

Sign-presented versus sign-interpreted content on British TV: What do deaf signers want?

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1. Introduction

In July 2025, a survey was launched to better understand what deaf audiences in the UK want when it comes to sign language on television, focusing on audience preferences for sign-presented and sign-interpreted content across different programme types. Television content in sign language is typically available in two formats: sign-presented and sign-interpreted. In sign-presented programmes, the content is created and delivered directly in BSL. In sign-interpreted programmes, the original spoken-language content is produced first, and a BSL interpreter or translator conveys it to viewers, often in-vision. The survey explored how deaf audiences value these two forms of access and which programme types they feel are best suited to each type of content.

The survey was developed collaboratively between three researchers at Heriot-Watt University and LumoTV. The project operated under a formal contract between Heriot-Watt University and LumoTV. Responsibilities were divided within the research team: Professor Annelies Kusters led budget spend, analysis and reporting, Professor Jemina Napier coordinated the research contract and budget approval, ethics, survey question design and filming of BSL content for the survey in collaboration with a deaf supplier, and Dr Robert Adam oversaw planning of data collection events and deployment of five research assistants. Ethics approval was secured through Heriot-Watt University.

2. Survey design and distribution

2.1. Process of creating the survey

LumoTV requested the survey would be large-scale, putting emphasis on participation numbers. In order to maximise responses, the priority was to keep the survey short. The HWU research team worked iteratively with LumoTV representatives (Camilla Arnold, Ashley Kendall, and Caroline Fearon) to draft the survey. Questions were drafted by the researchers and revised based on LumoTV feedback. Questions were kept deliberately short, with careful attention to avoiding leading formulations.

2.2. Video clips integrated in the survey

To ensure that all participants understood the distinction between sign-presented and sign-interpreted content, two short video clips were embedded in the survey: one sign-presented and one sign-interpreted, both with subtitles to reflect how deaf people typically watch television. Each video was approx. 45 seconds long and duplicated the same scene from a drama where two members of the same family were discussing the fact that one of them had started drinking alcohol in an unhealthy way. The sign-presented version (<https://youtu.be/98->

[UUlkWpNo](#)) involved two deaf actors conversing in BSL (Figure 1). The sign-interpreted version (https://youtu.be/qN28_wZVwFQ) involved two hearing actors conversing in spoken English, and a hearing in-vision BSL interpreter (Figure 2).



Figure 1: Screenshot of sign-presented video clip



Figure 2: Screenshot of sign-interpreted video clip

Each video used exactly the same script (see Appendix A) which was developed through initial discussion with the LumoTV team and what they felt would be good content to contrast between sign-presented and sign-interpreted (e.g. that showed an emotional conversation and ‘everyday’ language). After agreeing that it should be equivalent to a fairly dramatic scene from a soap opera, examples were viewed from soaps such as *Coronation Street* and *Eastenders* and a tentative script drafted. This was then developed further in collaboration with deaf filmmaker Ruaridh Lever Hogg, who went on to produce, film and edit the two videos, finalising

the script and recruiting and directing the actors. The interpreter was sourced through the Heriot-Watt University in-house interpreting team.

2.3. Survey questions: overview

The final version of the survey comprised 12 questions (see Appendix B). Three of the 12 questions served to check that participants had understood the project aims and viewed the two above discussed embedded sign-presented and sign-interpreted video clip examples. This left nine substantive questions. The survey asked about hearing status to ensure that responses came primarily from deaf, deafblind and hard of hearing participants, as they were the focus of the project. The aim was to focus on deaf signers as a broad group rather than distinguishing between deaf, deafblind, and hard of hearing participants. However, we included this question to ensure that deafblind and hard of hearing people were represented and included in the survey. The survey also asked whether respondents were sign language users, since the study concentrated on deaf people who use BSL. Henceforth, the phrase “deaf signers” will refer to this group, including deafblind and hard-of-hearing signers.

We asked for the respondents’ age range to see which age groups took part in the survey, which were most represented in the findings, and where further recruitment might be needed. We also wanted to explore whether there was a difference in preference for sign-presented versus sign-interpreted content across age groups, although age was not a main focus of the study.

The remaining six questions (question 7-12) formed the core of the survey and focused on participants’ preferences for sign-presented versus sign-interpreted content, the reasons behind those preferences, their views on the appropriate balance between the two (as budget constraints may require decisions about prioritisation), and which programme types they considered better suited to each format.

