

**The *Too Small To Fail*
Hollywood Integration Campaign:
Lessons Learned**

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INTRODUCTION

Too Small to Fail (TSTF) is an initiative of the Clinton Foundation to raise awareness about the importance of early brain and language development, and to empower parents with tools to talk, read, and sing with their young children from birth. *Too Small to Fail* is a wide-ranging initiative, including an array of efforts such as grass-roots outreach to parents at hospitals, pediatricians' offices, laundromats, and other locations; a texting campaign to deliver parenting tips directly to parents through their mobile devices; and media-based communications including public service advertisements (PSAs) featuring celebrity moms, a partnership to air extensive television content on the Univision network, and the Hollywood integration campaign, which seeks to embed messages about the importance of talking, reading, and singing to children in television shows popular among parents of young children.

The Hollywood integration campaign was based on previous research that has shown the potential for raising awareness of important issues through entertainment media (Brodie et al, 2001; Rideout, 2008). By incorporating messages into shows already watched by the target audience (in this case, parents of young children), a "content integration" campaign can leverage the popularity of television to communicate messages to a large audience.

The *TSTF* Hollywood integration campaign was launched in 2013, and has included briefings for writers and producers as well as one-on-one outreach to specific shows. To date, the effort has resulted in 15 placements in popular television shows.

This report presents the findings of research designed to evaluate the effectiveness of these content integrations in raising parent awareness of, attitudes about, and behavioral intentions regarding the importance of talking, reading, and singing to their young children.

METHODOLOGY

A randomized controlled experiment was conducted among a nationally representative, probability-based sample of 1,537 parents of children ages zero to five. Respondents were randomized into either a control group or one of four treatment groups, each of whom agreed to participate in an online survey. As part of the survey process, the treatment groups viewed one or more brief clips from shows that had incorporated *TSTF* messages into storylines, and then answered a series of questions about talking, reading and singing to children. The control group viewed an unrelated television clip (from a cooking show) and then answered the same series of questions.

Because participants were randomly assigned to the control condition (N=310), their responses to the survey questions on *TSTF* issues represent the “baseline” of parental views absent exposure to the campaign. Thus, any statistically significant differences between the control group and the treatment groups can be attributed to the effects of exposure to the campaign’s messages.

Participants in the treatment groups saw brief clips from *TSTF* messages that had been embedded in episodes of either *Law & Order: SVU* (n=307), *Jane the Virgin* (n=309), or *Orange is the New Black* (n=309), or a combination of clips from all three shows (n=302).

This experimental design is more rigorous than evaluations that use “pre/post” designs, in which respondents are asked a series of questions, exposed to the treatment content, and then asked those same questions again. The pre/post design “primes” respondents by having them answer the same survey questions twice, which can artificially inflate findings about the effectiveness of a treatment. The experimental design used in the current evaluation is also more rigorous than evaluations in which respondents are shown a piece of campaign content, and then asked how they feel about it and whether they are “more” or “less” likely to undertake certain actions than they were prior to exposure.

The survey was designed by Vicky Rideout of VJR Consulting and fielded by the research firm GfK. Primary data analysis was conducted by Ms. Rideout, and additional data analyses were conducted by Melissa Saphir of Saphir Research Services. The report was written by Ms. Rideout.

Survey sample. The survey was conducted by the GfK Group, using sample from their KnowledgePanel®. Data were collected in August 2018. GfK’s KnowledgePanel® is the first online research panel that is representative of the entire United States population. Panel members are randomly recruited through probability-based sampling, and households are provided with access to the Internet and hardware if needed. GfK recruits panel members by using address-based sampling methods (previously GfK relied on random-digit dialing methods). Once household members are recruited for the panel and assigned to a study sample, they are notified by email for survey taking. KnowledgePanel® is the largest online panel that relies on probability-based sampling techniques for recruitment; hence, the largest national sampling frame from which fully representative samples can be generated to produce statistically valid inferences for study populations. For the current survey, the margin of error at the 95% confidence level ranges from 7.7% to 8.3% per treatment group.

Demographic subgroups. In addition to presenting the results for the full sample of respondents, some findings are analyzed by parent gender, race/ethnicity, education, and household income. The educational breaks used in these analyses are low (high school diploma or less); medium (some college); or high (BA or higher). The income breaks used are low (less than \$35,000/year); middle (\$35,000 to less than \$75,000); and high (\$75,000 and above).

Television clips used in the evaluation. The clips used in the evaluation were selected to represent a range of types of content included in the campaign: a traditional broadcast drama (*Law & Order: SVU*), a comedy (*Jane the Virgin*), and a niche Netflix drama (*Orange is the New Black*). The combination group was included to reflect the fact that in the real world, the campaign is designed to expose parents to multiple embedded messages across a variety of shows. For a complete description of each clip used in the evaluation, please see Appendix A.

Notations of statistical significance. Differences between groups have been tested for statistical significance. Unless otherwise noted, findings are described in the text in a comparative manner (e.g., “more likely to,” “less likely to”) only if the differences are statistically significant at the level of $p < 0.05$. In tables where statistical significance has been tested, subscripts (using letters such as *a*, *b*, or *c*) are used to indicate whether results differ at a statistically significant level ($p < 0.05$) within a set of columns (e.g., by treatment or demographic group). Means that share a common superscript, and means that have no superscript at all, are not significantly different from each other. In addition, in some cases **bold** font is used to highlight significant differences, as noted in the tables.

