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“THIS IS NOT A SCAM!!”

**MIXED METHODS EVALUATION OF FINDINGS OF AN
INTERACTIVE THEATRE PRODUCTION ABOUT
SCAMS VICTIMIZING OLDER PEOPLE**



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EXECUTIVE SUMMARY

DEFINITIONS

Scammers use technologies (e.g., the internet, social media, and cell phones) to reach out to targeted people and manipulate them into sharing personal information (e.g., social security, credit card, and other personal identification numbers) via email or phone. Although scammers target everyone regardless of age, they disproportionately prey upon older people. Most scams remain unreported, especially those involving individuals 60 years of age and older.

BACKGROUND

In 2021-2023, this interdisciplinary collaborative project investigated the needs of older scam victims. The research team found that existing scam prevention programs are inaccessible: they are neither age-specific nor trauma-informed to meet older age groups' needs.

Following the analysis of 35 initial interviews with scam victims, an interactive theatre piece was created to address the needs of the older community in the New River Valley (Southwest Virginia). The play was showcased six times in five different locations. Aside from local retirement home residents, we also invited family members, caretakers, neighbors, and members of the community to the shows, enabling a diversity in age group and social location, empowering victims throughout the community. The play was advertised in the local news, Virginia Tech Daily News, and on printed flyers posted on campus and in public calendars such as grocery store billboards. Additionally, the venues put the shows onto their public calendars and displayed printed posters.

This report provides evidence that interactive theatre performances can help older adults to process trauma, enhance peer support, and build community awareness and capacity to defend against scammers.

METHODS

First, we conducted 35 in-depth interviews with scam victims (aged 60 and above) and their family members about scam victimization and secondary victimization. Typical scam scenarios were taken from the interviews and utilized to create a theatre play consisting of 11 short skits presenting scam related vulnerabilities, red flags, coping mechanisms, and victimization of older people. The research team utilized a mixed methods design to find out about how different audience types/age groups reacted to the shows, and how those reactions might differ. During the shows, research assistants and professional researchers filled out semi-structured observation sheets to note audience members' non-verbal reactions and type and intensity of engagement. Next, audience members were asked to participate in a short survey (online or printed format) after the show. The survey contained closed-ended and open-ended questions and was used to explore what the audience learned from the play. The survey also solicited feedback and offered participants the opportunity to sign up for a follow-up interview.

RESULTS

Observations

Over the course of all five performances, 22 semi-structured observation sheets were filled out (three-four per show) describing the audiences' reactions. Coding and analysis were performed by Atlas.ti v. 23 software's web version. The research team conducted generic and emerging coding. The PI and a research assistant coded all observations independently, and code discrepancies were resolved in follow-up meetings.

The overall atmosphere during the performance was positive, and most audience members scored the atmosphere as "excellent." However, several differences emerged from the observations by type and intensity of engagement and interaction, the depth of understanding of the presented problems, and feelings of comfort or concern:

- Retirement home participants were quieter in their engagement (vocal responses, nods, quiet chatter); the university audience was the most relaxed, and had the most knowledge about scam scenarios, risk factors, and methods of helping victims.
- The public audience was the most overtly interactive (with each other, with the performers in the interactive sessions, and after the show). However, their closed-off body language and signs of discomfort suggest they may have also been quite emotional (they displayed the most somber reactions of the dif-

ferent crowd types, such as discomfort, concerned looks, collective shock, and sober moods). The fact that this audience type displayed the most concern can be explained by their personal relationships with and emotional closeness to scam victims.

- Although laughter was the most frequent reaction of all audiences, positive reactions (displaying laughs, nods, smiling, louder laughs) were most present at the retirement homes. In contrast, disengagement (neutral reactions, lack of facial expressions, tiredness, signs of disinterest, multitasking) was most common among the university audience. This is unsurprising since this type of audience was likely the least burdened by serious scams (particularly those targeting older people).
- In contrast, the public audience displayed the most concern and discomfort and was the most interactive. Similarly, this group was most active in group-type engagement, sharing their own stories and reflecting on each other's utterances.
- The fact that the retirement home audience was somewhat cautious in sharing their own experiences in the breakout sessions may result from accessibility problems this group reported in the follow-up interviews.

After discussing the results of the observations, we compiled the following takeaways:

1. We will consider applying somewhat different theatre techniques and presentation speeds depending on the audience's age. That is, younger audiences might need more interactive breakout sessions and a quicker flow of storytelling to get them engaged on the spot; whereas older audiences may need to discuss the same scam scenarios in subsequent scenes, and more thoroughly revisit the problems in the later interactive sessions to achieve a deeper understanding.
2. Considering their cautiousness in sharing stories during the interactive breakout sessions, older audiences could use more time to engage, interact and spend informal time with each other, the performers and the researchers after the show.

Survey

Altogether, 175 participants submitted a survey (120 printed and 55 online). 11 surveys were dropped due to missing essential data. We hypothesized age group and audience type would present significant differences in appreciation of the show and in understanding the subtle signs of scams. Consequently, we applied age group and audience type as independent variables. We used SPSS software to assess the data and ran cross-tabulations. As expected, there were significant differences in understanding scams, and in preferred methods of assisting victims by both variables.

- Of the options provided on the survey, members of all audience types favored helping scam victims by telling

them to never give out personal information and to never buy gift cards for someone they do not know. The second most preferred option was assuring that someone was willing to listen to their concerns and would be on their side regardless of whether they intended to report the incident to the police. Interestingly, both of those answer options were selected less often by retirement home participants than by university and public audiences. Retirement home participants were also the least likely to identify the subtle signs of scams, including romance scams, sweepstake/lottery scams, IT support scams, government or police impersonation scams, and urgency in the tone of the unknown caller asking for money or gift cards.

- When examined by age group, it became clear that the older the audience member, the more difficulties they had in foreseeing typical consequences of being victimized by scams, identifying risk factors of scam victimization, identifying signs of scams, and helping others being scammed. The 19–40-year-old age group did not take scams against older people as seriously as older age groups (who, understandably, felt more directly affected), and the 41–60-year-old age group was the most successful in selecting the correct answers in the multiple-choice test assessing knowledge of scams and their most common features. It is also possible that because the youngest age group was associated with the university, they were generally more informed about scams. The second oldest age group was the second most informed, and greater age resulted in a gradually decreased understanding of scams – both the signs and the consequences thereof.
- When asking about some helpful responses to scam victimization, the 41–75-year-old age groups most frequently selected “listening to the victims and assuring them to have someone on their side.” It seems that people find human connection and trustful ears more soothing than a push to report the incidents to the police or other authorities, and are even more comforting than attempting to find a solution to get the money back (a finding corroborated by Parti & Tahir, 2023). This was observed regardless of former victimization, so we can confidently say that the show achieved one of its primary goals: it reassured the audience that active listening and reassuring the victim of their intelligence were always good choices when wanting to help victims.

Follow-up interviews

The audiences received the show quite well according to the feedback from the 15 follow-up interviews conducted up to two months after the shows. These interviews also revealed that devised theatre techniques such as non-verbal communication, symbolism, and body language indeed functioned as extra layers that helped demonstrate the dynamics of scams. Interactive elements between scenes helped the audience recognize the resources at their disposal and how they can help other community members. The diverse program components for diverse audiences (multiple generations, multiple location types) helped frame scams as multi-generational issues that affect not only mature populations but also their children

and grandchildren. Using humor, having their voices heard, and answering open-ended questions (who would you call; who wouldn't you call; what are the feelings associated with scams?) functioned to empower audience members. According to the feedback, the show had a long-lasting effect as people started to talk about it afterwards, with each other and with their loved ones who did not attend the shows. It helped retirement home caretakers identify the signs of scams earlier, and their quick actions led to a more rapid response to scam incidents.

Interviewees also offered important recommendations for the show, such as making the presentation more accessible, especially for hard-of-hearing people, as well as for audiences who do not or can not leave home to attend a theatre show in person. They also encouraged teaming up with local and national agencies for flyers and follow-up lectures to create a better and deeper understanding of specific scam scenarios. New and evolving scam scenarios, such as Medicaid and Medicare fraud, as well as AI-generated voice clone calls, should also be added to the repertoire to keep the audience updated and prepared for novel scams.

BACKGROUND

WHAT IS A SCAM?

Scams are technology-facilitated frauds in which offenders (strangers to the victims) intentionally deceive victims by misrepresenting, concealing, or omitting facts about promised goods, services, or other physical, mental, or emotional expectations that are nonexistent, unnecessary, and/or deliberately distorted for monetary gain (adapted from Beals et al., 2015). Scammers utilize technology, such as the internet, social media, and cell phones, to reach out to targeted people and manipulate them into sharing personal information such as social security numbers, credit card information, and other personal identification numbers via email or phone. Scammers apply subtle manipulation techniques called social engineering, playing on emotions to gain the victim's trust and motivate them to provide payments for the incident that is alleged to have transpired.

Although scammers target everyone regardless of age, they disproportionately prey upon older people. According to the FBI's Elder Fraud Report, victims aged 60 and above represented 21.5% of all fraud victimization, sustaining 30.4% of total fraud losses (FBI, 2021). Despite the widespread nature of these crimes, our knowledge about scams and targeted people's vulnerabilities is limited because most scams remain unreported (van de Weijer et al., 2019), especially those involving older adults (Pack & Shadel, 2011).