The response categories for explaining preferences were developed in discussion with LumoTV and reflected both practical and experiential aspects of viewing: whether the content was useful in everyday life, easier to understand, more enjoyable, more relatable, or of higher quality. These options were designed to give respondents a range of ways to express their choices without steering them toward any single type of answer. Programme type distinctions were included because LumoTV anticipated that preferences might vary depending on the type of programme. For example, interaction in a drama differs from a programme led by a single presenter. Some programme types are also more culturally embedded, such as comedy or soap operas, where linguistic nuance and cultural references play a larger role, whereas others, like news or documentary programmes, place more emphasis on the delivery of factual information.

2.4. Survey launch and distribution: online

The survey was created in Microsoft Forms, hosted by Heriot-Watt University, and made available in English. All questions were translated into British Sign Language by an independent deaf translator, including the introductory information about the purpose of the survey and explanation of consent. The bilingual survey was then piloted with the LumoTV team and slight tweaks made to ensure a smooth experience. Final approval from LumoTV was obtained before launch. After this point, while LumoTV supported the project by promoting the survey online and offering space at their stalls (see 2.5), they were not involved in any part of the data collection or analysis. All distribution of the survey, interactions with participants, and the collection and analysis of responses were carried out independently by the Heriot-Watt University research team. The survey was launched on 14 July 2025 and distributed on social media by HWU and LumoTV. It remained open until 29 September 2025, giving a total survey period of 77 days. In that time, 573 responses were collected. The average time taken to complete the survey was 13 minutes and 16 seconds. The first surge of responses (42 responses) came on 14 July when the survey was launched and promoted online, followed by further bursts linked to festivals and community events, and another notable rise of 75 responses on 5 August after the BDA disseminated the survey to their members in their newsletter.

2.5. Survey distribution: events

Alongside online distribution, research assistants actively promoted the survey at deaf community events in England, Scotland, and Wales. Five deaf research assistants (Maresia Liburd-Spencer, Leah Francisco, Lucy Clark, Ruairidh Lever-Hogg, Maxwell Barber) supported data collection at seven events, with one or two assistants present at each event:

- 17–18 July 2025: BDA 135th Anniversary Celebration, Leeds
- 1–5 August 2025: Deafland Rally, Shrewsbury
- 8–17 August 2025: Edinburgh Deaf Festival, Edinburgh
- 30 August 2025: Celtic Deaf Festival, Cardigan
- 4–5 September 2025: Flarewave Festival, Brighton
- 13 September 2025: Zebra Access's 20th Birthday Celebration, Wolverhampton
- 26–27 September 2025: Oxford Deaf Festival, Oxford

A leaflet was produced with details of the survey link and a QR code that allowed participants to access the survey directly. As an incentive, participants were offered a choice of sweet or savoury Graze snack boxes for completing the survey on the spot. Where LumoTV had a stall, research assistants used it as a base for data collection. Where no stall was available, they set up a table with leaflets and Graze snack boxes, or left leaflets on participants' seats in auditoriums where appropriate. Research assistants also mingled with attendees to encourage them to complete the survey, carrying an iPad on which participants could fill it in.

Research assistants consciously approached individuals from a diverse range of backgrounds, including younger and older adults, LGBTQ+ individuals, and people from various ethnic minority communities. They explained the purpose of the research and provided support to participants as needed, including assistance with navigating instructions on their phones, offering explanations. Participants were given the option to scan the QR code, access a survey link, or complete the survey collaboratively with the research assistant, on the iPad carried by them. In cases where participants chose to complete the survey independently, research assistants followed up with them to confirm completion.

The research assistants reported that the use of the two video clips was found to be particularly effective in supporting participant understanding of the difference between sign-presented and sign-interpreted content.

Each of the seven targeted festivals and events brought clear surges in survey responses, with the largest peaks around the Deafland Rally (80), the Edinburgh Deaf Festival (47), BDA anniversary (31), and with further bursts during the Celtic (17), Flarewave (22), Zebra Access (19), and Oxford (23) gatherings. These figures reflect responses logged on the event days themselves, though some participants may have completed the survey later at home, and some survey completions on these days may be unrelated to the events.

3. Survey findings

3.1. Distribution of survey responses

A total of 573 responses were collected. Since 50 respondents identified as hearing, they were removed from the dataset, as the survey was aimed at deaf audiences. This left 523 responses in total. Among these 523 people, 482 identified as deaf, 3 as deafblind, and 38 as hard of hearing. Within this group, 34 were not sign language users (14 deaf, 2 deafblind, and 18 hard of hearing). This leaves 489 deaf signers as our core sample for analysis (Figure 3).

