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RESEARCH ARTICLE **Section:** *Culture, Media & Film*

Hearing the screen: How Jordanian viewers with visual impairments receive the Arabic audio description of a Netflix series

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ABSTRACT

Audio description (AD) turns the visual content of films and television into spoken words, yet little is known about how Arab viewers who are blind or partially sighted receive it. This study surveyed 152 Jordanians with visual impairments after they watched an audio-described excerpt of the Netflix series AlRawabi School for Girls (Madrast Al-Rawabi LilBanat), using a 15-item, five-point Likert questionnaire on viewing habits, technical quality, comprehension, attitude, and recommendations for future provision. Exploratory and confirmatory factor analyses supported four measured constructs (CFI = .941, RMSEA = .069, SRMR = .060), and the hypotheses were tested with a bootstrapped path model, moderation analysis, and group comparisons. Technical quality (β = .24) and comprehension (β = .30) each independently predicted attitude towards the service (R^2 = .23), and attitude was the strongest predictor of calls for wider provision (β = .39); both technical quality and comprehension influenced these calls indirectly through attitude. The comprehension–attitude link did not vary by gender, age, or education, and comprehension did not differ by degree of visual impairment, although older and more educated viewers rated technical quality lower. Almost all respondents wanted Arabic broadcasters to offer AD free of charge. The results inform describer training and accessibility policy in the Arab world.

KEYWORDS: audio description, media accessibility, visual impairment, reception research, structural equation modelling, Arabic television

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1. Introduction

As film and television travel across borders, translation has expanded beyond the printed page into audiovisual translation (AVT), which covers content delivered through sound, image, or both, from cinema and television to video games (Jarrah et al., 2023) and staged events such as opera (Díaz-Cintas & Remael, 2014). Dubbing (Abulawi et al., 2022), subtitling, voice-over, and audio description (AD) are among its best-known forms.

AD, the subject of this study, puts into words what viewers cannot see. Beyond the screen, it is offered in theatres, museums, exhibitions, and places of worship, and smartphone applications such as Greta now deliver it on demand (Hättich & Schweizer, 2020). By describing on-screen action, settings, and characters, AD lets people who are blind or partially sighted follow a film or series as it unfolds and take part in a shared cultural activity.

Sometimes called video or visual description, AD is still a young practice that has drawn growing scholarly interest (Haider, Abu Tair, & Dagamseh, 2025; Haider et al., 2024). Streaming services such as Netflix now offer it as an optional track for subscribers who cannot follow the picture. Because the service exists primarily for blind and visually impaired people (B/VIP), describers need the skill to make the viewing experience enjoyable rather than burdensome; a description that lacks a clear, consistent logic can distract more than it helps.

Many people with visual impairments, whether fully blind or partially sighted, use described content for leisure and for language learning. In the Arab world, and in Jordan specifically, AD remains at an early stage both as a service and as a field of research (Darwish et al., 2023). Accessibility research in the region has so far concentrated mainly on subtitling for the deaf and hard of hearing (AlBkowr & Haider, 2023; Haider, Sahari, et al., 2025; Haider & Sahari, 2026). Visual impairment is the most widespread form of disability in Jordan, which makes it important to find out how Jordanian viewers with visual impairments respond to the described material that is currently available.

Few studies have examined how Arab viewers with visual impairments react to the AD of Arabic series. This study seeks to give these viewers a voice and to contribute to an emerging research area. It measures, quantitatively, how Jordanian viewers with visual impairments responded to the described version of the Netflix drama *AlRawabi School for Girls* (*Madrast Al-Rawabi LilBanat*), with the aim of identifying what the service does well, where it falls short, and how it could better serve its audience.

The study asks one question: How did Jordanian viewers with visual impairments respond to the audio-described version of *AlRawabi School for Girls*? Four hypotheses, derived from the constructs of the questionnaire, guide the analysis:

- **H1:** Technical aspects of the AD affect viewers' attitudes towards it.
- **H2:** Viewers' comprehension of the AD affects their attitudes and their recommendations for future provision.
- **H3:** Gender, age, and education level do not affect the relationship between comprehension and attitudes.
- **H4:** The degree of visual impairment affects comprehension of the AD.

2. Literature Review

2.1 AD within audiovisual translation

Translation carries the meaning and style of a source text into a target text; for Newmark (1987), its task is to convey a text's meaning in another language as its author meant it. Three kinds are usually distinguished. Intralingual translation stays within one language (Al-Abbas & Haider, 2021; Al-Abbas et al., 2022; Ghassan & Haider, 2025; Haider & Hussein, 2022); interlingual translation, which Jakobson (2013) calls "translation proper", moves verbal signs from one language into another (Abdelaal, 2019; Al-Zgoul & Al-Salman, 2022); and intersemiotic translation interprets verbal signs through a non-verbal system, or the reverse (Torop, 2003). The growth of audiovisual products created a need to make them available to new audiences, and AVT emerged as a field of translation studies in response. AD is one of its modes. Mazur (2020, p. 228) defines it as "audio commentary that describes the relevant visual elements of work (as well as meaningful sounds that may not be clear to the target audience) so that the work constitutes a coherent whole for the audience". Designed chiefly for blind and partially sighted people, AD is well established in the United States, Japan, and much of Europe and has recently begun to appear in the Middle East (Darwish et al., 2023; Haider et al., 2024). Hyks (2005) stresses how closely describing and translating are related: in both cases, information in one form is recast in

another, here from image to words, so that viewers with little or no sight can follow films and other audiovisual products.

Formal AD dates from 1981, when Margaret and Cody Pfanstiehl, founders of the Metropolitan Washington Ear, began offering listening services to blind, visually impaired, and print-disabled people in the United States, and later worked with Arena Stage to describe a production of *Major Barbara* (Snyder, 2005). Before such services existed, people with visual impairments depended on sighted companions whispering what was happening on stage, which shows that the need for description long predates its provision. AD has also been put to educational uses (Schmeidler & Kirchner, 2001).

Whether for live events or recorded media, from films and television to theatre, dance, and football, AD condenses the key visual features of a performance into short spoken descriptions woven into the programme, so that blind and partially sighted audiences can enjoy it. Because the same film or series can be described in many different ways, AD of screen fiction is open to debate. Piety (2004) traces the earliest academic treatment of AD to a 1975 dissertation by Frazier, which presented description as a means of improving blind listeners' comprehension.