PROBLEM STATEMENT

In 2021-2023, the PI and co-PI (Katalin Parti and Pamela Teaster, with Susanna Rinehart, Mason Rosenthal, and Charles Dye) worked on an interdisciplinary collaborative project investigating the needs of older scam victims and the reasons why so many scam victimizations do not get reported to law enforcement. The team collected survey data from 150 Virginia residents aged 60 and older, and conducted 35 follow-up interviews. The research identified the need for community-based prevention programs. In particular, the team found that older scam victims are reluctant to attend prevention and awareness-raising events out of embarrassment, and in fear of the victim blaming and the stigma associated with having been victimized. Because of the highly manipulative nature of scams (Norris et al., 2019), victims commonly miss the warning signs and believe that they precipitated the crime, as they agreed to pay or give out personal information to the scammer. Corroborating the findings of Schuneman (2017), the team found that prevention programs are inaccessible and neither age-specific nor trauma-informed to meet older age groups' needs (see Parti & Tahir, 2023).

Therefore, to address the needs of the older community, the research team created an interactive theatre performance, devised from transcripts of the above-mentioned interviews. The theatre piece was showcased six times in five New River Valley (Southwest Virginia) locations in February 2023, including retirement facilities, public libraries, and the Virginia Tech's campus.

The report provides evidence that an interactive theatre performance that engages the audience suits the needs of the older adult community. Interactive theatre creates immersive experiences that involve the audience in the storytelling (Turnbull, 2016) and intrinsically builds community, creates connections, and helps to break down the social isolation upon which scammers depend. Through engagement and interaction with the audience, this form of theatre can give victims a voice, help them process the trauma, enhance peer support, and build community awareness and capacity to defend against would-be scammers.

DESCRIPTION OF THE PLAY SCRIPT

The play script contained 11 skits portraying various scenarios of scammers approaching victims. These scenarios were adapted from selected stories shared by interview participants conducted by the PI and a research assistant beforehand (altogether, 35 interviews were conducted with 60+ Virginia residents in Summer of 2021). The playwrights and directors (Susanna Rinehart and Mason Rosenthal, Performing



Arts, Virginia Tech) constructed the script with the aim of telling scam scenarios from different points of view, i.e., how scam victimization of older persons affects the victims, their family members, neighbors, caretakers, and the community. Scammer behavior and manipulation techniques were also portrayed. In order to create a safe space and a sense of community, there were small breakout sessions between the scenes, where the performers engaged the audience with questions, and encouraged them to share their ideas for solutions, as well as their fears and feelings. As part of the play, reporting agencies were mentioned by performers and the audience was encouraged to share who they would talk to about their victimization. In order to encourage the audience to share, performers used the stage to share their own personal and familial experiences with scams. The goals were: to encourage discussion about scams against older people, to create a safe space for sharing experiences with each other, and to raise awareness about different scam scenarios targeting the older adults.

MIXED METHOD RESEARCH

The six performances took place in five locations: two local nursing homes, two local libraries, and on the Virginia Tech campus. The research team utilized a mixed methods design to find differences in how various audience types and age groups reacted to the show. During the shows, research assistants and professional researchers filled out semi-structured observation sheets to note the subtle reactions and the type and intensity of audience engagement. Next, audience members were asked to participate in a short survey (online or printed format) after the show. The survey contained closed-ended and open-ended questions and explored what the audience learned from the play, and what types of knowledge still needed improvement afterward. The survey also asked for general feedback, and allowed interested audience members to sign up for a follow-up interview one-to-three months after the show. This report analyzes the above data collections individually, and provides an integrated review of the program evaluation findings.

SPECIFIC FINDINGS: OBSERVATIONS

Altogether 22 observation sheets were taken (three-four per show). The observation was conducted by research assistants and professional researchers, using a semi-structured observation sheet that followed the script of the play. The total number of audience members was 236 (Mean = 34.06; SD=15.341; Min=21; Max=70). The show lasted for 42.72 minutes on average (SD=3.32; Min=37 minutes; Max=48 minutes). The primary audience was the targeted age groups and their family members and friends, while the secondary au-

dience was retirement home support staff and personnel. The primary audience was comprised of residents of an independent living retirement facility (38.9%); residents of town (33.3%); university students and faculty (22.2%); nursing home residents (16.7%); and others such as friends of cast and project members (5.6%). The secondary audience comprised location representatives such as staff members, IT facility managers (55.6%); family members of retirement home residents and cast/project members (44.4%); caretakers of retirement home residents (33.3%); others (33.3%); and library personnel (22.2%). Interaction intensity varied during and after the performance. During the shows, the most intense interactions took place between the audience and the performers, as expected (Min=1, Max=5 on a 5-point Likert scale; Mean=3.44; SD=1.042); the interaction among the audience with each other was somewhat weaker (Min=1, Max=5; Mean=2.89; SD=1.410). The interaction was sustained after the show but shifted towards audience members among themselves (Min=1, Max=5; Mean=3.39; SD=1.195) to discuss the show; however, some audience members intentionally sought out conversations with the cast (Min=1, Max=5; Mean=3.00; SD=1.283) and project members such as the PI and research assistants (Min=1, Max=5; Mean=2.78; SD=1.396). The overall atmosphere during performance was positive (Min=3, Max=5 on a 5-point Likert scale; Mean=4.22; SD=0.943; out of which Satisfactory=33.3%, Above average=11.1%, Excellent=55.6%).

Atlas.ti v. 23 software was used to transcribe and code the observation sheets. Codes were generated manually and organically, based on emerging themes. The PI and one undergraduate research assistant coded the transcripts individually; then, codes were discussed and corrected in meetings that followed. Next, initial codes were grouped into the following code groups: Patterns of engagement (individual vs. group-type), Patterns of reaction (interested/curious, appreciative, ambiguous/unclear, somber, amused, uninterested, neutral, relaxed, and understanding/compassionate), Level of engagement (high or increased, general level, low or decreased), Engagement per tempus (after show vs. during show), and Response types (positive, neutral, negative).

Below are the 20 most frequent codes, displayed as percentages. While “laughing” was overall the most frequently noted by observers in all audience types, there are important differences indicated by the level of compassion/understanding of the depth of the problem, and engagement type with each other and the show:

- The retirement home audience was somewhat quieter in reaction (vocal responses, nods, quiet chatter), but given that this audience’s observation created the greatest number of codes, they displayed the most diverse reactions as well. Disclosure: due to age and physical mobility-related limitations, out of the two retirement homes the play was showcased in, the audience at the independent living facility was much more engaged than the audience at the assisted living facility. However, and aligned with the goals and expectations of the production, this audience type was the most cheerful (most positive reactions) and the most appreciative of the show.

- The university audience was the most relaxed and disinterested and displayed the most signs of general understanding of the problems presented to them.
- While displaying a relaxed body language in general, the public audience produced the highest density of interaction, combined with signs of discomfort and closed-off body language.

The 20 most frequent codes (%) by audience type

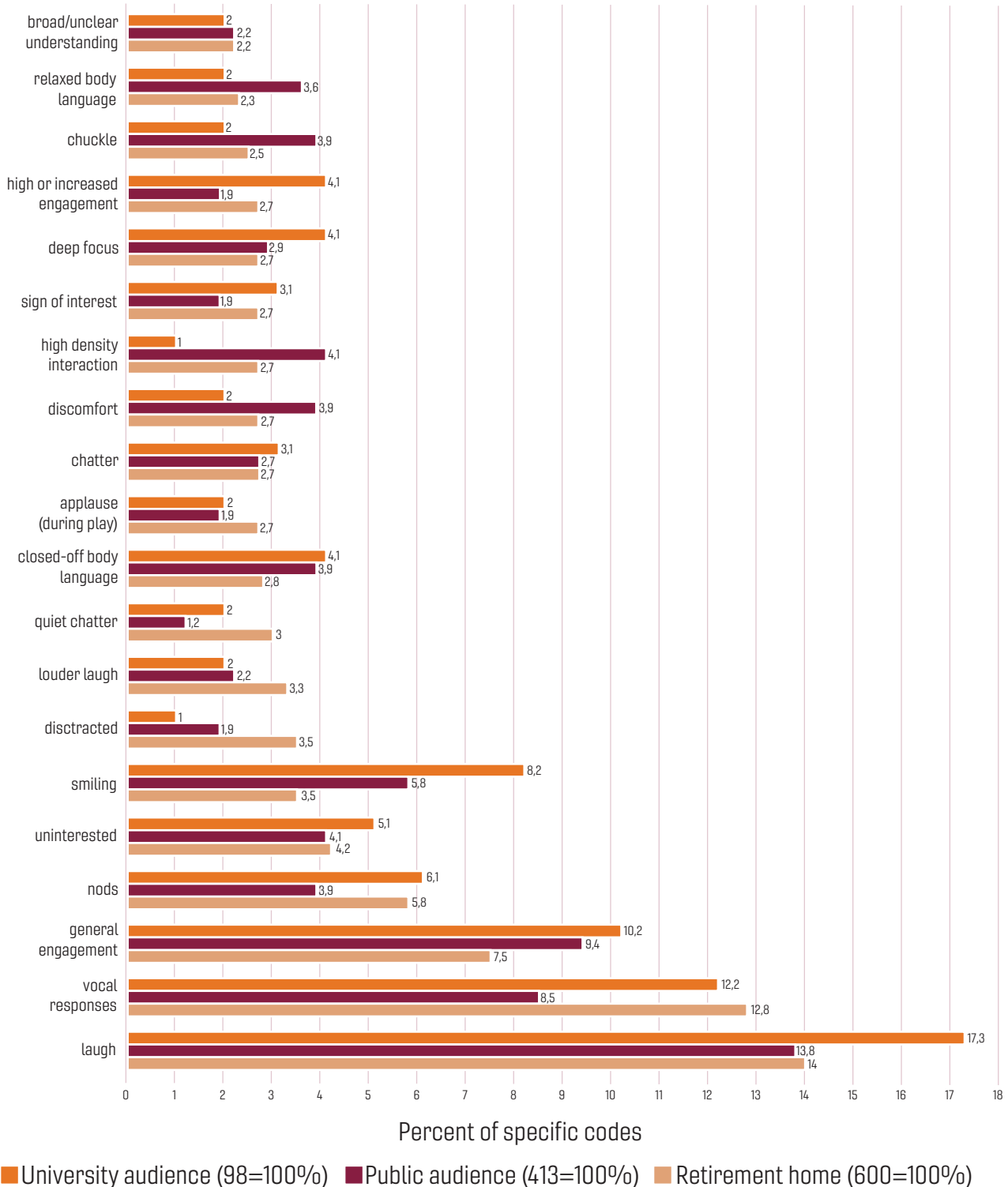


Figure 1: The 20 most frequent codes (%) by audience type

Similarly, the public audience was the most active in group-type engagement, such as responding to the prompts of the performers at the interactive breaks, reassuring and compassionate nods and vocal responses, and chatting with other audience members, cast members, and project members during and after the show. In contrast, the university audience displayed the most individual-type reactions, and were the least likely to directly engage with audience members and performers.

