allow them to express their views accurately.

187 Two follow-up emails were planned to prompt response from those who had been
188 invited but had not started or completed the survey, after which the prize drawing took place
189 and the winner contacted.

190 *Analyses*

191 All responses to each individual survey were fully reviewed. Analyses aimed to assess
192 issues of survey feasibility; thus, data exportation was a practice exercise only. Data obtained
193 were exported from the Qualtrics tool to Excel for data cleaning, then to STATA[®] for
194 descriptive statistics. Descriptive statistics were considered only to determine if the responses
195 to questions seemed reasonable, or if the questions were eliciting little respondent variability.
196 The audio tapes subsequent to in-class dissemination, and survey comments from the at-home
197 respondents, were reviewed and relevant suggestions were noted and applied to the main
198 survey.

199

200 **Results**

201 Fifty-five students (male=58%) were sampled. Overall, gender distribution was 47%
202 and 52% male (urban and rural school, respectively) (Education Review Office 2013,
203 Education Review Office 2014). Participants self-identified as NZ European (79%), Māori
204 (14%), Pacific Islander (7%), Indian (2%), Other Asian (5%), and Other (12%). The average
205 age of participants was 16.9 years. See **Tables I and II** for all results.

206 Forty-five of the 55 students sampled responded to the survey (82%). Participation
207 was higher “in-class” than “at-home” (response rates of 97% and 55%, respectively). Females
208 were more likely than males to complete the survey regardless of method (100% and 67%,
209 respectively). The average time to complete the survey was 16.6 minutes (16.2 in-class, and
210 16.9 at-home). Missing data occurred in 6.7% of surveys, meaning that 93.3% of respondents
211 who started the survey answered all questions posed. The missing data came from male
212 respondents. The first reminder email increased participation by 15.5% overall, and the
213 second reminder yielded no more respondents.

214

215 **Discussion and conclusions**

216 Overall the pilot proved feasible with regard to administration, and content changes
217 were indicated. Changes were made prior to the main study based on preliminary analyses,
218 respondent feedback, and collaboration with secondary school staff.

219 *Sampling aspects of study*

220 The pilot study informed on how to successfully approach and engage with schools
221 and students to create “buy-in” and support. For example, survey completion time was much
222 better than expected and served as a “selling point” for the main study. Negotiating access
223 ahead of time has been reported as being important for good participation (Smith, Gaffney et
224 al. 2002), and this, coupled with the fact that in-class participants were a “captive audience”,
225 may have contributed to the 82% response rate. Thus for the main study, the in-class method

226 was presented as the preferred method of distribution, and the at-home method offered as an
227 alternative. The \$25 gift vouchers as incentives could also have played a part in the high
228 response rate, although this was not assessed, as it is well-reported that incentives increase
229 response rate. Incentives will continue in the main study.

230 It was helpful to locate the survey in the school curriculum. The survey was
231 introduced during Information Technology classes, and used as an example of web-based
232 assessment. Some unforeseen barriers with regard to resource management surfaced. School
233 scheduling, even when done in advance, had its limitations. For example, at one school there
234 was a misunderstanding with regard to class availability. Thus, what was planned to take two
235 hours ended up taking two days, providing an important lesson for the main study.

236 There were also issues with student email access during the pilot. Schools that
237 approved the in-class method supplied students' school email addresses, as opposed to
238 students' preferred address. Thus many students who did not use their school email addresses
239 on a regular basis forgot their passwords and had to ask the teacher for help at the start of the
240 survey. The situation was easily remedied with such small groups. It was foreseen, however,
241 that with bigger groups at larger schools this would prove to be problematic. During the main
242 study therefore, this in-class limitation was discussed with schools beforehand.

