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Authors

Saleem, Muniba

Ismail, Ismaharif

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Testing the bi-directional influence of media and identity: a longitudinal study of Muslim American adolescents

Muniba Saleem^{1,2,*} and Ismaharif Ismail¹ 

¹Department of Communication, University of California, Santa Barbara, Santa Barbara, CA, United States

²Research Center for Group Dynamics, Institute for Social Research, University of Michigan, Ann Arbor, MI, United States

*Corresponding author: Department of Communication, University of California, Santa Barbara, Santa Barbara, CA 93106-4020, United States.
Email: msaleem@ucsb.edu

Abstract

Guided by social identity gratification theory, this study examines the reciprocal relationship between media consumption and social identity among 220 ethnically and linguistically diverse Muslim American adolescents over three years. Using latent growth curve modeling, we found stronger evidence for media-to-identity influence, particularly in predicting within-person changes over time. Media consumption was significantly associated with identity centrality and private esteem but not public esteem, highlighting the multidimensionality of social identity. The impact of media also varied by genre and language: native-language entertainment media positively influenced identity centrality and private esteem, whereas English-language media showed distinct effects at the between- and within-subject levels. Additionally, increased time on social networking sites was linked to a decline in Muslim private esteem over time. These findings highlight the complex ways media consumption shapes the social identity development of marginalized youth in the United States.

Keywords: social identity gratification, ethnic media, stereotypes, Muslim, longitudinal, social media

The social identity gratification (SIG) framework proposes a bi-directional relationship between social identities and media consumption, wherein individuals seek media that reflects and affirms their identities, while media exposure, in turn, shapes identity development (Harwood, 1999). Despite the theorized bi-directionality, most existing research within this framework has primarily examined social identity as a motivator for media selection, often overlooking how media usage might play an active role in shaping identity processes. This dynamic is especially relevant for marginalized and multilingual individuals, who encounter diverse media portrayals of their social identities. Although some media content may affirm their identities, other content may marginalize or challenge them (Harwood & Roy, 2005). Exploring how these individuals navigate media in such complex contexts is essential for advancing our understanding of the interplay between media consumption and social identity development.

The present research examines the bi-directional relationship between media consumption patterns and social identity dynamics in a diverse sample of Muslim American adolescents ($N = 220$) over three years. Addressing critical gaps in prior work, this study advances the SIG framework by utilizing a longitudinal design to capture within-individual changes over time. Previous cross-sectional studies have offered static snapshots, limiting the ability to establish directionality or understand how these relationships evolve. Adolescents are an ideal population for this investigation due to their heightened identity exploration and development during a critical formative period (Phinney, 2006). Further, by incorporating a multidimensional assessment of social identity, including centrality, private esteem, and public esteem, this study disentangles how media consumption influences distinct aspects of identity. Finally, it provides insights

into how stigmatized groups, like Muslim Americans, navigate media choices in an increasingly Islamophobic societal climate (Lajevardi et al., 2024).

Social identity and media choices

Social identity theory (SIT; Tajfel & Turner, 1986) highlights the importance of social identity for self-conception and the motivation to seek positive distinctiveness for one's ingroup. For marginalized populations, maintaining a positive social identity can be particularly challenging as they navigate stigmatization and societal perceptions of their groups' lower status compared to advantaged groups. Among various influences, media stand out as a pervasive force that shapes individuals' views of themselves and their groups within society, making it a central site for the "meaning-making" process for racial and ethnic minorities (Adams-Bass et al., 2014).

The SIG framework builds on SIT, proposing that individuals actively seek media content that reinforce their social identities while avoiding content that threatens them (Harwood, 1999). According to SIG, people use media as a tool for affirming and protecting their social identities, with media choices being shaped by their identity-related needs and motivations. This bi-directional relationship implies that individuals not only select media based on social identity needs, but that media consumption can also shape their identity perceptions over time.

Adolescence is a crucial period for examining this reciprocal relationship, as adolescents actively explore their identities and are highly susceptible to external influences, including media (Arnett, 1995; Valkenburg & Peter, 2013). Adolescents spend more time with media than with any other leisure activity aside from sleeping, and the rise of social

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media has amplified its role in their identity development (Rideout & Robb, 2019; Twenge et al., 2019). Unlike adults with more stable social identities, adolescents' identity motivations and responses to media portrayals are still forming (Phinney, 2006), rendering them more open to both supportive and conflicting representations of their social groups. This dynamic is even more pronounced for marginalized youth, who regularly encounter both positive and negative portrayals that shape their self- and group perceptions (Harwood & Roy, 2005).

Mainstream and ethnic media representations of ethnic minorities

Ethnic minorities are generally depicted less favorably than majority groups in mainstream media, with portrayals varying across genres and media types (Dixon & Williams, 2015; Hawkins et al., 2022; Tukachinsky, Mastro, & Yarchi, 2015). These negative media depictions, observed both in the United States and globally (Arendt, 2023; Kroon et al., 2021), have been linked to adverse effects on self-perception, ingroup evaluations, and intergroup relations (Behm-Morawitz, 2020). Negative portrayals can heighten identity salience, leading to lower self-evaluations (Fujioka, 2005; Ward, 2004) and reinforcing social disparities (Joyce & Harwood, 2014). As a result, marginalized groups often turn to ethnic media for more affirming portrayals (Harwood & Roy, 2005).