Measures used in the evaluation. The outcome measures used in the survey include items assessing attitudes, awareness, efficacy, and behavioral intentions. Following is the list of items used to evaluate the effectiveness of the campaign:

Attitudes:

- On a scale of 1 to 10, where 10 is extremely important and 1 is not important at all, how important do you think it is for you to talk, read, or sing to your child every day? [Extremely (9-10), very (7-8), somewhat (5-6), not too (3-4), or not important at all (1-2)]
- There are many different ways parents can prepare young children for success in life. This next question is about children’s language development—learning to speak and understand new words. In your opinion, how important are each of these things for a child’s language development? [Very important, somewhat important, not too important, not at all important]
 - Talking to them often
 - Narrating what you are doing as you go through your daily routine with them
 - Reading to them often
 - Singing to them often

Awareness:

- How much do you agree or disagree with the following statements? [Strongly agree, somewhat agree, somewhat disagree, strongly disagree]
 - The more parents talk to and interact with their children starting at a young age, the better those children do when they get to school
 - Babies don't understand what you're saying, so reading to them isn't important until they are older
 - If you don't talk to a baby a lot when they are little, they won't be as prepared as they should be when they start kindergarten

Efficacy:

- How much of a difference do you believe the actions that you personally take right now can make in helping your child or children succeed in school? [A big difference, somewhat of a difference, not much of a difference, no difference]
- How much do you agree or disagree with the following statement? [Strongly agree, somewhat agree, somewhat disagree, strongly disagree]
 - I can make the time to talk, read, or sing to my child every day [*if part-time parent, add: that I am with him or her*]

Behavioral intentions:

- During the next week, how likely is it that [*if part-time parent, add: on each day that you are with your child*] you will spend at least 15 minutes a day talking, reading, or singing to your child/him or her? [Very likely, somewhat likely, not too likely, not at all likely]
- When you spend time with your child during the next week, how likely is it that you will talk to him/her about what is going on around you, such as pointing things out and naming them, or telling the child what you are doing? [Very likely, somewhat likely, not too likely, not at all likely]

Limitations. There are several important limitations to this evaluation to bear in mind. Perhaps the most significant is that participants experienced the campaign in an artificial setting – sitting in front of a computer or mobile device and watching the television clips as part of an online survey, rather than watching them in a more natural setting, as part of their everyday life. Second, respondents viewed only short clips from the TV shows – watching the embedded messages in isolation from the full episode in which they were integrated. Third, the survey evaluated integrations from three different TV shows, but the campaign has embedded content in 15 shows.

Fourth, participants who were randomly assigned to the control group watched a short clip from a television cooking show called *The Chew*. This episode was selected because it was deemed to be unrelated to the parenting and child development issues integral to the campaign. However, it is possible that the nature of the show did in fact influence the views of participants about the importance of narrating daily life. During the show, chefs prepare meals and “narrate” what they are doing, which may have affected the results.

Fifth, because we wanted to evaluate and compare the effectiveness of integrations in several different shows, our sample sizes for the individual treatment and control groups are relatively small ($n \approx 300$),

meaning that differences between the groups need to be very substantial in order to rise to the level of statistical significance. It is possible that with larger sample sizes, more of the differences between groups would have risen to the level of significance, resulting in more positive findings for the campaign.

Finally, because the control group sample was recruited from the general public, it is possible—indeed likely—that some of them may have already been exposed to *TSTF* campaign messages during the normal course of their lives. Hence, the “baseline” findings may already reflect the influence of the campaign.

BASELINE FINDINGS: PARENTAL AWARENESS, ATTITUDES, AND BEHAVIORAL INTENTIONS ABOUT TALKING, READING, AND SINGING TO CHILDREN

The control group in the survey provides a small, nationally-representative sample of parents with children ages zero to five. (The control group consists of 310 randomly-assigned parents who were not exposed to *TSTF* campaign messages as part of the survey.) For purposes of the evaluation, the responses of the control group were used to compare to those in the treatment groups, who were exposed to the campaign's messages. However, survey findings among the control group also provide useful insights into the mindset of the *TSTF* target audience. Since these respondents were not exposed to any of the campaign's messages as part of the survey, the findings offer insights into the status of parents' views nationally about the importance of talking, reading, and singing to children.

Awareness and attitudes.

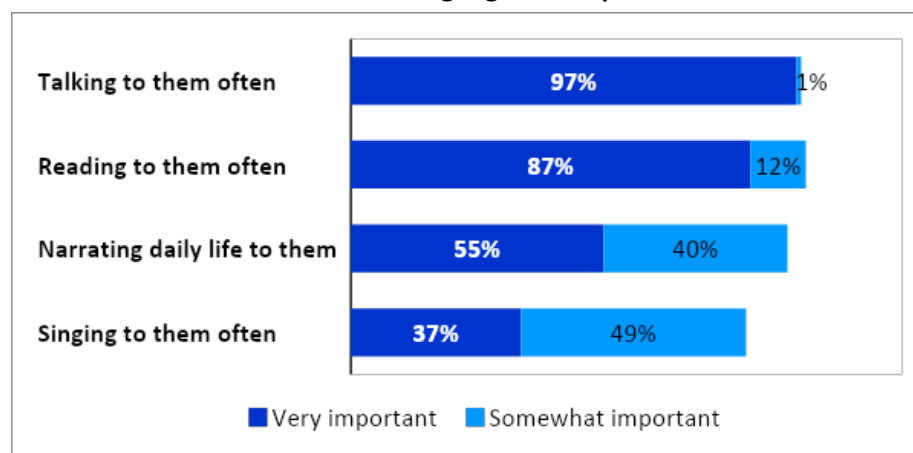
Most but not all parents of 0- to 5-year-olds understand the importance of talking, reading and singing to children from the earliest ages. Among the control group of parents:

