

**Receptiveness and Responsiveness of Using Social Media for Safe Firearm Storage  
Outreach in Washington State: A Mixed-Methods Study**

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A thesis submitted in partial fulfillment of the requirements for the degree of  
Master of Public Health

University of Washington  
2019

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Program authorized to offer degree:  
Epidemiology

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**Abstract**

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**Background:**

Childhood and adolescent firearm injury and death have increased over the past decade and become a major public health concern in the United States. There is a growing disparity in the incidence of these events occurring in rural compared to urban areas. Safe firearm storage have shown to be an effective measure to prevent firearm injury and death among youth.

**Objectives:**

To determine receptiveness and responsiveness in promoting lock box and trigger lock giveaway events on social media and describe characteristics of participants who find out about the event through social media.

**Methods:**

We conducted a mixed-methods study combining a content analysis of Facebook comments, quantitative analysis on positive and negative feedback on social media and a descriptive analysis of event participant characteristics. Through a qualitative content analysis approach, we thematically coded comments from each event posting. Inter-rater reliability and Kappa were calculated. Positive feedback data and negative feedback data were gathered. Prevalence of these feedback measures were calculated. Descriptive statistics for demographic characteristics

gathered from event surveys were calculated. Chi-square and t tests were used to examine whether there was a significance difference between collected measures based on how the participant found out about the event. Chi-square test was used to examine if there were different categories of receptiveness based on whether the event location was urban or rural.

## **Results**

With a total of 414 comments from 13 events, we found 7 themes within the comment coding process with the most prevalent being positive receptiveness (71.0%). There was a greater proportion of positive feedback interactions compared to negative ones. Among all surveyed participants (n=4,059), approximately 35.7% found out about the event through social media. On average, the participants who found out about the event through social media were significantly younger than those who found out through other means (-6.5 years, p-value <0.01). There were 54.7% of participants who identified as females among those who found out about the event on social media compared to 32.9% who identified as females who found out about the event through other means (p-value<0.01). There was also a 91.31% intention to use the giveaway equipment in those who found about the event via social media compared to 84.78% in those who found out about the event through other means (p-value<0.01). There were no significant differences in receptiveness, responsiveness and demographic characteristics in regard to rurality and urbanicity.

## **Conclusions**

Though firearm storage can be a sensitive and controversial topic, there is positive receptiveness and responsiveness towards these events when they are promoted on social media. Using social media, there was the ability to target a younger population and a larger proportion of females. Social media targeting was more likely to reach a younger, female population. There also seems

to be a correlation higher levels of intention to use equipment from the event when individuals found out about the event through social media compared to more traditional means. Future studies should extend this research to find if there is a difference in these findings for rural compared to urban settings.

## **Introduction**

Firearm injury is a major public health concern in the United States. Among children, approximately 1,300 die from, and 5,790 are treated for, gunshot wounds each year.<sup>1</sup> Firearm suicide rates among this population have been increasing over the past few years.<sup>1,2</sup> There are also higher rates of firearm injury and death seen in rural areas than urban areas.<sup>3,4,5</sup>

Safe storage of firearms is associated with reduced risk of unintentional and intentional self-inflicted firearm injury among youth.<sup>6</sup> A study found that 65% of all surveyed high school seniors had access to at least one firearm in their household.<sup>7</sup> Storing a gun locked (using devices such as a trigger lock or lock box) has been shown to drastically decrease the likelihood of unintentional and intentional self-inflicted firearm injuries among youth.<sup>8</sup> However, a notable proportion of firearm-owning households with children store their firearms unlocked.<sup>9</sup>

In Washington State, 34% of residents report having a gun at home and only 38% of those individuals report storing their gun locked and unloaded.<sup>10</sup> Washington State passed Initiative Measure No. 1639 in 2018. Initiative 1639 aims to increase public safety by enhancing background checks, waiting periods, increased age requirements for attaining semiautomatic assault rifles, and specifically requiring secure gun storage for all firearms.<sup>11</sup> With the passing of this initiative, a purchaser is required to provide proof of completion of a recognized firearm safety training program that must have included secure gun storage education and how to talk to children about gun safety; they are also required to put this training to practice.<sup>11</sup> Lack of adherence to these initiative guidelines will result in criminal charges.<sup>11</sup>