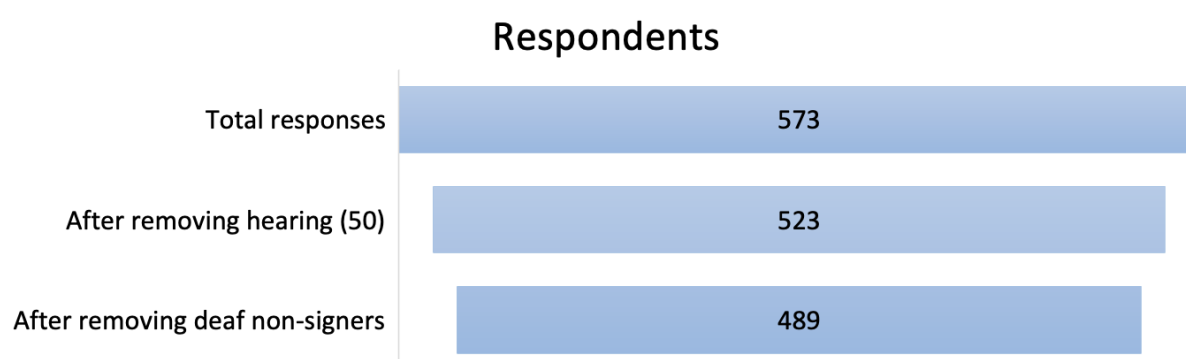


Figure 3: Survey respondents

The age distribution of the core sample of respondents is as follows (Table 1):

Age groups	Count
16 - 24	18
25 - 34	101
35 - 44	136
45 - 54	115
55 - 64	80
65 - 74	29
75 +	10
Total	489

Table 1: Age distribution of core sample of respondents

3.2. Deaf signers' and non-signers' preference for the sign-presented versus sign-interpreted clip

The main aim of this survey was to examine deaf signers' preferences for the sign-presented versus sign-interpreted clip. Deaf signers overwhelmingly favoured the sign-presented clip: of the 489 signers, **446 (91%) chose sign-presented and 43 (9%) chose sign-interpreted (Figure 4).**

While survey question 3 on respondents' sign language use was included primarily to filter out non-signers, their responses remain informative for this part of the analysis. Among the 34 non-signers, 18 (53%) still preferred the sign-presented video and 16 (47%) preferred the sign-interpreted video (Figure 5). This means that both deaf signers and deaf non-signers leaned towards the sign-presented clip, though to very different degrees. While these results are presented here for completeness, the remainder of the analysis focuses only on the 489 deaf signers' responses.

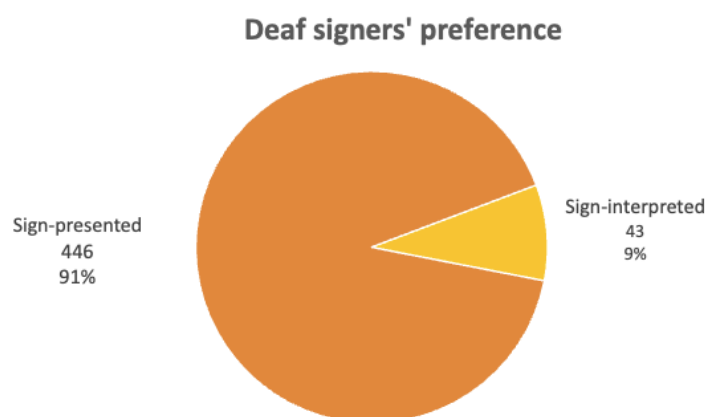


Figure 4: Deaf signers' preference for the sign-presented versus sign-interpreted clip

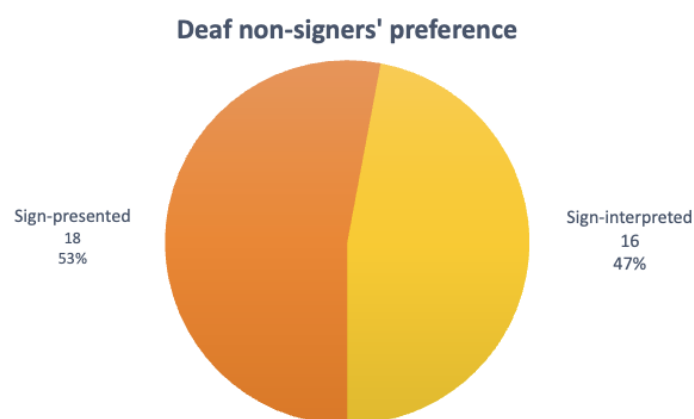


Figure 5: Deaf non-signers' preference for the sign-presented versus sign-interpreted clip

3.3. Age distribution of preference for the sign-presented versus sign-interpreted clip

Across all age brackets of the 489 deaf signers, the **sign-presented clip was preferred**, with support ranging from 85% to 95%. **Only a small minority in any age bracket preferred the sign-interpreted clip.** The youngest respondents (16–24) showed 11.1% preferring the sign-interpreted clip, while this dropped to just 5% among those aged 25–34. In the middle age groups (35–44 and 45–54), around 8–9% preferred the sign-interpreted clip, and the highest proportion appeared among respondents aged 55–64, where 15% preferred this clip. In the older groups (65–74 and 75+), the share dropped again to 6.9% and 10% respectively. These figures show that although there is a consistent and overwhelming preference for sign-presented content across all ages, sign-interpreted content finds slightly more support among respondents in the 55–64 age bracket than among the other age brackets (Table 2).