- 97% say *talking* to children often is “very” important for their language development
- 88% say that the actions they take today can make a “big” difference in helping their child succeed in school
- 87% say *reading* to children often is “very” important for their language development
- 77% say talking, reading, or singing to their child every day ranks as a “10” on scale of 1-10 in terms of importance (a total of 84% rank it as a 9 or 10)
- 74% believe that talking, reading, or singing to children actually helps build their brain cells
- 70% “strongly agree” that the more parents talk to and interact with their children starting at a young age, the better those children do when they get to school
- 59% “strongly disagree” that because babies don’t understand what you’re saying, reading to them isn’t important until they are older
- 55% say *narrating* your daily routine to children is “very important” for their language development
- 38% “strongly agree” that if you don't talk to a baby a lot when they are little, they won't be as prepared as they should be when they start kindergarten
- 37% say *singing* to children often is “very important” for their language development

There are some important nuances in parents' views about *TSTF* messages. As indicated above, overall nearly eight out of ten (77%) parents say talking, reading, or singing to children every day ranks as a 10 out of 10 in terms of importance for children's development. However, there is a clear hierarchy in terms of the importance attached to these different activities, with talking at number one. In separate questions, 97% of parents say talking to children often is “very” important for language development, compared to 87% who say the same about reading, and 37% about singing. This may be why, as discussed below, the most significant effect of the campaign was on parents' views about singing – where they had the most room to grow.

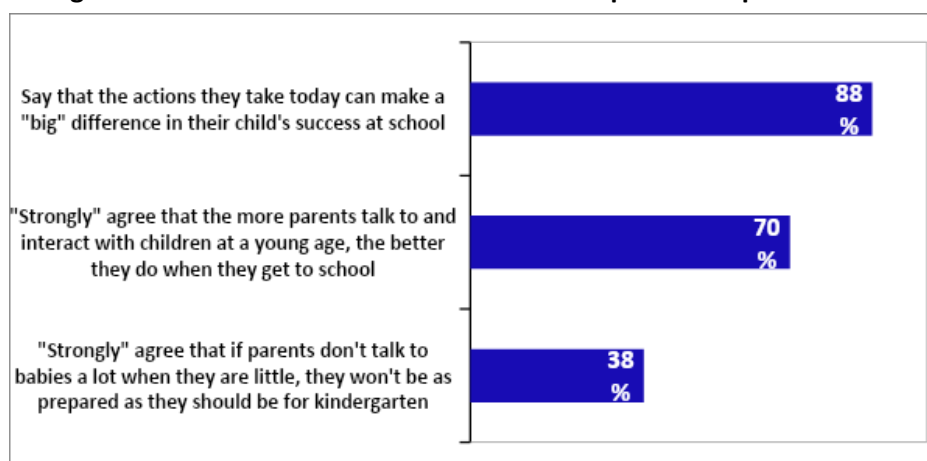
Another nuance in parents' views is that even though 97% say talking to children often is very important, not all *types* of "talking" are highly valued. Only about half of parents (55%) believe that narrating their daily life to their kids is "very" important for the child's language development. Similarly, while 87% say reading to children is very important, not all parents are agreed about the importance of reading *at the earliest ages*. Fifty-nine percent "strongly disagree" with the statement that because babies don't understand what you're saying, reading to them isn't important until they are older – meaning that about four in ten do *not* strongly disagree. There appears to be room for parental education specifically on the importance of reading at the earliest ages, and on narrating daily life as a meaningful way to foster language development.

Figure 1. Percent of parents who say each activity is very/somewhat important for a child's language development



Among control group (n=310) of parents of children ages zero to five.

There are also some important gaps in parents' views about school readiness. While nearly nine in ten (88%) parents believe that the actions they take today can make a big difference in helping their child succeed in school, there isn't universal agreement that talking, reading, and singing to children frequently, starting at birth, is among those actions. Seventy percent of parents "strongly agree" that the more parents talk to and interact with their children starting at a young age, the better those children do when they get to school – meaning that three in ten parents do *not* strongly agree with that statement. And only 38% "strongly agree" that if you don't talk to a baby a lot when they are little, they won't be as prepared as they should be when they start kindergarten. Finally, not all parents are aware that talking, reading or singing to children actually helps build their brain cells – 74% believe that it does, meaning about one in four do not.

Figure 2. Parents' views on school readiness - percent of parents who:

Among control group (n=310) of parents of children ages zero to five.

Behavioral intentions.

More than 8 in 10 parents say they intend to spend at least 15 minutes a day talking, reading, or singing to their child. Among the control group of parents:

- 86% say it is "very likely" that they will spend at least 15 minutes a day talking, reading, or singing to their child during the next week
- 85% say it is "very likely" that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week
- 80% "strongly agree" that they can make the time to talk, read, or sing to their child every day

While this is a high proportion of parents who say they are very likely to engage verbally with their children over the coming week, it is still concerning that one in five (20%) parents aren't sure they can make the time to do so, and that one in seven (14%) do *not* consider it "very likely" that they will do so for at least 15 minutes a day over the next week. The bar set in this statement – that the parent will at least *talk to* their child for just *15 minutes a day* – is not high. The fact that 14% of parents do not consider that very likely to happen is a sign that there is still work to do.

Demographic differences.