Type of engagement/interaction (%) by audience type

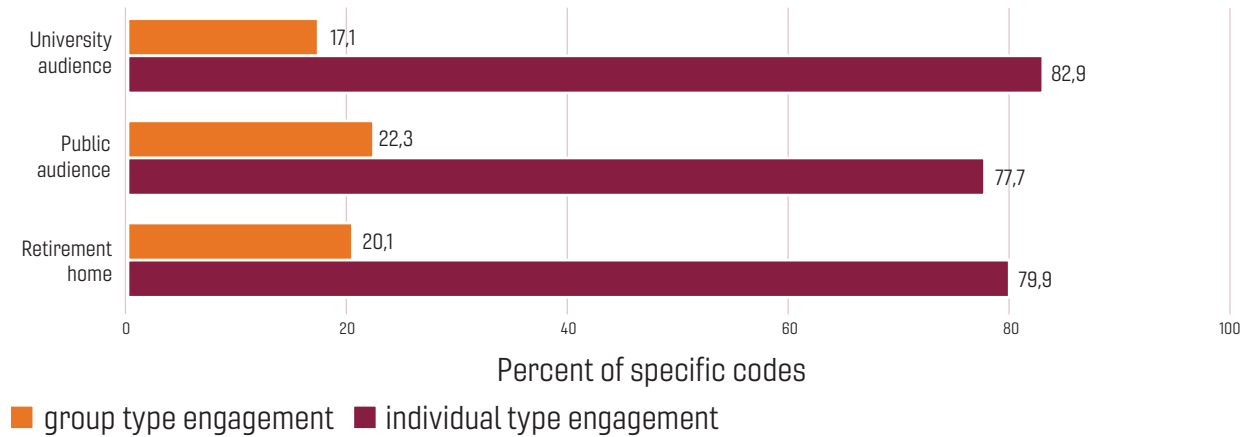


Figure 2: Type of engagement/interaction (%) by audience type

These patterns are also indicated in the following figure. While some people in the audience at the retirement homes displayed high or increased level of engagement with the show from time to time, the university audience maintained the most sustained level of engagement during the show's entirety (general + high or increased level of engagement = 77.2%). This might be due to the accessibility problems participants shared in the follow-up interviews (see specific section of the report discussing follow-up interview findings).

Level of engagement (%) by audience type

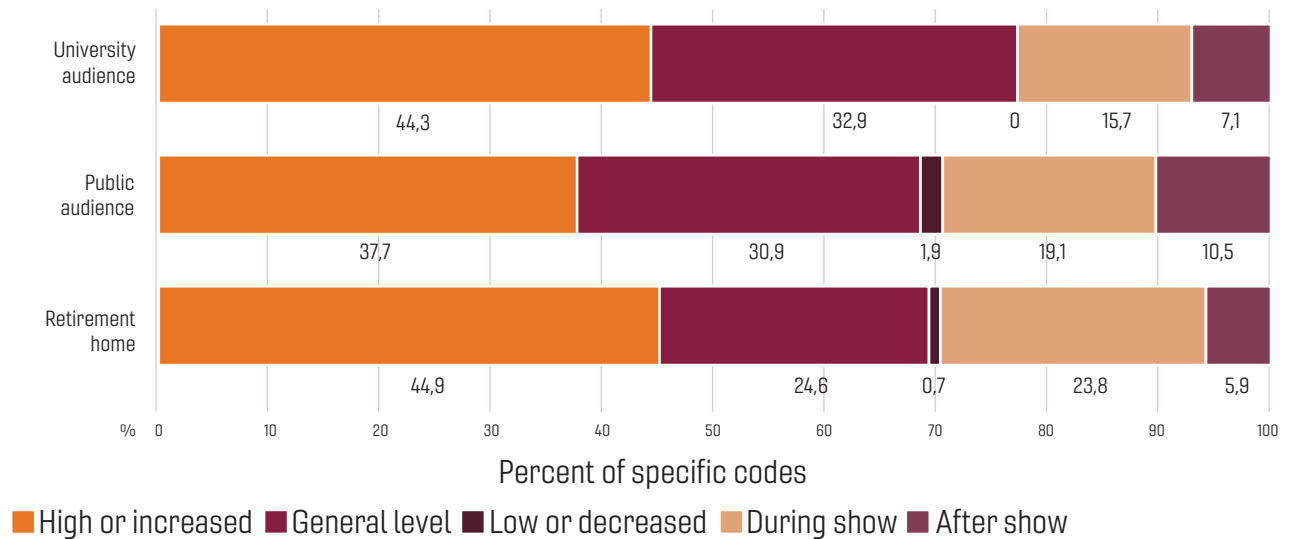


Figure 3: Level of engagement (%) by audience type

Retirement home participants displayed the most positive reactions (73.9%; includes laughing, nods, smiling, chuckling, louder laughs, chattering, etc.) during the show, while the university audience was the most relaxed and indifferent (neutral reactions: 19.5; includes lack of facial expression, tired reactions, uninterested, broad/unclear understanding, etc.).

Type of reaction (%) by audience type

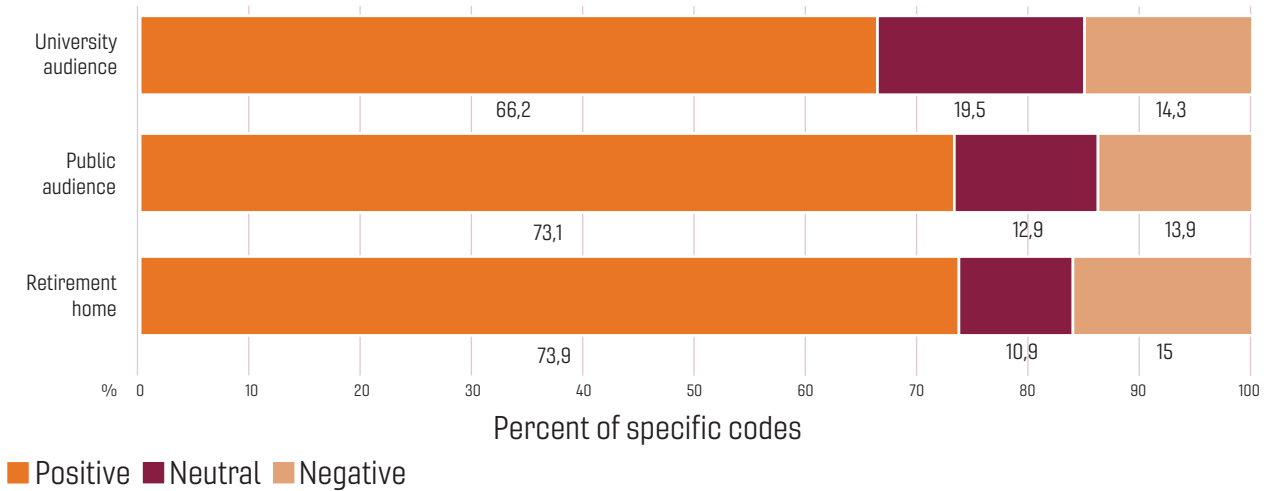


Figure 4: Type of reaction (%) by audience type

Although the most frequent reaction pattern from all audience types was amusement, the retirement home audience showed the most understanding/compassion, while the university audience instead showed neutral curiosity and interest in general rather than compassionate personal attachment. The public audience showed equally great amusement to the other two audience types; however, it was also the group showing the most somber reactions, such as discomfort, concerned look, collective shock, and sober mood.

