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Author(s)

Żerebecki, Bartosz G.; Oprea, Suzanna J.; Hofhuis, Joep; Janssen, Susanne

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Beyond Perceived Similarity: Development and Validation of the Character Recognizability Scale (CRS)

Bartosz G. Żerebecki ^a, Suzanna J. Oprea ^a, Joep Hofhuis ^{a,b},
and Susanne Janssen ^a

^aErasmus School of History, Culture and Communication, Erasmus University Rotterdam, Rotterdam, The Netherlands; ^bAmsterdam School of International Business, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands

ABSTRACT

Current understandings of similarity with media characters often focus on visible attributes including gender and race, yet overlook deep-level characteristics such as personality, attitudes, and experiences. In the present research, we address this limitation and develop and validate the Character Recognizability Scale (CRS), which captures different ways in which audiences can recognize themselves in characters. Based on a previous interview study, we formulated 26 scale items. Subsequently, we conducted two studies. In Study 1, we used a sample of 219 university students in the Netherlands to conduct an exploratory factor analysis. We determined the reliability, as well as criterion and convergent validity of the entire scale and the retained factors. In Study 2, we used a sample of 247 respondents in the United States to conduct a confirmatory factor analysis and replicate the results of the reliability and validity analyses. Based on Study 1, we kept 20 items. In both studies, the overall CRS scale as well as its subscales for Personality Recognizability (CRS-p), Attitudinal Recognizability (CRS-a), and Experiential Recognizability (CRS-e) showed a good internal consistency. They also showed criterion validity through an association with perceived similarity. Finally, the CRS and its subscales correlated positively with media engagement and exposure measures, thus demonstrating convergent validity.

Engagement with fictional characters means that media users experience psychological involvement with onscreen personas. One way media users

CONTACT Bartosz G. Żerebecki  zerebecki@eshcc.eur.nl  Department Media & Communication (M8-45), Erasmus University Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands

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become involved with characters is by finding shared traits with them, which is often called perceiving similarities. These shared characteristics can include gender, race, ethnicity, occupation, and sexual orientation, but also personality traits, attitudes, and life experiences among others. In the real-life context, similarity with other people increases interpersonal attraction (Montoya & Horton, 2013). In the media context, it is linked to other forms of media engagement such as character liking (Bui, 2017; Hall, 2019), perspective-taking (Appiah, 2001; Hoeken et al., 2016; Kaufman & Libby, 2012), wanting to emulate a character (Hoffner & Buchanan, 2005; Steinke et al., 2012), and even treating characters like real-life people (Tukachinsky et al., 2020). Extant research suggests that viewers who perceive media characters as similar engage with those characters through different psychological processes and are thus more likely to enjoy media content with those characters and to be influenced by that content (Tukachinsky, 2014; Tukachinsky & Tokunaga, 2013).

The sense of similarity with media characters can stem from different shared attributes. To map the different sources of feeling alike, we build on insights from social psychology where a distinction is made between surface-level and deep-level similarity (Jansen & Searle, 2021). Surface-level similarity refers to demographic similarities, i.e., mostly visible attributes like gender expression, age, racial and ethnic background. In contrast, less observable characteristics like personalities, attitudes, and experiences are referred to as deep-level similarities.

Surface-level vs. deep-level similarity

Multiple studies have demonstrated the importance of sharing surface-level characteristics for media involvement. Igartua et al. (2023) showed that similarity understood as shared age, gender, employment status, and educational background increased participants' identification with the protagonist. Additionally, Tukachinsky's (2014) meta-analysis reported that demographic similarity had a statistically significant effect on immersion into the story, measured as narrative transportation. When viewers and characters have the same age, gender, or racial background, they may also experience similar situations and life events. This overlap could make it easier for viewers to understand the characters, connect with them, and ultimately become more involved in the story.

Notably, some research shows that common demographic traits do not always play the most critical role in shaping engagement. In the aforementioned meta-analysis, Tukachinsky (2014) found no statistically significant effects of shared demographics on identification, following the analysis of six effects reported in four studies manipulating similarity. A recent meta-analysis by Huang et al. (2023) challenged those findings and based on 50 effects

reported in 39 studies, concluded that similarity affects identification. Notably, there were differences between these two meta-analyses. Huang et al. (2023) included more recent studies and examined the effects of different types of similarities. The authors observed that deep-level similarity pertaining to emotions, attitudes, and personality elicits a higher effect size on identification than demographic similarity. While common demographic identity markers may imply similarities in other areas and ultimately facilitate engagement, two people could still be vastly different in personalities, attitudes, and experiences despite being of the same age, gender, or race.

