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Abstract: High attention to campus surveys of sexual misconduct has raised concerns about the potential of nonresponse bias in data from these surveys. Best practices in survey methodology offer many options to limit nonresponse. Here we examine two of the most potent options: individual incentives for participation and two-phase survey designs that alter the method of contact. Analyzing data from the University of Michigan's 2015 campus climate survey we demonstrate that a two-phase design introducing telephone and face-to-face reminders to complete the survey can produce stronger change in response rates, characteristics of those who respond, and statistical estimates than higher incentive levels. Cost comparison also reveals use of trained interviewers to contact students can be more efficient than higher incentive levels.

Keywords: Climate surveys, survey nonresponse, sexual misconduct

Campus Climate Surveys of Sexual Misconduct: Limiting the Risk of Nonresponse Bias

National attention to the high prevalence of sexual assault in the United States and the federal government's investigation of sexual assaults on university campuses has stimulated widespread discussion about the collection of data about sexual assault and misconduct from students. Government agencies are considering requirements for institutions of higher education to collect data on student sexual assaults (White House Council on Women and Girls 2014). Because experience of sexual misconduct is believed to be widely underreported (National Research Council 2014), both the research community and administrators of higher education are concerned about representing the full breadth of sexual misconduct experiences on campus. University campus climate surveys on many topics already use some standard methods for improving participation in campus surveys – encouragement from authoritative sources, prenotification letters, lottery style incentives, and web surveys optimized for multiple devices. Individualized incentives can improve participation rates, but they are also expensive, creating a high priority on data regarding the optimal level of incentive. In this paper we examine the impact of two key design features on response rates, characteristics of those who respond, and survey estimates. The design features are incentive amount and a sequential deployment of multiple modes of recruitment to a web-based survey.

Randomization of individual incentives provides the strongest possible assessment of the data quality consequences of higher incentive amounts. In the campus climate survey we describe here, content was limited to less than fifteen minutes of questions to reduce the burden on student respondents, and students were randomized to receive either \$15 or \$30 as tokens of appreciation for completing the survey. We examine response rate differences across these two

incentive levels. We assess differences in the composition of students responding to the two different incentive levels, as well as measurement differences in reported experiences of sexual misconduct. Together these analyses provide a comprehensive picture of the representation and substantive consequences of using higher individualized incentives in studies of campus climate surveys related to sexual misconduct.

We also assess the use of sequential mixed modes of recruitment, combined with two-phase sampling to control costs (Hansen and Hurwitz 1946). Our survey design uses web-based data collection in the first phase following normal best practices and then adds interviewer-assisted (telephone and face-to-face) recruitment to web-based interviewing in the second phase to increase participation in the survey. We examine response rate differences across these two phases, assess differences in the composition of students responding to the two different phases, and assess measurement differences in reported experiences of sexual misconduct by phase. We also compare the costs of adding the second phase design to the costs of increasing the individual incentives. Together, our results provide both the research community and administrators responsible for these important decisions clear evidence of the consequences of investing these additional resources in campus climate surveys.

Response Rates

Sexual assault is believed to be chronically underreported to authorities, so that police or other official incident reports substantially underestimate true prevalence. Confidential surveys are an important tool to improve our understanding of the prevalence of sexual assault and related issues. However nonparticipation (survey nonresponse) could bias our understanding of the true extent of sexual assault. Therefore, in order to understand the full range of student

experience with sexual misconduct, the survey we describe here also prioritizes equally high response rates across students of all types. Because we do not have data for those who do not respond to the survey, we evaluate differences between responders and nonresponders with respect to sexual assault by comparing responders and nonresponders with respect to the characteristics associated with these experiences that are available on the full sample (e.g., gender, race, ethnicity). Additionally, we examine changes in estimates due to different experimental treatments or phases of design.

Limiting the risk of nonresponse bias is achieved by offering protocols that are effective at recruiting students covering the full spectrum of experiences with sexual assault. For some students, the topic may be salient. For other students, this is not the case. For this latter group, an incentive may be necessary to motivate participation. Some students may be willing to participate when invited by email. Other students may need the extra explanation or motivation that contact with an interviewer can provide.