Patterns of reaction (%) by audience type

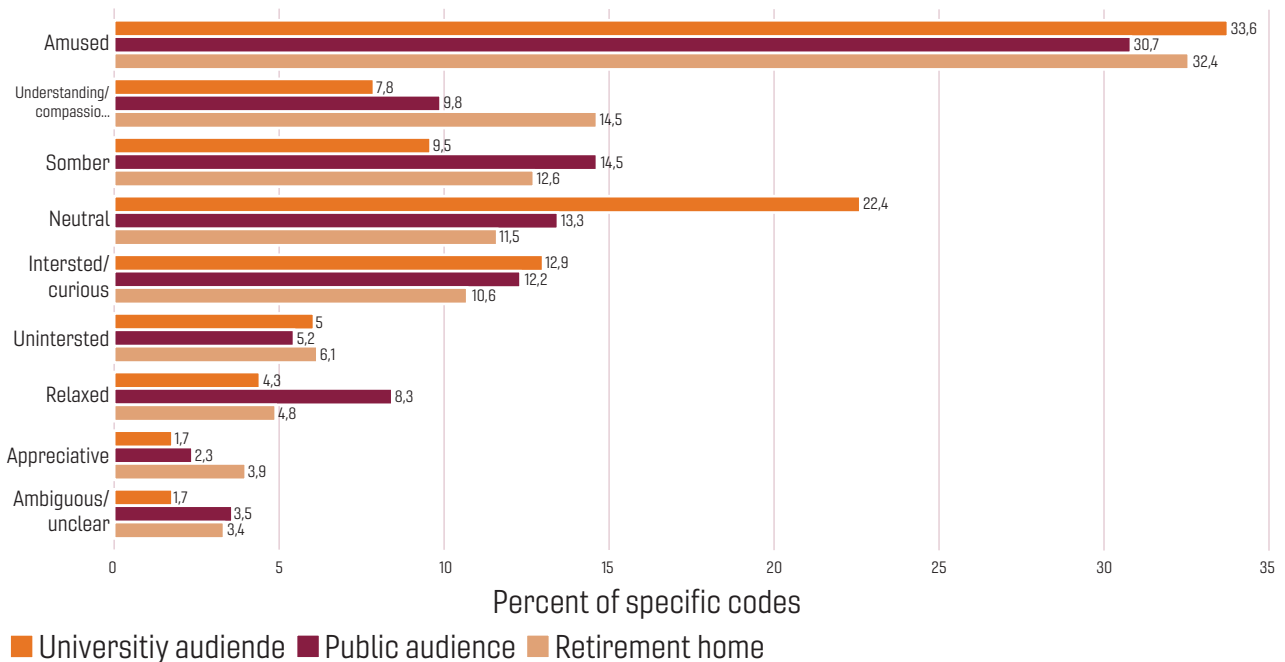


Figure 5: Patterns of reaction (%) by audience type

DISCUSSION OF OBSERVATIONS

The overall atmosphere during performance was positive, and most participants scored the atmosphere as “excellent.” However, several differences emerged in the codes by type and intensity of engagement and interaction, depth of understanding, knowing the problems presented, and feelings of comfort or concern. Namely, retirement home participants were quieter in action (vocal responses, nods, quiet chatter); the university audience was the most relaxed, and knew the most about the scam scenarios, the risk factors, and how to help victims. However, the public audience was the most active in interaction (with each other, with the performers in the interactive sessions, and after the show). However, the closed-off body language and signs of discomfort this type of audience displayed suggest they must have been quite emotional too (they displayed the most somber reactions such as discomfort, concerned looks, collective shock, and sober mood). The fact that this audience type was the most compassionate can be explained by their overall closeness to actual victims, that is, older populations. In fact, the public venue audience was closer to the target group (older victims) both in age, and in familial relationship than the other two venues’ audiences. (The university audience was the youngest, the retirement home audience was the oldest, and the least diverse in age. Although retirement home participants might know about the problems that emerged from the show, they did not take their family members to the show, and only knew the scams from their own experiences, not from their family members’ struggles.)

Although laughter was the most frequent reaction of all audiences, positive reactions (such as laughs, nods, smiling, louder laughs) were most present at the retirement homes. In contrast, indifferent (neutral reactions, lack of facial expressions, tiredness, signs of disinterest, multitasking) was displayed most by the university audience. This is no surprise since this type of audience could judge the situations from a distance, as they are less likely to be burdened by serious scams (primarily targeting older people) themselves. In contrast, the public audience displayed the most discomfort and concern and was the most interactive. Similarly, this group was most active in group-type engagement, sharing their own stories and reflecting on each other’s utterances.

The fact that the retirement home audience was somewhat cautious in sharing their own experiences in the breakout sessions might result from the accessibility problems this group reported in the follow-up interviews.

After discussing the results of the observations, the following takeaways can be considered:

1. We shall consider applying somewhat different theatre techniques and presentation speed depending

on the audience’s age. That is, younger audiences might need more interactive breakout sessions, and a quicker pace of storytelling, to get them engaged on the spot. Alternatively, older audiences may need to discuss the same scam scenarios in various subsequent scenes, and a more thorough revisiting of the problems in the upcoming interactive session to achieve a deeper understanding.

2. Taking into account their cautiousness in sharing stories during the interactive breakout sessions, older audiences could use more time to engage, interact and spend time with each other, the performers and the researchers after the show.

SPECIFIC FINDINGS: SURVEY

Altogether, 175 participants submitted a survey (120 printed and 55 online) right after watching the show. We dropped three because their data indicated a state of residence other than Virginia, and eight because of missing data on birth year. The overwhelming majority of participants were identified as female (female=86; male=48; nonbinary=3; prefer to self-identify=1). By attending the show, most participants indicated that their ability to help other individuals resolve scams improved (improved=83; much improved=29; remained unchanged=20; worsened=1). Most participants have been victimized by scams or witnessed a close family member’s victimization (66; 40.2%), although 56 (34.1%) were not victimized and another 17 (10.4%) were unsure of their victimization. Audience distribution skewed towards the retirement homes as more than one-third (n=56; 34.1%) of participants came to see the show in the two retirement home locations, while 38 (23.2%) came to the public location shows and 45 (27.4%) participated in the university show displayed at the university’s own theatre facility.

After noting the skewness (moderately skewed towards the older ages), we created age groups that distribute normally (skewness = .107), meaning every age group has an almost identical number of participants in it, with the highest number in the age group 61-75 (n=35, 21.3%).

| Age group | n | % |
|-----------|-----|------|
| 19-40 | 28 | 17.1 |
| 41-60 | 29 | 17.1 |
| 61-75 | 35 | 21.3 |
| 76-80 | 26 | 15.9 |
| 81-92 | 20 | 12.2 |
| Total | 138 | 84.1 |
| Missing | 26 | 15.9 |
| Total | 164 | 100 |

Table 1: Age groups (data from Survey)

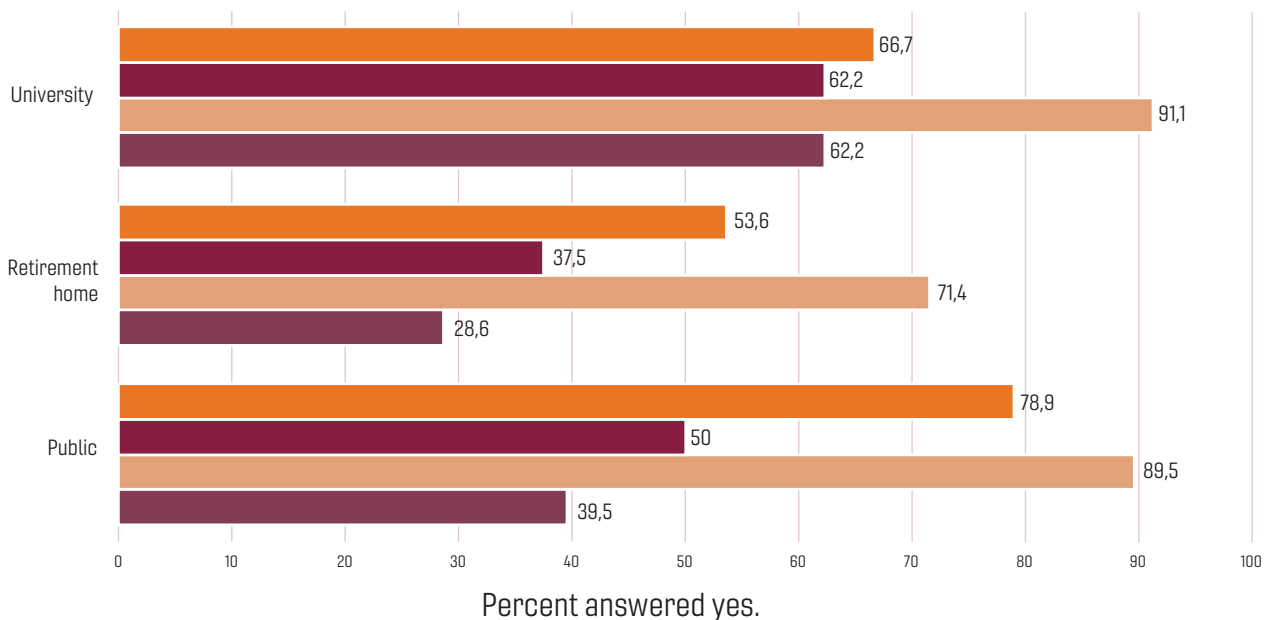
Next, we created cross-tabulations to identify whether statistical relationships exist between variables. In this report, we only discuss variables with statistically significant correlations. Since age group and audience type were meant to be definitive targets for the show (as the show sought attention especially from the older but financially independent audience), we decided to analyze the data through two independent variables: audience type (public, retirement home, university), and age group (see above).

Examination through audience type (Independent variable 1)

Question: "Please indicate how you would help older adults experiencing scams."

Interesting statistical relationships were identified between audience type and the responses to how audience members imagined they would help older individuals experiencing scams. Below, the figure only displays the values with statistical significance. Despite all being relevant, all these methods to help others – searching for contact information of the proposed offer ($p < .003$), telling them not to give out personal information and gift cards ($p < .015$), updating their computer with antivirus and malware protection ($p < .047$), and assuring the older individual of support, no matter what ($p < .039$) – were less likely to be selected by retirement home audience members than by the others.

Question: Please indicate how you would help older adults experiencing scams (%)



- You could assure the victim you are on their side.
- You could check if their computer antivirus, security software and malware protection are up to date.
- You could tell them to never give our personal identifiable information, money, gift cards, to unverified people or businesses.
- When you suspect a scam, you could search for the contact info of the proposed offer. Other people may have posted information about scammers.