The distinction between surface-level and deep-level similarity is even more important when considering that many contemporary media products have a global outreach. While similarities between audiences and characters from different parts of the world are possible, they are more likely to stem from deep-level traits rather than just demographics. Still, considerably fewer studies investigated similarity in psychological traits, concerning deep-level shared characteristics than demographic similarity (i.e., 11 samples vs. 37 samples, according to Huang et al., 2023). This numerical discrepancy is understandable since the experimental manipulation of demographic traits is easier. Even so, more research on deep-level traits like personality traits and attitudes could help further explain the role of similarity in media engagement.

Recent theoretical developments in media psychology open novel avenues for investigating deep-level traits. Klimmt and Rieger (2021) argued that media users engage with content through the lens of their personal experiences, specific to every individual. They proposed that entertainment content resonating with users' biographies will likely cause a meaningful, reflective state in media audiences, called eudaimonic engagement. Resonance implies similarity between users' experiences, situations, or major life events and those portrayed in narratives. Audiences may feel that content resonates with them when they recognize a plot point as something relevant to their lives that they have experienced. While media users and characters may share different experiences, biographic resonance theory suggests that similarities in major life events, changes, struggles, as well as events, places, and conversations with other people are likely to cause more resonance than commonplace situations. For example, Das and Peters (2022) reported that people feeling severe grief experienced more narrative transportation and protagonist identification compared with people feeling less severe grief when reading a transcendent narrative about loss, thus showing the importance of an overlapping experiences between media content and users. Moreover, Bonus et al. (2022) found that appreciation of both music and movies is higher when the content activated some autobiographical memories.

Biographic resonance brings attention to similarities between audiences' individual lives and the content of the media narratives, specifically in terms of deep-level traits such as experiences. Besides studying perceived similarity in terms of situations, communication scholars increasingly study shared personality traits and attitudes. For instance, Cohen and Hershman-Shitrit (2017) found that perceived similarity in personality traits was related to character engagement. Research on the ABC television show *Modern Family* reached similar conclusions. Viewers with overlapping personality traits with the selected characters reported greater parasocial friendship and wishful identification (Żerebecki et al., 2022). Besides personality traits, researchers also investigate shared attitudes. Tukachinsky and Stever (2019) argued that sharing similar attitudes is vital for forming close relationships with media personas. Moreover, Ott et al. (2021) found that movie viewers who attached high importance to the values they thought the movie portrayed, reported greater perceived effects of the movie. While values are more abstract guiding principles than attitudes, which refer to specific judgments about given situations, the study still demonstrated the importance of deep-level similarity.

Societal and academic relevance

Exploring deep-level similarities can be particularly important when studying mediated contact with ethnic, racial, and sexual minorities. Such characters gradually appear more often in broadcast TV series and shows available on streaming platforms (Garretson, 2015; Smith et al., 2021). Research suggests that viewers from social majorities around the world grow to appreciate such content (Mora, 2018; Żerebecki et al., 2022). While surface-level similarities could explain this engagement, perhaps deep-level similarities play a more significant role here. For instance, viewers can find common personality traits with characters like being extraverted or introverted, no matter their sexuality, ethnicity, or race. Agreement on pertinent moral and social issues does not happen only between people of the same background. Additionally, similarity in terms of life experiences might initially seem hard to achieve with minority members because of their unique cultural backgrounds and struggles. However, research on minority representation suggests that ordinary portrayals of LGBTQ or Black people exist simultaneously with representations of specific experiences (Żerebecki et al., 2024b). For instance, heterosexual youth viewers could see similar school experiences with young gay TV characters. Studying engagement with minority characters could help to explore further the role of deep-level similarities because they seem more likely to occur than demographic similarities.

While scholarly attention to deep-level similarities is increasing, there are not many appropriate, media-centered scales to evaluate the concept. Previous research asked participants to rate both their own as well as characters' personality traits (Cohen & Hershman-Shitrit, 2017). This approach could be laborious for survey respondents. Moreover, as this method does not directly ask audiences to reflect on personality similarities with characters, some respondents might not realize such similarities exist. Likewise, the extant research on biographic resonance has not used any validated scale to measure the occurrence of resonance but rather inferred its existence based on questions about autobiographical memory activation (Bonus et al., 2022) or a match between participant's experience and the experience portrayed in a narrative (Das & Peters, 2022). Creating a new instrument to measure deep-level similarities could help researchers compare their results and develop further theories on the role of similarity.

