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Does the Design and Personalization of Mailed Invitations Influence Online Survey Response Rates?

Brock Ternes
University of North Carolina Wilmington, ternesb@uncw.edu

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Cover Page Footnote

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INTRODUCTION

One of *JoSE'*s aims is to showcase "feasible advancements in the best practices standards" (Dunbar, 2020, p. 6). To understand effectiveness in data collection, this research compares applied sampling practices to examine how to connect with individuals in small towns and rural areas via online surveys. Despite survey researchers' interest in internet surveys, sampling rural populations via online surveys remains difficult due to some respondents' lack of internet access or computer literacy (Smyth et al., 2010). Telephone surveys have lost effectiveness. With more U.S. households no longer using landlines, random-digit dial (RDD) telephone surveys are increasingly problematic (Blumberg & Luke, 2007; 2009). Unfortunately, there is no complete list of email addresses that allows adequate probability sampling of internet users (Schonlau & Couper, 2017). Web connectivity has improved at the national level via widespread home access, Wi-Fi hotspots, and smartphones. Nearly three-quarters of rural Americans now have a home internet connection (Vogels, 2021)—up from 38 percent in 2008 (Horrigan, 2008).

Online sampling of rural communities faces difficulties that need to be addressed in order to understand small towns that are generally underrepresented in national-level surveys, which typically focus on populations of at least 20,000 households (Copeland, 2008; US Census Bureau, 2009). Coon and colleagues (2020) explore survey nonresponse in rural areas and found that response rates fell from 50 percent in 2007 to 32.7 percent in 2017—indicative of the larger trend of dropping response rates dunning survey research. Lichter and Ziliak (2017, p. 6) bewail, "rural America is too often ignored in the social sciences." Working at the intersection of rural studies and survey research, scholars of difficult-to-reach rural populations are hearing dismal statements on the future of surveys: "…many suggest the glory days of surveys are behind us…" (Couper, 2013, p. 145). Others somberly report, "household surveys [are] in crisis" (Meyer, Mok & Sullivan, 2015).

If databases of email addresses and phone numbers are not viable options for researchers, is using a mailed postcard to invite respondents to complete an online questionnaire workable when only mailing addresses are available? Mailing addresses appear to be more easily accessible to survey researchers, particularly the addressed-based sample frame Delivery Sequence File (DSF) run by the US Postal Service, which lists all household addresses that receive mail delivery from the post office (Iannacchione, Staab & Redden, 2003). DSF information is well-suited for surveyors using mail questionnaires, and it opens a sampling possibility for internet surveyors who can draw samples of households by mailing requests to complete online surveys. Address-based sampling (ABS) frames of the general population are commercially available, which has

empowered recent growth in mail surveys (Couper, 2017). Despite these options, survey research faces unprecedented declines in responsiveness.

In their study of rural residents in Idaho and Washington, Smyth and colleagues (2010) found that with a $5 incentive, pre-notice letter, and two reminder postcards, invitations including a URL and web survey instructions received a 41 percent response rate for completes coming via the web. Nevertheless, 14 percent of their respondents still elected to complete the printed survey by mail as opposed to the online version. Their study also uncovered that when given a choice, rural respondents preferred to mailed surveys over online surveys. In addition to being younger, more educated, and wealthier, web respondents tend to own cellphones and be heavy computer users. These demographics should worry online survey researchers interested in rural communities, as rural America tends to be older, lower-income, less educated, and has relatively low rates of cellphone ownership, computer use, and internet access (Smyth et al., 2010).

Even though response rates have been studied for decades by survey methodologists, the effects of personalization are not entirely clear. Overall, researchers have noticed a small increase in surveys and cover letters with personalized qualities (Carpenter, 1974; Dignan et al., 1994; Dillman, 2000; Edwards et al., 2002' Kahle & Sales, 1978; Rodgers & Worthen, 1995), yet personalization manipulations have also been commonly found to have no statistically significant effects on response rates (Jobber, 1986; McCoy & Hargie, 2007; Worthen & Vulcarce, 1985). Nonpersonalized questionnaires have also received higher response rates than personalized in previous work, suggesting a negative effect of personalization (Houston & Jefferson, 1975). Furthermore, Jobber (1986) suggested that personalization might be counterproductive when sensitive information is requested.