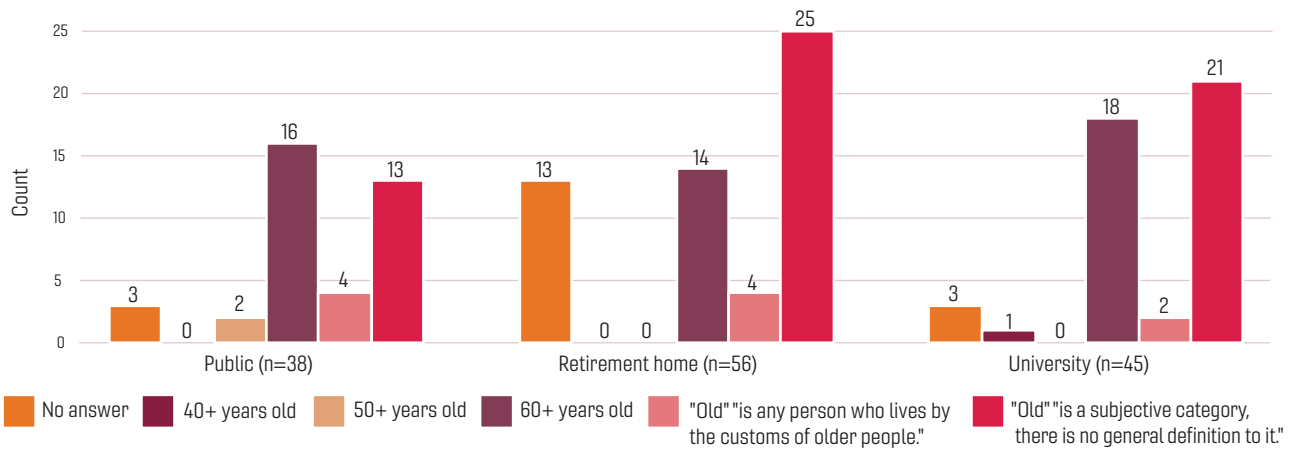
*** $p < .000$, ** $p < .010$, * $p < .050$

Figure 6: How would you help older adults experiencing scams? Percentage of answers by audience type

Question: What does "old" mean in America today?

Audience members were significantly ($p < .053$) more likely to respond that "old" was subjective or 60+ years of age than other response options, regardless of age or audience type. More retirement home and university audiences thought that "old" is a subjective category than members of the public; however, more university and public members judged 60+ people as "old" than retirement home members.

Q: What does "old" mean in America today? (N)

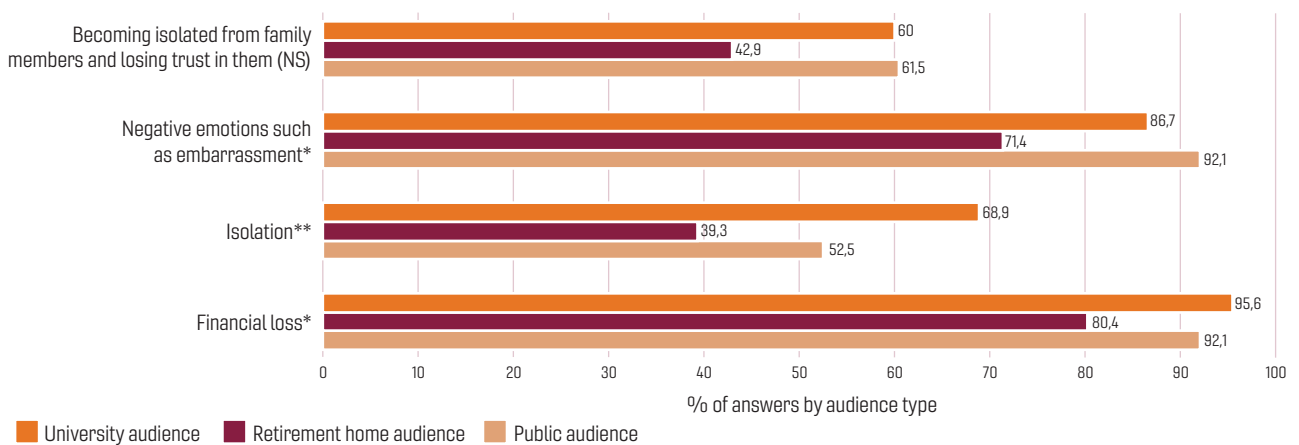


$p < .053$
Figure 7: What does "old" mean in America today? Percentage of answers by audience type

Question: "What might be the typical consequences of being victimized by scams?"

This question contained several answer options, out of which the university audience on average selected most of the correct answers. Audiences attending the retirement show(s) were the least likely to select any of these answers. This result indicates that retirement home residents are less likely to think that financial loss, isolation from family members or others, or negative emotions such as embarrassment were caused by scam victimization.

Q: What might be some typical consequences of being victimized by scams? (%)



* $p < .05$; ** $p < .01$; *** $p < .000$
Figure 8: What might be the typical consequences of being victimized by scams? Percentage of answers by audience type

Question: "What are some signs of scams?"

Similarly, the various signs of scams were more often correctly recognized by university and public audiences than by retirement home audiences. Although there are only two answer options that show statistical significance by type of audience here, it is worth noting that the group that was the least likely to consider these answer options as a red flag was the retirement home audience.

Q: What are some signs of scams? (%)

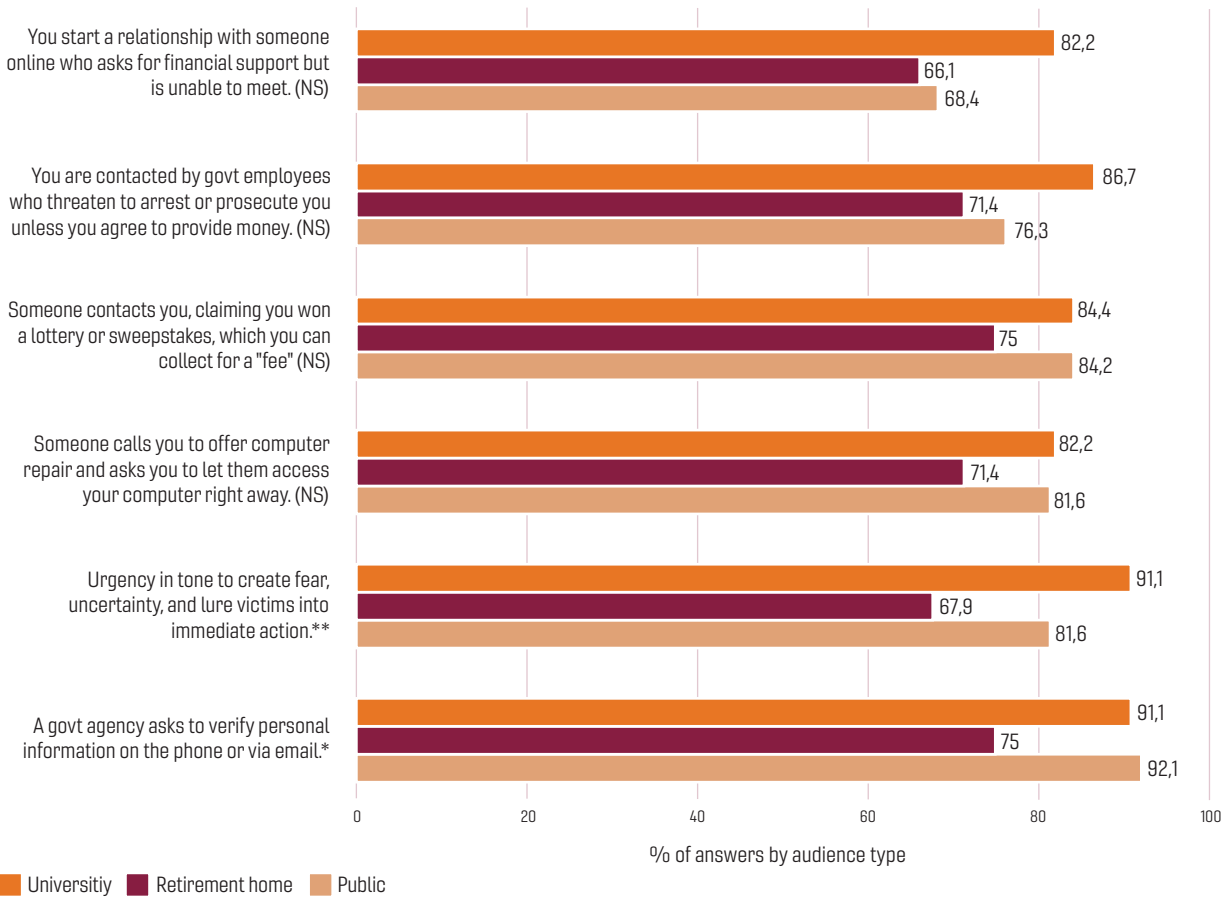


Figure 9: What are some signs of scams? Percentage of answers by audience type

Examination through age group (Independent variable 2)

Next, we investigated whether the age group made a difference in selecting the correct answer regarding the consequences and the signs of scams.