243 This pilot study supports evidence that follow-up methods are effective. Use of
244 reminder emails increased pilot participation by 15.5%, particularly with the at-home method
245 where a lower response rate was initially seen, so this practice continues in the main study.
246 While research has found the effect of reminders increases with the number of reminders sent
247 (Booker, Harding et al. 2011), our pilot outcomes demonstrated participation did not increase
248 after the first reminder

249 Research conducted via survey is vulnerable to response bias, especially with large
250 samples, as non-responders usually differ from responders, potentially affecting validity and

251 generalizability. Female respondents had a 100% response rate, compared to the male
252 response rate of 67%, and it is noteworthy that all missing data came from male respondents.
253 Gender distribution issues in survey response have been previously reported in the literature
254 (Mitra, Jain-Shukla et al. 2008, Sax, Gilmartin et al. 2008). It is common in online surveys to
255 establish age and gender quotas, to ensure that the achieved sample does not include too few
256 males and too many females, or to employ weighting techniques.

257 It became clear that this age group utilized email less than expected. Some students
258 asked if they could access the survey via Facebook. The main study therefore comprised
259 three delivery methods, including a Facebook page, to maximize participation. Unanticipated
260 problems with email access emerged, resulting in coverage errors. Some invitations ended up
261 in “spam” or “junk” folders, so some thought must be given to the subject line of invitation
262 emails to avoid this in the main study.

263 *Measurement aspects of the study*

264 One of the over-riding principles of survey planning is that the respondent defines
265 what can be done - the types of questions you can ask, the types of words you can use, the
266 concepts you can explore and the methodology you can practice (Tremblay 1957, Gendall P,
267 Hoek J et al. 2009). This pilot confirms that a web-based survey is an effective way to survey
268 older adolescents, and alerted us to necessary content changes.

269 The relatively small sample size of this study allowed us to individually assess each
270 respondent’s answers and compare them with others in order to assess response variability,
271 missing values, inconsistent answers, or results that did not make sense, permitting us to
272 directly gauge data quality. Questions that didn’t seem to work were detected, and these were
273 deleted or amended to improve clarity, collect missed information, or save time by avoiding
274 unnecessary queries. While testing a survey helps to establish how well the process works
275 and may reveal exceptional deficiencies in the questionnaire, most pilot studies do not allow

276 for assessment of whether or not survey questions are misunderstood by respondents (Gendall
277 1994). Inclusion of debriefing sessions with respondents after the in-class method allowed us
278 the unique opportunity to identify questions that had been misinterpreted.

279 Two demographic questions were added and one changed, to better relate ethnicity
280 and living situations. The main ethnicity query was monitored by an additional yes/no
281 question from the NZ Census, “*Are any of your parent, grandparents or great-grandparents*
282 *Māori?*” (Statistics New Zealand 2013). The brief question, “*How many households do you*
283 *live in?*” was also added. Two questions assessing internet and television use were changed.
284 To avoid confusion among respondents – many watch TV on their laptops, for example – the
285 two questions about internet and television use were reduced to a single question about screen
286 time, adapted from another study (White J 2013).

287 Some questions were reconsidered if not well-received by respondents, per feedback.
288 Among the well-being questions included, assessing happiness was in part done with a
289 validated question asking, “*In general, how do you feel about*” with 10 aspects of life
290 offered on a matrix of “*Very Happy*”, “*Happy*”, “*Unhappy*” and “*Very Unhappy*”(Olsson,
291 Mcgee et al. 2012). This was purposeful, to avoid “fence sitting”; furthermore, these response
292 options came from pre-existing validated questions. During real-time feedback, a student
293 asked why there was not a neutral option. An additional single-question happiness measure
294 was added that allowed for a neutral response (Jalloh A, Flack T et al. 2014). This served as a
295 “catch-all” to sum up happiness, and to compare responses with the other questions.