Ethnic media, produced by and for ethnic communities, offers culturally resonant content that challenges stereotypes and fosters positive group identification (Johnson, 2010; Matsaganis et al., 2011; Ramasubramanian et al., 2017). Research shows that when given a choice, minority audiences prefer ethnic media over mainstream sources for its more balanced and affirming representations (Harwood & Roy, 2005; New California Media, 2005). However, media consumption patterns are not exclusive as many minorities engage with both mainstream and ethnic media (Jeffres, 2000; Mora & Kang, 2016). Despite underrepresentation, some minorities may still identify with mainstream portrayals, even if negative, due to the value of visibility (Leavitt et al., 2015; Martins et al., 2022).

A critical gap remains in empirically and simultaneously examining how mainstream and ethnic media consumption differentially influence ethnic minority audiences and interact with group membership and its associated perceptions (Harwood & Roy, 2005; Johnson, 2010). This gap is especially important given the stark differences in quantity and quality of minority portrayals across these media, and their varied effects on audiences' self-perceptions and group identities (Harwood & Vincze, 2015). The limited studies on the relationship between social identification and usage of mainstream versus ethnic media are constrained by cross-sectional designs, restricting causal and directional insights. Nonetheless, important trends have emerged.

Abrams and Giles (2007, 2009) found that Hispanic and African American participants' ethnic identity correlated with selecting television that positively reflected their group while avoiding negative depictions. Among Indian Americans, Ramasubramanian et al. (2017) found that mainstream media exposure was linked to lower self-esteem, whereas ethnic media consumption fostered ethnic pride and cultural engagement. Harwood et al. (2015) observed that

media choices varied with perceptions of group vitality, which is how individuals perceive their group's societal status. Ethnic minorities gravitate toward media that portray their group positively, particularly when they perceive it as stigmatized (Vincze & Harwood, 2012). These findings highlight the need to examine how mainstream and ethnic media consumption distinctly shape social identities, especially for stigmatized groups (Vincze & Harwood, 2012).

Multidimensionality of social identity

In the existing literature on media and social identity, most research has focused on identity centrality (e.g., Fujioka, 2005; Ward, 2004), which is the degree to which one's group identity is central to self-concept. However, social identification is inherently multidimensional (Tajfel & Turner, 1986), encompassing not only centrality but other aspects including attachment, evaluation, importance and others (see Ashmore et al., 2004 for a review). This study focuses on private and public esteem, the evaluative dimensions of social identity, as prior research suggests they are particularly responsive to external influences such as media portrayals (Abrams & Giles, 2007; Ashmore et al., 2004).

Public collective esteem, which reflects societal views of one's group, may be sensitive to media portrayals as it relies on external validation (Luhtanen & Crocker, 1992). Negative media depictions may reinforce stigmas and lower public esteem, while positive portrayals could enhance perceived societal acceptance (Fujioka, 2005). In contrast, private collective esteem, an internal evaluation of one's group, may be more resilient to immediate external influences but could shift over time with sustained exposure (Luhtanen & Crocker, 1994). Consistent negative images may erode private esteem as individuals internalize these depictions, whereas repeated affirming portrayals might bolster it. Finally, identity centrality, which reflects how strongly one aligns with their group, is the most stable dimension and less likely to be influenced by contextual factors (Ashmore et al., 2004). This stability may make centrality a key motivator for seeking identity gratifying media, as suggested by SIG (Harwood, 1999).

Gaps in current research

Despite theoretical predictions of a bi-directional relationship between social identity and media consumption, empirical research has yet to clarify this directionality, primarily due to the reliance on cross-sectional designs. Such studies often fail to distinguish between individual differences (between-subject variation) and within-individual changes over time. This gap is particularly critical for adolescents, who undergo rapid identity development and are highly susceptible to external influences like media (Arnett, 1995; Phinney, 2006). Capturing these within-person shifts requires longitudinal designs, which allow for a dynamic examination of how media exposure and identity development interact over time (Coyne et al., 2013). Thus, we propose the following hypotheses to test these effects' directionality using a longitudinal design:

Hypothesis 1: Media consumption patterns will predict changes in social identity.

Hypothesis 2: Social identity will predict changes in media consumption patterns.

Another critical limitation in existing research is the lack of attention to how different media genres and types relate to social identity (cf. Ward, 2004). Studies show that people consume news and entertainment media for distinct purposes (Haridakis, 2012), and that news media often portrays ethnic minorities more negatively than entertainment media (Dixon & Williams, 2015). Entertainment media, however, is thought to be more persuasive due to mechanisms like identification, transportation, and emotional involvement (Moyer-Gusé, 2008), suggesting that genre-specific media consumption may both reflect and shape social identities in distinct ways. To examine this possibility, we pose the following research question.

Research Question 1: Do the relationships between social identity and media consumption outlined in H1 and H2 differ for news versus entertainment media?

Additionally, adolescents' increasing engagement with digital media may uniquely impact identity development (Twenge et al., 2019). Digital and social media afford users more opportunities to actively construct their identities, engage with like-minded communities, and curate their media environments (Carr, 2018), all of which can influence how identity and media consumption interact. Given these unique affordances, we ask the following research question:

Research Question 2: How will social media use influence the relationships between social identity and media consumption outlined in H1 and H2?