Nonresponse bias results when those who have not participated in the study have opinions or experiences that are systematically different from those who do participate. If there is no difference, then nonresponse does not introduce bias (although it still reduces the effective sample size). For example, if students for whom the topic is salient also have different experiences relative to campus climate, then a survey that does not offer an incentive may produce different results. We aim to shape the response process to maximize the probability that all types of students will participate. Using all information available, our survey design attempts to generate balanced response rates by year in school, residence on/off campus, gender, minority status and other characteristics of the target student population. Recent simulation studies using real survey data (Schouten, Cobben, Lundquist and Wagner 2016) and empirical gold standard

studies (Lundquist and Sarndal 2013) have found that this type of balancing leads to reduction in biases of nonresponse-adjusted estimates.

Some surveys of college students invite all students to participate (Cantor et al. 2015). Some of these limit participation to a single opportunity, while others issue an open invitation that allows the same students to participate in the survey multiple times. By contrast, the survey we report here invites participation from individual students who have been randomly sampled to represent the full campus population. Sampled students are only allowed to complete a survey one time. In open-invitation surveys it is not possible to assess nonresponse; in surveys of a representative sample of individual students it is. Further, surveys of individual college students have suffered from declining response rates (Jans and Roman 2007), with recent large national multi-institutional studies obtaining response rates around 30% (Sarraf and Cole 2014; Dugan, Turman and Torrez 2015).

The standard survey implementation for many web-based college student surveys involves communications distributed only through email, several reminder emails, sometimes involves an overall sweepstakes incentive, and often some local publicity around the study. A driving factor in these designs is cost – with many multi-institutional college student studies costing participating schools well under \$10,000 to conduct. Evidence is building to guide survey researchers in approaches to improve overall quality – and much of it is not a surprise. Better questionnaires (content and presentation) and improved delivery methods (contact modes, invitation design, use of prenotifications and reminders, incentives) are emerging as areas of focus (Couper 2008; Fan and Yan 2010; Tourangeau, Conrad and Couper 2013). Whether more costly methods will yield improved estimates is an open question for surveys of this topic.

Survey Approach

We describe an approach designed to study sensitive sexual misconduct-related attitudes and experiences among a representative sample of students at the University of Michigan. Given the large student population at the University of Michigan, this study used a sample survey approach rather than a census of all students. A randomly selected sample, generated using the University Registrar list of enrolled students as the sample frame, allowed us to make scientifically based inferences to the population as a whole. Defining the population temporally was a key step in the process of selecting a sample. The student population can change each day as small numbers of students may join or leave on any day. This change increases between semesters. Therefore, for sampling purposes, the student population of the University was defined as the population stood on January 6th, 2015, which was the first day of the winter term. Further, at that time, key characteristics of the student population were recorded. These population totals were later used to create adjustment weights for the respondents after the data collection. The sample was selected from two strata, graduate and undergraduate students, in order to ensure the proportionate representation of both student types. The same sampling rate was used in each stratum, producing a sample of 3,000 students. This sample included 1,005 (33.5%) graduate and professional students and 1,995 (66.5%) undergraduate students.

The approach prioritized as broadly a representative group of students as possible. This began by simultaneously employing known best practices – limiting the total length of the survey to average less than 15 minutes to minimize the burden on each student; considering the academic calendar when creating the data collection schedule; mailing a hard-copy invitation

letter (prenotification of the email invitation) which included survey login instructions¹, followed by an invitation email and up to four reminder emails sent to nonrespondents (Bandilla, Couper and Kaczmirek 2014); and offering a sweepstakes-style incentive (a 1 in 300 opportunity to win a \$100 American Express gift card) to all students who were invited to participate. To this we added a substantial individual cash token of appreciation (\$15 or \$30), conditional on completing the survey. In general, individual incentives are motivated by the same general principle of maximizing individual incentive-to-burden ratio to maximize individual participation (Groves and Couper 1998; Ryu, Couper and Marans 2006; Singer and Couper 2008). However, for any specific topic or task it is difficult to know the level of incentive that will maximize participation in the survey. Because of this unknown, we randomly assigned selected students to either a \$15 individual incentive (2/3 of the sample) or a \$30 individual incentive (1/3 of the sample).