Fathers and parents without a college degree are least likely to be aware of the campaign's central messages about the importance of talking, reading, and singing to children beginning at birth. These demographic groups are therefore the best targets for future campaign outreach. Due to the relatively small size of the control group (n=310), findings among subgroups should be interpreted with caution; and it is likely that additional subgroup differences would be revealed in a larger sample. However, certain trends seem evident, and could inform future efforts of the initiative:

- *Lower-educated parents* are less likely than either middle- or higher-educated parents to say that singing to children often is "very" important (22% vs. 47% and 44% respectively) or that it is

“very likely” that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week (75% vs. 93% and 88% respectively). (Lower-educated parents (n=43) are those with a high school diploma or less; middle-educated parents (n=82) are those with some college; and higher-educated parents (n=185) are those with a BA or higher).

- *Middle-educated parents* are less likely than higher-educated ones to say that reading to children often is “very” important (83% vs. 96%; due to the small sample size, the difference with lower educated parents, at 80%, is not statistically significant), and to “strongly” disagree that since babies don’t understand what you’re saying, reading to them isn’t important until they are older (58% vs. 79%; again, due to the small sample size, the difference with lower educated parents, at 38%, is not statistically significant).
- *Fathers* (n=86) are less likely than mothers (n=224) to say that singing to children often is “very” important (19% vs. 51%), and to “strongly agree” that they can make time to talk, read, or sing to their child every day (70% vs. 87%). And they are less like to strongly disagree that since babies don’t understand what you’re saying, reading to them isn’t important until they are older (46% vs. 69%). Eighty percent of fathers say that reading to children often is “very” important, compared to 92% of mothers, but due to the small sample size that difference is not statistically significant.

Table 1. Parents' views on TSTF issues, by demographics

Among the control group, percent of parents who say:	ALL	Parent education			Parent income			Parent race		Parent gender	
		L	M	H	L	M	H	W	H	M	F
n=	310	43	82	185	67	91	152	222	47	86	224
Talking to children often is "very" important	97%	96%	95%	98%	95%	93%	99%	96%	98%	96%	97%
Reading to children often is "very" important	87%	80%ab	83%a	96%b	76%	85%	92%	87%	76%	80%	92%
Singing to children often is "very" important	37%	22%a	47%b	44%b	30%	41%	39%	36%	9%	19%a	51%b
Narrating daily life to children is "very" important	55%	52%	59%	53%	62%	56%	51%	47%	66%	45%	61%
Talking, reading, or singing to children every day is "extremely" important (10 out of 10)	77%	79%	72%	78%	77%	77%	77%	77%	71%	74%	79%
Actions they take today can make a "big" difference in helping their child succeed in school	88%	80%	92%	92%	86%	86%	91%	86%	84%	85%	90%
"Strongly agree" that the more parents talk to and interact with a child at a young age, the better they do in school	70%	61%	69%	78%	59%	72%	73%	70%	66%	66%	72%
"Strongly agree" that if you don't talk to a baby a lot when they are little, they won't be as prepared as they should be for school	38%	34%	43%	37%	33%	43%	37%	34%	41%	34%	41%
"Strongly agree" that talking, reading, or singing to children helps build brain cells	74%	72%	72%	77%	73%	72%	76%	74%	70%	69%	78%
"Strongly Disagree" that babies don't understand what you're saying, so reading to them isn't important until they are older	59%	38%ab	58%a	79%b	49%	55%	66%	62%	53%	46%a	69%b
"Strongly agree" that they can make the time to talk, read, or sing to their child every day	80%	73%	82%	84%	84%	74%	81%	82%	72%	70%a	87%b
It is "very likely" that they will spend at least 15 minutes a day talking, reading, or singing to their child during the next week	86%	82%	86%	90%	89%	85%	85%	84%	86%	79%	91%
It is "very likely" that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week	85%	75%a	93%b	88%b	78%	84%	88%	79%	89%	83%	86%

Among parents of children ages zero to five. Items in **bold** are statistically significant ($p < .05$). See Methodology for definitions of sub-groups.

PROCESS EVALUATION: REACH AND ASSESSMENT OF *TOO SMALL TO FAIL*'S INTEGRATED ENTERTAINMENT MESSAGES

As part of the survey, parents who were randomized into one of the treatment groups and shown a clip from an embedded *TSTF* message were asked whether they had ever watched that particular episode before. This allows us to understand how widely *TSTF*'s messages have been seen among the target audience. Since the clips included in the study represent only a small portion of the total number of embedded messages, the findings are likely a substantial *under*-estimate of the total viewership.

The *Too Small to Fail* entertainment messages evaluated in this study have been seen by a significant proportion of parents. Among parents of 0- to 5-year-olds who watched clips from *TSTF* episodes in this survey (n=1227):

- 22% said they had previously seen the episode with the embedded campaign message
- The proportion who had seen the target episode ranged from 10% for *Jane the Virgin* to 15% for *Law and Order* and 26% for *Orange is the New Black* (note: the clips from *Orange* included in the survey included content from two separate episodes, which may have increased the chance that respondents had seen at least one of them before).

After parents in the treatment groups watched their assigned television clip or clips in the survey, they were asked how much they enjoyed the clips, and whether they thought the clips were entertaining. This allows us to understand how successful the embedded messages were as entertainment.

Most viewers enjoyed and were entertained by the clips with the embedded *TSTF* messages. Among parents who watched one or more *TSTF* clip for the survey (n=1227):

- 23% enjoyed the clip(s) they watched “a lot” and 69% enjoyed them at least “somewhat”
- 19% “strongly agreed” that the clip(s) they watched were entertaining, and 68% agreed at least “somewhat”
- The proportion of viewers who *enjoyed* each episode “a lot” ranged from 15% for *Jane the Virgin*, to 25% for those who watched *Orange is the New Black* and 28% for those who watched *Law & Order: SVU*. There were no differences in the proportion who strongly agreed that each show was *entertaining*.