Age groups	Sign-interpreted	Sign-presented	Grand Total	% prefer sign-interpreted	% prefer sign-presented
16 - 24	2	16	18	11.1%	88.9%
25 - 34	5	96	101	5%	95.0%
35 - 44	11	125	136	8.1%	91.9%
45 - 54	10	105	115	8.7%	91.3%
55 - 64	12	68	80	15%	85%
65 - 74	2	27	29	6.9%	93.1%
75 +	1	9	10	10%	90%
Total	43	446	489	8.8%	91.2%

Table 2: Age distribution of preference for the sign-presented versus sign-interpreted clip

3.4. Reasons for preferring the sign-presented versus the sign-interpreted clip

Respondents' reasons for preferring the sign-presented or sign-interpreted clips were as follows (noting that multiple options could be selected). **For both groups, easier to understand was the top reason given**, showing that "understanding" is a central concern regardless of format.

Among those who preferred sign-presented content all the other reasons—*more enjoyable* (293), *more relatable* (284), *quality is better* (232), and *useful in everyday life* (228)—also **received high levels of endorsement** (Figure 6). This suggests that sign-presented content not only aids comprehension but also offers enjoyment, relatability, and practical value.

By contrast, among the much smaller group who preferred **sign-interpreted content** (only 43 people, compared to 446 for sign-presented), the numbers for other reasons were low across the board: just 30 cited it as *easier to understand*, 18 as more useful in everyday life, 12 as higher quality, and only 10 each as more enjoyable or more relatable (Figure 7). This indicates that while interpreting can help some viewers with understanding, it does **not provide the same breadth of benefits that sign-presented content does**. The emphasis among the sign-interpreted group on content being *easier to understand* or *useful in everyday life* may suggest that their preference reflects a desire for **access to information**.

Because the number of respondents who preferred sign-interpreted content was so small (only 43 people, compared to 446 for sign-presented), their results should be treated with caution.

They give an indication of why this minority may favour interpreting, but they are less reliable than the patterns seen among those preferring sign-presented content.