Finally, the field work for this survey was designed to follow a two-phase sampling design approach (Hansen and Hurwitz 1946; Groves and Heeringa 2006), with web-based data collection in the first phase and interviewer-assisted web-based interviewing in the second phase. Due to the expected high costs of telephone and face-to-face contacts employed, Phase 2 of the survey chose a random sample of the nonrespondents who remained at the close of Phase 1. Trained survey interviewers attempted to contact nonrespondents and encourage them to participate in the survey. To avoid potential measurement bias from interviewer administration (e.g., Chapter 5 in Groves et al. 2004; Kreuter, Presser and Tourangeau 2008; Tourangeau and Yan 2007), interviewers did not administer the questionnaire. Instead, they encouraged sampled students to complete the web survey. Because the second phase involved telephone and face-to-face contact, sampling for this phase was stratified by on-campus vs. off-campus residential

¹ A small subset of students were identified to have invalid mailing addresses on file, as such, they were sent their prenotification letter via email. Because each enrolled student is assigned a unique email address upon enrollment, there are no invalid email addresses.

address, and whether or not a telephone number was available. Very few on-campus cases did not have a telephone number, producing three strata: 1) off-campus, no telephone number available, 2) off-campus, telephone number available, and 3) on-campus. The sample rates were 0.333, 0.6, and 0.6 respectively. These sampling rates were selected to minimize costs because the face-to-face contacts (the only option for the first stratum) were more expensive. The inverse of these selection rates was used as a selection weight.

Trained interviewers contacted nonrespondents by phone to encourage their participation and they sent a follow-up email with login instructions when potential respondents requested. Trained interviewers also visited nonrespondents' places of residence with tablet computers – students could use these devices to complete the web survey during the visit. For students living in university housing, the study team delivered reminder letters to housing staff in sealed envelopes who delivered these reminders to nonrespondents' mailboxes. These letters provided interviewer contact information for any potential respondents who preferred interviewer assistance.

Response Rate Outcomes

By systematically applying the strategies described above, this survey produced a relatively high overall response rate (67%²), meaning that the majority of those invited actually answered the questions asked. The response rate did vary across sub-groups within the population invited (see Table 1). Of those living on-campus, 75% responded and of those living

² This response rate conforms to the American Association for Public Opinion Research [AAPOR] Response Rate 2 (weighted). This rate includes partial interviews (respondents had to answer the core questions about sexual assault to be considered partial interviews) and interviews in the numerator. See the “AAPOR Standard Definitions” for a complete definition of how this response rate is calculated (AAPOR 2016).

Table 1: Response Rate by Subgroup. Percent and (Standard Error).		
	Response Rate	
Sex		
Female	71.0% (1.7)	off-campus, 64% responded. Of the women
Male	62.1% (1.7)	invited to participate, 71% responded and of the
Residence		
On-Campus	75.0% (1.9)	men invited to participate, 62% responded. Of
Off-Campus	64.2% (1.4)	the undergraduate students invited to
Student Status		
Undergraduate	61.8% (1.2)	participate, 62% responded and of the graduate
Graduate/Professional	76.6% (2.4)	and professional students invited to participate,
		77% responded.

The high overall response rate is a product of combining each of the steps described above, but two of those elements are particularly expensive – the individual incentives and the work of trained interviewers. In Table 2, we document the response rate differences by individual incentive level and phase.

Table 2: Response Rate by Incentive Level and Phase. Percent and (Standard Error).			
	Phase 1	Phase 2 ^a	Total ^b
Individual Incentive			
\$15	53.4% (1.12)	29.1% (2.11)	66.5% (1.45)
\$30	55.1% (1.57)	29.3% (3.07)	67.8% (2.05)
Overall	54.0% (0.91)	29.2% (1.74)	67.0% (1.18)
N	1,676	215	1,891

^a Among those who did not respond in Phase 1 and were selected as eligible for Phase 2.