2.2 Reception and related studies

Research on AD for Arabic films, series, and programmes is scarce. Among reception studies elsewhere, Fels et al. (2006) compared how blind and sighted viewers responded to first-person and conventional third-person description of the Canadian animated sitcom *Odd Job Jack*; after watching ten minutes of four clips, every blind participant praised the description, and blind viewers favoured the first-person style. In Spain, Utray et al. (2009) traced the development of AD and subtitling for the deaf and hard of hearing, reviewed the relevant standards and legislation, and concluded that producers and distributors must take concrete steps to keep assistive services available along the whole distribution chain.

Corpus methods, which make the analysis of large bodies of Arabic and English text more systematic and less exposed to researcher bias (Haider, 2019a, 2019b, 2019c), have also been applied to audiovisual material, including subtitle corpora (Abu-Rayyash & Haider, 2022), and to description scripts. Arma (2011) compared the Italian and English AD of *Chocolat* and found more subordinate clauses in the Italian version, calling for further research on the listening habits of visually impaired audiences and their satisfaction with different description styles. In the Arabic context, Darwish et al. (2023) used a corpus-assisted approach to identify which aspects of visual content are covered in the AD of Arabic series. Other work has examined AD as a learning tool. Sadowska (2015) found that 120 sighted Polish university students, most of whom had never heard of AD, learned up to four new English words on average from a two-minute described clip, and Vermeulen and Ibáñez Moreno (2017) showed with 153 Belgian language students that writing AD can raise intercultural awareness by connecting what we see with how we describe it.

Several studies have measured the experience of B/VIP audiences directly. Walczak (2017) surveyed 72 blind and visually impaired Polish viewers and found that creative description produced a stronger sense of presence than standard description, and that a human voice was preferred over a synthetic one for fiction, though not for documentaries. Karantzi (2020), using a questionnaire and a round-table discussion with visually impaired Greek viewers of three animated films, found that describing emotions and using adjectives enriched the experience. Zengin Temirbek uulu et al. (2021) showed that, with AD, visually impaired viewers in Turkey understood and retold a film's events much as sighted viewers did. Analyses of Netflix AD have further shown that describers' choices shape how blind and partially sighted viewers perceive gender (Haider et al., 2024) and the body (Haider, Abu Tair, & Dagamseh, 2025).

For Arabic, Alnatsheh (2020) produced two versions of the AD of the short Qatari film *Sh'hab*, one in Modern Standard Arabic (MSA) and one in Qatari dialect, and found that viewers preferred MSA as more eloquent and easier to follow. The choice between MSA and the vernacular has likewise been examined in Arabic dubbing and intralingual subtitling (Abulawi et al., 2022; Al-Abbas & Haider, 2021; Haider & Hussein, 2022). Said (2020) compiled an English–Arabic AD glossary from 18 Netflix films and called for more reception research in the region, and Khoshsaligheh et al. (2022) assessed Persian AD of three Iranian feature films against the ADLAB guidelines and found it fairly consistent. Reception research with Arab audiences has examined responses to video game localization (Jarrah et al., 2023) and AI translation (Haider, 2026b). Taken together,

these studies show that AD has been examined in many languages but that the reception of Arabic AD by Arab viewers with visual impairments remains largely unmeasured, which is the gap this study addresses.

3. Method

3.1 The series

AlRawabi School for Girls is a six-episode Jordanian teen drama, created and directed by Tima Shomali, written with Shirin Kamal, and produced by Filmizion Productions for Netflix. Released on August 12, 2021, with episodes of roughly 45 minutes, it deals with bullying among young women and with themes rarely aired in Arabic entertainment, including women's rights, mental health, religion, revenge, and abusive relationships, which made it controversial in Jordan. The series is available in 190 countries, with subtitles in 32 languages and dubbing in more than nine. Netflix offers the original Jordanian-vernacular soundtrack and an AD track voiced largely in Modern Standard Arabic (MSA).

3.2 Participants and procedure

The sample comprised 152 blind and visually impaired adults in Jordan. Centres serving B/VIP in Jordan put the author in touch with members willing to take part, and further participants were reached by snowball sampling. A link was circulated through WhatsApp groups asking participants to watch an audio-described excerpt of the series and then complete an online questionnaire built in Microsoft Forms, a mode of administration used successfully in an earlier survey of Jordanian respondents (Haider, 2026a). The questionnaire was administered in Arabic, Jordan's main language, and later translated into English for reporting.

Responses were collected between May 21 and July 28, 2022; the median completion time was 8.2 minutes (interquartile range 4.8–13.2). All 152 questionnaires were complete, so no data were missing.

3.3 Instrument

The questionnaire (Appendix) was designed after a review of instruments used in earlier reception studies (e.g., Haider, 2026a, 2026b) and checked by four experts in translation studies before use. Its first part recorded gender, age, education, and degree of visual impairment. Its second part contained 15 statements rated on a five-point scale (1 = strongly disagree, 5 = strongly agree), written to tap five areas: viewing habits (items 1–3), technical issues (items 4–6), comprehension and understanding (items 7–9), attitude (items 10–12), and future actions and recommendations (items 13–15). Item numbers in this article follow the questionnaire.

3.4 Scale construction, validity, and reliability

Item analysis on the full sample (Table 1) showed that two of the five intended scales did not hold together. The three viewing-habits items describe separate behaviours and opinions rather than one attitude ($\alpha = .22$), so they are reported item by item and not combined. Item 7 ("The audio description did not cover all the scenes of the series") is worded in the opposite direction from the other comprehension items and correlated negatively with them (corrected item–total $r = -.19$); it was therefore analysed separately, and comprehension was measured with items 8 and 9 ($r = .38$, $\alpha = .55$). Judged against the conventional .70 threshold for Cronbach's alpha (Cronbach, 1951; Nunnally, 1978), the remaining scales showed acceptable internal consistency for technical issues ($\alpha = .73$) and attitude ($\alpha = .77$), and modest consistency for future actions and recommendations ($\alpha = .58$), whose items were endorsed by almost every respondent and therefore varied little.

