

COVID-19 Messaging Campaigns Show Impact and Reach Through Strong Collaborations

Utah State University Extension reached communities impacted by COVID-19 through collaboration with partners to create and disseminate culturally appropriate physical and mental health messaging. Radio, print, online communication, and local community efforts were used to reach seniors and caregivers, multicultural communities, and those with underlying health conditions living in geographical areas of concern. Results showed reach and engagement of almost three million, and reported positive impacts on awareness, attitudes, and behaviors related to adherence of COVID guidelines. Providing targeted messaging using multiple outlets helped further the state's health directives to continue improving COVID-related behaviors among vulnerable populations.

IMPLICATIONS FOR EXTENSION

Gabriela Murza, Melanie Jewkes, Ashley Yaugher, Celina Wille, Paige Wray, and Cristian Meier



In the early months of 2020, physical distancing guidelines encouraged, or required, minimal contact with others to limit spreading the virus. Such guidelines resulted in decreased opportunities for social interaction, which led to unintended impacts on mental and physical health, especially among vulnerable populations.

Utah saw high numbers of infections and deaths due to COVID-19, despite the state's health directives, and ranked in the top ten nationally for COVID-19 transmission rates in 2020 (Curtis, 2020). The virus disproportionately affected the elderly and caregivers, those with

underlying health conditions, and Latino and tribal communities. In fact, a report published in May 2020 shared a finding by the Utah Public Health and Economic Emergency Commission that 76% of those who died had at least one underlying health risk factor and were on average 72.5 years old (Utah Senate, 2020).

Utah's Latino community represents 14.4% of the population, the second highest demographic after Caucasians (US Census, 2020), but accounted for 37.4% of all COVID-19 cases (Utah Department of Health, 2020). Increased rates of diabetes, obesity, high blood pressure and overall poor health

in this population put them at an increased risk of illness and death due to coronavirus (Brandley, 2020). Likewise, tribal communities who experience high rates of diabetes, poor overall physical and mental health, and additional adverse conditions due to unhealthy behaviors such as smoking and binge drinking (i.e., consuming 5 or more drinks in two hours), are at higher risk of serious illness due to COVID (Artiga & Orgera, 2020; American Addiction Centers, 2021). This data mirrored a national Centers for Disease Control and Prevention (CDC) report that indicated racial and ethnic populations were disproportionately afflicted by coronavirus due to factors that included underlying health conditions (Wortham et al., 2020).

Mental health concerns related to the COVID-19 pandemic began to emerge in the summer of 2020 (Harris, 2020; Renner, 2020). According to a national poll conducted in March 2020 by the Kaiser Family Foundation, 45% of adults in the US reported that worry and stress about the virus had negatively impacted their mental health, whereas one in five reported mental health concerns prior to COVID (Panchal et al., 2020). Likewise, the CDC's Morbidity and Mortality Weekly Report published August 2020 found that among the 11% of respondents who had considered suicide, the highest was among respondents aged 18-24 years, Hispanic respondents, and caregivers, at 25.5%, 18.6%, and 30.7%, respectively (Czeisler et al., 2020).

The State of Utah's guidance, Utah Leads Together, focused on following safe practices (e.g., wearing masks, limiting social interaction, and self-quarantining when necessary), engaging with the economy, and assisting others (State of Utah, 2020). However, there was minimal culturally

appropriate messaging surrounding details of these recommendations and minimal messaging combating the misinformation refuting the research-based guidance. In addition, there was a lack of culturally appropriate and sensitive messaging in multiple languages to reach Latino and tribal communities.

OBJECTIVES

Utah Leads Together established grants with CARES Act funding to provide additional COVID safety guidance to vulnerable communities, including high-risk populations and caretakers, multicultural communities, and those living in geographical areas of concern, through existing media channels and community partnerships. A multidisciplinary team of Utah State University Extension faculty were awarded one such grant and quickly convened to plan, develop, and deploy messaging campaigns to targeted communities through unique educational and awareness campaigns.

The grant objectives were to improve awareness, attitudes, and behaviors related to COVID-19 guidelines by 1) creating culturally appropriate and relevant material for the target populations and 2) providing health and wellness messaging to mitigate potential isolating effects caused by physical distancing guidelines. The target populations were seniors and caregivers, Latino communities, the Navajo Nation, parents of school-aged youth, those with limited internet access, and the general public within nine counties identified by state health officials as areas of concern due to high transmission rates (Utah Department of Health, 2020). Table 1 provides a demographic breakdown of the target counties.