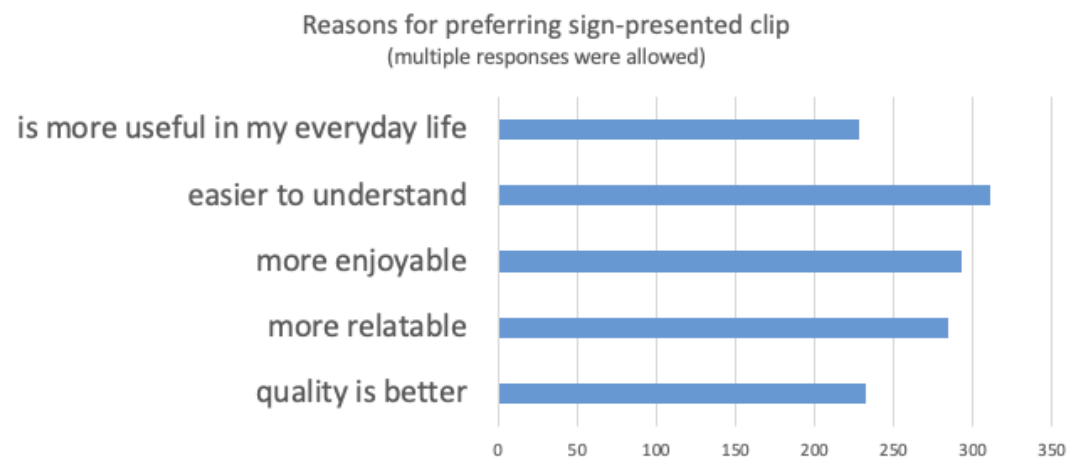


Figure 6: Reasons for preferring sign-presented clip

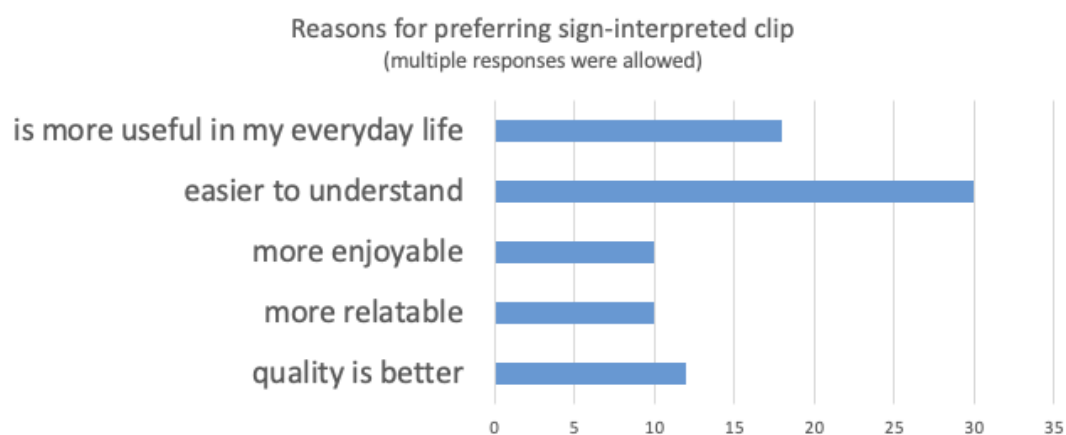


Figure 7: Reasons for preferring sign-interpreted clip

3.5. Support for offering both sign-presented and sign-interpreted content

When asked whether deaf signers should be **able to see both sign-presented and sign-interpreted content on TV**, a clear majority of respondents (342 people) answered **Yes**. A smaller number, 85, said *No*, while 62 selected *Don't know* (Figure 8). This shows strong overall support for making both forms of content available, though with some hesitation and disagreement among a minority of participants.

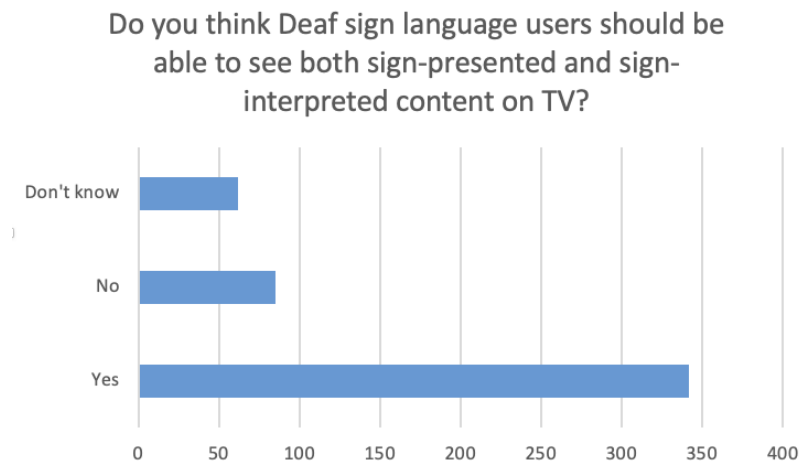


Figure 8: Support for offering both sign-presented and sign-interpreted content

3.6. Types of programmes seen as better for sign-presented versus sign-interpreted content

In relation to what types of programmes are seen as better for sign-presented versus sign-interpreted content, people could select more than one programme type option, giving insights in what programme types were seen as suitable for each type of content. The results show a very consistent pattern: **sign-presented content was preferred over sign-interpreted content across almost all programme types, with only one striking exception: the news.** A total of 328 respondents preferred sign-interpreted news, compared to 306 who preferred sign-presented (Figure 9). This makes news the only programme type where sign-interpreted content was the majority choice.

Types of programmes seen as better for sign-interpreted versus sign-presented content