OUTCOME EVALUATION: EFFECT OF VIEWING CAMPAIGN MESSAGES ON KEY MEASURES

In this section of the report, we present the findings of the experimental section of the survey – whether respondents in the treatment groups showed any statistically significant differences in the outcome variables regarding the importance of talking, reading or singing to children often, starting at birth.

Watching the embedded messages had a *positive* effect on respondents' views about the importance of singing to children often. The storyline in *Law & Order: SVU* included a specific mention of the importance of singing to children. In the episode, a caseworker is conducting an inspection of Detective Olivia Benson's home, to determine whether she will receive final approval to adopt her son Noah. Detective Benson mentions that Noah didn't receive much verbal interaction when he was young, so she reads to him at night to make sure he doesn't fall behind. The caseworker asks "Do you sing to him? That's important also." The survey provides strong evidence that even this brief reference had a meaningful effect.

- Viewers who watched *Law & Order: SVU* or the combination of clips from the three test shows were more likely than the control group to say that singing to children often is "very" important for their language development (14 percentage points and 18 percentage points higher respectively). Among the control group, 37% said singing to children often is "very" important, compared to 51% of *L&O: SVU* viewers and 55% of viewers of the combination of clips.

Watching the embedded messages also had a *positive* effect on respondents' views about the importance of reading to babies, even though they may be too young to understand all the words. In the survey, 59% of parents in the control group "strongly disagree" with the statement that "Because babies don't understand what you're saying, reading to them isn't important until they are older."

- Looking at all of the treatment groups combined, viewers were more likely than those in the control group to strongly disagree with this statement (70%). The findings were similar across each of the individual treatment groups, although due to the sample size, the results were statistically significant only when those in the treatment condition were considered as a whole.

Watching the embedded messages had a *negative* effect on respondents' views about the importance of talking to children often or narrating daily activities to them, and on respondents' intentions to narrate their daily routines to children during the upcoming week. Unfortunately, the results indicate that two of the target episodes had the opposite of the intended effect.

- Viewers who watched *Law & Order: SVU* and *Jane the Virgin* were *less* likely than the control group to say that talking to children often is "very" important for their language development (7 percentage points and 9 percentage points less likely, respectively). Among the control group, 97% said talking to children often is "very" important, compared to 90% of *L&O: SVU* viewers and 88% of *Jane* viewers.
- Viewers who watched *Jane the Virgin* and those who watched the combination of clips were less likely than the control group to say that narrating their daily routine to children is "very important" for the child's language development (24 percentage points and 13 percentage points respectively). Among the control group, 55% said narrating daily routines is "very" important, compared to 31% of *Jane* viewers and 42% of viewers of the combination of clips.

- Fewer viewers of *Jane the Virgin* or the combination of clips from all three shows said it was “very likely” that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week (11 percentage points in each case). Among the control group, 85% said it was “very likely” they would do so, compared to 74% among those who watched *Jane* or the combination of clips from all three shows.

It is unclear why the clip from *L&O: SVU* would have a negative effect on viewers’ attitudes or intentions regarding talking to children or narrating daily life to children. While it didn’t mention either of those topics specifically, it did reference the importance of reading and singing for children’s verbal development.

It is even more mystifying to understand why *Jane the Virgin* would have a negative effect, particularly with regard to the importance of narrating daily life for children, which was the explicit focus of the embedded storyline. In the episode, single Mom Jane is attending new baby classes with her newborn son Mateo. The teacher says “Make sure to explain to Mateo what you’re doing, Jane...I know it can seem a little silly – but that’s how language develops – narrate everything.” In a later scene, Jane arrives home with Mateo and says “And now I’m shutting the door...And I’m thinking that was weird....And I’m taking you out of your seatbelt...” One of the unique twists of the show – a comedy – is that the baby’s thoughts are rendered in an adult male voice-over, delivered as an aside to the viewers that Jane can’t hear. As Jane is saying all of this, the baby “says” to the audience “Wow, she’s pretty good at narration.”

This is clearly a thoughtful integration, and one would expect it to have been effective. It describes the desired behavior (“explain to Mateo what you’re doing”), explains why it’s important (“that’s how language develops”) and shows the lead character role-modeling the behavior (“And now I’m shutting the door...”). Upon reflection, however, there are several possible explanations for why this storyline would have the opposite of its intended effect:

- In an effort to acknowledge parents’ hesitation at the idea of narrating their daily lives to babies, the episode makes a nod to “both sides” of the issue. In one scene, the parenting instructor says “I know it can seem a little silly,” and in another scene, as Jane is narrating what she’s doing to Mateo she says “And I’m thinking that was weird...” Even though the ultimate message of this storyline is clear, it does also convey the notion that narrating to babies may be a little weird and silly. Although we would hope that viewers can absorb a bit of nuance in the messaging, it may be that simple, straightforward, and consistent messaging is important.
- *Jane the Virgin* is a comedy, one with an unusual comedic feature in which the baby “talks” to the audience. It is possible that comedies are a less effective vehicle for content integrations. Even when the lead character is delivering the campaign’s message, the audience is, in some sense, laughing – it’s all supposed to be funny. In this case, as Jane doing what the instructor told her to do – narrating her activities to her baby – we are meant to see what she’s doing as humorous. That may result in fewer audience members taking the campaign’s message to heart.

- Finally, it is possible that the clip seen by the *control group* had an unanticipated “pro-narration” effect, artificially increasing the control group’s sense of the importance of narration. The control group viewed a clip from the TV cooking show “The Chew.” In the clip, one of the hosts is preparing a dish, and as he does so he describes everything he’s doing. In retrospect, this could have inadvertently had an effect on the viewers, increasing their sense of the importance of narration for learning.