^b This response rate conforms to the AAPOR Response Rate 2 (weighted). This rate includes partial interviews and interviews in the numerator. See the “AAPOR Standard Definitions” for a complete definition of how this response rate is calculated (AAPOR 2016).

Although the final response rate is slightly higher in the group offered a \$30 incentive than in the group offered \$15, this difference was not statistically significant. By contrast, the overall response rate after Phase 2 was significantly higher than the response rate after Phase 1 (compare rates in column 1 to those in column 3 of Table 2). The first phase of data collection

achieved a response rate of 54% overall, yielding 1,676 completed interviews. Among those who did not respond in Phase 1 but were followed up in Phase 2, 29% responded. This second phase added 215 students to the study and raised the weighted response rate by 13 percentage points. The investment in trained interviewer effort in a two-phase design appears to be substantially more effective at increasing response rates relative to the increased incentive.

Also important, the costs of these two options for increasing response rates are similar. The \$30 incentives cost more than the \$15 incentive. Note that these incentives were paid after the survey was completed, so incentives were not spent on those who did not participate. Of the 3,000 students who were selected for the survey 1,891 completed it – had they all been paid a \$30 incentive, the survey would have cost about \$30,000 more than offering students a \$15 incentive. By contrast, it cost about \$15,000 to provide the 350-375 hours of interviewer effort to conduct the Phase 2 operation as implemented in this study³. So, a student population survey that uses a \$15 incentive and professional interviewer effort in a two-phase responsive survey design is expected to cost less and yield a higher response rate than the same survey using a \$30 incentive and no interviewer follow-up.

Because the second phase design was not conducted as an experiment, it is impossible to know precisely what the response rate would have been had the design been more limited. We can say, however, that if we had stopped the study after approximately 3 weeks, and had not employed interviewers for the follow-up effort, the study would have produced a response rate approximately 15 percentage points lower (52% rather than 67%).

³ Precise calculation of these relative costs is greatly complicated by the fact that our study combined both design elements – overall, however, the relative costs demonstrate that the expense of interviewer effort is not prohibitive.

Differences between phase 1 and phase 2 respondents

The addition of a second phase effort in this study not only increased response rates, it also changed the composition of students participating in the study. There are important reasons to expect this outcome.

The specific change between Phase 1 and Phase 2 of this survey – use of telephone calls and face-to-face visits by trained interviewers – is designed to improve contact with Phase 2 respondents, address their concerns about participating in the study, and encourage them to participate. Thus we would expect the Phase 2 protocol to disproportionately add respondents who either did not read the email invitations or who were otherwise reluctant to participate. The Phase 2 protocol was not designed to increase the incentive to participate, but contact with an interviewer communicates the importance and legitimacy of the study and may have answered respondent question or concerns, reducing reluctance. Because the Phase 2 protocol changed the form of contact to phone calls and personal visits from professional interviewers, this second phase of our responsive survey design is most likely to add respondents from subgroups in which the new form of contact increases their awareness about the survey or addressed their reluctance to participate (Axinn, Link and Groves 2011). So, Phase 2 should yield higher response among subgroups least responsive to email contact.

Among those who are otherwise reluctant to respond, the higher incentive should increase response. In general, we know that those who find the topic of a survey of personal interest are more likely to participate in a survey (Groves and Couper 1998; Groves et al. 2006; Groves, Presser and Dipko 2004). This survey was introduced as a survey on the topic of campus climate regarding sexual misconduct. Those selected who are either not interested in the topic of sexual misconduct or not sexually active may be those most likely to respond positively to a higher incentive.

Here we compare key demographic characteristics of the target population with the sample who responded during Phase 1 to those who responded during Phase 2. We also compare population characteristics across those who received the \$15 incentive or the \$30 incentive to participate. Our results are presented in Table 3.