Table 1. Corrected item–total correlations and Cronbach's alpha for the intended scales (N = 152)

Intended scale	Items	Corrected item–total r	α	Decision
Viewing habits	1, 2, 3	.33, .20, –.13	.22	Items reported separately
Technical issues (TI)	4, 5, 6	.53, .51, .64	.73	Retained
Comprehension and understanding (CU)	7, 8, 9	–.19, .17, .10	.00	Item 7 removed; CU = items 8–9 (α = .55)
Attitude (A)	10, 11, 12	.51, .76, .57	.77	Retained
Future actions and recommendations (FAR)	13, 14, 15	.35, .39, .45	.58	Retained

The 15 items were suitable for factor analysis: the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.743, and Bartlett's test of sphericity was significant, $\chi^2(105) = 619.14$, $p < .001$ (Cerny & Kaiser, 1977). Construct validity was then examined with an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA), reported in Section 4.3.

3.5 Analysis

Items were summarised as the percentages of respondents who agreed (4–5), were uncertain (3), or disagreed (1–2), with means, standard deviations, and medians. Scale scores were computed as the mean of their items. The EFA used principal axis factoring with varimax rotation, and the number of factors was judged by parallel analysis with 1,000 random data sets (Horn, 1965). The CFA was estimated by maximum likelihood with factor variances fixed at 1, and was judged by χ^2/df, CFI, TLI, RMSEA with its 90% confidence interval, and SRMR (Hu & Bentler, 1999). Convergent validity was assessed with composite reliability (CR) and average variance extracted (AVE; Hair et al., 2011), and discriminant validity with the heterotrait–monotrait ratio (HTMT; Henseler et al., 2015).

Because technical issues and comprehension were strongly correlated at the latent level and comprehension had only two indicators, a fully latent structural model produced unstable estimates. The hypotheses were therefore tested with a path model on scale scores: ordinary least squares regressions with standardised coefficients, variance inflation factors (VIF) to check multicollinearity, and 5,000 bootstrap resamples for the confidence intervals of indirect effects (Preacher & Hayes, 2008). H3 was tested by adding interaction terms between comprehension (mean-centred) and each demographic variable to the model predicting attitude, and H4 by one-way ANOVA with a Kruskal–Wallis test as a non-parametric check. Group differences on all four scales were examined in the same way, with Welch's t-test, Mann–Whitney U, Tukey's HSD post-hoc comparisons, and effect sizes (Cohen's d, η^2). For education, the two respondents without schooling were grouped with those with high school or less. Significance was set at .05.

4. Results

4.1 Sample profile

Table 2. Demographic profile of the respondents (N = 152)

Variable	Category	n	%
Gender	Female	84	55.3
	Male	68	44.7
Age	18–24	52	34.2
	25–30	44	28.9
	30+	56	36.8
Education	No schooling	2	1.3
	High school or less	34	22.4
	University undergraduate degree	71	46.7
	University graduate degree	45	29.6
Visual impairment	Low vision (incl. 3 severe low vision)	46	30.3
	Partial blindness	33	21.7
	Total blindness (incl. 1 near-total)	73	48.0

Just over half of the respondents were women, the three age bands were of similar size, and three quarters (76.3%) held a university degree. Nearly half were totally blind.

4.2 Item responses

Table 3. Distribution of responses to the 15 items (N = 152)

No.	Item (summarised)	Agree %	Uncertain %	Disagree %	M	SD	Mdn
Viewing habits							

1	Watches series for enjoyment even when no AD is offered	61.2	8.6	30.3	3.47	1.26	4
2	Described Arabic series are available only on paid subscription platforms	52.6	17.8	29.6	3.49	1.38	4
3	AD suits drama better than other genres such as comedy and romance	50.7	24.3	25.0	3.39	1.17	4
Technical issues							
4	Descriptions were the right length and left time to take them in	72.4	16.4	11.2	3.89	0.94	4
5	The AD track sounded good	75.0	13.2	11.8	3.87	1.01	4
6	Descriptions linking the parts of the dialogue were appropriate	72.4	14.5	13.2	3.80	0.96	4
Comprehension and understanding							
7	The AD did not cover all the scenes of the series	29.6	40.8	29.6	3.03	1.08	3
8	Describing details I could not grasp from the soundtrack helped me follow the series	83.6	11.8	4.6	4.20	0.85	4
9	Scenes, settings, costumes, and body language were described directly and clearly	77.0	12.5	10.5	3.93	0.94	4
Attitude							
10	Watching the series was enjoyable	82.2	10.5	7.2	4.07	0.89	4
11	I want to watch more described series	84.2	9.2	6.6	4.28	0.91	5
12	Described Arabic series make me feel more socially included	83.6	7.2	9.2	4.20	1.01	4
Future actions and recommendations							
13	Arabic media and streaming platforms should add AD	89.5	8.6	2.0	4.47	0.79	5
14	Described Arabic series and films should be free	95.4	2.6	2.0	4.61	0.67	5
15	Arab decision-makers should urge national TV channels to add AD	93.4	6.6	0.0	4.60	0.61	5

Agree = agree or strongly agree; disagree = disagree or strongly disagree. Full wording appears in the Appendix. Viewing habits were mixed. Six in ten respondents watch series for entertainment even without description, but three in ten do not, and about half agreed that described Arabic series are confined to paid platforms. Around three quarters rated the length, sound, and placement of the descriptions positively, and more than four in five said the description of details missing from the soundtrack helped them follow the series. Opinion on whether the AD covered every scene was evenly split, with the largest share (40.8%) uncertain. Attitudes were clearly favourable (82–84% agreement), and support for wider provision was almost universal: no respondent disagreed that decision-makers should press national channels to add AD, and 95.4% wanted described content to be free.

4.3 Factor structure

Parallel analysis retained three factors, whose eigenvalues (3.99, 1.77, 1.69) exceeded the 95th percentile of eigenvalues from random data (1.72, 1.53, 1.41). In the three-factor EFA solution (Table 4), the technical and comprehension items formed one factor, the attitude and recommendation items a second, and items 1 and 2 a third; items 3 and 7 did not load clearly on any factor, which agrees with the item analysis.

Table 4. Exploratory factor analysis: rotated loadings (principal axis factoring, varimax)

Item	Factor 1: Delivery and comprehension	Factor 2: Attitude and recommendations	Factor 3: Viewing habits
1	.09	–.04	**.50**
2	.19	.04	**.62**
3	.16	.05	–.24
4	**.57**	.14	.14
5	**.66**	.15	.08
6	**.75**	.16	.03
7	–.13	.04	–.23
8	**.56**	.43	.16
9	**.42**	.13	.40
10	.42	**.46**	–.12
11	.32	**.79**	–.05
12	.14	**.74**	.03
13	–.09	**.51**	.30
14	–.05	**.39**	.20
15	–.06	**.47**	.31
Variance explained	14.7%	15.2%	8.1%

Loadings of .40 or more on the factor an item was written for are in bold.