Prior to the passing of the Washington State Initiative No. 1639, a Children's Hospital began the "Safe Firearm Storage Giveaway Outreach Event" program, primarily focusing their efforts in Western Washington, hoping to reach areas across the spectrum of rurality and

urbanicity. The primary mission of these events is to prevent firearm injuries by creating safe environments for children, their families, and their communities, through providing free gun locks and trigger locks focusing on parents living in households with children. These have been community-based efforts involving multiple stakeholders, including research institutions, government entities, and lock box and trigger lock distributors. These efforts have shown to be effective in changing behavioral intentions and attitude towards safe firearm storage practices. Through an evaluation survey given 4-6 weeks after each of these events, a significantly greater proportion of households with children and adolescents reported having stored and locked their firearms.<sup>12</sup> Flyers, newspaper advertisements, and sharing through word of mouth, and posting on social media were used to promote these events.

It remains unknown whether there is acceptability to distribute messages about firearm storage on social media. The reach of Facebook is high as approximately 70% of all US adults use Facebook and this platform has shown to be widely used among all demographic groups.<sup>13</sup> More than 40% of US adults get their news from Facebook.<sup>13</sup> Facebook provides a digital platform that allows for interactive health promotion, which has the capability to provoke varying responses to posts sharing about events, news related posts, or individualistic or organizational ideas. This can be done by posting, commenting, reacting or liking, or even reporting or hiding the posts and other future posts from the same page as well. Knowing the high levels of reach of Facebook, the Children's Hospital chose this platform to promote the events.

Social media marketing is a growing trend for many fields and due to its structure, can be a versatile and useful tool in the area of public health and safety. Many organizations are skeptical in social media marketing for topics such as firearm use and storage practices, due to

the potential for controversial conversations and reactions that it may elicit. This study sets out to understand the individual and community level responses in social media as an educational and marketing tool for promoting safe firearm giveaway events and to analyze the attitudes and conversations that come up through this social media marketing posts.

There were three primary aims for this study: (1) understand the receptiveness of using social media as a way to promote safe firearm storage in the continuum of rural to urban areas; (2) assess the individual level responsiveness towards the “Safe Firearm Storage Giveaway Outreach Events” hosted by the Children’s Hospital; and (3) compare the characteristics of event participants who found out about the event via social media and those who found out about the event through other sources.

## **Methods**

We used a mixed-methods approach, incorporating both qualitative and quantitative methods. A mixed-methods approach was deemed most appropriate to understand what makes an intervention, such as the “Safe Firearm Storage Giveaway Outreach Events” hosted by a local Children’s Hospital, feasible and functional in the real world.<sup>14</sup>

Data from social media comments were qualitatively analyzed to understand receptiveness and quantitatively evaluated to understand responsiveness. Receptiveness is defined as the attitudes towards the event and responsiveness is defined as the quantifiable interactions on these event posts. Additionally, information collected on surveys distributed during the events were examined to understand the characteristics of event participants.

The content analysis portion of the study was exempt from IRB because it only used publicly accessible and de-identified data from Facebook. The survey data used in this study was

approved by the institutional review board of the Seattle Children’s Hospital, Seattle, Washington.

### *Assessing rurality and urbanicity*

We used the United States Department of Agriculture (USDA) Economic Research Service Rural-Urban Continuum Codes (RUCC) from 2013.<sup>15</sup> The 2013 edition was the most recent one at the time of analysis as they are conducted every 10 years.<sup>15</sup> Codes are assigned to counties with ranging from 1 to 9.<sup>15</sup> Codes are assigned based on population size and proximity to a metropolitan area.<sup>15</sup> Urban counties are coded between 1 and 3. Being categorized as a 1 is a city in a large sized urban county, 2 is a city in a medium sized urban county, and 3 is a city in a small semi-urban sized county.<sup>15</sup> Non-metropolitan counties are coded between 4 and 9, 4 being a city in a larger semi-rural county and 9 being a city in a small completely rural county.<sup>15</sup> See Table 1 for event locations and for their assigned RUCC.