Previous research has shown a similarly confusing effect for content integration in a comedy (Collins, 2003). In the early 2000s, the highly popular sitcom *Friends* featured a storyline in which two of the lead characters, Ross and Rachel (who used to be a long-time couple), learn that Rachel is pregnant as the result of a brief reunion. The show’s writers incorporated dialogue referencing the fact that the couple had used condoms, and that condoms are “only” effective 97% of the time. These references were intended to promote condom usage and to relay the notion that even though the condom had failed on this occasion, condoms are almost always effective (and therefore worth using). However, an evaluation of the effects of this episode showed that viewers got mixed messages; the 3% failure rate was seen as high, due to the very funny reaction that Ross has to learning that condoms aren’t 100% effective, as he had thought they were. While there are clearly differences between the *Friends* episode and the *Jane* episode, both presented information in a comedic format and both offered what could be seen as conflicting dialogue about the main message. In future efforts, those using content integration to communicate social messages may want to avoid similar situations.

Watching the embedded messages had *no effect* on respondents’ views about any of the other items measured in the survey. There were no statistically significant differences between viewers of the control group and viewers of any of the shows with embedded messages (or the viewers of the combination of clips) in the percent of respondents who:

- Say that the actions they take today can make a “big” difference in helping their child succeed in school
- Say that reading to children often is “very important” for their language development
- Say that talking, reading, or singing to their child every day ranks as a “10” on scale of 1-10 in terms of importance
- Strongly agree that the more parents talk to and interact with their children starting at a young age, the better those children do when they get to school
- Strongly agree that if you don’t talk to a baby a lot when they are little, they won’t be as prepared as they should be when they start kindergarten
- Say it is “very likely” that they will spend at least 15 minutes a day talking, reading, or singing to their child during the next week
- Strongly agree that they can make the time to talk, read, or sing to their child every day

Two of these outcome measures concern school readiness, which was not an explicit topic in any of the episodes, so the lack of change on those measures is not as surprising as it is for the others. Parental awareness on the non-school-related measures was already extremely high: 87% of parents already believe that reading to children often is “very” important, 86% already say it is very likely that they’ll talk, read, or sing to their child for at least 15 minutes a day over the next week, 77% already rank talking,

reading, or singing to children every day a 10 out of 10 in importance, and 80% already strongly agree that they can make time to talk, read or sing to their child every day. It is possible that because parents' attitudes and behavioral intentions already align so closely with the *TSTF* messages, there was less room for movement on those items.

By and large, whether or not respondents were frequent viewers of the treatment show was not related to how well they absorbed the intended message of the episode. Entertainment media is thought to be a powerful conduit for social messages in part because those watching the show are already invested in its characters and storylines, by virtue of the fact that they have chosen to watch the show as part of their normal lives. Therefore, we hypothesized that the *TSTF* episodes may have been more effective with respondents who regularly watch the target show. Given that we saw far fewer positive changes than we hoped to in the overall evaluation, it would be especially important to know if the integrated messages *did* have an effect among a show's regular viewers. However, as seen in Table 2, in just two of the 12 outcome measures did those who often watch the show differ significantly from those who hardly ever or never watch the show, in terms of how well they absorbed the campaign's messages (singing to children often is "very" important, and the actions parents take today can make a "big" difference in helping their child succeed in school). And in one of those two measures (helping their child succeed in school), even the frequent viewers still did not differ significantly from the control group.

This was of particular interest with regard to the episode of *Jane the Virgin*. The show is somewhat quirky, and uses a technique that may be confusing to infrequent viewers (having a baby's thoughts expressed in an adult male voice-over). For this reason, we took a close look at respondents who often or sometimes watch this specific show. We compared regular viewers of *Jane* from the control group to regular viewers in the treatment group who watched the *Jane* episode as part of the survey, either singly or in combination with the other clips. It should be noted that there were very few respondents in either of these groups, so that the results should be considered with great caution ($n=31$ *Jane* viewers in the control group; $n=62$ *Jane* viewers who watched a *Jane* clip as their treatment condition). The only statistically significant difference in outcome measures between the two groups is that those in the treatment groups were significantly *less* likely than those in the control to believe that talking to children often is "very" important – still a backfiring of the intended message.

In conclusion, the fact that not all participants in the evaluation normally watched the shows with the embedded messages does not appear to account for the lack of effects. In an experimental evaluation such as this one, participants are asked to view shows they may not normally watch as part of their everyday lives. These shows may not be particularly appealing to them; in the real world, viewers are seeing the integrated messages because those messages have been placed in shows the viewer has chosen to watch. This could make embedded content more effective in the real world than in an experimental evaluation. And this could be particularly the case with shows such as *Jane the Virgin*, which has a comedic approach and an unusual format. It could also have been the case with a show such as *Orange is the New Black*, in which the mother in the storyline is in prison, and uses course language to convey the *TSTF* message. However, our analyses indicate that the respondents' lack of familiarity with these shows was likely *not* the reason they did not have a greater effect in changing

viewers' attitudes or awareness about *TSTF* messages. Even viewers who normally watch those shows did not experience statistically significant changes in the experiment.