The theorised four-factor measurement model (technical issues, comprehension, attitude, and recommendations, with items 1–3 and 7 excluded) was then tested with CFA and compared with two more parsimonious alternatives suggested by the EFA (Table 5). The four-factor model fitted acceptably, $\chi^2(38) = 65.53$, $p = .004$, $\chi^2/df = 1.72$, CFI = .941, TLI = .915, RMSEA = .069 [90% CI .039, .097], SRMR = .060, and significantly better than a three-factor model merging technical issues and comprehension ($\Delta\chi^2(3) = 17.75$, $p < .001$) or a two-factor model that also merged attitude and recommendations ($\Delta\chi^2(5) = 41.08$, $p < .001$).

Table 5. Fit of competing CFA models (N = 152)

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA [90% CI]	SRMR
Four factors (TI, CU, A, FAR)	65.53	38	1.72	.941	.915	.069 [.039, .097]	.060
Three factors (TI + CU merged)	83.28	41	2.03	.910	.879	.083 [.057, .108]	.073
Two factors (TI + CU; A + FAR)	106.61	43	2.48	.864	.827	.099 [.076, .123]	.085
Criterion (Hu & Bentler, 1999)			< 3	≥ .90	≥ .90	≤ .08	≤ .08

Table 6. Four-factor CFA: standardised loadings, reliability, and convergent validity

Construct	Item	Std. loading	z	α	CR	AVE
Technical issues (TI)	4	.63	7.75	.73	.74	.50
	5	.66	7.99			
	6	.81	10.18			
Comprehension (CU)	8	.78	8.10	.55	.59	.43
	9	.49	5.58			
Attitude (A)	10	.62	7.98	.77	.80	.58
	11	.93	13.06			
	12	.71	9.36			
Future actions and recommendations (FAR)	13	.58	5.83	.58	.59	.33
	14	.53	5.35			
	15	.61	6.02			

All loadings were significant ($p < .001$). CR = composite reliability; AVE = average variance extracted.

Technical issues and attitude met the usual standards for composite reliability (≥ .70) and AVE (≥ .50; Hair et al., 2011). Comprehension and recommendations fell short, which reflects their small number of items and, for recommendations, the ceiling effect visible in Table 3; results involving these two scales should be read with that in mind. Discriminant validity was supported for most pairs (HTMT .16–.69), but the HTMT for technical issues and comprehension (.89) was close to the .90 limit (Henseler et al., 2015), and their latent correlation was .80, indicating that respondents judged how the description was delivered and how well it helped them understand as closely related.

Table 7. Scale descriptives and inter-scale correlations (N = 152)

Scale	M	SD	Mdn	TI	CU	A	FAR
Technical issues (TI)	3.85	0.79	4.00	–			
Comprehension (CU)	4.07	0.75	4.00	.57***	–		
Attitude (A)	4.18	0.78	4.33	.41***	.44***	–	
Future actions and recommendations (FAR)	4.56	0.51	4.67	.10	.30***	.41***	–

Pearson correlations; Spearman correlations led to the same conclusions. *** p < .001.

All four scale means were well above the scale midpoint of 3, rising from technical issues to recommendations. Attitude correlated moderately with technical issues and comprehension, and recommendations correlated with attitude and comprehension but not with technical issues.

4.4 Hypothesis tests

H1 and H2: direct effects. Each predictor was first tested on its own (Table 8). Technical issues predicted attitude (β = .41, p < .001), explaining 16.7% of its variance. Comprehension predicted both attitude (β = .44, p < .001; R^2 = .19) and recommendations (β = .30, p < .001; R^2 = .09).

Table 8. Simple regressions for H1 and H2 (N = 152)

Path	B	SE	t(150)	p	β	R^2
TI → A (H1)	0.404	0.074	5.49	< .001	.41	.167
CU → A (H2a)	0.456	0.077	5.95	< .001	.44	.191
CU → FAR (H2b)	0.205	0.054	3.83	< .001	.30	.089

B = unstandardised coefficient; β = standardised coefficient.

Path model. Because technical issues and comprehension are correlated (r = .57), their effects were also estimated jointly, with attitude as a mediator of their effects on recommendations (Table 9; Figure 1). Multicollinearity was not a concern (all VIF ≤ 1.59). Together, technical issues and comprehension explained 23.0% of the variance in attitude, F(2, 149) = 22.20, p < .001, and both kept independent effects: technical issues β = .24 (p = .007) and comprehension β = .30 (p = .001). H1 and H2a were therefore supported. In the model for recommendations, F(3, 148) = 13.27, p < .001, R^2 = .21, attitude was the strongest predictor (β = .39, p < .001), comprehension retained a direct effect (β = .24, p = .010), supporting H2b, and technical issues had a small negative direct effect (β = –.20, p = .033) once attitude and comprehension were held constant.

Table 9. Path model: standardised coefficients with 95% bootstrap confidence intervals (5,000 resamples)

Outcome	Predictor	β	SE	t	p	95% CI
Attitude (R^2 = .23)	Technical issues	.24	.087	2.74	.007	[.03, .45]
	Comprehension	.30	.087	3.48	.001	[.11, .48]
Recommendations (R^2 = .21)	Technical issues	–.20	.091	–2.14	.033	[–.37, –.04]
	Comprehension	.24	.092	2.61	.010	[.05, .43]
	Attitude	.39	.083	4.66	< .001	[.21, .57]
Indirect effects	TI → A → FAR	.09				[.01, .21]
	CU → A → FAR	.12				[.03, .22]

An indirect effect is significant when its confidence interval excludes zero.

Both indirect effects were significant. Better-rated delivery and better comprehension raised viewers' attitudes towards AD, and more positive attitudes in turn strengthened their calls for wider provision. The total effect of technical issues on recommendations was close to zero (β = .10, p = .228), because its positive indirect effect through attitude was offset by its negative direct effect.