### *Aim 1: Qualitative Analysis - Receptiveness*

We used content analysis to evaluate comments generated by Facebook users in response to posts advertising and promoting the “Safe Firearm Storage Giveaway Outreach Events”. This social media content analysis involved a codebook that was iteratively created in order to capture the themes in attitude and perception towards these events presented in the coded comments.

### *Data Extraction - Setting and Participants*

Data was extracted from Facebook, which was chosen because this was the primary social media platform used for promoting these events. These events were held between December 2014 and May 2018. The links of these posts were extracted through a social media analytic software, SimplyMeasured. Posts that were still publicly available at the time of data extraction were used. Data and event location were cross-referenced to ensure accuracy and

matching of those posts and the actual event. All comments were coded excluding those not written in English. The name of the Facebook user who commented was not recorded.

At the time of data extraction, among the 15 events held, 13 were found to still have a publicly available post which was generated by the Children's Hospital prior to the event. To ensure that all comments were evaluated, "all comments" was chosen on the Facebook post's comments display option.

#### *Codebook Development and Coding Validation*

Iterative categorization approach was used for this analysis to allow for deductive and inductive coding resulting a structured system that would allow for reproducible results.<sup>16</sup> Using this approach, we created parent and child codes. Parent codes are overarching salient themes and child codes stem from each of the parent codes, with much more specific attitudes and perspectives.

#### *Data Collection*

All comments, including replies and comments from the Children's Hospital, were coded. Text from the comment were recorded verbatim, excluding identifiers such as the name of the Facebook user or names of any tagged users. There is no validated assessment for emoticons, therefore emoticons were not coded. Each comment was only allowed one code; therefore, for longer comments, the most salient theme was chosen to be coded. The comment and the assigned code were recorded in a password protected Excel spreadsheet.

To evaluate the coding process and to ensure the validity of the codebook, inter-rater reliability and Kappa were calculated. A research team member with prior training in content analysis and specifically in this codebook was given 10% of the comments to code independently. Coding results from this research team member and the first set of given codes

were compared. The results indicated 88.10% observed agreement with 11.05% expected agreement, (Kappa = 0.87, p-value<0.01). This indicates strong level of agreement supporting the reliability of the codebook.

#### *Codebook variables*

The coding schema at the end of the iterative coding process is presented in Table 2.

#### *Aim 2: Quantitative Analysis - Responsiveness*

Each event post allows for “liking” of the post, in addition to commenting. “Liking” the post is publicly available data. In addition to this publicly available data, we used SimplyMeasured, which allowed access to track de-identified data including the number of clicks and the “total reach” of the post. The “total reach” is defined as the total number of unique people who saw the post during the “reporting period”. The “reporting period” is the duration in which the post is publicly available. From SimplyMeasured, we also gained access to data on “negative feedback”. “Negative feedback” data extracted displayed the number of individuals who chose to hide the post, report the post as spam, hide all future post from the same account, and those who un-liked the page who posted these event posts.

For each event, prevalence was calculated using the count of each measure as the numerator and the “total reach” number as the denominator.

#### *Aim 3: Quantitative Approach - Survey Data*

At each of the “Safe Firearm Storage Giveaway Event”, participants were asked to complete an anonymous paper self-administered survey prior to receiving a trigger lock or lock box. These surveys assessed how the participant found out about the event, demographic characteristics, their current firearm storage practices, and their intention to use the giveaway equipment in the next week. Data from those surveys were imported into a password protected

REDCap server. Relevant data for this study was extracted from REDCap. Only individual level responses deemed “complete” by the data importer were used. Chi-square test was used to examine whether there was a significant difference in distribution of the categorical variables (gender, gun storage practices, and intention to use in the next week) based upon on how the individual found out about the event. t-test was used to examine if there was a significant difference in mean age by how individuals found out about the event. A p-value less than 0.05 was used as the cut-off for significance.