Furthermore, existing research often fails to account for the experiences of linguistically and ethnically diverse individuals, many of whom consume media in multiple languages and cultural contexts (cf. Harwood & Vincze, 2015). Such media consumption may present alternative identity narratives that contrast with those in mainstream media, shaping identity development in complex ways. To explore this dimension, we pose the following research question:

Research Question 3: Do the relationships between social identity and media consumption outlined in H1 and H2 differ between English-language and native-language media consumption?

Finally, this study advances theoretical understanding by examining social identity as a multidimensional construct, addressing a critical gap in prior research, which often focuses solely on centrality. Centrality, private esteem, and public esteem capture different facets of identity that may relate differently to media consumption. To investigate this possibility, we ask:

Research Question 4: Do different dimensions of social identity (centrality, private esteem, public esteem) relate differently to media consumption patterns?

Current context

Although negative media portrayals of marginalized groups are a global issue, we focus specifically on the Muslim community due to the particularly pervasive and overwhelmingly negative coverage of Muslims across various media platforms worldwide (Sandberg et al., 2023). Content analyses consistently reveal that Muslims are portrayed far more negatively than other religious groups in Western media, especially in news coverage (Bleich & van der Veen, 2021). These

persistent stereotypes contribute to adverse social, psychological, and political outcomes for Muslim populations (Lajevardi et al., 2024; Saleem & Ramasubramanian, 2017). For Muslim immigrant youth, the widespread, one-dimensional portrayal of their religious group in mainstream media has been a major source of frustration, fueling feelings of exclusion and alienation from the societies they live in (Fine & Sirin, 2008; Saleem et al., 2018).

Muslims in the United States represent a particularly relevant case for studying the relationship between media and social identity due to their unique position as both the most ethnically diverse religious group in the country and one that faces high levels of stigmatization based on religious identity (Pew Research Center, 2017). This stigmatization has contributed to the formation of a shared pan-ethnic identity among U.S. Muslims, bridging diverse ethnic backgrounds, a process less common in other parts of the world where Muslim communities tend to be more ethnically homogeneous (Fine & Sirin, 2008). Additionally, as a significant portion of this population consists of first- and second-generation immigrants, they are more likely to consume media across multiple languages, often accessing more favorable portrayals of their religious group than what is available in U.S. mainstream media (Pew Research Center, 2017). Therefore, understanding how these diverse media consumption patterns influence the social identity development of Muslim American adolescents is particularly significant.

Method

The data used in this study are part of a larger longitudinal project examining identity development among Muslim American youth. While portions of the dataset have been analyzed and published in other manuscripts (Bañales et al., 2024; Spiegler et al., 2021), the specific focus on media usage and its impact on identity development has not been previously examined.

Data availability

Due to IRB constraints, the data underlying this article cannot be publicly shared. However, it will be made available upon reasonable request to the corresponding author.

Recruitment and procedure

Participants were recruited from three schools and community sites in metro Detroit, Michigan, and Columbus, Ohio to participate in three annual waves of data collection. These charter schools and community sites were selected, as they have programs (e.g., English as a second language), services (multilingual translators), and staff that are knowledgeable and sensitive to Muslim students' concerns. Self-identified Muslim students in each of these sites were invited to participate in the research study in exchange for \$10 payment. Parental consent and student assent were obtained, and participants completed paper surveys in English in group settings in the presence of multilingual research assistants.

Participants

The sample included 220 adolescents who self-identified as Muslim. Most youth identified as Arab ($n=137$; 62.3%) with a smaller percentage identifying with 14 other racial or ethnic groups ($n=83$; 37.7%), such as Somali (15.9%), African American (8.6%), Pakistani (1.8%), Bengali (1.8%),

African (1.4%), and other ethnic groups (8.5%). In terms of denominations, most identified as Sunni (63.6%), followed by Shia (19.1%), Ismaili (3.2%), and others (1.5%), including those uncertain of their religious denomination (8.6%) and 4.1% of youth having missing data. Approximately half of adolescents identified as girls (girls = 53.2%; boys = 42.3%; missing = 4.5%) and were born in the United States (U.S. born = 68.2%; non-U.S. born youth = 27.7%; missing = 4.1%). Youth not born in the United States had lived in the United States for an average of 7.75 years. Most participants (84%) grew up in multilingual households ($n = 185$).

At W1, participants were on average 14.20 years old ($SD = 0.94$) and included 12- (.9%), 13- (21.8%), 14- (40.5%), 15- (24.5%), 16- (7.7%), and 17-years-olds (.9%). A small portion (3.6%) of age data was missing. A small percentage of youth were recruited at the community sites in Columbus, Ohio (22.7%; $n = 50$), whereas most youth were from the schools and community sites in metro Detroit, Michigan (77.3%; $n = 170$). Of the total sample, 79.7% participated again at W2 (2016) and 69.8% continued to participate at W3 (2017).

Measures

All measures were assessed across all three waves. Descriptive statistics and key variable correlations are summarized in [Supplementary Appendices A and B](#).

Muslim identity

Three aspects of Muslim identity were assessed using adapted items from the collective self-esteem scale ([Luhtanen & Crocker, 1992](#)). Centrality, which is the extent to which youth consider identifying as Muslim to be an important part of their self-concept was assessed with two items (e.g., “Being Muslim is an important part of who I am”; $r = 0.60$ – 0.81). Private esteem, which is how individuals personally feel about their religious identity, was assessed with two items (e.g., “I feel good about being Muslim”; $r = 0.82$ – 0.91). Public esteem, which is the way Muslims feel others evaluate their group, was assessed with two items (e.g., “In general, others respect Muslims”; $r = 0.45$ – 0.64). All items were rated on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Confirmatory factor analysis showed strong support that the three constructs could be treated as conceptually distinct factors of Muslim identification, $\chi^2(9) = 8.48$, $p = .486$, CFI = 1.00, SRMR = 0.03, RMSEA = 0.00.