METHODS

DETERMINING APPROPRIATE MEDIA CHANNELS

To effectively execute the prevention messaging campaigns in 12 weeks (October through December 2020), the team first reviewed published data on proven ways of reaching the targeted audiences. The Pew Research Center has followed social media use in the US since 2005. At the time of the project, social media was shown to be highly accessed by the campaign's target audiences, including among limited income and multicultural communities (Pew Research Center, 2021). Furthermore, a best practices guide published by USU Extension faculty cited findings that information seen on bus ads and read in mailers by

similar audiences were highly memorable (Utah State University, 2020). The team concluded that messaging via virtual channels (social media, websites), traditional communication channels (commercial and public radio), and ad positioning in public spaces (bus ads and highway billboards) would be effective outreach strategies. To engage audiences with limited internet access, such as seniors and the Navajo community, flyers, handouts, and other print materials were created and disseminated through community networks.

DEVELOPMENT AND DISSEMINATION OF CREATIVES

The team worked with an external advertising agency to develop messaging materials (creatives) in English and Spanish, which were primarily promoted through online channels. The team also worked with USU Extension's internal marketing staff and community organizations that included NavajoStrong, AmeriCorps Seniors, a state-wide Caregiver Coalition, and five-county Areas on Aging. These groups helped create and adapt print materials written in English, Spanish and Navajo (see Appendix A), and disseminated them through local community efforts, including food distribution events, grocery stores, and voting events.

Messages were themed around Fall and Winter holidays using the tagline "Stay Happy Stay Healthy" (see Appendix B), which was included on all online and print creatives and linked to <https://stayhappystayhealthy.usu.edu>, a landing page created for the project. The website provided information in English and Spanish for four specific actions: Stay Connected; Take Care of Yourself; Remember COVID-19 Safety, and Build and Maintain a Healthy Immune System, and linked to additional resources for families and professionals.

Creatives were distributed via external social media ads and internal USU social media posts; as clickable banners on premium news websites; as magnets and flyers via aging service programs including Meals on Wheels and the AmeriCorps Seniors network; as magnets and flyers in caregiver wellness packages via a statewide Caregiver Coalition network; as magnet/mask kits, posters, and flyers at food distribution events, grocery stores, regional campus buildings, and food pantries serving Navajo Nation and Latino communities; as posters and masks at an early voting location; as an electronic flyer in a school e-newsletter for parents; via PSA's on Utah Public Radio and Latino radio stations (see Appendix C); on bus wraps and billboards; and through magnetic mailers and other printed materials.

DATA COLLECTION

Data points on outputs were gathered to report the number of impressions on web-based ads, which include frequency of seeing the ads, social media engagement, percentage of the target population reached, number of flyers and mailers delivered, and listeners of the radio ads.

In addition, a survey using a 5-point Likert-type scale with retrospective-pre-then-post questions was developed in English and Spanish to assess impacts related to the messaging campaigns. Qualtrics® was contracted to disseminate the online survey to a random sample (N = 325) throughout the nine targeted counties. The survey included five qualifying questions, 14 questions with visuals of the messages asking “have you seen this image,” and a Likert-type matrix question on how helpful the messages were in affecting thoughts and actions regarding awareness of COVID-19 concerns, attitude towards COVID-19 safety guidelines and mandates, encouragement to adopt practices to improve emotional and mental health, and encouragement to adopt practices to reduce the risk of COVID-19.

DATA ANALYSIS

Descriptive statistics were used to summarize the self-reported view of each of the 14 creatives and participant demographics. A paired-samples t-test was conducted to determine if there was a significant difference in awareness, attitudes, and behaviors between survey sample participants who had previously seen at least one creative in the community and those who were seeing the creatives for the first time during the survey. Multiple regression was also conducted to control for differences by racial and ethnic background, gender, and county of residence.

RESULTS

Table 2 shows the total estimated reach of social media, online websites, radio, on-the-ground efforts, and community distribution. The billboard creative was in a highly visible area along an interstate route with 2.5 million estimated impressions. Overall, it was estimated that creatives reach was just under 3.0 million (excluding billboards).

Survey results indicated that the average number of creative views was 2.4 (SD = 3.0), with views ranging from 0-14 out of a total of 14 possible creatives to view. Most often participants had seen at least one creative

(60.3%) prior to the survey. Table 3 shows the demographic distribution of the sample. The age of survey participants varied with participants most often reporting being in the 25-34 age range (27.7%). Finally, 10% (n = 33) of respondents self-identified as Hispanic/Latino.