By evaluating the potential for conducting online surveys via mailed requests, this paper asks: (1) Can rural Kansans be convinced by a postcard to complete an online questionnaire? (2) If a researcher has mailing addresses of a target population, but does not have the budget to print out surveys and pay for return postage, can push-to-web designs be effective without cash incentives? (3) What is the most convincing postcard design to elicit a response to an internet survey? According to the AAPOR Task Force, the most common mode for recruiting respondents is mail (Olson et al., 2021), and this project uses mailed invitations for a web survey. Internet surveys are generally low cost compared to printed surveys (Couper & Miller, 2008) and this project explores if mailed postcards could be a practicable push-to-web tool. Or, in Schonlau and Couper's (2017) words, to "recruit off-line [and] conduct online" (p. 280). Online data collection without a record of email addresses requires additional planning and

strategies to reduce nonresponse. To assess this, a variety of postcards were sent to a sample population of rural Kansans.

DATA COLLECTION

This project's dataset was based on responses to a 2015 online survey of Kansas well owners, a mostly rural subpopulation. The survey evaluated the participants' behaviors and attitudes regarding water conservation and responses to drought, and it included 40 to 50 questions about water conservation and other water-related issues towards the tail end of a historic statewide drought. I obtained the well owners' home addresses from the Kansas Geological Survey (KGS) database of Water Well Completion Forms (WWC5s). The KGS database of WWC5s has records of roughly 280,000 wells in the state, providing access to several well owners' home addresses. Since 1974, Kansas well drilling companies have submitted a WWC5 record when a well is drilled, reconstructed, or plugged. After compiling an extensive list of addresses, over 7,000 notification postcards were mailed to invite Kansas well owners to participate in the online survey.

Reaching these survey respondents required obtaining their mailing address (listed on their WWC5) and inviting them to participate in an online survey via notification postcards. The KGS WWC5 database provides well users' names and mailing addresses, but does not provide their email addresses; therefore, surveying this population with online questionnaires requires added planning and investment. Thankfully, mailing postcards is a tested method to affordably solicit volunteers for online questionnaires (Olson et al., 2021; Smyth et al., 2010). The KGS database of well completion forms allowed access to a range of rural respondents who use wells: gardeners, ranchers, farmers, and domestic well owners.

Research assistants collected 8,132 well owners' addresses from the KGS WWC5 database as part of their course credit in an individual undergraduate research course, a process that spanned three semesters and required seven research assistants. They screened the KGS database for WWC5s that were submitted between the years 2000-2015 in order to access the most up-to-date addresses. The postcards were delivered in the spring of 2015. After scanning the addresses for deliverability at the post office, 7,021 were sent and the undeliverable addresses were removed from the address pool.

Data collection entailed two waves of notifications to amass responses; by mailing two waves of notification postcards, I gleaned valuable lessons about notification design that can slightly influence response rates. Furthermore, because thousands of postcards were delivered and the instrument was created using planned missing data designs, I had a unique opportunity to test how small aesthetic variations alter response rates. For instance, whether or not the mailing

label included “or current resident”, if the notification had a photocopied signature in blue or red ink, and the length of the deadline to participate in the study were adjusted to examine their connection to a change in responsiveness.

For the purposes of examining how minor differences in survey design influence response rates, these notification postcards had different color schemes, personalized addresses, and survey completion deadlines. Overall, the research design examines three conditions: the photocopied signature was displayed either in blue or red ink, some postcards contained the phrase “or current resident” in the receiving address information, and marginally different deadlines on the postcards for the request to complete the online survey were used. Understanding how these variations influence response rates is an interesting methodological contribution that sheds light on how to study nonresponse to online surveys.