	Incentive Level		Phase Difference		Combined Response	Population Totals
	\$15	\$30	Phase 1	Phase 2		
Sex (compared to female)						
Male	47.4% (1.5)	45.7% (2.1)	44.4% (1.2)	56.8% (3.4)***	46.8% (1.2)	51.8%
Race (compared to white, non-Hispanic)						
African American	5.2% (0.7)	5.4% (1.0)	4.3% (0.5)	9.3% (2.0)**	5.3% (0.6)	5.4%
Hispanic/Latino	5.5% (0.7)	4.7% (0.9)	5.1% (0.5)	5.9% (1.6)	5.2% (0.5)	5.0%
Asian	24.0% (1.3)	26.5% (1.8)	24.2% (1.1)	27.6% (3.2)	24.8% (1.1)	20.4%
Native American	1.02% (0.3)	0.4% (0.3)	0.9% (0.2)	0.4% (0.4)	0.8% (0.2)	1.1%
Mixed Race	6.4% (0.7)	4.6% (1.0)	6.1% (0.6)	4.9% (1.6)	5.8% (0.6)	3.0%
Student Status (compared to undergraduate)						
Graduate or Professional	37.6% (1.5)	40.2% (2.0)	35.4% (1.2)	51.1% (3.4)***	38.5% (1.2)	33.3%
Sexual Identity (compared to gay, lesbian, bisexual or other)						
Heterosexual	92.4% (0.8)	91.2% (1.1)	91.2% (0.7)	95.2% (1.4)*	92.0% (0.6)	N/A
Sexual Activity (compared to sexually active in past 12 months)						
Not sexually active in past 12 months	20.2% (1.2)	23.9% (1.8)+	21.3% (1.0)	22.1% (2.9)	21.4% (1.0)	N/A
Residence (compared living with family, fraternity/sorority, and on campus housing)						
Off Campus Housing	61.3% (1.4)	62.5% (2.0)	62.1% (1.2)	59.8% (3.3)	61.7% (1.2)	N/A
Memberships^a						
Fraternity/Sorority	17.3% (1.1)	15.6% (1.5)	17.2% (0.9)	15.0% (2.4)	16.7% (0.9)	13.9%
Varsity Sports Team	2.4% (0.4)	1.8% (0.5)	2.5% (0.4)	0.8% (0.6)	2.2% (0.3)	N/A
Club Sports Team	5.0% (0.6)	6.0% (0.9)	5.7% (0.6)	3.8% (1.3)	5.3% (0.5)	N/A
Marching Band	2.0% (0.4)	1.0% (0.4)	1.8% (0.3)	1.2% (0.9)	1.7% (0.3)	N/A
ROTC	0.6% (0.2)	0.9% (0.4)	0.7% (0.2)	0.4% (0.4)	0.7% (0.2)	N/A
None of the above	72.9% (1.3)	74.6% (1.8)	72.3% (1.1)	78.3% (2.8)+	73.5% (1.1)	N/A

+ p < .10 * p < .05 ** p < .01 *** p < .001. One-tailed tests.

^a Each respondent may choose all that apply.

The first two columns of Table 3 focus on distributions of selected respondent characteristics for the two incentive conditions (including those interviewed during Phase 1 and 2 under each incentive treatment). For example, male students are 47% of respondents under the

\$15 treatment and 46% under the \$30 treatment. The third and fourth columns show the distribution of these same characteristics for respondents to Phase 1 and Phase 2. Males constituted 44% of respondents during Phase 1 and 57% during Phase 2. The “Combined Response” column shows the distribution of the cumulative weighted responses for Phase 1 and 2 and the combined incentive groups. The last column shows the population proportions (available only for characteristics recorded by the University Registrar). In the combined set of surveys, 47% were male while 52% of the student population is male. The results demonstrate that several subgroups of the student population responded to the Phase 2 protocol at higher rates than others. Phase 2 increased the proportion of males and African Americans among the responders (statistically significant differences across phases). Both groups had responded at rates lower than the population values during Phase 1 (compare population totals in the final column with Phase 1 column). Phase 2 also increased the proportion of graduate and professional students among the responders, which increased their overrepresentation relative to undergraduate students. The “Combined” column of results is generally closer to the population total column than the “Phase 1” column. This means that even though many in these groups did respond to the initial email protocol, the representation of each of these groups was significantly changed by switching to telephone and face-to-face contact from professional interviewers.