The results of the independent sample t-tests show that there were significant differences between those who had previously seen at least one of the creative in the community (n = 196) and those who had just seen the creatives for the first time during the survey (n = 129) in two areas. The first was a significant difference in reporting that the creative(s) was/were helpful in impacting their attitude toward COVID-19 safety guidelines and mandates. Respondents who had not viewed any of the creatives prior to the survey had an average response that was significantly lower ($\mu = 3.36$) than those who had seen at least one creative in the community ($\mu = 3.75$; $p = 0.01$). The second was a significant difference in reporting that the creative(s) was/were helpful in encouraging them to adopt practices to reduce their risk of contracting COVID-19.

Respondents who had not viewed any of the creatives prior to the survey had an average response that was significantly lower ($\mu = 3.40$) than those who had seen at least one creative in the community ($\mu = 3.75$; $p = 0.03$). No additional significant differences in attitudes were found. Regressions were conducted to control for differences by race, gender, or county of residence, however no differences were found.

SUMMARY

The survey data shows that seeing the messages more than once increased positive attitudes toward COVID-19 safety guidelines and encouraged adoption of practices to reduce risk. While we can't infer how many different creatives respondents were exposed to (i.e., banner, mailer, radio PSA), our pre-assessment helped determine the best forms of media for our target populations. Additionally, the results point toward the inclusivity of creatives as there were no differences in creative effects across racial and ethnic backgrounds. An implication for future social marketing or awareness campaigns is to consider multiple types of distribution to increase probability of seeing and internalizing messages by multiple demographic groups.

By collaborating with multiple partners and using the USU Extension system, the team was able to leverage a

variety of methods to disseminate culturally appropriate and effective COVID-19 messages to targeted communities. This method made it possible to affect a positive attitude change surrounding COVID-19 guidelines and mandates. However, there was underrepresentation of some hard-to-reach groups (e.g., Navajo or aging adults) by using online surveys. Future efforts implementation of messaging and surveys could benefit from local persons participating in the dissemination of messaging and recruitment of participants using in-person data collection strategies.

USU Extension's COVID-19 messaging campaign filled a niche as there was a lack of messaging related to mental health, which is presenting itself in various ways, including substance use disorder and suicide. These kinds of unhealthy coping strategies have increased in the months since the pandemic hit, and are considered health challenges that communities may face in the long-term. Addressing these types of concerns early can be beneficial to stakeholders and residents alike.

The unique position of the Cooperative Extension system ensures that research-based programs and resources reach audiences through partnerships with key stakeholders, coalitions, and organizations to meet the needs of the communities in which they serve. With planning and coordination, communities can tap into their local resources to reach audiences in similarly innovative ways.



You may click here to access the references, tables, and graphs for this article.



CONTACT INFORMATION

Gabriela Murza, MS, MCHES®
Professional Practice Extension Assistant
Professor, Health and Wellness
Utah State University Extension
1426 E. 750 N., Suite 202
Orem, UT 84097
gabriela.murza@usu.edu

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Table 1

Demographics of Target Counties Compared with State of Utah and the United States, 2019 Estimates

County	Total Population	Youth (under 18)	Seniors (65+)	White	Black/African American	American Indian/Alaskan Native	Asian	Native Hawaiian/Pacific Islander	Hispanic/Latino	Multiracial (2+ races)
Salt Lake	1,160,437	33.8	11.2	70.3	2.2	1.4	4.6	1.8	18.8	2.9
Morgan	12,124	41.7	11.9	94.4	0.5	0.4	0.6	0.2	3.2	1.1
Davis	9,000	38.4	17.7	96.6	0.2	0.3	0.3	0.0	1.7	1.0
Box Elder	56,046	39.2	13.2	86.7	0.6	1.1	0.8	0.2	9.7	2.1
Cache	128,289	38.3	9.8	83.5	1.1	1.1	2.3	0.5	10.9	2.1
Washington	177,556	22.1	22.0	83.8	0.9	1.7	1.0	0.9	10.9	2.2
Iron	54,839	25.8	12.9	85.8	0.7	2.4	1.0	0.4	8.9	2.1
Weber	260,213	25.3	11.9	75.6	1.7	1.4	1.6	0.4	18.7	2.7
Utah	636,235	32.1	7.9	81.7	0.8	0.8	1.9	0.9	12.2	2.8
Utah (State)	3,205,958	36.7	11.4	77.8	1.5	1.6	2.7	1.1	14.4	2.6
United States	328,239,523	28.6	16.5	60.1	13.4	1.3	5.9	0.2	18.5	2.8