SURVEY DESIGN

Implementing innovative, modern surveying techniques can improve how researchers gather data from their respondents, and this project has been influenced by a number of advances in survey design. Survey methodologists have unlocked a fascinating way to think about data collection, one benefit of using contemporary surveying practices is the implementation of Planned Missing Data Designs (PMDD). PMDD is a form of data collection which makes it possible for researchers to provide random portions of their questionnaire to respondents, instead of their entire bank of survey questions, which keeps the questionnaire shorter. For example, by randomly assigning each of the respondents three-quarters of the total survey questions, questionnaire length can be cut by 25 percent, thereby reducing respondent fatigue. Designing abbreviated surveys allows respondents to answer the shortened survey more clearly than they would a lengthier survey, as respondents who participate in shorter surveys are less likely to submit incorrect answers due to fatigue (Dillman, 2000). Therefore, randomly providing respondents truncated versions of the questionnaire keeps the responses more trustworthy than data generated by full-length questionnaires. If a survey is split into four parts, an *X* set, an *A* set, a *B* set, and a *C* set, researchers can randomly provide respondents with a survey form consisting of XAB, XAC, or XBC combinations (Table 1). This 3-form design was outlined by Graham, Hofer, and Mackinnon (1996), and the format has since seen innovative variations (Enders, 2010; Graham, 2012; Graham et al., 2006).

Such an approach enabled me to randomly provide respondents one of three versions of the survey, and an ancillary benefit of PMDD emerged while planning the postcard mailouts. Each online survey required its own specific URL, so it was necessary to print three different styles of notification postcards (one for each of the online surveys). I slightly tweaked the notifications’ designs