News media consumption

Participants were asked how often they watched, heard or read news in English language ($\omega = 0.54$) and in their native language separately ($\omega = 0.60$). Participants responded to these questions on a rating scale from 1 (*never*) to 5 (*all the time*).

Entertainment media consumption

Participants were asked how often they watched TV shows and movies in English language ($\omega = 0.67$) and in their native language ($\omega = 0.71$) separately. Participants responded on a rating scale from 1 (*never*) to 5 (*all the time*).

Social networking sites (SNS) consumption

Participants reported how many hours they spent on SNS such as Facebook, Twitter, Instagram, and others on a daily basis ($\omega = 0.69$).

Covariates

Theoretically relevant demographic variables collected at W1 were used as covariates in our models. Despite the racial and ethnic diversity of our sample, slightly over half of the participants self-identified as Arab, representing the ethnic demographics of the specific geographic regions from where we recruited. Therefore, we controlled for whether participants self-identified as Arab (1) or as another ethnoracial background (0). Additionally, we controlled for age (a continuous variable) and sex (0 = male; 1 = female), as both factors influence adolescents' media consumption patterns ([Common Sense Media, 2022](#)). Furthermore, given the significant role of immigrant generational status in social identity development ([Dizon et al., 2021](#)), this variable was included in our analysis (0 = first generation; 1 = second generation).

Analytical approach

Given our longitudinal data collected at three time points, we selected latent growth curve modeling (LGCM) to examine the bi-directional relationship between Muslim identification (across three dimensions) and media choices. LGCM allows us to test how *changes* in identification influence media consumption over time and vice versa.

LGCM offers several distinct advantages for this type of analysis. First, LGCM captures bi-directional (non-recursive) relationships at both within-person (slope) and between-person (intercept) levels, which is essential for studying individual and group-level changes in identity and media usage over time ([Johannes et al., 2022](#)). Unlike cross-lagged panel or cross-sectional models, which focus on between-person differences and assume stable trajectories across individuals, LGCM enables us to assess whether shifts within a person's media usage predict changes in their identification or vice versa ([Thomas et al., 2021](#)). This feature directly addresses our study's goal of establishing the directionality of the identity-media relationship.

Second, LGCM can account for contextual influences that may impact adolescents' identity development and media usage across the sample. Given our data spans periods before, during, and after the 2016 U.S. presidential election, a period of increased public hostility against Muslims ([Lajevardi et al., 2024](#); [Saleem et al., 2019](#)), LGCM is advantageous as it models both individual growth patterns and collective responses to such events, providing a time-sensitive analysis that other models may miss ([Thomas et al., 2021](#)).

Third, LGCM employs full information maximum likelihood estimation (FIML) to address missing data, allowing for the inclusion of participants with incomplete survey responses. This method is particularly advantageous in longitudinal research, where participant attrition is common, as it yields more accurate and less biased parameter estimates compared to listwise or pairwise deletion ([Enders & Bandalos, 2001](#)).

Following recommended practices for LGCM ([Kline, 2023](#)), we used a two-step analytical approach. First, unconditional models were tested to establish baseline trajectories for the outcome variables, excluding demographic or predictor variables, allowing us to identify initial growth patterns.

Then, conditional models were specified by adding demographic and predictor variables to test bidirectional influences, estimating how media usage (or identity-related) factors from Wave 1 impacted both within-person changes and between-person differences in identification (or media usage) over time.

Between-person effects capture differences across adolescents in average levels of media usage and identification, indicating how average media consumption is associated with identity dimensions across individuals. These effects are similar to cross-sectional correlations, and directionality *should not* be inferred from these findings. Within-person effects reflect changes over time within individuals, capturing how fluctuations in media usage relate to shifts in identity dimensions (or vice versa). By assessing these longitudinal effects, we can infer the directionality of influence between media and identity.

Results

Baseline trajectory of media usage and identification

We first tested unconditional LGCMs to estimate adolescents' trajectories in Muslim identification and media usage over three years. For Muslim identification, the model fit indices indicated excellent alignment with the data across all three dimensions ($\chi^2(1) = 0.00$ – 0.46 , $ps > .49$, CFI = 1.00, SRMR = 0.00–0.01, RMSEA = 0.00). Results revealed a significant within-person decline in Muslim identification for centrality ($\beta = -0.40$, $p = .005$, $Var = 0.07$), private esteem ($\beta = -0.37$, $p = .001$, $Var = 0.10$) and public esteem ($\beta = -0.27$, $p = .012$, $Var = 0.17$). This downward trend suggests that, on average, adolescents' identification as a Muslim weakened over time, regardless of their initial strength of identification, aligning with other research on the religious identity development among Muslim adolescents in Western contexts (Spiegler et al., 2025).

For media usage, fit indices showed excellent model fit for all media variables ($\chi^2(1) = 0.00$ – 1.78 , $ps > 18$, CFI = 0.98–1.00, SRMR = 0.00–0.03, RMSEA = 0.00–0.06), except for SNS, which did not converge.¹ In contrast to the changes observed in Muslim identification, no significant within-person changes were found in media usage among Muslim American adolescents over the three years ($ps > .26$). This stability suggests that media usage among participants remained consistent over the three year span of our study, aligning with other research showing minimal change in certain forms of adolescents' media exposure, such as television (Zhu et al., 2023).