In experimental studies, the effects of overlapping personalities, attitudes, and experiences are also often overlooked. Such research often matches respondents as similar or dissimilar with a condition solely based on demographics (Huang et al., 2023). Tukachinsky (2014) noted that even when experiments manipulate the stimulus to evoke a high or low sense of similarity among participants, the checks are often performed with a perceived homophily scale (J. C. McCroskey et al., 1975; L. L. McCroskey et al., 2006) or with unvalidated similarity measurements. While perceived homophily differentiates background and attitude similarity, it captures a general sense of similarity in those domains. Its items focus broadly on "similar background," "similar status," or, in case of the attitudinal subscale, ask about "feeling similar," "sharing values," or "behaving like the other person" among others. When considering such a general sense of similarity, audiences may consider first surface-level characteristics like gender, race, age, sexuality, or appearance, rather than deep-level traits. Moreover, a scale with only broad questions about values or behaviors in general, without any further specifications, could be hard to complete for respondents since audiences and characters can share just a specific subset of values or behaviors. Therefore, scholars may benefit from a new instrument that can reliably evaluate the existence of different types of deep-level similarities, pertaining to concrete personality traits, attitudes, and experiences.

Development of the character recognizability scale

Considering the growing interest in different types of similarities and the need for reliable instruments to evaluate them, we propose a new measurement that assesses to what extent viewers think they share personality traits, attitudes, and experiences with media characters. The instrument is called Character Recognizability Scale (later CRS)

because each item evaluates whether people recognize an aspect of the fictional character in themselves. With the use of the CRS, scholars can measure deep-level similarities between viewers and characters in terms of personalities, attitudes, and experiences. Research indicates that these deep-level similarities predict other forms of media engagement such as eudaimonia (Klimmt & Rieger, 2021), identification (Huang et al., 2023), parasocial relationships (Tukachinsky & Stever, 2019), and perceived media effects (Ott et al., 2021). So far though, there has not been a uniform way of measuring deep-level level similarities. We hope that the CRS may facilitate testing and developing media engagement theories in communication science and media psychology.

Given our conceptualization, it is pertinent to highlight how perceiving deep-level similarities relates to and differs from the common forms of media engagement. Parasocial interactions describe cognitive and affective responses to media characters during the time of exposure, which resemble momentary interactions with real-life people (Dibble et al., 2016). Upon repeated exposure and cognitive involvement outside of watching time, these interactions may become a more permanent bond. Media users can form one-sided relationships with media characters called parasocial relationships (Tukachinsky & Stever, 2019). When viewers consider what could happen with characters without thinking of them as friends, they may be engaging in retrospective imaginative involvement (Slater et al., 2018). In other cases, audiences can simply like a character without responding to the character in the moment of watching or forming a durable bond. Besides, some committed viewers may experience character identification when they merge their identities with characters and experience the content through the eyes of the character (Cohen, 2001). This process can also involve wanting to become more like the character in real-life situations, called wishful identification (Hoffner & Buchanan, 2005). Similarities between audiences and characters may facilitate further media engagement processes because characters with similar personalities, attitudes, and experiences can seem more accessible and relevant for viewers. The CRS evaluates whether viewers recognize the existence of such deep-level similarities, and thus, measures a process that is a possible antecedent of further involvement with characters through the aforementioned media engagement processes.

We decided to examine the recognizability of characters from a social minority, specifically LGBTQ characters, because of a focus on deep-level traits. Our goal was to create a scale applicable to a wide range of media and audience contexts. Therefore, we decided against choosing racial, ethnic, or religious minority characters that could be found mainly in specific cultures and countries. LGBTQ characters are represented quite frequently on streaming platforms (Smith et al., 2021), which makes it more likely that

various TV fans would see them and connect with them. While some surface-level similarities with LGBTQ characters are possible in terms of race or gender, many people could still initially perceive LGBTQ characters as dissimilar due to differences in sexual orientation and life experiences. Regardless, media audiences may still experience various deep-level commonalities with them and, for instance, perceive similarities in personality traits and attitudes. In the following sections, we outline the development and validation of the CRS. Importantly, the recognizability concept can be applied to other minority characters as well as non-minority characters.