296 Previous to a question about transport to and from school, the query “*Did you go to*
297 *school at least one day last week?*” was inserted to save time of those who did not attend
298 school that week. The wording of question “*In the last month, which of these transport*
299 *modes have you used to get places?*” was changed to “*In the last month, which of these have*
300 *you used to get places?*” to omit the jargon of the word “mode”. The options available in this

301 question (and other questions related to transport throughout the survey) included *bus*,
302 *walking, bike, skateboard or non-motorised scooter, motorbike, car as passenger, and car as*
303 *driver*. Based on feedback, *non-motorised scooter* was removed from the list for the main
304 survey, as respondents related that scooters were only used by younger children, and motor
305 scooters or motorcycles were preferred by their age group. Skateboarders felt that their
306 activity should not be combined with others. As current literature combines skateboarding
307 with other “walkability” issues (Andrews, Hall et al. 2012), this suggestion was very apt and
308 could elicit new knowledge about skateboarder behaviour and well-being for future research.
309 Queries also arose about whether or not *bus* meant school bus or public bus. Based on this
310 feedback, the transport options offered became *school bus, public bus, walking, cycling,*
311 *skateboarding, car as driver, car as passenger, and motorbike or scooter*.

312 Four questions asked respondents to indicate, from a list, the sporting, outdoor,
313 cultural, social, leisure, and community-related activities in which they were involved. Real-
314 time feedback and responses to the free-text survey question advised the final response
315 options for these questions. In the pilot version, the activities not chosen by a respondent
316 were offered up for explanation in the question, “*Following are the activities you said you*
317 *didn't participate in last month. Which of these didn't you do because you didn't have*
318 *reliable transport?*” This resulted in 98% choosing the option “*none of these*”, and one
319 respondent choosing all activities, suggesting in the first instance that the question was not
320 providing useful information, and in the second that it was misunderstood. This question was
321 replaced with one allowing a free-text response, “*In the past month, were there any hobbies*
322 *or activities that you were unable to participate in because you didn't have reliable*
323 *transport?*” In the main survey, the questions resulted in meaningful data.

324 Depending on their responses to the query “*In the last month, which of these*
325 *transport modes have you used to get places?*” respondents were offered specific questions

326 about why they used the modes they used, and how they felt about it. The most oft-used form
327 of transport reported was “*car as passenger*” (87%). To address this, three additional
328 questions were added to the main survey regarding the passenger experience: 1) “*You*
329 *mentioned in the last month you were a passenger in a car. How well do the following*
330 *statements describe how you feel as a passenger?*” with statements on a matrix of and
331 “*Always/Mostly true*”, “*Often true*”, “*Sometimes true*” and “*Never/Almost never true*” to
332 assess their attitudes about being driven; 2) “*When you drive, which of these statements best*
333 *describes the passenger situation in the car?*” to assess whether they drove alone or with
334 others; and 3) “*You said you either always or sometimes drive with passengers in the car.*
335 *Who is it that usually rides with you?*” to assess the age of their passengers.

336 To capture future intentions regarding transport, the following question was asked, “*If*
337 *you had your choice, what would be your preferred mode of transportation?*”, and 78% of
338 respondents choose “*Driving yourself*”. The question was changed to rank list format, so that
339 participants could rate their preferred choices on a numbered scale instead of choosing just
340 one, to give us a better and more nuanced picture of their plans. The question itself was
341 amended to “*If you had your choice, how would you choose to get around? Please click and*
342 *drag each up or down to rank them in order of preference*”. This operated better in the main
343 survey.

344

345

346 A version of this survey was piloted in a U.S. city. Thus, with the exception of region-
347 specific questions such as those querying ethnicity, activities, and culture, this survey is
348 generalizable to other respondents of the same age group in different countries. It is
349 acknowledged that a pilot study is an “idealised” version of the main study, and while some
350 problems can be planned for, it was anticipated more trouble-shooting would perhaps be

351 necessary. Nonetheless, this pilot survey was absolutely invaluable with regard to confirming
352 the feasibility of the survey design, content, and resource facilitation.