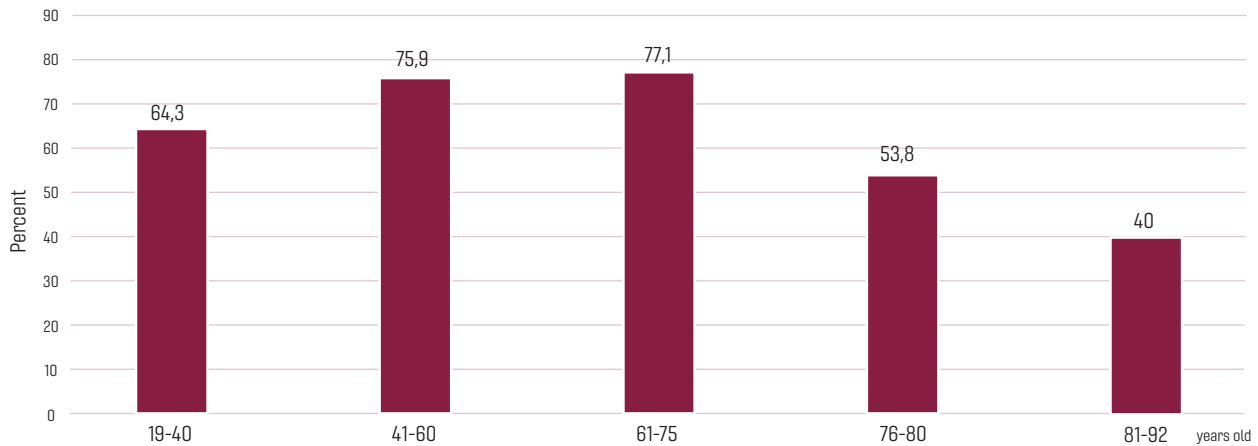
Question: "Please indicate how you would help older adults who experience scams."

There is one statistically significant answer; the answer option "You could ensure you are on the older person's

side, no matter whether they decide to report it or not” was selected significantly more often by the middle age group (61-75) than by all other age groups ($p < .031$). This indicates that this age group is more sensitive towards actively listening to the older victim’s needs and concerns regarding reporting.

Q: Please indicate how you would help older adults who experience scams!

A: You could ensure you are on the older person's side, no matter whether they decide to report it or not. (%)



$p < .031$

Figure 10: How would you help older adults experiencing scams?

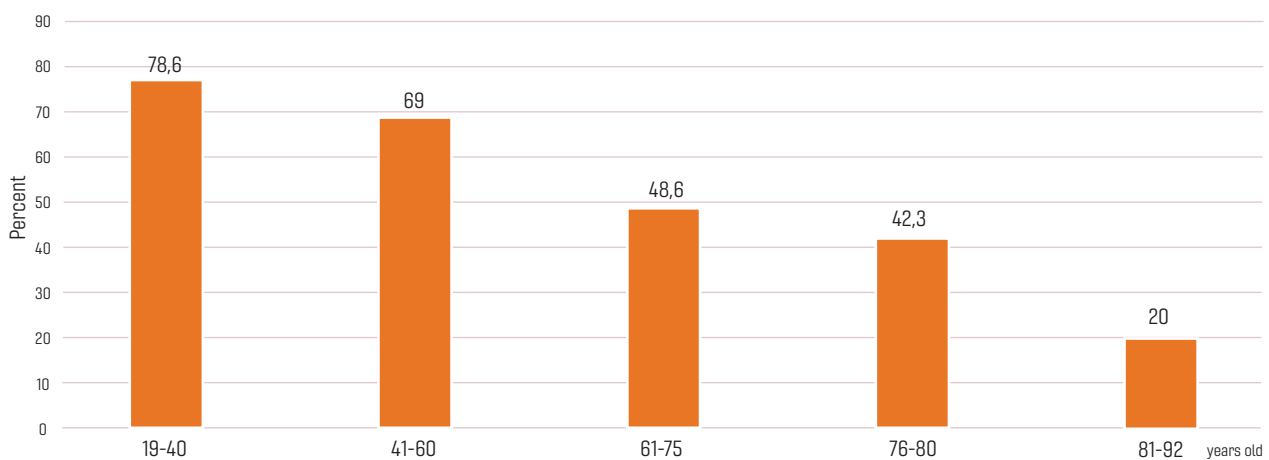
Specific answer: You could ensure you are on their side no matter whether they decide to report it or not. Percentage of answers by age group

Question: “What might be some typical consequences of being victimized by scams?”

The only answer that came out statistically significant was “isolation” ($p < .001$). The younger the age group, the more likely “isolation” was to be selected as a typical consequence of being scammed. All other answer options were not significant.

Q: What might be some typical consequences of being victimized by scams?

A: Isolation. (%)



$p < .001$

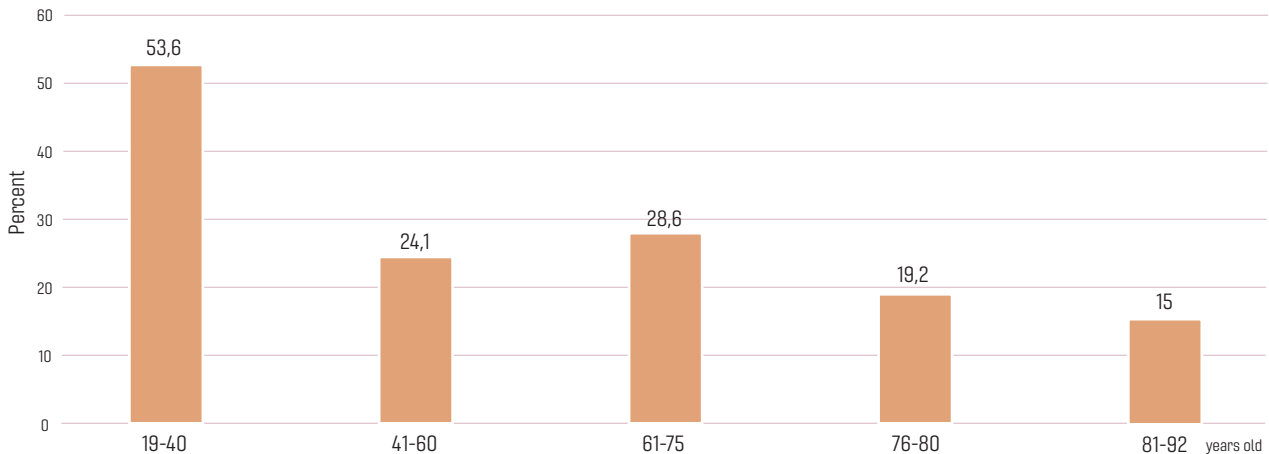
Figure 11: What might be the typical consequences of being victimized by scams?

Specific answer: Isolation. Percentage of answers by age group

Question: "Other than age, what factors account for scam victimization?"

Answer option: Having more financial assets leads to being overconfident in spending, risk-taking, and, eventually, losing more money. Age indeed plays a role in having financial assets associated with confidence, risk-taking, and losing more money, and the 19-40 and 61-75 age groups were significantly more likely to think so ($p < .020$). (All other answer options to this question were not statistically significant.)

Q: Other than age, what factors account for scam victimization?
A: Having more financial assets leads to risking and losing more money. (%)



$p < .020$

Figure 12: Other than age, what factors account for scam victimization?

Specific answer: Having more financial assets leads to risking and losing more money. Percentage of answers by age group

Question: "What are some signs of scams?"

This question produced a statistically significant differences between the cautiousness of the age groups.

Answer option 1: Start a relationship with someone online who asks for financial support but is unable to meet ($p < .008$).

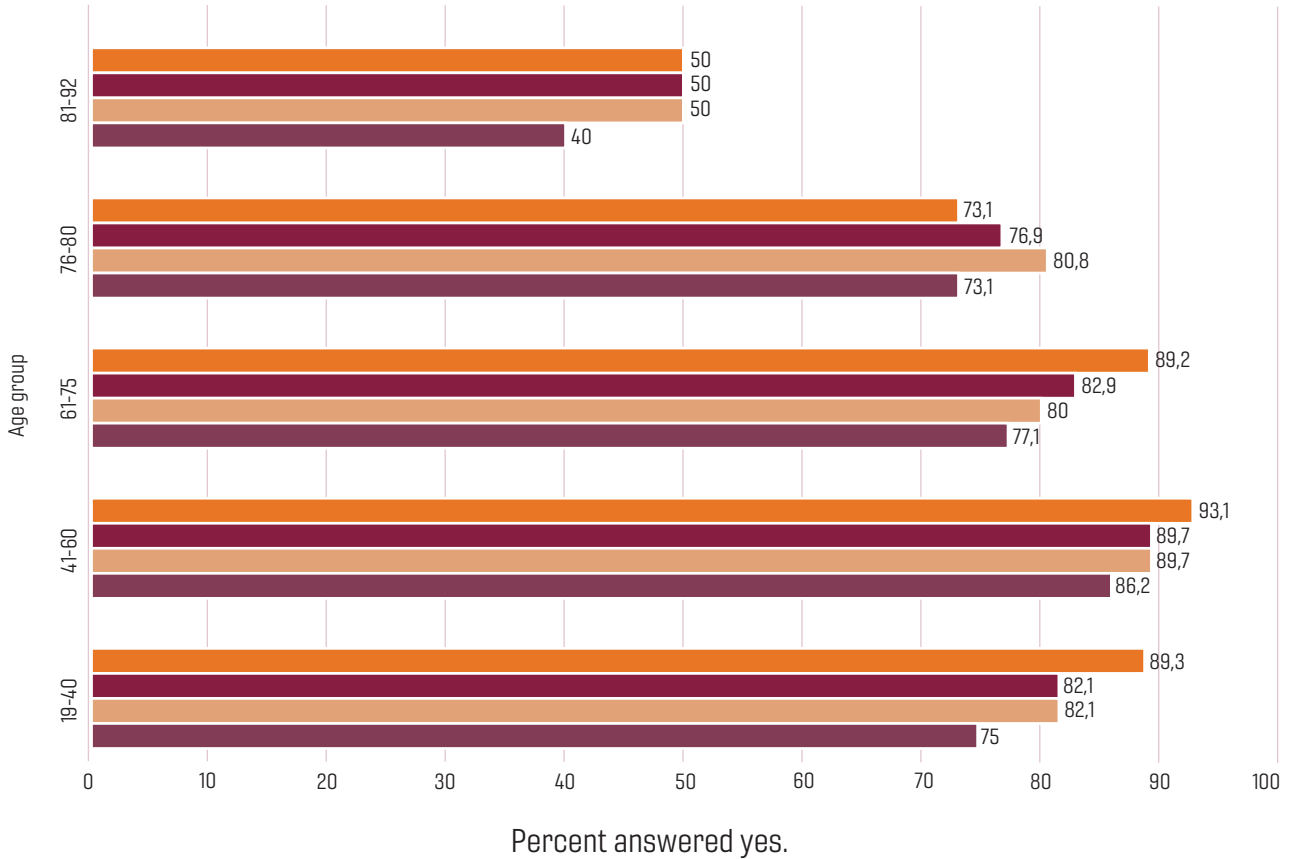
Answer option 2: You are contacted by government employees who threaten to arrest and prosecute you unless you agree to provide money ($p < .017$). Both answer option 1 and 2 revealed similar cautiousness in the age group 41-60. This age group was the most sensitive to these issues, and consequently, saw these as a red flag of possible scamming activities.