Creating the CRS item pool

The importance of examining deep-level similarity in media engagement is illustrated by an earlier qualitative study about entertainment content selection criteria among young people (Żerebecki et al., 2024a). When interviewed, participants claimed they do not focus on or consider the issues of perceived similarity with TV characters. Hardly any of the respondents could clearly indicate whether they feel similar to their favorite TV characters. Instead, they recognized particular aspects of the characters that reminded them of their own lives. They discussed analogous personalities, attitudes, or daily life situations. Through the extensive qualitative data gathered in this study, we identified a pool of possible items that capture a sense of recognizability. To write the scale items, we reanalyzed respondents' answers, focusing on statements in which viewers compared characters to themselves. We looked for quotes where participants reported being similar to characters, discussed analogies between their lives and onscreen plots, or found some features of plots realistic, familiar, and comparable to their own lives. Next, we rephrased the quotes into a list of possible aspects of characters' portrayal that participants could recognize in themselves.

Our aim was to create a scale applicable to different TV genres. Therefore, to account for the multiplicity of onscreen plots and situations, we phrased certain scale items as recognizing behaviors, solutions to problems, reactions, etc. that audiences could possibly experience themselves. Thus, we prompt viewers to consider not only their personal experiences, which can be limited for one individual, but also consider analogous experiences that seem possible. Other items focusing on personality traits and attitudes ask whether audiences recognize these aspects in themselves. The same attitude or personality trait can be portrayed and experienced in different ways. Therefore, various audiences may see those traits even if the screen portrayal deviates from their lives. We tried to balance general items (e.g., focusing broadly on personality traits, behaviors, etc.) and more concrete items (e.g., referring to strengths, weakness, opinions about good and bad, opinions about other people, etc.). Finally, the project followed

a data-driven approach to explore what items cluster as recognizability subconcepts. In total, 26 specific statements about recognizability were created that formed the initial item pool for the CRS. See the Appendix for a complete list of items.

Validation of the CRS

To validate our scale, we conducted two survey studies, one with an international student sample and one with a sample of the American population, representative in terms of age, sex, and ethnicity. In both surveys, we asked about TV watching frequency and different media engagement measurements with a recalled, positive LGBTQ character from a TV show. We measured recognizability, perceived similarity, parasocial friendship, character liking, and wishful identification. First, in Study 1, an exploratory factor analysis was conducted to find the underlying structure of the scale. Then, in Study 2, a confirmatory factor analysis was conducted to replicate the findings from Study 1. Besides establishing and confirming the factorial structure of the CRS, we calculated internal consistencies to find reliabilities for the identified subscales in both studies. Finally, we demonstrated criterion and convergent and divergent construct validities by proving that the CRS, along with its subscales, shows correlations or lack thereof with other concepts according to the existing theories (Noar, 2003).

To demonstrate criterion validity, we check the correlation between recognizability and perceived similarity as operationalized by J. C. McCroskey et al. (1975). Due to a focus on shared characteristics, we posit:

H1: Recognizability is positively associated with perceived similarity with a chosen character.

In the following sections, we discuss previous literature on the relationships between similarity and other media engagement and exposure measures to examine the construct validity of the CRS.

Similarity and media engagement

In a meta-analysis, Tukachinsky et al. (2020) reported 16 studies that found a link between perceived similarity and parasocial relationships with media characters. The proposed mechanism for this association is that mediated relationships work in the same way as real-life relationships where similarity increases interpersonal attraction (Montoya & Horton, 2013). Therefore, we posit:

H2: Recognizability is positively associated with parasocial relationship with a chosen character.

Bui (2017), following the similarity-attraction hypothesis, argued that a sense of similarity can promote liking media content in general. While her research focused on gender similarity, we extend the argument to similarity in personality traits, attitudes, and experiences, and propose that:

H3: Recognizability is positively associated with character liking of a chosen character.

Finally, perceived similarity has been related to wishful identification. Initially, it might seem that viewers would want to change themselves to be more like someone different. However, as argued by Hoffner and Buchanan (2005), an existing degree of similarity could make viewers believe that they can develop similarities in other areas too. Following this logic, it might be easier for viewers who recognize aspects of themselves in characters to assume that they can become like their characters in other aspects. Therefore, we argue that:

H4: Recognizability is positively associated with wishful identification with a chosen character.