## **Results**

### *Aim 1: Qualitative Analysis - Receptiveness*

A total of 418 comments from 13 event posts were publicly available during the timeframe of interest, December 2014 to May 2018. A total of 414 comments were coded; 4 comments were not evaluated because they only used emoticons or were not written in English. From the 15 events that occurred within the timeframe, only 13 resulted in publicly available posts during the data search and extraction. On average, event posts had 32 comments (range: 0-131). Of the 13 event posts evaluated, 8 were from cities categorized as being in a large urban county, 1 was categorized as a city in a medium sized urban county, 3 were categorized as a city in a small sized semi-urban county and 1 was categorized as a city medium sized semi-rural county.

A total of 7 parent codes were established: 1) Positive Receptiveness, 2) Negative Receptiveness, 3) Post-Event Commenting, 4) Advocacy Against Firearm Storage, 5) Advocacy for Firearm Storage, 6) Commenting to Moderate and 7) Comments by the Host. Stemming from these parent codes, 21 child codes were created. The coding schema at the end of the iterative

coding process results are presented in Table 2. Examples of de-identified coded comments for each parent code is presented in Table 3.

The most common parent code found was Positive Receptiveness. Of all comments coded, 71.01% displayed themes of Positive Receptiveness - defined as a comment showing a positive attitude towards the event including expressing excitement, gratitude, and/or interest explicitly or sharing the event by tagging friends. Expressing excitement and/or gratitude towards the event made up 10.77% of all comments. Of all comments coded, 40.42% were of Facebook users tagging friends which can be an implicit notion of sharing the event post. Among all codes, 6.22% of all comments were coded as the Facebook user showing interest for the event but could not make it to the event due to the distance and timing of the event.

Negative Receptiveness made up 3.62% of all comments. Of all comments, 2.87% were of individuals expressing that they did not understand why these events were necessary and/or that they did not think that lock boxes work. Only 0.72% of individuals showed doubtful sentiments about the potential success about the events.

Post-event commenting made up 0.72% of all codes. This included participants going back to the event post and commenting about their experience at the event. Most of these comments were factual experiences including how long the wait was to receive their giveaway equipment and/or what they type of firearm storage they received at the event.

Advocacy against firearm storage made up 4.07% of all total comments. These comments included sentiments that children should be trained to use firearms and that there should be much more liberal firearm ownership.

Advocacy for firearm storage made up 7.00% of coded comments. These comments included perspectives that children should be well protected from firearm and there were some comments that showed sentiments of wanting more firearm control.

The parent code, Commenting to Moderate, was used to denote anytime a Facebook user commented during or subsequent to a political or controversial discussion. We defined this as moderating as this type of comment would aim at drawing attention back to the mission of the event and alleviates the tone created by controversial comments; 2.39% of coded comments were coded as such.

Comments by the Host is a parent code defined as any comment posted by the Children's Hospital to answer any inquiries from a comment or to sometimes thank commenting users for their support. We found that 9.42% of all comments to be Comments by the Host.

Comments that were not relevant to the topic of the event were not coded with any of the parent codes or child codes and were marked as Spam (2.42% of all comments).

We did not find a significant difference in categorization of parent codes based on the event location's RUCC code (p-value=0.17).

#### *Aim 2: Quantitative Analysis - Responsiveness*

Among the 13 events whose comments were coded, 4 of those events did not yield data from SimplyMeasured to allow for positive and negative feedback prevalence to be calculated. Among the 9 events with this type of data, we found that the total reach on Facebook was 491,155. The average reach per post was 54,572 per event. The highest reach was seen in the first Seattle event with a reach of 187,072. The lowest reach was seen in Tri-Cities, with a reach of 10,536.

### Positive Feedback

The average number of likes was 1,271.33 per event. The highest prevalence of likes was seen in Tacoma (13.63 likes per 1,000 engagements). The average number of clicks per event was 5,183.60 for all events. The highest prevalence of clicks was seen in Monroe (76.48 clicks per 1,000 engagements). The lowest prevalence of clicks was seen in Kirkland (18.04 clicks per 1,000 engagements). See Table 4 for the comprehensive positive feedback results among all evaluated event posts.