Answer option 3: Someone calls you to offer computer repair and asks you to let them access your computer immediately ($p < .015$).

Answer option 4: Urgency in tone to create fear, uncertainty, and lure victims into immediate action ($p < .002$). The 41-60 age group was also the most likely to select these options. Although these answers were indeed red flags for most age groups, the middle age group (41-60) was most likely to think these were signs of potential scams, compared to younger and older age groups. Surprisingly, most of the oldest age group participants did not think these answer options indicated scamming activities (although this group only included 20 participants).

Finally, these results did not change when controlling for whether the participant or a family member was a victim of scams ever in life, at either independent variable (i.e., audience type or age group).

Question: What are some signs of scams? (%)



- ****Urgency in tone to create fear, uncertainty, and lure victims into immediate action.**
- ***Someone calls you to offer computer repair and asks you to let them access your computer right away.**
- ***You are contacted by government employees who threaten to arrest and prosecute you unless you agree to provide money.**
- ****Start a relationship with someone online who asks for financial support but is unable to meet.**

***p<.000, **p<.010, *p<.050

Figure 13: What are some signs of scams? Percentage of answers by age group

Survey open-ended questions

The survey contained an open-ended question where participants were asked to share their feedback. The overall positive feedback is reflected in the quotes below.

"The actors truly captured the main components of online/telephone scams. The best point was [that] the victim recognized the red flags, but they still followed the directions of the predator." (Public audience member)

"Wrapping the victim with the telephone cord was brilliant! It was a great method to show how the victim was 'trapped.'" (Public audience member)

"Thank you for the interaction portion—this was an incredible method to assist in the education." (Public audience member)

There was overall positive feedback from retirement home caretakers: communication about scams became easier with residents after the show. According to the feedback, the show facilitated better communication and processing of cases. It became easier for residents to communicate their suspicions to caretakers, which steered the process of finding solutions to scam victimization. The below email followed the show three weeks after wrapping up.

"It so happens that I had an interaction (...) with one of our residents who was trying to figure something out about [technology]. Turns out she had become a victim of a scam. I was able to recognize what had happened and was able to guide her to communicate immediately with her son and address the situation with the authorities. Seeing this [show] definitely steered my process with this resident." (Email feedback, residential caretaker, retirement home)

Discussion of survey findings

After the show, the audience was asked to participate in a short survey (printed or online). The goal was to receive general feedback about the show, i.e., whether their ability to recognize early signs of scams improved, what they learned about typical responses to scam victimization, and how they would help victims. We considered age group and audience type as two features which we anticipated would significantly impact appreciation of the show and understanding of the subtle signs of scams. Consequently, we applied

these as independent variables. We used cross-tabulations as a method of analysis and SPSS software to assess the data. As expected, there were differences in understanding scams, and the selected modes of assisting victims by both variables.

For all audience types, the most preferred option to help scam victims was telling them never to give out personal information and never buy gift cards for an unknown person. The second most preferred answer was assuring the older victim that someone was listening to their concerns and would be on their side regardless of whether they intended to report the incident to the police. Interestingly, all these answer options were selected less often by retirement home participants than by university and public audiences. Retirement home participants were also the least likely to identify the subtle signs of scams, such as romance scams, sweepstake/lottery scams, IT support scams, government or police impersonation scams, and urgency in tone of the unknown caller who asks for money or gift cards.

When examined by age group, it became clear that the older the audience member, the more difficulties they had foreseeing some typical consequences of being victimized by scams, identifying the risk factors of scam victimization, identifying the signs of scams, and helping others being scammed. The youngest age group which was associated with the university was generally the most knowledgeable of scams. The second oldest age group was the second most informed, and so on.

Regarding coping, it is worth revisiting the significance of friendly listeners. When asking about some helpful answers to scams, listening to the victims and assuring them you were on their side was the most popular in older age groups, and was most likely to be selected by 41–75-year-old age groups. It seems that human connections and trustful ears soothe more than urging to report the incidents to the police or other authorities, and even more than finding a solution to get the money back. This was observed regardless of former victimization, so we can confidently say that the show achieved one of its primary goals: it reassured the audience that active listening and giving the victim credit were valuable when wanting to help victims. Regarding the typical consequences of scams, the victim's isolation was the only answer selected with statistical significance. As for the factors accounting for scams, having larger financial assets, and taking more risks and losing more money as a consequence were selected, especially by 60-75-year-old individuals. However, these and the signs of typical scams were less likely to be identified by older audiences than younger ones.

As for the format of the show, the open-ended questions clearly indicated that the audience appreciated the techniques, the symbolism, and the humor with which the sometimes severe consequences of scams were presented. According to follow-up emails from caretakers in retirement homes, communication with residents as well as the ability to identify suspicious calls and emails became more manageable and more straightforward.

SPECIFIC FINDINGS: FOLLOW-UP INTERVIEWS

Between May 15 and June 15, we conducted 15 interviews with audience members who signed up for an interview by providing their email addresses or telephone numbers at the end of the survey. The interviews were either online or in person, depending on the interviewee's location, and ranged from 24 to 67 minutes, with a 42.8-minute mean length. Out of the 29 sign-ups, only 20 responded to our call/email, and eventually, the research team interviewed 15 respondents. Most interviewees were male (with five female participants and one non-binary participant), and fell in the 18-40 or 41-60-year-old age groups (4 and 4, respectively; additional age group categories included 61-75: 3; 76-80: 3; 81-92: 1 participant). Most of the interviewees saw the show at one of the local public libraries (Christiansburg: 8), Virginia Tech (3), or the independent living facility (4), and estimated their computer savviness between 3 and 5 on a 1-5 scale where 5 indicated high savviness or computer programming skills (mean=3.9). All interview participants reported that they or someone they know had been approached by scammers (online or on the phone).

The follow-up interviews aimed to receive direct and detailed feedback from the audience about the show, whether the show succeeded in educating the audience (what were the main takeaways), and to receive suggestions for future program improvement.

Accessibility

a) *The show was not fully accessible to hard-of-hearing populations.*

Interviewees asserted that sometimes it was hard to hear what the performers said, especially when more people were talking simultaneously, which often resulted in cacophony. While it was intentional for the show, it was advised to account for hard-of-hearing populations, especially as aged populations tend to lose sensory abilities compared to younger people. In addition, the show had a great variability in high- and low-pitched voices, and the actors moved around the stage, which made it harder to hear what they said.

And the biggest problem I had with a presentation is I have probably heard 40% of what was said. So, a lot of times, I'm kind of guessing it. And I've got excellent hearing aids that are cranked up as high as they'll go. And I still can't hear. And so that's one thing I wanted to mention to you that, if you haven't already, given some thought to this. You might want to consider is there some way of amplifying these people's voices [...] in your project? (Male, 81-92, University)

If someone is facing me, I can hear him pretty good. When I turn, and your actors were moving around a good bit, and when they're turning facing some other audience, well, they may lost me. (Male, 81-92, University)

b) *What about those who cannot leave their homes? They need online streaming.*

Online streaming of future shows was suggested by interview participants in order to reach audiences who cannot or do not want to leave their homes.

c) *Symbolism and non-verbal cues helped convey the message.*

In the meantime, participants appreciated the symbolism and non-verbal communication techniques embedded in the scenes, which helped them understand the feelings attached to victimization (e.g., the can-phone scene).

The main message of the show

In order to check whether the show successfully conveyed its main messages, we asked participants to talk about the most valuable takeaways of the show.

a) *Scams are ubiquitous.*

One of the main takeaways was to note that scams can happen to anyone, and older people are not to take the blame for the incidents.

Well, I think you're trying to say that the scams are ubiquitous and that they appear in the most ordinary. That everyone should be alert. Pretty much all the time to try to avoid some serious effect. That seems to me to be the one of the main messages you may have had some others, but that was that communicated to me. (Male, 81-92, University)

b) *The show absolved the audience from feeling guilt and self-blame.*

Another important message the show conveyed is that everyone who uses computers/phones will encounter scammers. Although panicking and having negative feelings are normal, it is also normal to ask for help and talk about it.

The main message...Yeah, it's going to happen and it's okay when it does (Female, 41-60, Independent living)

That's okay, those are just feelings, those are gonna past. It's okay to have all those emotions. That was another really big thing about it just giving permission, that it's okay that it's okay, this way or this way in this way, and you're not a bad person. If this happens to you. (Female, 41-60, Independent living)

c) *Shame prevents dialogue.*

Another takeaway indicated that the key is eliminating shame, which hinders people from conversation and learning.