Table 1. Overview of Planned Missing Data Designs following the 3-Form Technique

	Item set			
Form	X	A	B	C
1	1	1	1	0
2	1	1	0	1
3	1	0	1	1

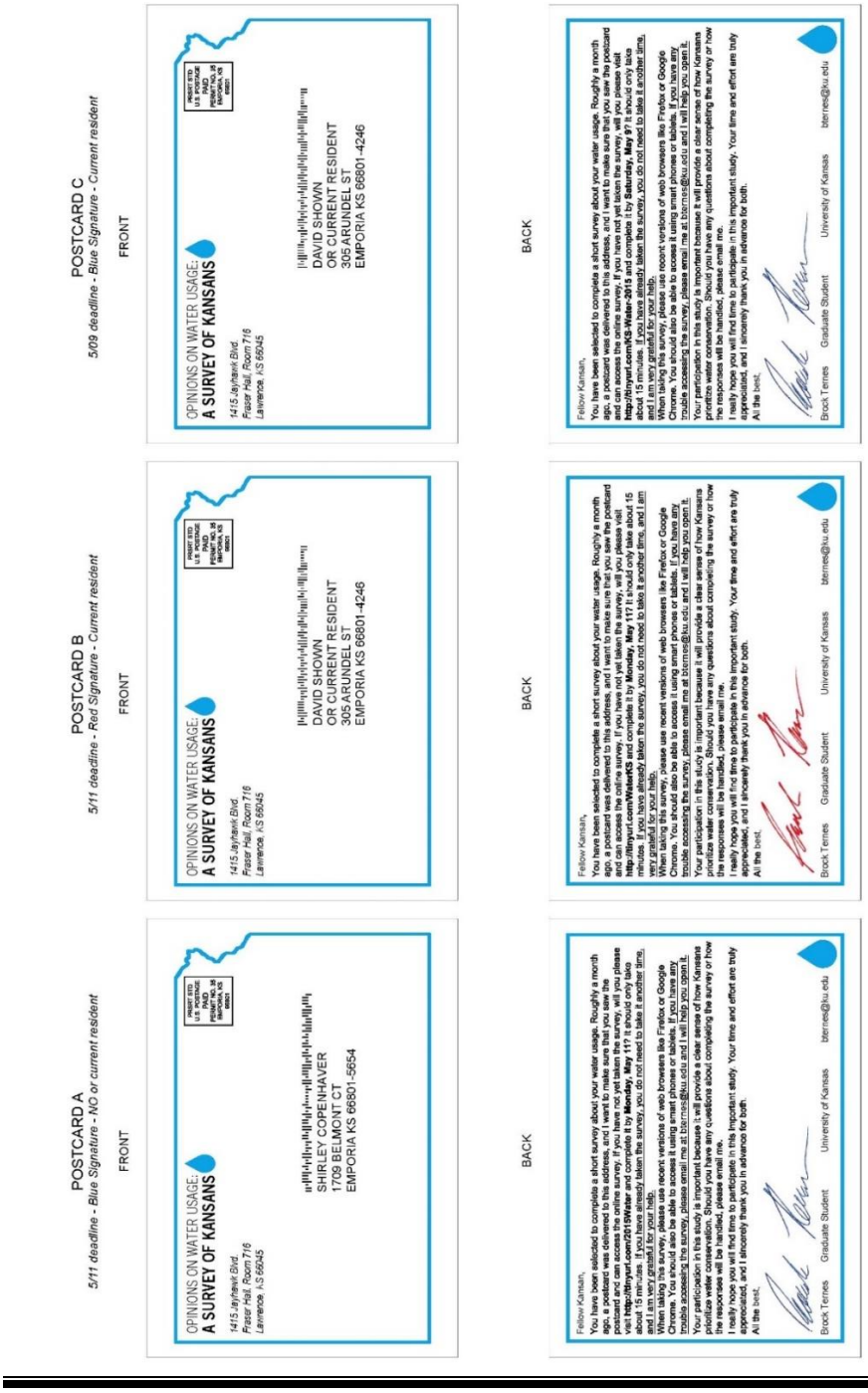
Note: 1 = questions asked; 0 = questions not asked. Letters A-C refer to different sets of items. Source: Graham et al. 2006:326.

to see if minor changes in deadlines would influence response rates. Using planned missing data designs affords researchers the opportunity to make modest adjustments to their surveys, which can in turn provide the researcher feedback as to which stylistic modifications yield the highest returns. To put another way, think of running a study using planned missing data not as running a single survey, but multiple surveys simultaneously. I used the 3-form design (Graham et al., 1996) in both waves of data collection; therefore, I designed, finalized, and launched six surveys. Taking advantage of the project's natural design provided an opportunity to conduct additional research on the design of mailed notifications. Applied learning entails "applying knowledge and skills gained from traditional classroom learning to hands-on and/or real-world settings" (SUNY, 2015a). Applying skills from two graduate seminars on statistics and survey methods (and their related readings; see Little, 2012; 2013a; 2013b), I examined three sampling approaches.

METHODS

Three stylistically different mailed invitations were developed. The description of the study, the write-up of the web survey instructions, and the placement of the survey's URL were consistently designed across the three postcards; however, each of the three styles contained minor alterations regarding the deadlines to complete the survey, the personalization of recipients' address, and the color of my signature. Figure 1 depicts the follow-up postcards, which were mailed about six weeks after the first invitations were sent, and it illustrates the extent to which the mailed invitations were formatted differently in terms of deadlines, the inclusion of the phrase "or current resident" in the mailing address, and the color of my photocopied signature. Additionally, I assigned web addresses to the survey that respondents could easily transfer from the postcard into their web browser (for instance, http://tinyurl.com/WaterKS).

Figure 1. Three Versions of the Mailed Invitations.