### Negative Feedback

The average count of times in which “hide post” was clicked on these event posts was 72.33, 1.33 counts per 1,000 engagements. The highest prevalence of “hiding the post” was in Kirkland with 5.84 counts per 1,000 engagements. The lowest prevalence of “hiding the post” was seen in the first Seattle event (0.41 counts per 1,000). There were not any posts that were reported as spam. The average count of “hiding all future posts” was 8.56, with 0.16 counts per 1,000 engagements. The highest prevalence of “hiding all future posts” was 0.88 per 1,000 engagements from the Kirkland post. The lowest prevalence of “hiding all future posts” was 0.08 per 1,000 engagements from the Mount Vernon post. There were only 2 counts of “un-liking the page” among the 9 events, and both instances happened on the Fife event post. See Table 4 for comprehensive negative feedback results for all evaluated events.

### *Aim 3: Quantitative -Survey Data*

Among 13 events, a total of 4,509 participants completed the intake survey and were deemed to have “complete” results by the data importer. A total of 2 events did not use a survey assessing how participants found out about the event; therefore, data from those 2 events were not evaluated. Upon evaluation, 1,450 (35.72%) participants stated that they found out about the

event on social media and 2,609 (64.28%) found out through other means. These other means included finding out about the event through a friend, newspaper ads, and flyers.

The average age of individuals who found out about the event via social media was 38.76 with a range of 18-81 years. The average age of individuals who found out about the event through other means was 45.21, with a range of 18 to 88. Those who found out about the event via social media was 6.45 years younger than those who found out through other means. There was a significant difference in mean age between those who found out about the event via social media and finding out about the event through other means ( $p\text{-value}<0.01$ ).

Among the group that found out about the event on social media, 43.48% were male. Among the group that found out about the event through other means, 59.95% of them were male. There was a significant difference in gender distribution, with a greater proportion of females among the social media group compared to the other group ( $p\text{-value}<0.01$ ).

Among the group that found out about the event on social media, 24.34% reported not having locked their firearm, whereas in the non-social media group, 25.83% did not lock their firearm. In the social media group, gun safes (36.83%) were the most prevalent current gun storage used. Among the other group, gun safes were also of highest prevalence (37.64%). There was no significant difference in reporting not having gun storage between the two groups (the social media vs. the non-social media group;  $p\text{-value}=0.30$ ).

There was high intention to use the giveaway firearm storage equipment in all event participants. Among the social media group, 91.31% said that they would use in the next week, whereas, in the non-social media group, 84.78% said they would use in the next week. We found that intention to use was significantly higher among the social media group than in the non-social media group ( $p\text{-value}<0.01$ ). See Table 5 for a description of event participants.

## **Discussion**

To our knowledge, this study is novel in using mixed methods approach to understand the receptiveness and responsiveness of using social media as a marketing tool for a safe firearm storage giveaway intervention. Prior to this study, it was unknown as to whether or not social media was the appropriate tool to use to market these events due to the more controversial nature of this topic and whether there would be acceptance and if so, if the level of acceptance would differ between rural and urban areas.

We found high levels of acceptability and positive receptiveness towards these social media posts through comment responses. Through our content analysis, we found a much higher proportion of positive comments than negative ones. Facebook generated an avenue for users to not only find out about the event, but also share the event through easily “tagging another Facebook user” in the comment. We found that individuals ask for more of these events, specifically for ones closer to where they reside, indicating that there is a call and need for these events. Promoting these events on Facebook also allowed for conversations between users and between the user and the Children’s Hospital hosting this event. Facebook users were able to comment with questions about their event and either other users and/or the Hospital could respond in a more immediate manner.