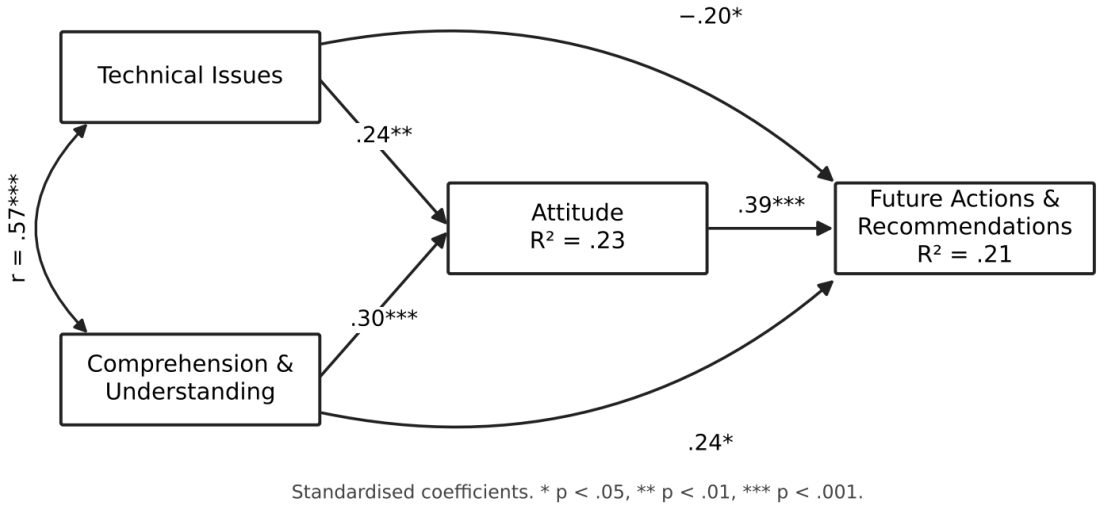


Figure 1. Path model of the effects of technical issues and comprehension on attitude and recommendations

H3: moderation by gender, age, and education. Adding interaction terms between comprehension and each demographic variable did not significantly improve the prediction of attitude (Table 10), so the comprehension–attitude relationship did not differ by gender, age, or education. H3 was supported. Within every subgroup the slope was positive, and it was significant in all subgroups except graduates (p = .082).

Table 10. Moderation of the comprehension → attitude path

Moderator	Group (n)	B	p	Interaction test
Gender	Female (84)	0.54	< .001	ΔF(1, 148) = 1.81, p = .181, ΔR² = .010
	Male (68)	0.33	.019	
Age	18–24 (52)	0.40	.005	ΔF(2, 146) = 0.72, p = .489, ΔR² = .008
	25–30 (44)	0.61	< .001	
	30+ (56)	0.40	.002	
Education	High school or less (36)	0.35	.017	ΔF(2, 146) = 1.83, p = .165, ΔR² = .020
	Undergraduate (71)	0.60	< .001	
	Graduate (45)	0.28	.082	

B = unstandardised slope of attitude on comprehension within each group.

H4: degree of visual impairment. Comprehension did not differ by degree of visual impairment, F(2, 149) = 1.53, p = .219, η² = .020; Kruskal–Wallis H(2) = 2.27, p = .321 (Table 11). H4 was not supported: viewers with low vision, partial blindness, and total blindness understood the described series equally well.

4.5 Group differences

Table 11 compares all four scales across the demographic groups. Gender and degree of visual impairment made no significant difference to any scale (all |d| ≤ .15; all p ≥ .08). Age and education mattered only for technical issues. Respondents over 30 rated the technical quality of the description lower than those aged 18–24 (difference = 0.57, Tukey p < .001) and 25–30 (difference = 0.40, p = .025), F(2, 149) = 8.29, p < .001, η² = .10. Graduates rated it lower than respondents with high school education or less (difference = 0.52, p = .008), F(2, 149) = 4.66, p = .011, η² = .06. Non-parametric tests led to the same conclusions.

Table 11. Scale means (SD) by demographic group

Variable	Group (n)	Technical issues	Comprehension	Attitude	Recommendations
Gender	Female (84)	3.82 (0.77)	4.02 (0.78)	4.17 (0.76)	4.53 (0.55)
	Male (68)	3.89 (0.81)	4.12 (0.70)	4.19 (0.80)	4.60 (0.46)
	Test	t = −0.55, p = .585, d = −0.09	t = −0.78, p = .436, d = −0.13	t = −0.09, p = .927, d = −0.01	t = −0.92, p = .361, d = −0.15
Age	18–24 (52)	4.12 (0.68)	4.17 (0.71)	4.22 (0.74)	4.51 (0.50)
	25–30 (44)	3.94 (0.72)	4.08 (0.75)	4.14 (0.85)	4.46 (0.59)
	30+ (56)	3.54 (0.84)	3.96 (0.77)	4.17 (0.77)	4.69 (0.43)
	Test	F = 8.29, p < .001, η^2 = .100	F = 1.16, p = .315, η^2 = .015	F = 0.14, p = .870, η^2 = .002	F = 2.98, p = .054, η^2 = .038
Education	High school or less (36)	4.13 (0.76)	4.15 (0.72)	4.28 (0.63)	4.52 (0.46)
	Undergraduate (71)	3.87 (0.77)	4.07 (0.77)	4.18 (0.84)	4.58 (0.54)
	Graduate (45)	3.61 (0.77)	3.99 (0.74)	4.10 (0.78)	4.57 (0.51)
	Test	F = 4.66, p = .011, η^2 = .059	F = 0.48, p = .618, η^2 = .006	F = 0.54, p = .582, η^2 = .007	F = 0.17, p = .847, η^2 = .002
Visual impairment	Low vision (46)	3.77 (0.90)	3.91 (0.86)	4.01 (0.85)	4.44 (0.60)
	Partial blindness (33)	3.86 (0.62)	4.08 (0.61)	4.20 (0.58)	4.53 (0.47)
	Total blindness (73)	3.90 (0.78)	4.16 (0.71)	4.27 (0.80)	4.65 (0.46)
	Test	F = 0.42, p = .658, η^2 = .006	F = 1.53, p = .219, η^2 = .020	F = 1.60, p = .204, η^2 = .021	F = 2.55, p = .082, η^2 = .033

Gender: Welch's t-test, df ≈ 150. Age, education, and visual impairment: one-way ANOVA, df = (2, 149).