Estimating the bi-directional relationship of identity and media

In the next stage, we used conditional LGCMs, incorporating Wave 1 predictors and demographic covariates, to examine the directionality between identity and media use outlined in H1 and H2. Below, we summarize the findings for each proposed direction, providing a basis for comparison to determine whether there is stronger evidence for media-to-identity or identity-to-media pathway. Detailed results for each model are provided in the next section.

Media-to-identity path (hypothesis 1)

Adolescents' media usage accounted for notable variability in identity outcomes, explaining differences at both between-

person and within-person levels. At the between-person level, media usage was associated with adolescents' average private esteem ($\Delta R^2 = 10.9\%$, $p < .001$). At the within-person level, fluctuations in media usage predicted changes in private esteem over time within individuals ($\Delta R^2 = 13.2\%$, $p = .021$). Media usage also accounted for between-person differences in average identity centrality ($\Delta R^2 = 10.8\%$, $p < .001$), though it did not explain within-person changes in centrality over time ($p = .470$), or any between- or within-person effects on public esteem ($ps > .28$).

Identity-to-media path (hypothesis 2)

Muslim identification accounted for significant between-person differences in adolescents' average consumption of native-language entertainment media ($R^2 = 7.3\%$, $p < .001$), native-language news media ($R^2 = 5.5\%$, $p = .028$), and English-language news media ($\Delta R^2 = 9.9\%$, $p = .012$). However, identification *did not* significantly influence within-person changes in media consumption over time ($ps > .15$).²

In sum, these results provide stronger support for the media-to-identity path proposed in H1, as media usage was associated with within-person changes in adolescents' private esteem. In contrast, identification appeared less influential in explaining within-person changes in media consumption, as outlined in H2. The next section explores the specific effects within each model.

Media usage effects on identity development

Baseline unconditional models indicated a general decline across all dimensions of Muslim identification, including centrality ($\beta = -0.40$, $p = .005$), private esteem ($\beta = -0.37$, $p = .001$), and public esteem ($\beta = -0.27$, $p = .012$). In the following section, we examined how media usage relates to this trend at both the between-person and within-person levels. Although both types of effects are reported, only the within-person effects test the media-to-identity directionality whereas between-person effects assess the cross-sectional relationships between media and identity. Standardized coefficients are summarized in Table 1, with detailed path coefficients provided in Supplementary Appendix C.

Entertainment media

At the between-person level (intercept), entertainment media consumption was positively associated with both centrality and private esteem. Adolescents who, on average, consumed more native-language entertainment media reported higher identity centrality ($\beta = 0.26$, $p = .010$) and private esteem ($\beta = 0.21$, $p = .026$) compared to their peers. Although native entertainment media consumption had a similar positive association with public esteem, the relationship was non-significant ($\beta = 0.21$, $p = .076$). These associations suggest that native-language media, which may include culturally affirming content, is positively related to adolescents' sense of identity and self-regard. Surprisingly, adolescents with higher English-language entertainment media consumption also reported higher identity centrality ($\beta = 0.37$, $p < .001$) and private esteem ($\beta = 0.38$, $p < .001$), compared to their peers. Although its relationship with public esteem was positive, it did not reach significance ($\beta = 0.19$, $p = .113$).

In terms of within-person development (slope), the decline in private esteem over time was linked with the language of entertainment media consumed. English-language entertainment

Table 1. Media-to-identity path coefficients of latent growth curve model

	Centrality		Private esteem		Public esteem	
	β	p	β	p	β	p
Between-persons (intercept)						
Native entertainment media	0.26*	.010	0.21*	.026	0.21	.076
English entertainment media	0.37***	<.001	0.38***	<.001	0.19	.113
Native news media	0.13	.209	0.15	.115	-0.03	.826
English news media	-0.17	.094	-0.31**	.001	-0.21	.067
Social networking sites	-0.02	.811	-0.07	.386	0.00	1.00
Within-persons (slope)						
Native entertainment media	-0.11	.395	-0.01	.955	-0.05	.692
English entertainment media	-0.19	.189	-0.28*	.033	-0.09	.485
Native news media	-0.18	.209	-0.24	.072	-0.15	.245
English news media	0.11	.443	0.32*	.011	0.01	.959
Social networking sites	-0.22	.080	-0.28*	.015	-0.06	.599

Note. All coefficients reported are standardized.

* $p < .05$,

** $p < .01$,

*** $p < .001$.

media was negatively associated with private esteem. Adolescents who, on average, consumed more English-language entertainment media than their peers in the sample experienced a greater decline in private esteem over time ($\beta = -0.28$, $p = .033$). This finding suggests that increased usage of English-language entertainment media, which may lack positive representations of Muslim identity (Hawkins et al., 2022), could accelerate the decline in private esteem among Muslim American adolescents. In contrast, native-language entertainment media usage was not significantly associated with this decline ($\beta = -0.01$, $p = .955$), indicating that it may not adversely influence adolescents' private esteem. Entertainment media consumption was also unrelated to within-person decline in identity centrality or public esteem over time ($ps > .18$).