The first wave of postcards to the well owners located in the Kansas Geological Survey's database arrived in the middle of March 2015. Some of the notifications requested that the recipients complete the survey by Saturday, March 28; other postcards listed a deadline of Monday, March 30. At the very shortest, this window should have allowed recipients about 8 to 9 days to take the survey, and perhaps as many as 10 to 11 days. Another change to the postcards was producing my signature in blue and red ink, as the color of the signature might influence the perceived authenticity or personalization of the notification (King, Pealer & Bernard, 2001; McDermott & Sarvela, 1999). Finally, in the address line of the postcard, some notifications included a line that said "or current resident" beneath the respondent's name. Personalized addresses can influence rates of return on surveys, and testing these small variations' influence on a sample of well owners provides a lesson for reaching this population of primarily rural Kansans. During the second wave of delivering notifications, I removed any addresses of respondents who already completed the survey and changed the due dates so they left a similar window for completing the online questionnaire.

Designing two of the three survey forms' notifications with the phrase "or current resident" marginally lessened the personalization of the postcard. There is a slim chance that this approach might have helped my overall return. Many of the completion forms in the KGS database contained inaccurate information. Not only could have the well owners' addresses been incorrectly recorded, but their names could have also been erroneously written down or misspelled. If the resident listed on the WWC5 was not correct, the current resident may have taken the survey even if the postcard's target participant was not currently present.

Another tweak made to each of the three survey forms had to do with an option Qualtrics provides for its survey designers. Colleagues at Qualtrics encouraged the use of a "request response" option, which prevents respondents from "skipping through" the survey without answering questions. If a respondent did not answer a question, a request screen asked the participant to provide a response. The participant was allowed to proceed without answering and this function did not force them to answer any unanswered items on the screen, which allows this mechanism to remain suitable for human subjects testing. For the XAB and XAC forms, I requested responses for the first segments of the survey which focused on water conservation, and turned off the request response feature for some of the demographic questions. In the XBC form, I requested responses on as few items as possible—only the questions pertaining to well ownership, water supplies, and county of residence (which I needed to establish the respondent's location in the state). Overall, the request response function did not make any difference for demographic variables. For instance, forms XAB and XAC had the request response activated for the respondents' total household income, and that item was completed no more frequently than other demographic

questions that did not have a request response (e.g., marital status, religious identification, race, etc.). In form XBC, the question measuring income had the request response function deactivated, and again, that question was answered just as frequently as other demographic questions. Overall, each survey form was about 80 to 90 percent complete, whether the request response function was activated or not.

RESULTS

The returns from each of the postcards hovered around 3 percent, and the color of the postcard's signature seemed to have the most influence on response rates out of all the modifications tested on the notifications (see Tables 2 and 3). Notifications with blue signatures received slightly better responses than those with red signatures in the first wave, but those with red signatures were about even with the blue signatures on the second wave (performing better than the blue-signed notifications with the truncated deadline, but worse than the blue-signed notifications with the extended deadline and without "or current resident"). However, on average—and in the aggregate—postcards with red signatures performed worse than their blue counterparts. Maximizing a two-wave survey notification, according to my returns, suggests mailing an opening wave of

Table 2. Response Rates of Both Notification Postcard Waves (n = 444)

Survey Form	First Wave Response Rate (%)	Second Wave Response Rate (%)	Average Response Rate (%)	Overall Response Rate (%)
XAB	2.98 (75/2,513)	3.44 (83/2,416)	3.21 (158/4,929)	6.29 (158/2,513)
XAC	2.45 (55/2,244)	3.09 (68/2,199)	2.77 (123/4,443)	5.48 (123/2,244)
XBC	3.89 (88/2,264)	2.35 (51/2,166)	3.14 (139/4,430)	6.14 (139/2,264)
Total	3.19 (224/7,021)	2.88 (202[1]/6,781)	3.22 (444/13,802)	6.32 (444/7,021)

[1] In the final analysis, 24 respondents were added to the overall collection of surveys. Twelve respondents in the first wave had difficulty accessing the survey and were redirected to a functional survey link using the second wave's URL. Additionally, 12 respondents requested to take a paper copy of the survey and were given a printed XBC form. When they returned their paper copies to me, I put their answers in the second wave of responses. The total of the rows, therefore, is not reflected in the overall total.