5. Discussion

Jordanian viewers with visual impairments received the Arabic AD of *AlRawabi School for Girls* favourably. More than four in five enjoyed the series with description, wanted more described content, and felt that described Arabic series made them more socially included. This matches Fels et al. (2006), in whose study every blind participant welcomed the description, and confirms that AD meets a real need among Arab viewers.

The path model shows how this favourable attitude arises. Both how the description is delivered and how well it helps viewers understand the story contributed to attitude, each independently of the other. Timing, sound quality, and the fit of descriptions into gaps in the dialogue therefore matter alongside the content of the descriptions. The comprehension result agrees with Zengin Temirbek uulu et al. (2021), who found that description allowed visually impaired viewers to follow film events as well as sighted viewers, and with Walczak (2017), whose Polish viewers' experience depended on how descriptions were written and voiced. It is also consistent with analyses of Netflix AD showing that the selection and wording of visual details, such as body language and physical appearance, shape what blind viewers can take from the screen (Haider, Abu Tair, & Dagamseh, 2025; Haider et al., 2024).

Attitude, in turn, was the main route to viewers' calls for wider provision: both delivery and comprehension raised recommendations indirectly, through a more positive attitude, a link between attitudes and adoption that has also been examined in reception research on translation technology among Jordanian users (Haider, 2026b). Comprehension also had a direct effect, suggesting that viewers who experienced how much description adds to their understanding were especially likely to demand it elsewhere. The small negative direct effect of technical quality, which appeared only once attitude and comprehension were controlled, should be interpreted cautiously; one possibility is that viewers who were less satisfied with the delivery felt a stronger need for better and more widely available services. Recommendations were endorsed so widely, however, that this scale varied little and had modest reliability.

The effect of comprehension on attitude did not depend on gender, age, or education, and comprehension

was the same whether viewers had low vision, partial blindness, or total blindness. AD therefore appears to serve the whole spectrum of visual impairment, not only totally blind viewers. Age and education did shape one thing: older and more highly educated respondents judged the technical quality of the description more critically. These groups may have more viewing experience or higher expectations, and their views deserve attention when platforms review describing practices.

The item results also point to gaps. About three in ten respondents felt that the description did not cover all scenes, and four in ten were unsure, which suggests that coverage was uneven or hard for viewers to judge. About half agreed that described Arabic series are available only on paid platforms, and nearly all wanted described Arabic content to be free and national channels to adopt it. Together, these findings show that the main barrier is access rather than acceptance: viewers who can reach AD value it, but too few can reach it. Comparable gaps in accessibility provision have been reported for Arab deaf and hard-of-hearing audiences (AlBkowr & Haider, 2023; Haider, Sahari, et al., 2025; Haider & Sahari, 2026).

6. Conclusion

This study examined the reception of the Arabic AD of a Netflix series by 152 Jordanian viewers with visual impairments. Both the delivery of the description and the comprehension it supports shaped viewers' attitudes, and attitudes in turn drove calls for wider and free provision. Gender, age, education, and degree of impairment did not change the link between comprehension and attitude, and comprehension was the same across levels of impairment, although older and more educated viewers were more critical of technical quality.

For describers and trainers, the results point to the timing and voicing of descriptions and to complete, clear coverage of visual details that the soundtrack cannot convey; corpus resources already built for audiovisual translators (Abu-Rayyash & Haider, 2022) could be adapted for training describers. For broadcasters and policymakers, they show strong demand for accessible Arabic content beyond subscription platforms.

The study has limitations. It examined one series through a single excerpt, and its sample was recruited through centres for the visually impaired and by snowball sampling, so the findings may not generalise to all Jordanian viewers. The data come from a single self-report questionnaire, so the associations cannot be read as causal and may be inflated by common-method variance. Comprehension was measured with two items and the recommendations scale had modest reliability and a ceiling effect; Likert responses were also treated as continuous. Future research should use longer, validated scales, compare different description styles and language varieties for the same material, include objective comprehension measures, and extend to other genres such as documentaries and sports broadcasts.

Declarations

Informed consent. Participants were informed of the purpose of the study and that their responses would be used for research purposes only. Participation was voluntary, and completing the questionnaire indicated consent.

Conflict of interest. The author declares no conflict of interest.

References

Abdelaal, N. M. (2019). Subtitling of culture-bound terms: Strategies and quality assessment. *Heliyon, 5*(4), e01411. https://doi.org/10.1016/j.heliyon.2019.e01411

Abu-Rayyash, H., & Haider, A. S. (2022). Construction of a parallel corpus of English–Arabic movie subtitles: A genuine source for audiovisual translators. *The International Journal of Humanities Education, 21*(1), 21–37. https://doi.org/10.18848/2327-0063/CGP/v21i01/21-37

Abulawi, F., Al Salman, S., & Haider, A. S. (2022). Modern Standard Arabic vs. Egyptian vernacular in dubbing animated movies: A case study of A Bug's Life. *The International Journal of Communication and Linguistic Studies, 21*(1), 125–141. https://doi.org/10.18848/2327-7882/CGP/v21i01/125-141

Al-Abbas, L. S., & Haider, A. S. (2021). Using Modern Standard Arabic in subtitling Egyptian comedy movies for the deaf/hard of hearing. *Cogent Arts & Humanities, 8*(1), 1993597. https://doi.org/10.1080/23311983.2021.1993597

Al-Abbas, L. S., Haider, A. S., & Saideen, B. (2022). A quantitative analysis of the reactions of viewers with hearing impairment to the intralingual subtitling of Egyptian movies. *Heliyon, 8*(1), e08728. https://doi.org/10.1016/j.heliyon.2022.e08728

Al-Zgoul, O., & Al-Salman, S. (2022). Fansubbers' subtitling strategies of swear words from English into Arabic in the *Bad Boys* movies. *Open Cultural Studies, 6*(1), 199–217. https://doi.org/10.1515/culture-2022-0156

AlBkowr, N., & Haider, A. S. (2023). Subtitling for people with hearing impairments in the Arab world context: The case of the Blue Elephant 2 movie. *Online Journal of Communication and Media Technologies, 13*(4), e202347. https://doi.org/10.30935/ojcmt/13602

Alnatsheh, A. T. (2020). *A contrastive study of two linguistic varieties of audio description: MSA vs. Qatari dialect* [Master's thesis, Hamad Bin Khalifa University].