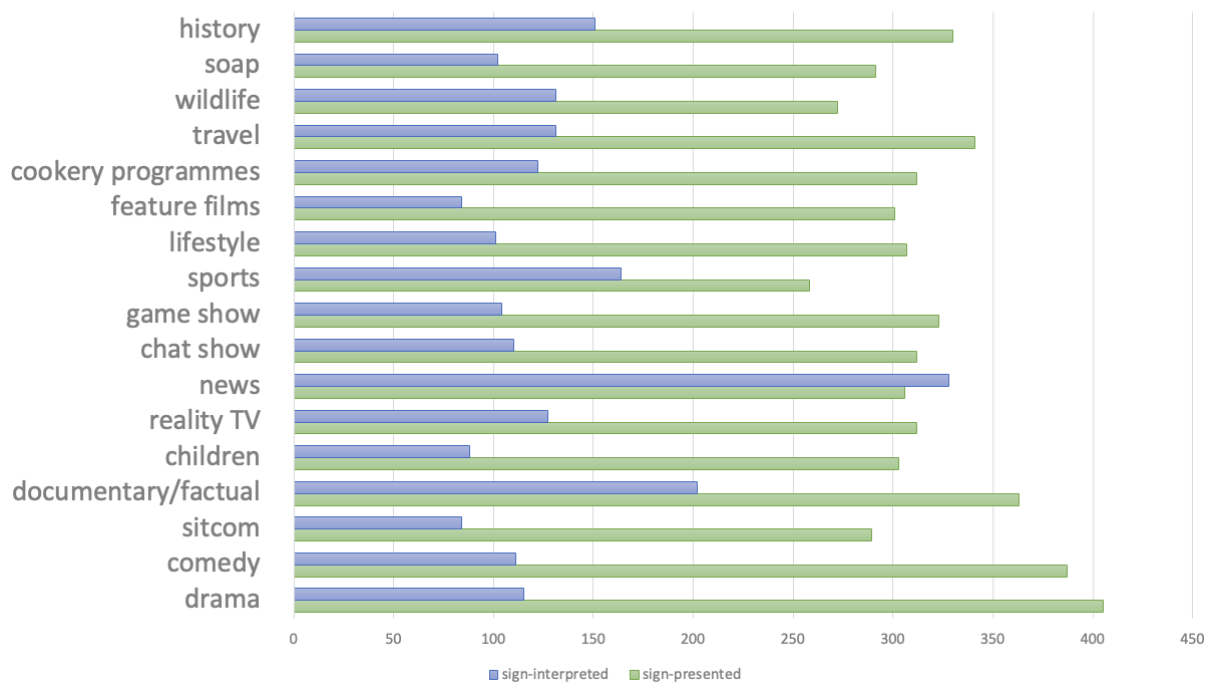


Figure 9: Types of programmes seen as better for sign-interpreted versus sign-presented content

Looking at the distribution of preferences for sign-presented content (Table 3), drama (405) and comedy (387) clearly stand out as the most popular, followed by documentary/factual (363) and travel (341). Across the board, almost all programme types attracted high support in the sign-presented format, showing that this mode of delivery is broadly appealing across different types of content. In other words, **sign-presented is not only the overall preferred format but also consistently popular regardless of programme type.**

By contrast, sign-interpreted content shows a much narrower profile (Table 3). News dominates strongly at the top with 328 preferences, and the next most popular programme types; (documentary/factual (202), sports (164), and history (151)) trail far behind. Beyond these, preferences for other programme types in sign-interpreted format drop to much lower numbers, often clustering around 100 or fewer responses.

This suggests that **sign-interpreted content is strongly valued for certain types of information-heavy or live formats, especially news and factual programming, but much less so for programme types where immersion, performance, and narrative matter more.** Comparing the order of popularity makes this divide even clearer. For sign-presented, drama and comedy lead, programme types associated with storytelling and cultural expression, while news sits mid-table. Thus, while news was the top-ranked category for sign-interpreted content, it was still popular in sign-presented format rather than being among the least preferred. In fact, sports was the least popular sign-presented programme type, with only 258 respondents selecting it. This may be linked to the fact that deaf viewers have had little

exposure to sports programming in BSL, which remains scarce compared to other programme types. Yet, the number of respondents who appreciate sign-presented sports content is still higher than for any sign-interpreted programme type, except news.

This division of preferences suggests that a mixed model, with strong provision of sign-presented programming but also continued availability of interpreting for certain programme types, would best reflect audience needs.

sign-presented in order of popularity		sign-interpreted in order of popularity	
sports	258	sitcom	84
wildlife	272	feature films	84
sitcom	289	children	88
soap	291	lifestyle	101
feature films	301	soap	102
children	303	game show	104
news	306	chat show	110
lifestyle	307	comedy	111
chat show	312	drama	115
cooking programmes	312	cooking programmes	122
reality TV	312	reality TV	127
game show	323	travel	131
history	330	wildlife	131
travel	341	history	151
documentary/factual	363	sports	164
comedy	387	documentary/factual	202
drama	405	news	328

Table 3: Popularity of sign-presented and sign-interpreted content across programme types

3.7. Preferences for future balance of sign-presented and sign-interpreted content

The results show a clear **majority preference for increasing the amount of sign-presented content and reducing sign-interpreted content**. Of the respondents, 289 (59%) supported this shift, compared to only 60 (12%) who wanted the opposite (more sign-interpreted and less sign-presented content). Meanwhile, 140 respondents (29%) felt that the current balance should remain the same (Figure 10). Taken together, these figures demonstrate that most deaf

signers want sign-presented content to play a larger role in television programming, while only a small minority advocate for increasing interpreted content.