Table 2. Effects on outcome measures, by frequency of viewing

Item % who say:	Control	Treatment		
		Often watch target show	Sometimes watch target show	Hardly ever/never watch target show
n=	310	221	217	788
Talking to children often is "very" important	97	91	92	90
Reading to children often is "very" important	87	85	86	84
Singing to children often is "very" important	37	64	56	45
Narrating to children is "very" important	55	50	56	43
Talking, reading, or singing to children every day is "extremely" imp (10)	77	84	77	75
Actions they take today can make a "big" difference in helping their child succeed in school	88	92	90	84
"Strongly agree" that the more parents talk to and interact with a child at a young age, the better they do in school	70	75	68	63
"Strongly agree" that if you don't talk to a baby a lot when they are little, they won't be as prepared as they should be for school	38	42	34	37
"Strongly DISagree" that babies don't understand what you're saying, so reading to them isn't important until they are older	59	67	74	69
"Strongly agree" that they can make the time to talk, read, or sing to their child every day	80	70	72	74
It is "very likely" that they will spend at least 15 minutes a day talking, reading, or singing to their child during the next week	86	83	84	87
It is "very likely" that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week	85	79	72	77

*Findings that differ significantly from the control group are highlighted.
Findings that differ significantly from one another based on frequency of viewing are bolded.*

Table 3. Effects on outcome measures, among those who often or sometimes watch *Jane the Virgin*

Percent who say:	Among those who often/sometimes watch <i>Jane</i>	
	Control	Treatment (assigned to Jane or combo)
<i>n</i> =	31	62
Talking to children often is “very” important	100% ^a	86% ^b
Reading to children often is “very” important	83%	90%
Singing to children often is “very” important	57%	64%
Narrating to children is “very” important	73%	48%
Talking, reading, or singing to children every day is “extremely” imp (10)	64%	86%
Actions they take today can make a “big” difference in helping their child succeed in school	97%	87%
“Strongly agree” that the more parents talk to and interact with a child at a young age, the better they do in school	76%	68%
“Strongly agree” that if you don’t talk to a baby a lot when they are little, they won’t be as prepared as they should be for school	49%	39%
“Strongly DISagree” that babies don’t understand what you’re saying, so reading to them isn’t important until they are older	66%	70%
“Strongly agree” that they can make the time to talk, read, or sing to their child every day	74%	61%
It is “very likely” that they will spend at least 15 minutes a day talking, reading, or singing to their child during the next week	75%	74%
It is “very likely” that they will talk to their child about what is going on around them, such as pointing things out and naming them, or telling the child what they are doing, during the next week	85%	64%

Note: Due to small sample size, results should be interpreted with caution.

CONCLUSION

In summary, this evaluation has confirmed that the *Too Small to Fail* Hollywood integration strategy was successful in reaching a large number of parents with messages about the importance of talking, reading, and singing to children, and in changing parents' views about the importance of singing to children often and reading to them as babies, even when they are too young to fully understand. However, it also revealed null or negative results with regard to other campaign messages. Finally, the evaluation provides several insights for future efforts.

The evaluation indicates that a remarkable proportion of parents – at least one in five – have been reached by the *TSTF* messages embedded in popular TV shows. This is the proportion of parents who reported having previously seen at least one of the three episodes included in the evaluation. Since the campaign itself has actually included messages in far more episodes than just those three, it is likely that an even higher proportion of parents have been reached. These findings are a testament to the incredible potential of a “Hollywood” strategy, through which large numbers of parents can be reached at once, and at a relatively inexpensive cost.

All three of the episodes were effective at changing parents' views about the importance of reading to babies even when they are too young to understand the words (an 11 percentage point change). In addition, one of the episodes evaluated, *Law & Order: SVU*, achieved its goal of raising parents' awareness of the importance of singing to children to help promote their verbal development (a 14 percentage point change). A second episode, *Jane the Virgin*, backfired and actually decreased parents' understanding of the importance of talking to children often and narrating daily life to them. The third episode in the evaluation, *Orange is the New Black*, had no other impact on viewers, despite its more extended storyline.

There are several limitations to the evaluation that could account for the lack of positive findings. First, only three integrations out of a total of more than a dozen were included in the evaluation. It is possible that episodes from some of the other shows might have had a greater positive effect. Second, while the overall sample size for the survey was substantial (n=1537), respondents were randomized into five different groups (a control group, three groups that viewed clips from one episode each, and one group that viewed clips from all three episodes). It is possible that with larger samples sizes in each group, other effects would have been revealed. Finally, the evaluation included a single exposure to the campaign's messages – either a clip from a single show, or three clips viewed all together. It is possible that additional exposures to campaign messages, over time, may have yielded greater effects.

Recommendations. If *TSTF* decides to continue working with writers and producers to include campaign messages in popular TV shows, the following recommendations may be helpful:

- **Focus on less-well-known aspects of the *TSTF* messages.** The vast majority of parents are already convinced that talking and reading to children often is very important to the development of language skills. Previous research suggests that Hollywood integrations may work best on topics that are not already widely understood (Brodie et al, 2001; Rideout, 2008).

The campaign may need to develop additional, very specific messages for its content integration effort. Some of the *TSTF* messages have been very broad – that talking, reading, or singing to kids “is important” or helps prevent kids from being “f***ed” up. In future efforts, it may make sense to focus on specific aspects of the *TSTF* messages that parents *aren’t* already aware of or in as wide agreement with, such as the fact that interacting with babies a lot even when they are very little helps prepare them for school (38% strongly agreed with that). Another variation of the campaign’s message to focus on might be the importance of reading to children even when they are very young, another element of the message that fewer parents are already aware of.

- **Consider avoiding integrations in comedies.** As mentioned above, previous research has indicated that comedic integrations may not be as effective as dramatic ones (Collins, 2003). The current evaluation provides further evidence to support this conclusion. While it may be that integrations into comedic shows *can* be effective, with limited resources it may make sense to focus on other genres for the time being.
- **Make sure the shows’ messages are explicit and clear.** The successful *Law & Order* integration, while brief, was specific, straightforward and clear: singing to children is “important” to make sure a child doesn’t get “behind” in “language development.” The *Jane* integration, on the other hand, included caveats acknowledging that narrating to babies can be seen as “silly” or “weird.” While these caveats were likely included for excellent reasons, it may be that they inadvertently detracted from the episode’s impact.