Through there was the presence of some negative and advocacy-oriented comments, data illustrates the emergence of Facebook moderators and the ability for the Hospital to respond. Though there was a presence of some negative and advocacy-oriented comments, finding indicate that there were other Facebook users who were willing to step in as moderators to draw the attention back to the goals of the event. Data supports the presence of certain Facebook users - moderators – to speak up drawing the conversations back to the goal of the event - to protect

children and households through safe firearm storage practices - and pushing the conversations away from topics such as talking about the legalities of firearm ownership. Moderators have the potential to also lift some of the burdens of the event host to have to constantly monitor and intervening. Previous studies have found that moderators in the online communities have contributed greatly to keeping discussions on track by countering negative social media perceptions.<sup>17</sup> While this study only captured a small fraction of these moderators, this observation shows the importance of engaging positive influencers on social media for promotion of events like this.

We also observed a much higher level of positive responsiveness than negative responsiveness. There were many more interactions such as clicking the post and liking the post compared to hiding the post or un-liking the post. This high level of positive responsiveness is important because it shows that despite the controversial subject matter, no notable backlash towards the hospital hosting the event or any perceivable impact on their clinical medical oriented branding occurred.

We found that approximately one-third of all participants across 13 events found about the event through social media indicating that this a useful marketing tool. Additionally, we found that through using social media, younger individuals and an increased number of females were reached. Those who found out about the event on social media were on average 6.45 years younger than those who found out through other means. Contextually, this is representative to the users of Facebook, where there is a higher proportion of female users compared to male users (74% vs. 62% of US adults) and a decreasing trend in usage as age increases.<sup>18</sup> This is important when thinking about the demographic characteristics of reach. Participants who found out about the event on social media had an even greater intention to use the giveaway event safe storage

device than those who found out about the event through other means. When implementing an intervention, it is important to use the most appropriate and efficient of tools to promote it. In this study, it is suggested that social media to capture younger individuals and a different gender distribution than more traditional means such as using flyers, newspaper ads, and posters.

### *Limitations*

Using primarily data posted on Facebook to understand receptiveness, there are likely to be biases in attitudes presented on social media. Across social media platforms including Facebook, there is a tendency for greater positive expressions because they are generally perceived as more appropriate than negative sentiments.<sup>19</sup> Similarly, we found many more positive comments than negative ones. This may be due to the fact that Facebook users with negative attitudes and perceptiveness towards firearm storage may not find Facebook as the most appropriate venue to express that sentiment.

The social media content analysis evaluated data from 13 events, though there were 15 events that occurred between December 2014 and May 2018. The 2 events were not evaluated because they were not publicly available on Facebook at the time of data extraction. This decreased the sample size for our qualitative analysis and may decrease the generalizability of the results. There were also missingness in the quantitative data; there were 4 additional events that did not yield data available through SimplyMeasured, the social media analytics software. As such, the positive and negative feedback data were incomplete and only representative of 9 of the events. This may also decrease the generalizability of our results. In addition, due to missing data, we were unable to draw conclusions on whether there were differences in receptiveness and responsiveness based on the event location as being urban or rural. This is because our available

data were heavily skewed towards urban areas and the missing data concentrated in posts about more rural events.

## **Conclusion**

We found much higher levels of positive receptiveness and responsiveness towards event posts promoting the “Safe Firearm Storage Giveaway Outreach Events”. Specifically, these social media posts reached a greater proportion of younger participants and females. There were also higher levels of intentions of use for the giveaway equipment among the participants who found about the equipment on social media. Due to missing data, we were unable to draw conclusions on whether or not there were differences in acceptability of such events or using social media to market these events in rural and urban areas.

We found that social media allowed for multifaceted interactions from user to user, the user to host, and user to the social media platform. These interactions are unique because, with social media, there is now the ability for more immediate displays of receptiveness and responsiveness compared to more traditional methods of health promotion such as posters and flyers. Our analysis found that there are high levels of acceptability in using social media to market an intervention that may have more controversial connotations. Additionally, our findings support the idea that social media can be used as a tool for health promotion, specifically as a tool for promoting and discussing community-focused interventions. Future research should focus on understanding if there is a difference in rural versus urban acceptability for firearm storage education and promotion and focus on the greater implementation of these events to encourage safe firearm storage practices.