Similarity and media exposure

Besides media engagement, we expect recognizability to be connected with media exposure. Heavy television viewers are known to incorporate media messages into their thinking (Morgan et al., 2009). TV consumption can gradually cultivate a sense of connection to characters (Kühne & Oprea, 2020; Tukachinsky et al., 2020). Watching a lot of television, irrespective of the types of programs watched, can aid viewers in recalling their favorite characters and their plots better. The improved recall may help audiences to compare themselves to characters, and ultimately recognize aspects of themselves in characters. We argue that:

H5: General TV exposure is positively associated with recognizability with a chosen character.

Cultivation effects are strongest when media messages presented to the viewer are consistent (Morgan et al., 2009). Often, cultivation research investigates the association between exposure to a given message across different TV programs and audience's attitudes. For example, Hefner et al. (2015) reported an association between watching different queer TV shows and LGBTQ attitudes among viewers. Frequent exposure to different

LGBTQ characters can help normalize queer characters and facilitate audiences connecting to them. Therefore, we propose that:

H6: Exposure to LGBTQ characters in general is positively associated with recognizability with a chosen character.

Finally, it is important to acknowledge that not all media characters are written with the same psychological depth and attractive personality traits. LGBTQ characters have historically suffered from negative and stereotypical representation (Stone, 2020). The current media landscape consists of both underdeveloped and well-written LGBTQ characters. Notably, the engagement with a media persona depends on their representation: attractive, well-written characters encourage more audience involvement (Żerebecki et al., 2021, 2024b). Thus, it is relevant to distinguish between general exposure to LGBTQ characters and exposure to well-written LGBTQ characters. Audiences who specifically watch complex LGBTQ storylines frequently are also more likely to develop a thorough understanding of the lives and the issues faced by the LGBTQ community. Therefore, a media diet with many different well-written LGBTQ characters may prime the audiences to feel a strong sense of connection with one, individual LGBTQ character. Thus, we posit that:

H7: Exposure to well-written LGBTQ characters is positively associated with recognizability with a chosen character.

Similarity and age

To study divergent construct validity for the CRS, it was crucial to identify and include a construct that is unrelated to recognizability. Existing research with young adults (Eyal & Dailey, 2012) and elderly adults (Chory-Assad & Yanen, 2005), found that people of all ages are able to engage in different forms of involvement with media characters (i.e., parasocial friendship and wishful identification). Since we prompted participants to decide themselves on a memorable, positive LGBTQ character that they liked watching, we propose that:

H8: Age of the TV viewer is not associated with recognizability with a chosen character.

Study 1: Exploring the CRS' factorial structure

In the first study, we tested whether the proposed recognizability items could be grouped within subscales, calculated the reliabilities for the entire scale and its

subscales, and determined the correlations with the relevant validation concepts. The design of the study received approval from the ESHCC Institutional Ethics Review Board, ETH2122–0684. Before launching the survey, we pretested it with a small group of people ($N = 19$) to ensure that the survey was understandable to everyone. The final survey was distributed in classes conducted in an international media and communication bachelor program at a Dutch University during the first two weeks of September 2022. The survey opened with an informed consent form, which mentioned the purpose of the study, lack of risks or benefits, guarantee of the data anonymity, and voluntary participation. In the first block, the participants were asked questions about different types of television exposure, including LGBTQ TV characters. The term LGBTQ was defined to make sure that the participants understood the instructions.

The next block of questions prompted the participants to think about one LGBTQ character that was positive, memorable, and seen within the month prior to taking the survey. This way, we could capture existing, real-life connections the participants create with actual media characters. Moreover, by allowing participants to choose the characters themselves, we tried to ensure that participants recall the characters and their plots well. According to recent research, participants can still report parasocial relationships with movie characters up to half a year from exposure (Ott & Slater, 2024), which suggests an ability to recollect some plot details well. Thus, we facilitated answering recognizability items, which require participants to compare themselves to characters on many different dimensions. Studying connections with characters identified by audiences themselves has been done before in scale validation (Tukachinsky, 2010) and theory testing research (Lauricella et al., 2023). To ensure a robust data collection, participants could indicate that they chose a character they saw more than one month ago, that they did not see any LGBTQ characters they liked, or that they did not see any LGBTQ characters at all. In case respondents chose one of the latter two options, they were directed to the last two blocks of the survey that asked about attitudes toward LGBTQ people and demographics. Otherwise, the participants answered questions about different engagement measures with the selected character. The name of the character was inserted into every media engagement question to ensure validity.