In the integration in *Orange*, the importance of talking, reading, and singing to children was expressed in strong and emotional terms, but the consequences of not doing so were that the child will “end up f***d up by the time they’re five,” or will “end up like me,” meaning in prison. This message did not explicitly relate to verbal development or school readiness, which is what the outcome measures concerned; this may be why the episode was ultimately less successful than the *Law & Order* episode. While it may have been logical to expect that the messages about verbal development and school readiness would have been clearly implied in the episode, the evaluation results suggest that it may be necessary to state the central message even more explicitly.

- **Conduct additional formative research.** The campaign may need to better understand a) which parents currently are not talking, reading, or singing to their children frequently, and b) why. Messages may need to be more closely *targeted* (to those parents who don’t already engage in the desired behaviors) and *tailored* (to persuade parents more effectively). The current survey provides some insights as to the target audience (fathers and parents without a college degree), but a larger and more in-depth survey would be very useful. And given the survey’s findings regarding the high proportion of parents who already agree with or are aware of some of the campaign’s main messages, it may be time for another round of formative research (focus groups and a national survey) before the next wave of the campaign. This research could focus on which messages would be most effective in motivating parents to change their behavior. Since so many parents already seem to understand the importance of talking, reading, and

singing to children, there may be other underlying causes for their failure to do so, which the campaign could address.

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APPENDIX

Show name: *Law and Order: SVU*
Genre: Drama
Platform: Broadcast television: NBC
Date aired: TBD
Length of clip: One minute five seconds

In the scene, a social worker is conducting a home visit with Detective Olivia Benson to determine whether she is will receive final approval to adopt the toddler Noah who has been living with her for some time. In the scene, Detective Benson is holding Noah, and her adoption attorney is also present.

Attorney (as caseworker is inspecting the home): "And Ms. Benson spends weekends and evenings with Noah."
 Detective Benson: "And at night, of course, we read. Noah didn't have a lot of verbal interaction as an infant, so I want to make sure he doesn't get too far behind in his language development."
 Social worker: "Do you sing to him? That's also important."
 Detective Benson: "Of course."
 Social worker: "Good."

Shortly after this conversation, the social worker informs Detective Benson that she has been officially approved to be Noah's adoptive parent.

Show name: *Jane the Virgin*
Genre: Comedy
Platform: Broadcast television: The CW
Date aired: October 16, 2015
Length of clip: One minute 27 seconds

Jane is in a Mom's group, learning parenting skills. She and the other Moms are on their knees in a circle, with their infants on their backs on blankets in front of them. Jane is trying to get Mateo to blink back to her.

Teacher: "Make sure to explain to Mateo what you're doing, Jane."
 Jane: "Mommy's trying to get you to blink, because that's what all your friends are doing."
 Teacher: "I know it can seem a little silly – but that's how language develops – narrate everything."

In the next scene, Jane is carrying Mateo as she opens the door to their home and comes inside.

Jane: "And now I'm shutting the door...And I'm thinking that was weird....And I'm taking you out of your seatbelt..."

Mateo [in adult voice-over, giving viewers insights into the infant's supposed thoughts]: "Wow, she's pretty good at narration."

Jane: "Now we are going to check the mail. Look Mateo, Mommy got a letter from grad school. And now I'm opening it. And now I'm reading...'We're delighted to inform you that you've been accepted into our graduate writing program.' And now, we're dancing! Because Mommy got into grad school, [starting to dance] get it, get it, work, work!"

Show name: *Orange is the New Black*
Genre: Drama
Platform: Subscription service: Netflix
Date released: 2015
Length of clip: Two minutes and 6 seconds

The scene takes place in the visiting room of a prison. The prisoner is a young mother who is holding her infant daughter and speaking with the baby's father across the visiting table. The Dad is sullen and uncommunicative.

Mom: "She already looks so different."

Dad: "Yeah."

Mom (to baby): "Hello!! Yeah, that's right, I'm your Mommy! And I love you so so so so so so so much. And soon we're gonna be spending lots of time together, I promise! Before you can even remember stuff, we're going to be together."

Mom (to Dad): "When is that, when you can remember stuff – when you're four or five, right? I think I remember something from when I was four."

Dad: "Don't know."

Mom: "Her head smells so good! And she looks like you, you know? But...pretty. Is she a good baby? Does she sleep okay? Is she eating?"

Dad: "Yeah."

Mom: "It's so good talking to you."

Dad: "Yeah."

Next scene, same location and characters, but now the Mom is visibly upset:

Mom: "You have to talk to her, like *all the time*. There's all these studies that say if you don't talk to the baby they end up fucked up by the time they're five. Talk to her, sing to her, read to her. You gotta promise me, okay. You'll read to her while I'm in prison? I know you don't like to talk, but you have to do it for her."

Mom (to baby): "Right baby girl? I'm talking to *you*. I'm talking to you. Yeah, I'm talking to you! You grab Daddy's face and you make him say shit so you don't end up like me."

Next scene, same location and characters, some time in the future. Dad is now holding the baby and is in much better spirits.

Dad (to baby): "You hear that my love? Mommy's not going far away. She's staying right here. So we can see her. And kiss her. And tell her all about how our day was. And how we read that book. And how your diaper leaked all over Daddy's pants! That's right. We're very excited, right baby? We are soooo excited....aren't we?"

Dad (to Mom): "Aren't we?"

Mom, smiling and teary: "Yeah."