News media

At the between-person level (intercept), adolescents' Muslim identification varied based on the language of the news media they consumed. English-language news media consumption had a negative relationship with private esteem. Adolescents who, on average, consumed more English-language news media than their peers reported lower private esteem ($\beta = -0.31$, $p = .001$), suggesting that exposure to this type of media, which tends to negatively depict Muslims (Bleich & van der Veen, 2021), could be linked to diminished self-regard for Muslim adolescents. However, English-language news media was not significantly associated with identity centrality ($\beta = -0.17$, $p = .094$) or public esteem ($\beta = -0.21$, $p = .067$), albeit the direction of association was similar to private esteem. In contrast, native-language news media was unrelated to all three dimensions of Muslim identity ($ps > .11$).

For within-person changes in identity over time (slope), the decline in private esteem varied by news media language. Surprisingly, English-language news consumption had a positive relationship with private esteem. In other words, adolescents who consumed more English-language news over time experienced a less pronounced decline in private esteem ($\beta = 0.32$, $p = .011$). In contrast, native-language news consumption was not associated with within-person changes in private esteem ($\beta = -0.24$, $p = .072$). News consumption in both

languages was unrelated to changes in identity centrality or public esteem over time ($ps > .20$).

Social networking sites

At the between-person level (intercept), SNS usage was not significantly associated with adolescents' identity centrality, private esteem, or public esteem ($\beta = -0.070$ – 0.00 , $ps > .38$). However, at the within-person level, increased SNS use was linked to a greater decline in private esteem over time ($\beta = -0.28$, $p = .015$). Although non-significant, SNS use had a negative relationship with identity centrality ($\beta = -0.22$, $p = .08$), but was unrelated to public esteem ($\beta = -0.06$, $p = .599$).

Muslim identification effects on media usage

Baseline analyses indicated no significant within-person changes in media usage among Muslim American adolescents over the three years, suggesting stable media consumption patterns across the sample. Here, we examine how identity-related variables impact media usage at both between- and within-person levels. Standardized coefficients are summarized in Table 2, with detailed path coefficients included in Supplementary Appendix D.

Identity centrality

At the between-person level, identity centrality had a positive relationship with only English-language news media. Adolescents with higher average levels of identity centrality compared to their peers consumed more English-language news media ($\beta = 0.40$, $p = .020$). This association suggests that adolescents with stronger connection to their Muslim identity may consume more English-language news, perhaps to stay informed about societal issues affecting their group. However, identity centrality was unrelated to adolescents' consumption of other media forms, $ps > .05$. At the within-person level (slope), identity centrality did not predict changes over time for any type of media usage ($ps > .25$), indicating that fluctuations in identity centrality were not linked to shifts in adolescents' media usage.

Table 2. Identity-to-media path coefficients of latent growth curve model.

	Native entertain		English entertain		Native news		English news		SNS	
	β	p	β	p	β	p	β	p	β	p
Between-persons (intercept)										
Identity centrality	0.20	.107	0.23	.054	0.14	.353	0.40*	.020	0.16	.220
Private esteem	0.09	.494	-0.07	.580	0.15	.348	-0.49**	.006	-0.21	.124
Public esteem	0.15	.071	-0.02	.842	0.02	.843	-0.07	.566	-0.10	.277
Within-persons (slope)										
Identity centrality	-0.21	.225	-0.09	.758	-0.16	.356	-0.14	.665	–	–
Private esteem	0.08	.671	-0.49	.109	0.01	.948	0.04	.912	–	–
Public esteem	-0.04	.700	0.02	.927	0.14	.203	0.31	.125	–	–

Note. All coefficients reported are standardized. SNS = Social Networking Sites; Entertain = Entertainment.

* $p < .05$,

** $p < .01$,

*** $p < .001$.

Private esteem

At the between-person level, private esteem was negatively associated with English-language news media. Adolescents with higher private esteem reported lower consumption of English-language news media on average compared to their peers ($\beta = -0.49$, $p = .006$). This finding contrasts with the association observed for identity centrality, suggesting that while higher Muslim identity centrality is associated with greater consumption of English-language news, higher private esteem, indicating a more positive personal regard for one's Muslim identity, is linked to less usage of this media type. Private esteem showed no significant associations with consumption of any other type of media ($ps > .12$). Similarly, at the within-person level (slope), changes in private esteem did not predict changes over time for any type of media usage ($ps > .10$).

Public esteem

Public esteem was not significantly associated with any type of media usage. At the between-person level, differences in public esteem were not related to adolescents' consumption of native-language entertainment media ($\beta = 0.15$, $p = .071$), or any other type of media ($ps > .27$). Likewise, at the within-person level, changes in public esteem did not correspond to changes in media usage over time ($ps > .12$), suggesting that public esteem in our sample did not influence media usage trends.

Overall, utilizing LGCM, we tested the bi-directional relationship theorized between social identity and media usage, distinguishing between stable between-person differences and dynamic within-person changes. The results provide stronger support for the media-to-identity directionality outlined in H1, suggesting that media usage exerts a greater influence on social identity dimensions than the reverse.

Discussion

This study tested predictions from SIG by examining the bi-directional relationship between media usage in both native and English languages and Muslim identity among a linguistically and ethnically diverse sample of Muslim American adolescents. Given the multidimensional nature of social identity, we analyzed effects separately for identity centrality, private esteem, and public esteem to provide a detailed view of how distinct identity aspects relate to media consumption. We

further examined the effects of news, entertainment, and social media consumption, offering a comprehensive understanding of how different types of media usage relate to social identity development. To address limitations in existing research, we utilized a three-wave longitudinal design, providing a more robust test of the directionality of these relationships in dynamic (within-subject) contexts.