We found few statistically significant differences by incentive level, but one significant difference deserves attention. The higher incentive recruited relatively more persons who were not sexually active in the past 12 months ($p < 0.10$). Because this survey was introduced as related to the topic of sexual misconduct, the theory of survey response predicts that students who are not sexually active will be more reluctant to participate because the topic is less salient to them (Groves, Presser and Dipko 2004; Groves and Couper 1998). It is no surprise to find that the higher incentive level increases participation among those students who have not had sexual experience within the prior 12 months.

The final set of subgroups in Table 3 reflect memberships in various student organizations – fraternities and sororities, varsity and club sports teams, the marching band, and ROTC. The majority of University of Michigan students are not members of any of these special groups, and those students who were not members of any of these special groups responded at a significantly higher rate to the Phase 2 protocol. Members of each of these groups have an enhanced engagement with the University which may increase their attention to email requests from University officials. The telephone and personal contact significantly improved participation among those students who do not have these additional relationships to the University.

Measures of Sexual Misconduct

The University of Michigan survey was specifically designed to provide careful and comprehensive measurement of three types of sexual misconduct:

- Sexual assault involving touching, kissing, fondling and/or other acts, but not penetration
- Sexual assault involving penetration (oral, vaginal or anal penetration)
- Sexual harassment

Specific words used to define each of these types of sexual misconduct in the survey are provided in the Appendix. In our last set of analyses we assess the impact of both the incentive level and the two-phase survey design on the key summary measures of each of these types of sexual misconduct. The differential incentive created no statistically significant difference in the overall summary measures of these three types of sexual misconduct. The two-phase design did produce significant differences across phases, but the small size of Phase 2 in this study prevented those differences from generating significant changes in the final statistics. These differences and final statistics are presented in Table 4.

Table 4: Differences in Key Statistics by Phase. Percent and Standard Error). (Bold and * indicate a statistically significant decrease in percentage.)

	Phase 1	Phase 2	Phase 1 & 2
Experienced any unwanted touching, kissing, or fondling	10.4% (0.8)	9.6% (2.3)*	10.3% (0.8)
Experienced any unwanted penetration	5.6% (0.6)	4.4% (1.4)**	5.4% (0.6)
Experienced any unwanted sexual harassment	23.4% (1.2)	16.9% (2.9)**	22.4% (1.1)

* $p < .05$ ** $p < .01$. One-tailed tests.

The results in Table 4 show that those who responded in Phase 2 of the survey have significantly lower rates of reporting all three forms of sexual misconduct. Rates of experiencing unwanted touching, kissing and fondling are themselves substantially higher than rates of experiencing unwanted sexual penetration. However, the difference in response between phases is larger for unwanted penetration, with nearly a 40% reduction in the rate in Phase 2 compared to Phase 1. The additional interviewer effort to add these students to the study brought in students who had significantly lower rates of experiencing all forms of sexual assault, but particularly lower rates of unwanted penetration. However, the small number of cases targeted for Phase 2 resulted in changes to final statistics on assault that were not statistically significant.

We find a similar pattern for sexual harassment. The reported experience of unwanted sexual harassment is much more frequent than the experience of assault and the difference between phases is also larger. Those who responded in Phase 2 were characterized by 6.5 percentage point (approximately a 28% less) lower rate of experiencing sexual harassment than those who responded in Phase 1 and this difference is also statistically significant. The two-phase survey design brought different subgroups of respondents into the survey (Table 3) and the higher representation of these groups produced reports of lower levels of reported experiences with sexual misconduct (Table 4).

Conclusion

The campus climate survey of sexual misconduct at the University of Michigan was designed and conducted to inform university policies, design new university programs to reduce sexual misconduct on campus, and test the success of those programs with repeated measures across time. Here we show that the two-phase survey design with different recruitment protocols offered at each phase changed the representation of key subgroups in the survey as well as the reporting of sexual misconduct. These changes produce important differences in the substantive conclusions reached from statistics estimated on these survey data.