Table 3. Returns Both Notification Postcard Waves (n = 444)

Survey Form	Signature Color	Included "or current resident"	Due Date	Response Rate
First Wave XAB	Blue	No	March 30, 2015	2.98
First Wave XAC	Red	Yes	March 30, 2015	2.45
First Wave XBC	Blue	Yes	March 28, 2015	3.89
Second Wave XAB	Blue	No	May 11, 2015	3.44
Second Wave XAC	Red	Yes	May 11, 2015	3.09[1]
Second Wave XBC	Blue	Yes	May 9, 2015	2.35[2]

[1] In the final analysis, I added 12 to this survey form, as a dozen respondents to the first wave had trouble accessing the survey and were redirected to a functional survey link using the second wave's URL.
[2] In the final analysis, I added 12 to this survey form because 12 respondents requested to take a paper copy of the survey and were given a printed XBC form. When their paper copies were returned to me, I put their answers in the second wave of responses.

notifications with blue signatures, a tight deadline, and inclusion of the phrase "or current resident" and a follow-up wave of postcards with blue signatures, a slightly extended deadline, and removing "or current resident" from the mailing label. I did not find evidence that the lack of "or current resident" was highly influential.

Based on these results, if a researcher can only afford (or has time for) one wave of mailed notifications, I recommend using a blue signature with a tight deadline and including the phrase "or current resident" after the respondent's name. This design had the highest return in the first wave, but the lowest response rate in the second wave. What accounts for this? Perhaps this most effective format attracted a "high" percentage of enthused and eligible respondents, and that pool of participants was starting to flatline in their responsiveness by the time the second postcard arrived. If a relatively high percentage of willing respondents react to the first notification, then many of the cooperative participants are no longer eligible to take the questionnaire after the second mailout because they had already taken the initiative to complete their questionnaire after the first opportunity.

Table 4. Correlations for Completed Surveys, Notifications with Blue Signatures, Personalized Mailing Address, and Extended Completion Deadlines (n = 7,021)

	Participation	Blue	Personalized	Extension
Participation	--	.01	.01	-.01
Blue		--	.51*	-.47*
Personalized			--	.52*
Extension				--

* $p < .05$

Let us now move beyond the descriptive statistics and assess whether the minuscule variances in response rates were significantly different. I ran a correlation in which returning the survey is the dependent variable (0 = did not participate; 1 = participate), and the manipulated postcard characteristics are separate independent variables (receiving a postcard with a red signature = 0; blue signature = 1; receiving a postcard with a less personalized address = 0; more personalized = 1; receiving a postcard with a shorter deadline to complete the survey = 0; an extended deadline = 1). Table 4 shows no significant correlations between returning a survey and the color of the signature, the personalized qualities of the address line, and the length of the suggested timeline to finish the online survey. There are no significant correlations between survey completion and the controlled designs of the postcards.

DISCUSSION AND LIMITATIONS

Personalization is the process of convincing a respondent they are receiving the researcher's individual attention (Dillman & Frey, 1974). I was unable to personalize the online surveys beyond including a well owner's name on their notification postcard (and having the option of including "or current resident" in the recipient information). However, for the dozen respondents who requested paper copies to complete, I hand-wrote the addresses on the delivery and return envelopes, personally signed the cover letter and Institutional Review Board information page, and at the beginning and end of each survey I wrote a short note using the respondent's name, thanking them for their help. As Smyth and colleagues (2010) noted, one remaining problem with mailing requests to complete online questionnaires is that respondents who do not have internet access or are unwilling to use the internet are unlikely to respond to an internet survey even if they are contacted. Moreover, "when taken together, the results… suggest great caution when considering the Web as a sole survey mode… Eliminating the mail follow-up [leaves] out an important subgroup of sample members that is very different from those who responded via the Web" (2010, p.