353 In New Zealand, care needs to be taken to ensure that Māori, the indigenous people of
354 the country, are able to participate in research relevant to them. During the pilot survey
355 engagement process, the main researcher met with a Māori immersion school (a Kura
356 Kaupapa) in the region. While they did not contribute to the pilot, they expressed interest in
357 participating in the main study, if the survey was to be translated into the Māori language.
358 The interaction with the Kura Kaupapa is an example of applying the over-riding principle of
359 respondent orientation to survey design, as it helped us improve engagement by allowing us
360 the opportunity to consult with community stakeholders regarding better ways to genuinely
361 include Māori youth (Wyeth, Derrett et al. 2010).

362 The main study survey was therefore translated to te reo Māori, fulfilling research
363 requirements described by Wyeth et al 2010 under the Treaty of Waitangi Articles II and III,
364 addressing Rangatiratanga (chieftainship) and Ōritetanga (equality) (Wyeth, Derrett et al.
365 2010). Articles II and III recommendations were achieved through application to and
366 discussion with the Ngāi Tahu Research Consultation Committee; consultation with
367 stakeholders and researchers; inclusion of Māori students in both the qualitative photovoice
368 study (Ward, Freeman et al. 2015) that advised feasibility issues for the pilot study, and the
369 pilot itself (participants reported 28% and 14% Māori ethnicity, respectively); translation of
370 the main survey into te reo Māori; and dissemination of findings to Māori health
371 organisations. The process of translation and distribution of the Māori version of the survey is
372 detailed elsewhere [Ward et al, in peer review].

373 It is well-reported that male respondents have a lower response rate than females.
374 However, reasons for this disparity have not been fully explored. While this was not

375 addressed in our final survey as the target was age- and region-specific, future research on
376 how to better engage older adolescent males in survey-based research is needed.

377 Piloting surveys is not new. However, this pilot permitted us to change the survey in
378 ways that otherwise would not have been obvious, providing us the opportunity to avoid
379 missed opportunities for better measurement and survey delivery later on, and serves as a
380 timely reminder of the value of piloting a survey. It ensured a well-run main survey, resulting
381 in meaningful data.

382

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538 **Table I: Pilot survey participant description**

		n
Gender		
	Male	32
	Female	23
	Total	55
School		
	Urban	28
	Rural	23
	Total	55
Year Level		
	Year 12	29
	Year 13	16
	Total	55
Ethnicity¹		
	NZ European	43
	Māori	8
	Pacific Islander	4
	Indian	1
	Other Asian	2
	Other	7

539 ¹This measure adds up to more than n=55 as per the NZ Census, respondents could self-identify as
 540 more than one ethnicity

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548 **Table II: Pilot survey completion by delivery method**

	<u>Delivery Method</u>		Totals <i>n(male/female)</i>
	In-class method <i>n(male/female)</i>	At-home method <i>n(male/female)</i>	
By Gender			
Total participants invited (male/female)	35(14/21)	20(18/2)	55(32/23)
Total surveys completed (male/female)	34(13/21)	11(9/2)	45(22/23)
By Year Level	<i>n(%)</i>	<i>n(%)</i>	<i>n (%)</i>
Year 12 - Total participants completed	23(96)	6(60)	29(85.3)
Year 13 - Total participants completed	11(100)	5(50)	16(76.2)
Overall	<i>n(%)</i>	<i>n(%)</i>	<i>n(%)</i>
Overall response rate	34(97)	11(55)	45(82)
Response rate by gender			
<i>Male</i>	13(93)	9(50)	22(67.1)
<i>Female</i>	21(100)	2(100)	23(100)
Increase in respondents after reminder emails			
<i>1st reminder</i>	0	7	7(15.5%)
<i>2nd reminder</i>	0	0	0(0)
Missing data¹	3 (8.8)	0 (0)	3(6.7)
Time range to complete survey, in minutes	10-23	8-79	8-79
Average time to complete, in minutes²	16.2	16.9	16.6

549 ¹All missing data were from male respondents

550 ²The average time calculation does not include the 79 minute outlier for the at-home method

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