Table 2***Distribution and Reach of COVID-19 Creatives***

Location	Type of Marketing	Estimated Reach	% of Total Reach
Facebook	USU-specific pages	18,678	0.63
Instagram	USU-specific pages	12,085	0.41
Twitter	USU-specific pages	8,672	0.29
Latino grocery stores, food distribution sites, campus buildings, caregiver packages, magnet mailers, state-wide school e-newsletter	Flyers, posters, magnets, and electronic PDF versions	77,688	2.62
Utah Public Radio – English and Spanish	Radio PSA (6)	200,000	6.74
Latino radio stations	Radio PSA's (3)	8,500	0.29
Facebook – English and Spanish	External FB paid ads	13,196	0.44
November - December Web ads	External paid ads inserted on premium news websites	2,630,011	88.59
Total		2,968,830	100
Billboard ^a	Electronic billboard along high-traffic route	2,500,000	

^aBillboard reach was not included in the total due to less direct opportunities for engagement compared to the other marketing mediums used.

Table 3***Demographics of COVID-19 Survey Respondents (N = 325)***

Characteristic	Respondents	
	<i>n</i>	%
Gender		
Male	106	32.82
Female	217	67.18
Age, years		
18-24	52	16.00
25-34	90	27.69
35-44	71	21.85
45-54	37	11.38
55-64	29	8.92
65-74	37	11.38
75-84	8	2.46
85 or older	1	.31
Race		
White	281	87
Black or African American	4	1.27
American Indian or Alaska Native	4	1.24
Asian	16	4.95
Native Hawaiian or Pacific Islander	1	.31
Other	17	5.26
Ethnicity		
Hispanic	33	10.15
Non-Hispanic	292	89.85

Fall and Winter themes and holiday-specific messages were created and translated in English and Spanish languages.



Halloween themed creative distributed in October 2020



Thanksgiving themed creative distributed in November 2020



Christmas themed creative distributed in December 2020



Christmas themed creative distributed in December 2020



Creatives in English and Spanish languages distributed in November and December 2020



Creative distributed in December 2020



Creatives in English and Spanish languages distributed in November and December 2020



Creative distributed in November and December 2020



Creatives distributed in December 2020

Appendix C
Examples of Radio PSAs in English and Spanish Languages

KNIV 104.6 FM Mi Preferida and KEGH 107.1 FM Placer Latino radio stations – Pre-recorded and aired 10 times per day for four weeks

Radio Spot 45 sec. #1 COVID-19 Prevention

Ayuda a detener la propagación del coronavirus

Si tienes fiebre, tos,

dolor de garganta, escalofríos,

dificultad para respirar y

pérdida del sentido del olfato o del gusto

mantente alejado de otros y

hazte la prueba

Este es un mensaje del programa de Extension de USU

Búscanos en la pagina

Stayhappystayhealthy.usu.edu

Radio Spot 45 sec. #2 COVID-19 Protection

Protégete del coronavirus observando las siguientes recomendaciones

Mantente a distancia de otros

Usa cubre bocas

Evita saludar de mano o beso y

Lávate las manos con frecuencia

Recuerda también que tu mejor defensa

es mantenerte saludable

Este es un mensaje del programa de Extension de USU

Búscanos en la pagina

Stayhappystayhealthy.usu.edu

Utah Public Radio available state-wide – Read live 8 times per day for five weeks

Radio spots (3), 15 seconds each (also translated into and read in Spanish)

1. Usu extension's stay happy stay healthy campaign. The pandemic has caused confusion and uncertainty, and it is easy to become anxious and skeptical. A positive attitude can help in times of stress. Tips available at [stay happy stay healthy dot usu dot edu](http://stayhappystayhealthy.usu.edu)
2. Usu extension's stay happy stay healthy campaign. During this holiday season, stay connected in safe and innovative ways, like making front porch visits or sending care packages to loved ones. More tips available at [stay happy stay healthy dot usu dot edu](http://stayhappystayhealthy.usu.edu)
3. Usu extension's stay happy stay healthy campaign. Taking care of your physical and mental health is essential during the pandemic. Remember to keep your cup full with relaxing and meaningful activities. Tips available at [stay happy stay healthy dot usu dot edu](http://stayhappystayhealthy.usu.edu)