1438). In this study, I located a small—yet highly motivated and encouraging—subgroup of willing volunteers who preferred paper surveys.

Personalization, however, has also been documented to have a positive influence on response rates with rural respondents (Dillman et al., 2007). In many of his publications, Don Dillman, the renowned survey methodologist and rural sociologist, emphatically supports personalization, a central tenet of his "Tailored Design Method" (2000) to surveys, or what I refer to as the "Dillman approach." The various postcard designs I used in my study did not generate tremendously different response rates. Although Dillman advocates personalization, it had little, if any, influence on my project's returns. Simply put, each of these notifications yielded low returns, regardless of personalized methods and stylistic differences. In fact, the color of the signature seemed to have the largest effect on response rates—though it made a very small difference. This contribution echoes prior scholarship. Dodd and Markwiese (1987) note that response rates for paper questionnaires with hand-signed cover letters do not produce higher response rates compared to those with photocopied signatures. Furthermore, signatures, ink color, and handwritten postscripts on cover letters "have little to do with survey response" (Dodd, Boswell & Litwin, 1988). McKenzie-McHarg and colleagues (2005) detected no advantage in response rates when comparing hand-signed cover letters to cover letters with printed signatures. Evaluators of nonresponse bias do not advocate for personalization as a way to address nonresponse; rather, they encourage survey researchers tailor their projects to the rural contexts of their target residents, and use multiple methods to facilitate triangulation (Coon et al., 2020).

An additional finding regarding the accuracy of the KGS WWC5 database deserves particular attention. As previously stated, research assistants accessed the home addresses of Kansas well owners who were listed in the Kansas Geological Survey's database of Water Well Completion Forms (WWC5s). Throughout 2014 and early 2015, a total of seven undergraduate research assistants and I diligently collected 8,132 addresses from the KGS database. The well drilling companies or individuals responsible for completing some of the WWC5s simply did not complete the form's contact information accurately—or at all. Many WWC5s have only the well owner's name and their city of residence. "Tom Smith of Olpe" is all the contact information provided for many well owners in smaller towns, particularly on the forms that were filed over a decade ago.

The research team selected recent forms that were completely filled out; this made collecting addresses at random virtually impossible. Even though KGS's database contains over 280,000 WWC5s as of June 2021, some of the forms did not provide mailing addresses or accurate information. In order to improve the accuracy of our address collection, the research assistants double-

checked all of the mailing addresses provided on each WWC5 using online maps before including it in our collection of addresses. While we searched for the addresses in Google Maps or Yahoo Maps to make sure the address on the form actually led to a residence, in many cases, the listed addresses did not appear in online searches. Minor labels like "Street," "Avenue," and so forth made some addresses unrecognizable to the search engines. The team carefully combed through every county's records in the hopes of receiving responses from well owners all across Kansas; we received replies from 93 of the 105 counties in Kansas.

Surprisingly, after the attempts to validate addresses online, a sizable portion of our addresses were still inaccurate. This reality was revealed after sending the massive address list to a printing company, which preliminarily screened the addresses with the post office before they printed for the notification postcards' mailing labels. The post office reported that 1,111 of the 8,132 addresses (just under 14 percent) were "undeliverable." Apparently, over an eighth of well owners live in rural places so remote that even online search engines cannot accurately establish their addresses, and about one in eight of the Water Well Completion Forms for wells dug since the year 2000 is not accurately labeled. Should this trend hold true across all the private well owners in the state, and if the WWC5s are one of the only records of well owners' contact information, then the ability to reach the owners of potentially thousands of wells is seriously compromised. If 14 percent of all well owners in Kansas cannot be reached with the WWC5 records, a state with over 280,000 wells could be missing important information on the people overseeing some 40,000 wells. Reaching these survey respondents required obtaining their mailing address (listed on their WWC5) and inviting them to participate in an online survey via notification postcards. Using this database as a means to acquire mailing addresses was obviously vital for finding well owners, but it is in no way comprehensive.