I think there's a lot of shame and shame prevents dialogue, which furthers, you know, a tendency to hide, like, prolong addressing issues or like prevent dialogue from happening. (Non-binary, 18-40, Independent living)

d) *Scams affect people differently; therefore, the involvement of different generations and the various responses they provided were beneficial.*

So many different types of people and demographics are impacted. The way that scams, specifically, like harm people in many different ways. (Female, 41-60, Independent living)

e) *Be responsible for others; help others.*

Another critical message encouraged community members to be responsible for their fellow human beings. Often a responsible community can help victims in a more helpful way than public agencies' responses.

But also, it's almost as if we all have to take on the responsibility to be looking out for others. (Female, 41-60, Independent living)

If I just overhear a conversation, you know, I'd be like, hey, wait a second, actually, Hi, this is who I am. This is where I work. And this is done. To give permission to me to be able, yes, I can now go out be an advocate for others. So that's great. (Female, 41-60, Independent living)

f) *It emphasized the role of the family.*

The show tapped into the roles of different generations and the victims' families in resolving shame and healing quicker.

Because it is, yeah, because then you still you still have that person that went home. You know, feeling horrible that they got scammed. And, you know, unless their family says it's okay. (Female, 18-40, Public library)

g) *The show had a novel way of presenting already well-known material.*

Participants asserted that the presentation format was new, and had advantages.

Well, I think and in fairness, I'd say no, I, what that did for me was to present the scams in a novel way. But I don't recall hearing anything that I had not heard about before. Yeah. So we I don't I don't know. I wouldn't say that. (Male, 81-92, University)

That presentation was a very nice addition to the educational materials that are available to this through many sources. And this kind of fills a gap or something. (Male, 81-92, University)

What did participants appreciate in the show?

a) *Real people were telling stories.*

The performers were not professional actors but "real" people. This way, they brought the stories closer to the audience.

But they weren't professional actors. They were like real people. Yeah, trying to act out real situations. And I know that they even did they simulated phone ringing and things like that. I recall. Recall that I thought that was pretty good. (Male, 81-92, University)

b) *The format of the program.*

The message was wrapped into a theatre show, where the audience had no distractions and received the message without multitasking.

But I think one reason that your play is effective is because you've gone to the effort to attend, and you're paying attention, and probably not distracted by a lot of other things as you would be with almost all these other things. So you get a, you get something in the mail that really communicates with you. But it's the same time you got about ten other things that you're paying attention to at the same time. But you're like going to this performance where you pretty much thinking about the experience. And I think that's its value. (Male, 81-92, University)

c) *The humor.*

The humor made it easier to digest the presentation of hard feelings and difficult situations.

And it's a fun and funny show. Because it breaks down the seriousness of it, it makes it approachable, you have to do that. Either that or just feels like this big giant gorilla in the room. And it helps you take on the bits of information easier, it makes it more digestible. It gives you a release from the fear. It's an important, I think, a necessary balance when you really want to drive a point home. (Female, 61-75, Independent living)

d) *The symbolism.*

The show applied non-verbal cues and devised theatre techniques that helped tell stories in a way that made it more accessible for everyone.

It was really funny, the scene that I remember most vividly is the one with the tin cans and the rope. And it's because it's you visually with a very simple prop, you were able to visually mirror what was happening in the conversation and with emotions, like, was getting tied up. (Female, 41-60, Public library)

e) *The play showed that scam victimization affects multiple generations at the same time.*

Interview participants appreciated that the show provided insight into how different generations handled the same situation and how their lives were affected.

You cannot not feel that it is your job to deal with it. Everyone is affected. (Male, 18-40, Public library)

When you show it like in the show, when you shove the fact that one choice you make will have ripple effects, that will always have a ripple effect, and your choices. Your choices matter, your choices will always

matter. And it will affect it's not because you know, when you lose a lot of money, you know, it is going to affect, you know, your children, your grandchildren, it's going to affect all sorts of things. (Female, 41-60, Independent living)

f) *It was personal instead of statistical.*

The audience appreciated the style and format of the presentation. In particular, they emphasized that it was personal instead of statistical. It presented information in a highly digestible format that will be remembered.

This was personal. This made it for me, this was a personal connection, instead of just data sheets of this is where it happens. This is what to expect when it happens that blah blah blah, you know, statistics, for versus, hey, it's almost like someone with a graph chart and a pointer versus someone coming up and taking someone's hand. (Female, 41-60, independent living)

g) *It did not put pressure on people to report scams.*

Interview participants asserted that, unlike other presentations and programs, the show did not want to pressure victims and their communities to report the incidents. The interactive breakout sessions (i.e., when actors asked the audience about reporting activities) tapped into the advantages of reporting, but it was not something the show insisted the audience do. Instead, the performers discussed the issue with critical reflection.

So not necessarily they want to convince the victim to report it, you know, it's not that kind of pressure. (Female, 41-60, Public library)

When you focused on the human side of things. Time and time again, that will always get you greater results than you know, here's a flyer with phone number. And if this happens, call this number and this is, you know, these are the different government agencies. (Male, 81-92, University)

h) *It emphasized the importance of human connections.*

Interviewees mentioned that the show did an excellent job of emphasizing the "heart connection," as one of the interviewees put it.

The heart connection, the understanding, and to provide an environment where it's okay to talk about it. I honestly believe that you can really break down a lot of the bad stuff. (Female, 41-60, Independent living)

i) *The show sparked discussion about scams.*

The audience mentioned that discussion sessions between the scenes served to gain a better understanding of the scams and their impact.

I talked to my sister about it. She didn't attend. But we did have a conversation about it and I about the show, and I think we both are working to develop compassion, through the hurt, like through the pain and everything that we've lost, kind of as a result of scams. So I think it was helpful in that it sparked discussion for us. (Non-binary, 18-40, Independent living)

Recommendations for improvement

Finally, we asked interview participants about their recommendations to develop the program further.

a) *Make the show more accessible for hard-of-hearing audiences.*

There were repeated requests to serve hard-of-hearing people better. The transcript/captions of the play could be displayed on iPads, disseminated to the audience.

I wondered if you could use some kind of visuals in your play. I'm thinking back to the old vaudeville days, you know, where they did all sorts of stunts on the stage. But for example, going from one scam to another that transition. (Male, 81-92, University)

b) *Improve accessibility in general.*

The show could be broadcast on TV channels and livestreamed to remote communities.

Seeking to provide transportation services, the project could team up with AARP.

The issue is the difficulty of getting to your presentations, there are some people who need [the information]. Who aren't there, because you can't get there. (Male, 81-92, University)

c) Include more body language, more non-verbal communication, less verbal.

While interviewees appreciated the symbolism incorporated in the show, they emphasized the multi-layered meaning of the scenes and that devised theatre techniques such as non-verbal communication, body language, and using tools could be still added to enhance access and understanding.

d) Apply more diverse channels of communication to enhance understanding.

A recommendation to complement the show was a short description of the stories, in a booklet, to aid audience in literal understanding. It could also help with digesting the information, especially if the audience could bring the booklets home and revisit them.

The booklet could contain useful information such as what to do and where to report incidents. Takeaways and learning points could also be highlighted at the end of each scene, so that people could study it once the show was over.

e) The project could team up with local and national agencies for the distribution of flyers and advertisement of the shows.

It is worth noting that the project already used AARP flyers and informational material at the shows in Spring 2023, however, this was again recommended by interview participants with connections to AARP.

f) Follow-up presentations could be organized and provided by the AARP Speakers Bureau in Virginia.

Interview participants pointed out that some audience members would like to know more about the scam scenarios presented. Therefore, the organizers should consider setting up follow-up events which could tap into the details of each scene, by inviting some speakers that match topics to the show's scenes.

And it would be great to have a follow up presentation from these speakers, you know, because I think it's useful for the people who get hooked by the presentation. So, to say that, Hey, okay, so I realized this is happening, and where can I know, where can I learn more about these things? (Male, 81-92, University)

The follow-up events could also include more information on scams, and information/stories on specific scams. (For example, Medicaid scams or romance scams were mentioned specifically).

Discussion of the follow-up interviews

The show was received quite well by the audience, according to the feedback in the follow-up interviews. Our goal was to educate older people about online and telephone scams that victimize both them and their loved ones. The show intended to start a conversation about these highly manipulative cybercrimes by incorporating various scam scenarios and their impact on older people and their families as primary and secondary victims. We also wanted to provide ideas for the audience about the financial and emotional impacts of the crimes, help them re-think feasible responses, and mobilize to become aware of the strategies they can employ to assist each other.

Devised theatre techniques such as non-verbal communication, symbolism, and body language indeed functioned as extra layers that helped convey the dynamics of scams. Interactive elements between scenes helped the audience recognize their resources, and the ways they can help other community members. The diverse program components for diverse audiences (multiple generations, multiple location types) helped frame scams as a multi-generational issue that not only affects mature populations, but also their children and grandchildren. Humor, having their voices heard, and asking open ended questions (who would you call? who wouldn't you call? what are the feelings associated with scams? how would you feel when scammed?) functioned to empower audiences. According to the feedback, the show had a long-lasting effect as people started to talk about it afterwards, including with their loved ones who did not attend. It helped retirement home caretakers identify the signs of scams earlier, and their quick actions led to a more rapid response to incidents.

However, there are still important recommendations for the show, such as making the presentation more accessible, especially for hard-of-hearing people, and also to audiences who do not or cannot leave home to attend a theatre show in-person. Teaming up with local and national agencies for flyers and follow-up lectures was another suggestion the audience made to nurture a better and deeper understanding of certain scam scenarios. New and evolving scam scenarios, such as Medicaid and Medicare fraud should also be part of the repertoire, to keep the audience updated and prepared for novel scams.

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