Broader implications

Three broad findings from the present study offer both theoretical and methodological insights for the social identity gratification framework and media effects scholarship: (1) media usage patterns more strongly predicted changes in social identity dimensions than the reverse, suggesting a predominantly media-on-identity influence; (2) the associations between media use and identity were stronger at the between-person level than at the within-person level; and (3) media had varied impacts on identity across different dimensions, influencing some aspects of social identity more strongly than others.

First, although SIG posits a bi-directional relationship between media usage and social identity-based motivations (Harwood, 1999), our results primarily support a media-to-identity directionality. This pattern may reflect the unique developmental context of adolescents, who are in a period of identity formation and negotiation and are therefore more susceptible to external influences, including media content (Arnett, 1995; Phinney, 2006). In contrast, adults with more stable identities may show greater identity-driven selectivity in their media choices, suggesting that media effects on identity may vary across developmental stages (Valkenburg & Peter, 2013). Another important consideration is that, over the three-year period, adolescents' media consumption remained largely stable, offering little variability for social identity dimensions to predict. Other research has similarly found minimal changes in certain forms of adolescent media usage, such as television exposure (Zhu et al., 2023). Whether this stability reflects developmental consistency in media habits, limitations in our assessment of these constructs, or an insufficient assessment duration to capture change remains an open question.

Second, the finding that media consumption patterns explained less variance in within-person changes over time than in static between-person differences raises important methodological considerations. Studies relying on cross-

sectional or short-term experimental designs may overstate the long-term impact of media on identity by conflating stable between-person differences with dynamic within-person changes (see [Grimm et al., 2021](#) for a review). Using latent growth curve modeling, our results revealed that most of the variance in how media usage relates to social identities occurs between individuals rather than within individuals over time. This suggests that media's influence on identity is more strongly tied to stable individual differences than to dynamic shifts within individuals, indicating that prior studies may have overstated the extent to which media affects identity change over time.

Third, our results highlight the importance of examining social identity as a multidimensional construct within media effects research. Although there is parsimony in assuming a unidimensional social identity, the benefits of adopting multidimensionality is apparent when examining the directionality of the identity-media relationship. In other words, the differences between each identity dimension were more pronounced at the within-person level, as compared to the between-person level. Whereas prior studies have often focused solely on identity centrality, we found that other dimensions, such as private esteem, are also associated with marginalized individuals' media usage. Private esteem is consistently linked to psychological well-being among marginalized groups ([Crocker et al., 1994](#)), indicating that certain types of media usage may have implications for these youths' mental health. Notably, no significant relationship was observed between media usage and public esteem at the within-person level, suggesting that for youth in our sample, media may not be the primary influence on their perceptions of societal views of Muslims. This could be due to the strong social support and homogeneous ingroup context specific to this sample, as noted in the limitations section.

Specific findings

Beyond these broader points, specific findings from the media-to-identity and identity-to-media pathways are discussed below. Although we briefly discuss some significant between-subject level findings, we focus primarily on the within-subject effects, which are more indicative of change and directionality within these models.

Media-to-identity pathway

Testing the effects of media consumption on social identity dimensions revealed several notable findings. At the between-subject level, positive associations emerged between native-language entertainment (but not news) media and Muslim identity centrality and private esteem. These between-person associations align with SIG propositions, suggesting that native-language media consumption supports social identities among ethnic minorities by providing authentic, affirming, and counter-stereotypical portrayals of their ingroups ([Harwood & Roy, 2005](#)). Such content may validate viewers' cultural and social identities, fostering a stronger sense of group pride and belonging ([Ramasubramanian et al., 2017](#)). However, the absence of within-subject effects suggests that native-language media may reinforce stable identity differences across individuals rather than drive dynamic changes in identity within individuals over time.

The positive between-subject effects of English-language entertainment media consumption on identity centrality and private esteem are surprising given the predominantly

negative portrayal of Muslims in American entertainment media ([Hawkins et al., 2022](#)). However, these associations warrant cautious interpretation, as they were not reflected at the within-subject level. In fact, within-subject analysis revealed that increased consumption of English-language entertainment media over time was linked to a more pronounced decline in private esteem. This suggests that while Muslim adolescents who consume more English-language media may initially report higher identity centrality or self-regard, sustained exposure may gradually erode private esteem due to the negative portrayals embedded in this media. Given that within-person effects capture dynamic changes over time within individuals, they offer more robust evidence of how ongoing media exposure may shape identity.

A notable contrast emerged across the between-subject and within-subject effects of English news media consumption on private esteem. At the between-subject level, English news media consumption was inversely associated with private esteem, aligning with SIG predictions given the predominantly negative portrayal of Muslims in mainstream American news ([Bleich & van der Veen, 2021](#)). However, at the within-subject level, an unexpected trend emerged: increased exposure to English news media over time was linked to a slower decline in private esteem. One possible explanation is that participants may have encountered more balanced portrayals in certain English-language news outlets (e.g., Al Jazeera English), potentially buffering against declines in private esteem. Due to limitations in our measures, which did not capture the specific content consumed, this interpretation remains speculative and is discussed further in the limitations section.