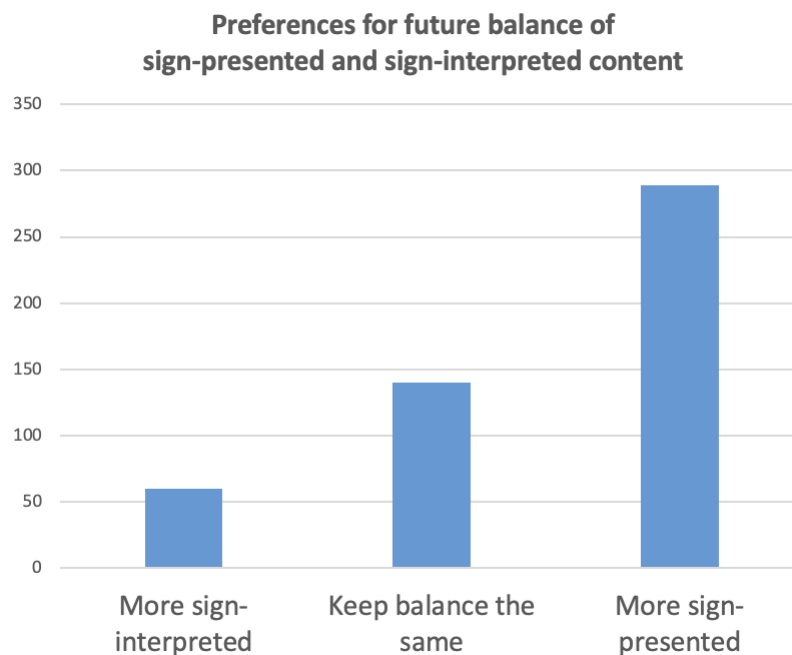


Figure 10: Preferences for future balance of sign-presented and sign-interpreted content

When comparing respondents' preferences for the sign-presented versus sign-interpreted clip (from question 7) with what they would like to see in the future (question 12), the patterns align very clearly. **Among those who preferred the sign-interpreted clip, most wanted the amounts of sign-presented and sign-interpreted content to stay the same (24)**, while 14 felt the amount of sign-interpreted content should be increased and sign-presented content reduced, and only 5 thought the amount of sign-presented content should be increased and sign-interpreted reduced. By contrast, **among those who preferred the sign-presented clip, the majority (284) wanted the amount of sign-presented content to be increased and sign-interpreted reduced**, while 116 preferred the amounts to stay the same, and 46 thought sign-interpreted content should be increased (Figure 11).

Taken together, this confirms that preferences for the clips correlate with preferences for the future: the small group preferring sign-interpreted content leaned towards stability or increasing interpreted content (with a preference for keeping the balance the same), while the much larger group favouring sign-presented content overwhelmingly asked for it to be increased.

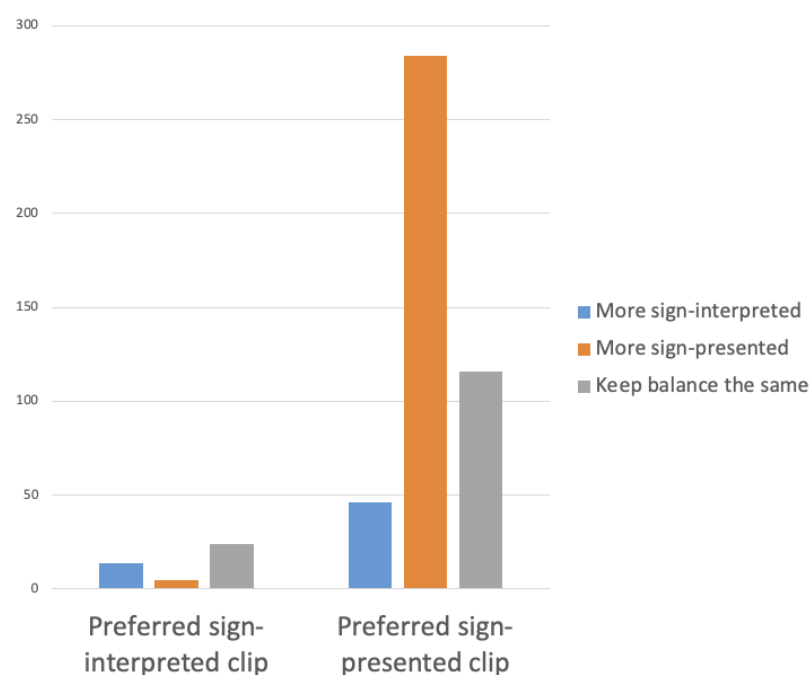


Figure 11: Correlation between clip preferences and preferences for future balance