In this study we found that obtaining higher response rates in campus student surveys of sensitive topics is possible. The topic of this study was salient on campus, and the high response rate may have been produced, in part, by the context of general media publicity that existed at the time. Nevertheless, comparison of a random assignment experiment on incentive level and the two-phase design, which used interviewer-assisted recruitment of a random subsample of nonresponding students, reveals that the expense of the second phase generated a bigger improvement in the response rate than the higher incentive, and the costs of interviewer effort can be affordable. The documentation we provide here of subgroup differences by phase and incentive levels allow those who must choose a survey design to understand the likely consequences of their choices.

In the months ahead many university leaders across the United States and around the world will be faced with difficult decisions regarding the allocation of scarce resources to the conduct of campus-specific data collections about sexual misconduct. The results presented here can be used to guide those difficult decisions. However, even as the specific topics of campus student surveys evolve across time and setting, institutions of higher education have substantial

ongoing demand for data collection among their students. The results demonstrate the relative consequences of two of the most effective but expensive tools for managing nonresponse – incentives and interviewer-assisted recruitment. These results provide an important resource for the design and implementation of all types of campus climate surveys going forward. Finally, surveys of sensitive topics such as sexual misconduct among institution-specific populations are not at all limited to universities. They are also needed and conducted among academic staff and faculty, government employees, military service members, and corporate staff. The relative comparison of key design features provided here can be used to assist in guiding design decisions for all such institution specific climate survey data collections.

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Appendix: Specific Wording Measuring Sexual Assault and Harassment⁴

Sexual assault involving touching, kissing, fondling and/or other acts, but not penetration	Sexual assault involving penetration (oral, vaginal or anal penetration)	Sexual harassment
<p>In the past 12 months, has anyone fondled, kissed, or rubbed up against the private areas of your body (lips, breast/chest, crotch or butt) or removed some of your clothes without your consent (<i>but did not attempt sexual penetration</i>) by...</p> <p>...continually verbally pressuring you after you said you didn't want to?</p> <p>...taking advantage of you when you were under the influence of drugs or too drunk to stop what was happening?</p> <p>...taking advantage of you when you were unconscious or asleep or physically incapacitated and you could not stop what was happening?</p> <p>...threatening to physically harm you or someone close to you?</p> <p>...using force, for example holding you down with their body weight, pinning your arms, or having a weapon?</p>	<p>In the past 12 months, has a man put his penis into your vagina, or has anyone inserted fingers or objects into your vagina without your consent by...</p> <p>...continually verbally pressuring you after you said you didn't want to?</p> <p>...taking advantage of you when you were under the influence of drugs or too drunk to stop what was happening?</p> <p>...taking advantage of you when you were unconscious or asleep or physically incapacitated and you could not stop what was happening?</p> <p>...threatening to physically harm you or someone close to you?</p> <p>...using force, for example holding you down with their body weight, pinning your arms, or having a weapon?</p>	<p>In the past 12 months, has anyone...</p> <p>...stared at you in a sexual way or looked at the sexual parts of your body after you asked them to stop?</p> <p>...made teasing comments of a sexual nature about your body or appearance after you asked them to stop?</p> <p>...sent you sexual or obscene materials such as pictures, jokes, or stores in the mail, by text, or over the Internet, after you had asked them to stop? Do not include mass mailings or spam</p> <p>...showed you pornographic pictures when you had not agreed to look at them?</p> <p>...made sexual or obscene phone calls to you when you had not agreed to talk with them?</p> <p>...watched you while you were undressing, nude, or having sex, without your consent?</p> <p>...taken photos or videotapes of you when you were undressing, nude, or having sex, without your consent?</p> <p>...showed you the private areas of their body (ex. buttocks, penis, or breasts) without your consent?</p> <p>...made sexual motions to you, such as grabbing their crotch, pretending to masturbate, or imitating oral sex without your consent?</p> <p>...masturbated in front of you without your consent?</p>

⁴ For a complete description of the item measures in this survey and the results please see the University's report at <https://publicaffairs.vpcomm.umich.edu/wp-content/uploads/sites/19/2015/04/Complete-survey-results.pdf>

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