Arma, S. (2011). *The language of filmic audio description: A corpus-based analysis of adjectives* [Doctoral dissertation, Università degli Studi di Napoli Federico II].

Cerny, B. A., & Kaiser, H. F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioral Research, 12*(1), 43–47. https://doi.org/10.1207/s15327906mbr1201_3

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334. https://doi.org/10.1007/BF02310555

Darwish, N. T., Haider, A. S., & Saed, H. (2023). Aspects of visual content covered in the audio description of Arabic series: A corpus-assisted study. *Open Cultural Studies, 7*(1), 20220174. https://doi.org/10.1515/culture-2022-0174

Díaz-Cintas, J., & Remael, A. (2014). *Audiovisual translation: Subtitling*. Routledge.

Fels, D. I., Udo, J. P., Diamond, J. E., & Diamond, J. I. (2006). A comparison of alternative narrative approaches to video description for animated comedy. *Journal of Visual Impairment & Blindness, 100*(5), 295–305.

Ghassan, H., & Haider, A. S. (2025). Partial intralingual subtitling as a means of understanding varieties of the same language: A case study of Syrian vernacular and Modern Standard Arabic. *Ampersand, 14*, 100219. https://doi.org/10.1016/j.amper.2025.100219

Haider, A. S. (2019a). The representation of Al-Megrahi's release in Arabic and English newspapers in 2009 and 2010: A corpus-assisted discourse study. *Dirasat: Human and Social Sciences, 46*(1, Suppl. 2), 297–317. https://doi.org/10.35516/0103-046-986-019

Haider, A. S. (2019b). Syrian–Lebanese relations: A corpus-based critical discourse analysis of Bashar Al-Assad's speeches and interviews. *Dirasat: Human and Social Sciences, 46*(4), 551–570. https://doi.org/10.35516/0103-046-004-040

Haider, A. S. (2019c). Using corpus linguistic techniques in (critical) discourse studies reduces but does not remove bias: Evidence from an Arabic corpus about refugees. *Poznan Studies in Contemporary Linguistics, 55*(1), 89–133. https://doi.org/10.1515/psicl-2019-0004

Haider, A. S. (2026a). AI as a language tutor: Jordanian university students' perceptions of AI-generated feedback on their English. *Research Journal in Advanced Humanities, 7*(4), 1–17.

Haider, A. S. (2026b). Trust in AI translation: Reception and adoption among Jordanian business professionals. *Research Journal in Advanced Humanities, 7*(4), 1–15.

Haider, A. S., Abu Tair, S., & Dagamseh, M. (2025). A qualitative analysis of body representation in Netflix

audio descriptions. *Training, Language and Culture, 9*(2), 71–83. https://doi.org/10.22363/2521-442X-2025-9-2-71-83

Haider, A. S., Abu Tair, S., Obeidat, M. M., Saed, H., & Sahari, Y. (2024). Shaping the visually impaired perception of gender through Netflix audio description of movies and series. *Lebende Sprachen, 69*(2), 1–30. https://doi.org/10.1515/les-2023-0034

Haider, A. S., & Hussein, R. F. (2022). Modern Standard Arabic as a means of euphemism: A case study of the MSA intralingual subtitling of Jinn series. *Journal of Intercultural Communication Research, 51*(6), 628–643. https://doi.org/10.1080/17475759.2022.2106289

Haider, A. S., & Sahari, Y. (2026). Informing an inclusive digital accessibility tool for viewers with disabilities: Music description in Arabic and English SDH. *Journal of Disability Research, 5*(3), 20260837. https://doi.org/10.57197/jdr-2026-0837

Haider, A. S., Sahari, Y., Saed, H. A., & Abu Tair, S. (2025). Enhancing accessibility for Saudi deaf and hard-of-hearing audiences: Sound representation in SDH subtitling of Saudi series. *Journal of Disability Research, 4*(4), 20250648. https://doi.org/10.57197/jdr-2025-0648

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139–152.

Hättich, A., & Schweizer, M. (2020). I hear what you see: Effects of audio description used in a cinema on immersion and enjoyment in blind and visually impaired people. *British Journal of Visual Impairment, 38*(3), 284–298.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30*(2), 179–185. https://doi.org/10.1007/BF02289447

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55.

Hyks, V. (2005). Audio description and translation: Two related but different skills. *Translating Today, 4*, 6–8.

Jakobson, R. (2013). On linguistic aspects of translation. In R. A. Brower (Ed.), *On translation* (pp. 232–239). Harvard University Press.

Jarrah, S., Al-Salman, S., & Haider, A. S. (2023). Video games localization into Arabic: Gamers' reactions to localizing PUBG and Free Fire. *Journal of Social Computing, 4*(1), 74–93. https://doi.org/10.23919/JSC.2023.0004

Karantzi, I. (2020). "Feeling" the audio description: A reception perspective. *Bridge: Trends and Traditions in Translation and Interpreting Studies, 1*(1), 39–65.

Khoshsaligheh, M., Shokoohmand, F., & Delnavaz, F. (2022). Persian audio description quality of feature films in Iran: The case of Sevina. *International Journal of Society, Culture & Language, 10*(3). https://doi.org/10.22034/ijscl.2022.552176.2618

Mazur, I. (2020). Audio description: Concepts, theories and research approaches. In Ł. Bogucki & M. Deckert (Eds.), *The Palgrave handbook of audiovisual translation and media accessibility* (pp. 227–247). Palgrave Macmillan.

Newmark, P. (1987). *A textbook of translation*. Prentice-Hall International.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

Piety, P. J. (2004). The language system of audio description: An investigation as a discursive process. *Journal of Visual Impairment & Blindness, 98*(8), 453–469.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Sadowska, A. (2015). Learning English vocabulary from film audio description: A case of Polish sighted students. *Roczniki Humanistyczne, 63*(11), 101–123.

Said, E. (2020). *Into the language of audio description: Compilation of an English-Arabic AD glossary* [Master's thesis, Hamad Bin Khalifa University].

Schmeidler, E., & Kirchner, C. (2001). Adding audio description: Does it make a difference? *Journal of Visual Impairment & Blindness, 95*(4), 197–212.

Snyder, J. (2005). Audio description: The visual made verbal. In J. Díaz-Cintas (Ed.), *The didactics of audiovisual translation* (pp. 15–17). John Benjamins.