## **Acknowledgements**

We would like to acknowledge Stacy Andrews, Elizabeth (Tizzy) Bennett, and Cassie Simoena at the Seattle Children's Hospital and Aubrey Gower from the University of Wisconsin-Madison for their assistance and support in this project.

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**Table 1.** Locations of events that were evaluated including rural and urban codes

<b>Event Number</b>	<b>City</b>	<b>County</b>	<b>RUCC Code</b>
1	Seattle 1	King	1
2	Fife	Pierce	1
3	Tri-Cities	Franklin	2
4	Monroe	Snohomish	1
5	Tacoma	Pierce	1
6	Kirkland	King	1
7	Toppenish	Yakima	3
8	Marysville	Snohomish	1
9	Wenatchee	Chelan	3
10	Seattle 2	King	1
11	Mount Vernon	Skagit	3
12	Lacey	Thurston	2
13	Moses Lake	Grant	5
14	Silverdale	Kitsap	2
15	Federal Way	King	1

**Table 2.** Codebook used to evaluate event posts' comments

Parent Code	Child Codes
1. Positive Receptiveness	a. Sharing about the event by tagging another Facebook user
	b. Asking for more of these events and/or suggesting other locations for these events
	c. Showing appreciation/gratitude towards the Children's Hospital for hosting these events
	d. Showing exciting for the event, positive exclamation/emotion for the event (eg. Yay! Awesome!)
	e. Calling for others to go to the event by sharing more details about the event
	f. Expressing interest for the event, but also saying that they cannot go to the event
	g. Saying that they will go to the event
	h. Positive comments about lock boxes or trigger locks
	i. Asking for more information about the event
2. Negative Receptiveness	a. Does not understand why these events are necessary or why lock boxes/trigger locks are necessary
	b. Doubtful about how these events will be successful
	c. Shared past negative experience with a lock box or trigger lock
3. Post-Event Commenting	a. Shared factually about experience at the event without a sense of positivity or negativity
4. Advocacy against firearm storage	a. Shares a story or factually that children can handle guns well, advocates that children learn how to handle guns
	b. Words of disagreement/discourse against firearm safety
	c. Advocates for liberal gun ownership
5. Advocacy for firearm storage	a. Advocates that children should be well protected from guns
	b. Words of disagreement/discourse relating to firearm safety
	c. Brings up banning gun ownership
6. Commenting to moderate	a. Moderates a heated discussion and draws the attention back to the mission of the event
7. Comments by Host	a. Children's Hospital outreach comment or responds to an inquiry
<i>Spam</i>	Anything unrelated to the topic of firearm safety, the Children's Hospital or the event

**Table 3.** Examples of coded comments for each Parent Code

<b>Parent Code</b>	<b>Example</b>
1. Positive Receptiveness	“Thank you Seattle Children's and Outdoor Emporium. This was just what my family needed.” - FB user
2. Negative Receptiveness	“This is a nice give away but I doubt there will be enough boxes....there will be plenty of locks. Which every gun has a lock sold with it. And will never be used by anyone with brains.” - FB user
3. Post-Event Commenting	“After they ran out of Bulldog brand they started handing out Fortress brand lockboxes” - FB user
4. Advocacy Against Firearm Storage	“Problem is in a home invasion you don't have time to unlock your safe gun box. You lose, that's what happened to my brother.” - FB user
5. Advocacy For Firearm Storage	“But does every other kid who comes in your home? I'm all for firearm education, I went through it all when I was a kid, but fewer kids these days are learning from real educators and more from cartoons and movies. Not trying to pick a fight, just posing a question. My 4 year old play shoots (much against my wishes) and my almost 2 year old has picked up on it. The older one comprehends the severity of death, but the baby has no idea. Lock boxes and trigger locks isn't to protect the ones who understand, it's to protect the ones who don't.” - FB user
6. Commenting to Moderate	“XXX, I'd expect an anti-gun advocate to be more collected. if you are truly trying to win over any readers to be anti-gun advocates perhaps leave out the personal slams. I do hope you read your messages to XXX, and sincerely apologize to her. In my humble opinion it was completely unwarranted. Have a lovely evening. “ - FB user
7. Comments by Host	“We have a couple hundred items to give away, XXX. If you can't come to the giveaway Saturday, visit <a href="http://www.lokitup.org">www.lokitup.org</a> for retailers in King County who are offering a discount on select storage devices or lock boxes through December 2014.” - FB user