Sample

We distributed the final survey to all 278 students enrolled in a bachelor's level course. After data cleaning, which involved the deletion of unfinished surveys, surveys where the completion time score was an outlier (where the z -score was greater than 3.29 as recommended by Tabachnick & Fidell, 2013), and surveys showing straight-lining in scales with reversed items, we obtained a sample of $N = 219$ respondents. The average age was 19.65 years

with $SD = 1.09$. The sample consisted of 41 men, 177 women, and one person who preferred not to reveal their gender. There were 57 students who identified as lesbian, gay, bisexual, queer, or transgender. The sample consisted of international students from different countries in Europe, Asia, Africa, Australia, and Northern and Southern Americas. From the most frequent nationalities, 63 respondents identified themselves as Dutch, 17 as German, 10 as Polish, and 8 as Spanish. However, the sample also included participants from Japan, Kyrgyzstan, South Africa, and Chile, among others. All students had a proficient command of English as this is an admission requirement of the program.

Measurements

Recognizability

The concept was measured by asking respondents to indicate to what extent they agreed with 26 separate items. All the items had similar wording to ensure that respondents could easily answer them. Each statement began with the phrase “I recognize . . .” followed by the specific aspect of comparison. Example items included “I recognize the situations that [name of the character] encounters as situations that could also happen to me,” “I recognize the emotions of [name of the character] as the emotions that I could feel,” and “I recognize the decisions of [name of the character] as decisions that I could make.” The answer options were based on a 7-point Likert scale where 1 = *strongly disagree* to 7 = *strongly agree*. The Appendix presents the complete list of items, and the results section elaborates upon the factorial structure.

Perceived similarity

We measured the construct with a four-item scale from L. L. McCroskey et al. (2006) and J. C. McCroskey et al. (1975), $\alpha = .88$, $M = 3.62$, $SD = 1.26$. The answer options were a 7-point Likert scale with the same answer categories as the recognizability scale. An example item is “[name of the character] is like me.”

Parasocial relationship

We used a short, three-item scale from Slater et al. (2018), $\alpha = .72$, $M = 3.72$, $SD = 1.42$. The answer options were a 7-point Likert scale with the same answer categories as the recognizability scale. An example item is “I like to imagine [name of the character] as a person I know personally.”

Character liking

Liking of the selected LGBTQ character from a TV show was measured with a single question “How much do you like [name of the character] as

a character on a scale from 1 to 10?” ($M = 8.29$, $SD = 1.17$). We indicated to participants that a higher score meant more character liking.

Wishful identification

We measured this concept using Hoffner and Buchanan’s (2005) five-item scale, $\alpha = .82$, $M = 2.89$, $SD = 0.88$. The answer options were based on a 5-point Likert scale where 1 = *strongly disagree* to 5 = *strongly agree*. An example item is “[name of the character] is the sort of a person I want to be like myself.” There was one item where agreement with the statement indicated low wishful identification. We have reverse-coded this item before including it in the average total score of wishful identification.

Exposure to TV and LGBTQ characters

Following the approach from Oprea et al. (2021), we distinguished three different levels of specificity of exposure to television content to confirm that they show the same correlations with recognizability. We examined general exposure to TV, exposure to LGBTQ characters on TV, and exposure to specific representations of LGBTQ characters identified as successful in previous research (Żerebecki et al., 2024b).

First, to establish general TV exposure, respondents were asked to indicate approximately how much time they spend watching TV on an average weekday and a weekend, following recommendations from De Vreese and Neijens (2016) and Slater (2004). This question was asked separately for TV content accessed on (a) broadcast television, including synchronous and asynchronous viewing, (b) streaming platforms, and (c) free websites and applications. The answer options were presented on a slider with a range of 0 to 3 hours and intervals of 0.1 hour. If someone watched more than 3 hours of TV per day, they were instructed to choose 3 hours. To calculate the final score for TV exposure per week, we calculated two sums of average TV time on three different media, one for weekdays and one for weekends. Then, we multiplied the average weekday time by five, and average weekend time by two, and summed those two scores. On average, the participants watched 22.73 hours of TV shows on broadcast TV, streaming platforms, and free websites and applications combined in one week ($SD = 10.58$).

Second, to establish exposure to LGBTQ characters, the respondents were asked to indicate how often they saw LGBTQ characters in three ways, (a) on broadcast television, including synchronous and asynchronous viewing, (b) streaming platforms, and (c) free websites and applications. The answer options were a 7-point Likert scale where score 1 = *never*, 4 = *sometimes* and 7 = *very often*. Our participants indicated a mean score for LGBTQ character exposure of 4.60 with $SD = 1.10$.