Finally, within-person effects pertaining to SNS usage revealed a negative association between frequent SNS usage and private esteem, highlighting the significant role of social networking sites for identity development among adolescents ([Twenge et al., 2019](#)). For Muslim youth in our sample, the prevalence of Islamophobic content on social media ([Awan, 2016](#)) likely increased exposure to hate speech, particularly during the 2016 election cycle ([CAIR, 2019](#)), adversely affecting their private regard for their Muslim identity.

Identity-to-media pathway

Testing the effects of identity on media usage yielded no significant within-subject effects but did reveal interesting between-subject patterns. Specifically, different identity dimensions influenced English-language news media consumption in distinct ways. Adolescents with higher private esteem reported lower usage of English-language news, while those with stronger identity centrality reported higher usage. Adolescents with higher private esteem reported lower usage of English-language news, likely motivated by affective concerns, such as maintaining a positive internal group evaluation ([Ashmore et al., 2004](#)). Negative portrayals of Muslims in English-language news may threaten this evaluation, leading these adolescents to avoid such media as a form of self-protection.

In contrast, those with higher identity centrality reported higher usage of English-language news, likely driven by cognitive motivations, such as a strong connection to one's group and a desire to stay informed about ingroup issues ([Ashmore et al., 2004](#)). This motivation could encourage adolescents with high centrality to engage with a broader range of media, including potentially negative portrayals, to stay informed

and challenge inaccurate representations of their ingroup (Harwood, 1999; Saleem et al., 2021).

Though these patterns reveal the importance of assessing social identity through a multidimensional lens, they do not strongly support the theorized predictions that social identity would drive within-person changes in media consumption, at least within our sample.

Limitations and recommendations

Several limitations of the current research need to be considered. First, our media exposure variables did not assess specific content types or the portrayal of Muslims within those media. Although research suggests that ethnic and native language media typically depict racial and ethnic minorities more favorably than mainstream American media (e.g., Harwood et al., 2015), it is possible that the specific English-language content consumed by adolescents in our sample offered more nuanced or positive portrayals. For instance, entertainment shows such as “Little Mosque on the Prairie,” “Ramy,” and “Mo” present positive representations of Muslims and could foster more supportive identity effects among Muslim youth. Similarly, English-language news sources such as Al Jazeera English may offer less stereotypical portrayals of Muslims compared to mainstream U.S. news sources (Khamis, 2007). Without assessing the specific portrayals within the media consumed by participants, we cannot be certain that our sample’s media use aligns with broader content analysis findings. Future studies could benefit from more granular assessments of the types of media consumed and the specific portrayals of Muslims to better understand nuanced impacts on social identity development.

Second, while our study is unique in its ethnically and linguistically diverse sample of Muslim adolescents, it has limitations in the geographic specificity of recruitment. Marginalized youth from regions with higher ingroup representation, as in our sample, may benefit from protective social support, which mitigates stigmatization effects and promotes positive coping. This social context could potentially moderate the impact of media on identity. Additionally, for adolescents from varied cultural backgrounds sharing a language, our assessment of “native language” as a proxy for ethnic media consumption may not have fully captured culturally specific media influences. Future research could use refined assessments that distinguish cultural contexts within shared language groups to better capture diverse influences on social identity.

Third, although this study expands on previous research by examining social identity beyond centrality, other untested dimensions may also relate to and be shaped by media consumption patterns. Future research should further explore these relationships using alternative frameworks and more nuanced measures of social identity to capture its full complexity.

Lastly, the downward trajectory observed in all aspects of Muslim identification in our baseline models, consistent with other research on Muslim adolescents (Spiegler et al., 2025), suggests that unmeasured factors beyond media may contribute to identity development trends. Future research should consider other acculturative factors and explore these dynamics across geographic and social contexts to further enhance the generalizability of these findings. Additionally, it is important to consider how the findings of this study might differ for other immigrant populations both within and beyond

the U.S., whose distinct media usage patterns and portrayals may influence identity in varied ways.

Conclusion

This research advances SIG theory by testing the bi-directional influence between media consumption and social identity in an ethnically and linguistically diverse sample of Muslim adolescents. Using a longitudinal approach, our findings provide stronger support for the media-to-identity pathway than the identity-to-media pathway. Results within each pathway highlight the critical importance of accounting for variations across language (English versus native), media type (traditional versus social), and genre (news versus entertainment). Further, results highlight the value of examining different social identity dimensions and differentiating between effects across individuals and changes within individuals over time. Together, these insights emphasize the necessity of adopting multifaceted approaches to better understand the relationship between social identity and media consumption among marginalized youth.

Supplementary material

Supplementary material is available at *Human Communication Research* online.

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Conflicts of interest

None declared.

Public significance statement

This study examines how media consumption shapes the social identity development of Muslim American adolescents. Findings show that media use more strongly influences identity than identity drives media choices. Effects varied across identity dimensions, highlighting the importance of viewing social identity as both multidimensional and developmentally dynamic for marginalized youth.

Notes

1. The unconditional model converged for SNS as an outcome when slope was excluded from the model $\chi^2(4) = 8.53$, $p = .074$, CFI = 0.93, SRMR = 0.07, RMSEA = 0.07, thus, subsequent analyses with SNS only tested for between-person effects.
2. For media usage, English-language entertainment and news media, LGCM could not estimate R-squared of the within-person effects due to little variability in within-persons trajectory for those media choices ($\text{Var} < 0.05$, $ps > .56$). Nonetheless, it did not affect our conclusion that we found no evidence for identity accounting for meaningful changes in media usage.

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