**Table 4.** Positive feedback results <sup>a</sup>

	<b>Total Reach</b>	<b>Number of Likes</b>	<b>Likes per 1,000</b>	<b>Number of clicks</b>	<b>Clicks per 1,000</b>
1. Seattle 1	187,072	4119	22.12	9861	52.71
2. Fife	125,504	2690	21.43	7595	40.60
3. Tri-Cities/Kennewick	10,536	234	22.21	591	56.09
4. Monroe	50,992	1395	27.36	3900	76.48
5. Tacoma	15,110	206	13.63	371	24.55
6. Kirkland	22,616	1418	62.69	408	18.04
7. Wenatchee	12,316	206	16.73	241	19.57
8. Seattle 2	18,664	309	16.56	367	19.66
9. Mount Vernon	48,345	865	17.89	2584	53.45
Total	491,155	11,442		25,918	
Average prevalence per 1,000			2.33		5.28

<sup>a</sup> Missing data for 6 events: Moses Lake, Federal Way, Toppenish, Lacey, Silverdale, and Marysville

**Table 5.** Negative Feedback Results <sup>a</sup>

	<b>Total Reach*</b>	<b>Hide Post</b>	<b>Hide Post (per 1,000)</b>	<b>Report Post as Spam</b>	<b>Report Post as Spam (per 1,000)</b>	<b>Hide All Future Posts</b>	<b>Hide All Future Posts (per 1,000)</b>	<b>Unlike Page</b>	<b>Unlike page (per 1,000)</b>
1. Seattle 1	187,072	76	0.41	0	0	19	0.10	0	0
2. Fife	125,504	197	1.57	0	0	12	0.10	2	0.02
3. Tri-Cities	10,536	12	1.14	0	0	1	0.09	0	0
4. Monroe	50,992	88	1.73	0	0	15	0.29	0	0
5. Tacoma	15,110	42	2.78	0	0	0	0	0	0
6. Kirkland	22,616	132	5.84	0	0	20	0.88	0	0
7. Wenatchee	12,316	46	3.73	0	0	3	0.24	0	0
8. Seattle 2	18,664	19	1.02	0	0	3	0.16	0	0
9. Mount Vernon	48,345	43	0.89	0	0	4	0.08	0	0
Total	491,155	655		0		77		2	
Average prevalence per 1,000			1.33		0		0.16		0.001

<sup>a</sup> Missing data for 6 events: Moses Lake, Federal Way, Toppenish, Lacey, Silverdale, and Marysville

**Table 6.** Description of event participant characteristics <sup>a</sup>

	Found Out Event via Social Media		Found Out Event via Other Means	
	n	%	n	%
Total n = 4,509	1,450	35.72	2,609	64.28
<u>Current firearm storage practice</u>				
No Gun Storage	353	24.34	674	25.83
Gun Safe	529	36.48	982	37.64
Gun Lock	226	15.59	307	11.77
Cable Lock	301	20.76	433	16.60
Trigger Lock	270	18.62	418	16.02
Other Gun Storage	50	3.45	94	3.60
Missing/No Answer	17	1.17	129	4.94
<u>Plans to use the lock box or trigger lock in the next week</u>				
No	39	2.69	119	4.56
Yes	1,324	91.31	2,212	84.78
Unsure/Not Sure	73	5.03	151	5.79
No Answer	14	0.97	127	4.87
<u>Gender</u>				
Female	629	54.76	860	32.96
Male	794	43.38	1,564	59.95
Other	3	0.21	7	0.27
Missing/No Answer	24	1.66	178	6.82
<u>Age</u>				
Mean (SD)	38.76	(SD=11.80)	45.21	(SD=15.44)
range	[18,81]		[18,88]	
Missing/No Answer	95		321	

<sup>a</sup> Missing data for Toppenish and Marysville