Third, we measured exposure to well-written LGBTQ characters. We selected representations of minority characters that are likely to trigger media effects, following a literature review on minority representation (Žerebecki et al., 2024b). Specifically, we asked about exposure to LGBTQ characters who:

- (1) “... experience situations that happen to real people that belong to the LGBTQ community”
- (2) “... have an attractive personality. Meaning they were either funny, successful, resilient, friendly, smart, or admired by others”
- (3) “... have complex psychology. This means that the characters developed over time or learnt from past experiences or deliberated about life situations”
- (4) “... disprove negative stereotypes about LGBTQ people”
- (5) “... have friendly interactions with people who are not members of the LGBTQ community.”

The answer options were a 7-point Likert scale with the same labels used in general exposure to LGBTQ characters. Our participants indicated a mean score for content specific LGBTQ character exposure of 4.91 with $SD = 0.87$.

Results

Exploratory factor analysis

The analysis was conducted in SPSS IBM version 28. The 26 generated recognizability items were entered into an exploratory factor analysis using Principal Components with Direct Oblimin rotation, $KMO = .91$ χ^2 ($N = 219, 325$) = 2,832.01, $p < .001$. The resulting model explained 51.7% of the variance. The model proposed five factors with the following eigenvalues: 9.61, 2.24, 1.60, 1.23, and 1.17. We decided to retain the first three factors for further analysis because factors 4 and 5 had 3 and 2 items respectively, and our goal was to create subscales with multiple items. Moreover, we decided to exclude one item from component 1 because its factor loading was below 0.40.

For the retained factors, we calculated the Cronbach's alpha values, to demonstrate reliability of our scales. The five items grouped in the Personality Recognizability subscale, $\alpha = .82$, $M = 4.38$, $SD = 1.15$, were about recognizing oneself in the characters, and recognizing oneself in the personality traits, strengths, weaknesses, and behaviors of the characters as explained in items 7, 8, 14, 9, and 17 in the Appendix. The eight items grouped in the Attitudinal Recognizability subscale, $\alpha = .88$, $M = 4.78$, $SD = 1.05$, were about recognizing oneself in the character's opinions about moral issues, social issues, thought processes, decisions, and reactions

to stressful situations as shown in items 26, 25, 21, 23, 22, 24, 18, and 20 in the [Appendix](#)). Finally, the seven items grouped in the Experiential Recognizability subscale, $\alpha = .85$, $M = 4.10$, $SD = 1.17$, concerned recognizing oneself in the places, conversations, situations, past experiences, life experiences, and life changes experienced by the characters as shown in items 1, 2, 4, 3, 15, 16, and 19 in the [Appendix](#). We have also calculated the overall score for recognizability by averaging scores of the three identified factors: $\alpha = .80$, $M = 4.42$, $SD = 0.95$. [Table 1](#) shows the items and their factor loadings for the retained components. Notably, all extracted factors indicated good reliability, $\alpha > .80$ (Lance et al., 2006).

Based on the factor analysis, 6 items were dropped from the scale. The excluded items included: I recognize (a) “... the emotions of my [chosen character] as the emotions that I could feel,” (b) “... the things that [chosen character] finds funny as things I find funny myself,” (c) “... the reasons why [chosen character] is happy as reasons I could be happy about in my life,” (d) “... the people that [chosen character] meets as the sort of people I could meet,” (e) “... the reasons for which [chosen character] is sad as reasons I could be sad about in my life,” (f) “... the reasons for which [chosen character] is angry as reasons I could be angry about in my life.” In hindsight, these items could be hard to answer as they refer broadly to all the possible emotions a character could feel or all kinds of people a given character encounters, or, too specifically, to all the possible reasons a given character could be in a particular emotional state. These items do not measure easily identifiable deep-level traits of media characters that we intended to capture with the CRS.

CRS Validation

Recognizability is one concept composed of three recognizability subscales. Therefore, to check the validity bivariate correlations between the entire scale as well as the underlying factors (i.e., personality, attitudinal, and experiential recognizability) and perceived similarity, parasocial friendship, character liking, wishful identification, general TV exposure, exposure to LGBTQ characters, exposure to well-written LGBTQ characters, and age of the participants were calculated. The results are summarized in [Table 2](#).