4. Conclusion

Overall, the survey findings show a strong and consistent preference among deaf signers for sign-presented content across programme types, age groups, and future expectations. Sign-interpreted content was preferred only for the news, while sign-presented delivery was overwhelmingly favoured for its greater ease of understanding, enjoyment, relatability, and quality. The findings indicate that deaf signing audiences see sign-presented content as the most suitable mode for television overall, while recognising interpreting as preferable for the news and as a complementary option for some factual programme types. Taken together, the results point toward a **mixed model, with sign-presented programming as the central focus and sign-interpreted content retained for specific programme types where it best serves audience needs.**

Appendix A: Script for video clips

Sam is sitting having a drink and Alex approaches them and asks her if they have been drinking again. Sam confirms that they have and it's to escape from the feelings that they have about their terrible mother. Sam expressing a desire to drink and get drunk before they can face returning home. Alex questions if their family is so bad that Sam should avoid them, and if she (Alex) herself is so bad that Sam can't stand to be around her.

Int, living room- day

Sam sits alone at a corner table, nursing a coffee. Alex walks in, spot her and approaches cautiously.

ALEX
(Quietly, concerned)
Have you been drinking again?

SAM
(Sighs)
Yeah. I have.
(beat)
It's only way I can shut it all off...The stuff with my mum- it's too much.

ALEX
(sits down across from her)
You said you were done. That you were trying.

SAM
I was. But I can't go back there sober. Not yet. I need to be numb before I walk out and see her.

ALEX
(softly, hurt)
Is it really that bad? Is your family so awful that you have to drink and disappear?

SAM
(look up)
It's not about you. It's about everything. But sometimes...yeah, even being around you feels like too much.

Silence. Alex looks away, blinking back emotion. Sam stares into her drink, ashamed.

Appendix B: Survey questions

1. Type *ok* as your answer when you have read this message or watched the BSL explanatory video.
2. Do you identify as deaf, hard-of-hearing or hearing? (tick one)
 - ☐ Deaf
 - ☐ Deafblind
 - ☐ Hard-of-hearing
 - ☐ Hearing
3. Are you a sign language user? (tick one)
 - ☐ Yes
 - ☐ No
4. What is your age range? (tick one)
 - ☐ 16–24
 - ☐ 25–34
 - ☐ 35–44
 - ☐ 45–54
 - ☐ 55–64
 - ☐ 65–74
 - ☐ 75+
5. Watch this video of a sign-presented conversation in BSL. Type *ok* as your answer once you have watched it.
6. Watch this video of a sign-interpreted conversation in English. Type *ok* as your answer once you have watched it.
7. Which video clip do you prefer? (tick one)
 - ☐ Sign-presented
 - ☐ Sign-interpreted
8. Why do you prefer this one? (tick as many as you like)
 - ☐ is more useful in my everyday life
 - ☐ easier to understand
 - ☐ more enjoyable
 - ☐ more relatable
 - ☐ quality is better
9. Do you think Deaf sign language users should be able to see both sign-presented and sign-interpreted content on TV? (tick one)
 - ☐ Yes
 - ☐ No
 - ☐ Don't know

10. Which types of programmes are better for sign-presented content? (pick as many as you like)

- ☐ drama
- ☐ comedy
- ☐ sitcom
- ☐ documentary/factual
- ☐ children
- ☐ reality TV
- ☐ news
- ☐ chat show
- ☐ game show
- ☐ sports
- ☐ lifestyle
- ☐ feature films
- ☐ cookery programmes
- ☐ travel
- ☐ wildlife
- ☐ soap
- ☐ history

11. Which types of programmes are better for sign-interpreted content? (pick as many as you like)

•

- ☐ drama
- ☐ comedy
- ☐ sitcom
- ☐ documentary/factual
- ☐ children
- ☐ reality TV
- ☐ news
- ☐ chat show
- ☐ game show
- ☐ sports
- ☐ lifestyle
- ☐ feature films
- ☐ cookery programmes
- ☐ travel
- ☐ wildlife
- ☐ soap
- ☐ history

•

12. Do you think that the amount of sign-interpreted or sign-presented content currently on TV should be increased, reduced, or stay the same? (tick one)

- amount of sign-interpreted content should be increased and sign-presented content reduced
- amount of sign-presented content should be increased and sign-interpreted content reduced
- amounts of sign-presented and sign-interpreted content should stay the same