This experience with the KGS WWC5 database leads to one straightforward recommendation that could be relatively easily to implement: update the Water Well Completion Form with a section for the well owner's email address in addition to their home address, and make sure the forms are electronically submitted so the issue of illegible handwriting is no longer an issue. Updating the completion forms for ease-of-use in an increasingly online world will enable the KGS to contact this important subpopulation of Kansans more easily.

Finally, despite the high rate of nonresponse, I do not want to give the impression that well owners are a subpopulation prone to resist sociological assessment. A dozen respondents replied to the first notification by contacting me via email, explaining that they could not get the URL address provided on their

notifications to work. This suggests that they were not discouraged after encountering trouble when trying to access the survey—they were willing to inform the researcher of technical difficulties, and volunteer their time and insight. After launching a new wave of surveys with updated URLs, I provided those respondents with links to the surveys of the second wave. Additionally, another dozen respondents returned their notification postcards via post to my office, informing me that they would like to participate in the study but either did not have internet access or own a computer. They requested a paper copy, which was promptly sent with a pre-paid return envelope. The sequencing and layout of the online and paper questionnaires were similar, so the visual differences between the web and mail questionnaires would not influence answers (Dillman, 2016; Dillman, Smyth & Christian, 2009). Reaching this population is challenging because of their remote, rural locations and their occasional lack of internet access, but many respondents expressed a sincere devotion to this topic despite their initial technical problems or inability to retrieve online surveys. Even though a handful of hesitant or resistant postcard recipients caught my attention, I also stumbled upon at least two dozen eager volunteers who were willing to participate in a study about their water usage without cash incentives.

CONCLUSION

This study provides several insights into procedures for conducting online surveys measuring pro-environmental behaviors in rural areas of the United States. Environmental concern is lower among rural than urban residents, and environmental crises are less salient in rural contexts (Safford et al., 2012). Achieving a 3 percent response rate using these methods might be discouraging for some surveyors, but that return would have likely been higher with small cash incentives, pre-notifications, and additional reminders. Dillman and colleagues (2009; 2014) note that response rates improve with cash incentives. Pushing respondents to an online survey using postal contact can be successful by mailing letter asking for web responses with a $2 incentive and sending three email requests over 22 days (Dillman et al., 2014). This study's research funding was too limited to send such incentives to the nearly 7,000 recipients of notification postcards.

Currently, "inadequate internal infrastructures may… impose limitations on SUNY's explicit goal of applied learning expansion" (Dunbar, 2020; see also SUNY, 2015b). Given this backdrop, data collection activities must run as efficiently as possible. It appears that sampling rural Americans via online surveys is still an uphill battle, but recruiting internet participants with mailed notifications containing somewhat altered personalized addresses, request completion dates, and signatures enable an assessment of which strategies might

slightly boost response rates. Notifications with red signatures had marginally lower return rates than notifications with blue signatures. Including a blue signature, a shorter timeline (a little over a week), and the phrase "or current resident" could yield the best response rate if researchers can only deliver one wave of mailed notifications. Maximizing the return on a project using two waves of notifications could include the inaugural invitation containing a blue signature, a short deadline to complete the online survey, and including "or current resident," with a follow-up postcard that has blue signatures, a slightly longer deadline, and removing "or current resident" from the mailing label, making it slightly more personalized and lenient on the return date.

As survey researchers continue to opt for self-administration and push-to-web designs, nonresponse reduction strategies remain an important topic of exploration. Methodological research is crucial for improving surveys and identifying new methods (Couper, 2011), as recruiting off-line still has its disadvantages (Schonlau & Couper, 2017). This project's data collection methods offered a unique opportunity to test how minor aesthetic variations alter response rates throughout the sample population. Overall, the selective implementation of personalized designs and proposed deadlines for participation in online questionnaires can nudge response rates, and should be carefully considered by internet surveyors who aspire to elicit volunteers using mailed invitations.

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