Torop, P. (2003). Intersemiosis and intersemiotic translation. In S. Petrilli (Ed.), *Translation translation* (pp. 271–282). Rodopi.

Utray, F., Pereira, A. M., & Orero, P. (2009). The present and future of audio description and subtitling for the deaf and hard of hearing in Spain. *Meta, 54*(2), 248–263.

Vermeulen, A., & Ibáñez Moreno, A. (2017). Audio description as a tool to enhance intercultural competence. In J. Deconinck, P. Humblé, A. Sepp, & H. Stengers (Eds.), *Transcultural competence in translation pedagogy* (pp. 133–156). LIT Verlag.

Walczak, A. (2017). Measuring immersion in audio description with Polish blind and visually impaired audiences. *Rivista Internazionale di Tecnica della Traduzione, 19*, 33–48.

Zengin Temirbek uulu, Z., Sağın-Şimşek, Ç., & Antonova-Ünlü, E. (2021). The effect of audio description on film comprehension of individuals with visual impairment: A case study in Turkey. *British Journal of Visual Impairment*. https://doi.org/10.1177/02646196211020058

Appendix: Questionnaire

The Reactions of Jordanian Audience with Visual Impairments to the Audio Description of Arabic Series

ردود فعل الجمهور الأردني من ذوي الإعاقة البصرية على الوصف الصوتي للمسلسلات العربية

Dear Participant: This research tool is designed to elicit the responses of people with visual impairment about their experience of watching series with audio descriptions. The researchers assure you that your responses to the questionnaire will be used only for research purposes. Please respond to the following questions as indicated against each. Thank you!

عزيزي المشارك، تمّ تصميم هذه الاستبانة لاستخلاص ردود أفعال الأشخاص ذوي الإعاقة البصريّة حول تجربتهم في مشاهدة المسلسلات المصحوبَة بالوصف الصوتي. يؤكد لك الباحثون أنّ مشاركتك في هذا الاستبيان وردودك على أسئلتها ستستخدم لأغراض البحث العلمي فقط. يرجى الردّ على الأسئلة التالية كما هو مبين مقابل كلّ منها. شكرا لك!

Part 1. Demographic information / المعلومات الديموغرافية

Question	Options
Gender / الجنس	Male ذكر · Female أنثى
Age / العمر	18–24 · 25–30 · 30+
Education / المستوى التعليمي	No schooling أمي · High school or less ثانوي أو أقل · University undergraduate degree بكالوريوس · University graduate degree دراسات عليا
Visual impairment degree / تصنيف الإعاقة البصرية	Low vision ضعف بصر · Severe low vision ضعف بصر شديد · Near total blindness قريب من كفيف · Partial blindness كفيف جزئيا · Total blindness كفيف كليا

Part 2. Statements (Strongly agree أوافق بشدة · Agree أوافق · Uncertain غير متأكد · Disagree غير موافق · Strongly disagree غير موافق بشدة)

No.	English	Arabic
	A. Viewing habits	**عادات مشاهدة المسلسلات**
1	I watch series for entertainment, even if there is no audio description.	أشاهد المسلسلات للترفيه، حتى لو لم تكن تحتوي على وصف صوتي.
2	Arabic series with audio descriptions are accessible via paid platforms that require a subscription.	مشاهدة المسلسلات العربيّة المصحوبَة بالوصف الصوتيّ متاحة فقط عبر المنصات المدفوعة والتي تتطلب اشتراكك فيها.
3	Audio description suits series with drama genres more than other types.	ينا سب الوصف الصوتي أنواع المسلسلات الدرامية أكثر من الأنواع الأخرى مثل الفكاهية والرومانسية.
	B. Technical issues	**القضايا التقنية والفنية**
4	The length of the audio description was good, and I had enough time to process the information.	طول الوصف كان جيدا، وكان لدي الوقت الكافي لاستيعاب المعلومات.
5	The quality of the AD sounds is good.	جودة الصوت في الوصف الصوتي كانت جيدة.
6	The audio description placed between the portions of dialogue is suitable.	الوصف الصوتي الذي يربط بين أجزاء الحوار الأصلي مناسب.
	C. Comprehension and understanding	**الفهم والاستيعاب**
7	Some senses were lost in the audio description.	الوصف الصوتي لم يغطي جميع مشاهد المسلسل.
8	The audio description of the visual details that cannot be understood from the main soundtrack made me better understand the series.	الوصف الصوتي لتفاصيل المسلسل التي لا يمكنني فهمها من النص الأصلي ساعدني على فهم أحداث المسلسل بشكل أفضل.

9	Descriptions of new scenes, settings, costumes, and body language such as facial expressions were concise and clear.	الوصف الصوتي للمشاهد الجديدة، والمكان والزمان، والملابس، ولغة الجسد كتعابير الوجه كانت مباشرة ومفهومة.
	D. Attitude	**الانطباع العام**
10	The experience of watching the series is entertaining.	تجربة مشاهدة المسلسل ممتعة.
11	I would like to watch more series with audio-description in the future.	أرغب في مشاهدة المزيد من المسلسلات التي تحتوي على وصف صوتي في المستقبل.
12	Watching different Arabic series with audio-description enhances my feeling of social inclusion.	مشاهدة مسلسلات عربية مختلفة ذات وصف صوتي يعزز شعوري بالاندماج الاجتماعي.
	E. Future actions and recommendations	**الإجراءات المستقبلية والتوصيات**
13	Arabic media and streaming platforms should provide audio descriptions for their programs.	وسائل الإعلام العربية ومنصات البث يجب أن تضيف خدمة الوصف الصوتي إلى برامجها المختلفة.
14	Arabic series and movies with audio descriptions should be available for free.	المسلسلات والأفلام العربية ذات الوصف الصوتي يجب أن يكون متوفرا بالمجان ودون اشتراكات.
15	Decision-makers in the Arab world should recommend Arabic national TV channels to add audio-description to movies, series, and programs.	يجب على صانعي القرار في العالم العربي أن يقدموا توصياتهم إلى القنوات التلفزيونية الوطنية بإضافة خدمة الوصف الصوتي إلى الأفلام والمسلسلات والبرامج.

The questionnaire was administered in Arabic; the English version was used for reporting. Where the two differ, as in item 7, the Arabic wording is the one respondents answered.