As expected, the entire CRS scale and all three recognizability subscales were positively related to perceived similarity ($r_{\text{CRS-all}} = .72$, $p < .001$; $r_{\text{CRS-p}} = .66$, $p < .001$; $r_{\text{CRS-a}} = .65$, $p < .001$; $r_{\text{CRS-e}} = .53$, $p < .001$), parasocial friendship ($r_{\text{CRS-all}} = .41$, $p < .001$; $r_{\text{CRS-p}} = .38$, $p < .001$; $r_{\text{CRS-a}} = .32$, $p < .001$; $r_{\text{CRS-e}} = .33$, $p < .001$), character liking ($r_{\text{CRS-all}} = .38$, $p < .001$; $r_{\text{CRS-p}} = .31$, $p < .001$; $r_{\text{CRS-a}} = .37$, $p < .001$; $r_{\text{CRS-e}} = .28$, $p < .001$), wishful identification ($r_{\text{CRS-all}} = .57$, $p < .001$; $r_{\text{CRS-p}} = .48$, $p < .001$; $r_{\text{CRS-a}} = .58$, $p < .001$; $r_{\text{CRS-e}} = .40$, $p < .001$), and exposure to well-written LGBTQ characters ($r_{\text{CRS-all}} = .25$, $p < .001$; $r_{\text{CRS-p}} = .20$,

Table 1. Principal component analysis for the Character Recognizability Scale (CRS) in Study 1, N = 219.

	Component 1 Personality Recognizability CRS-p	Component 2 Attitudinal Recognizability CRS-a	Component 3 Experiential Recognizability CRS-e
I recognize ...			
... the personality traits of <chosen character> as traits that I have.	.82		
... the weaknesses of <chosen character> as weaknesses that I have.	.77		
... myself in <chosen character>.	.68		
... the strengths of <chosen character> as strengths that I have.	.63		
... the behaviors of <chosen character> as behaviors that I could show.	.49		
... <chosen character>'s approach to life as an approach to life that I have.		.80	
... <chosen character>'s opinions about what is good and bad as opinions I have.		.80	
... the solutions to problems of <chosen character> as solutions I could follow.		.75	
... <chosen character>'s opinions about other people as opinions I have.		.71	
... the thought processes before decisions of <chosen character> as thought processes I have.		.64	
... <chosen character>'s opinions about social problems as opinions I have.		.55	
... the decisions of <chosen character> as decisions that I could make.		.51	
... the reactions to stressful situations of <chosen character> as reactions that I could have.		.44	
... the situations that <chosen character> encounters as situations that could also happen to me.			.73
... the past experiences of <chosen character> as similar to my past experiences.			.71
... the problems that <chosen character> has as the problems that I could have.			.67
... the places, in which I see <chosen character> as the places I could be in.			.59
... my life in the life of <chosen character>.			.53
... the topics that <chosen character> discusses with others as the topics I could discuss with other people in my life.			.52
... the life changes <chosen character> experiences as life changes that could happen to me.			.52
R ²	37.0%	6.2%	8.6%
Cronbach's α	.82	.88	.85

Table 2. Bivariate correlations between the studied variables in Study 1, N = 219.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Recognizability CRS-all		.86***	.83***	.84***	.72***	.41***	.38***	.57***	-.14*	.16*	.25***	.01
2. Personality Recognizability CRS-p			.61***	.57***	.66***	.38***	.31***	.48***	-.14*	.13	.20**	.01
3. Attitudinal Recognizability CRS-a				.52***	.65***	.32***	.37***	.58***	-.05	.10	.21**	.01
4. Experiential Recognizability CRS-e					.53***	.33***	.28***	.40***	-.15*	.17*	.22***	.02
5. Perceived Similarity						.30***	.33***	.53***	-.07	.18**	.18**	.11
6. Parasocial Friendship							.29***	.45**	.01	.06	.17*	.07
7. Character Liking								.36***	-.06	.20**	.18**	.00
8. Wishful Identification									-.01	.13	.19**	-.03
9. General TV watching time										.27***	.00	-.08
10. Exposure to LGBTQ characters											.40***	.07
11. Exposure to well-written LGBTQ characters												.08
12. Age												

*** $p < .001$, ** $p < .01$, * $p < .05$

$p = .003$; $r_{\text{CRS-a}} = .21$, $p = .002$; $r_{\text{CRS-e}} = .22$, $p < .001$). All these relationships were statistically significant, supporting for H1, H2, H3, H4, and H7 along with showing construct validity. Furthermore, we proposed that age is not related to recognizability. To test this hypothesis, we followed an equivalence testing procedure for correlations described by Weber and Popova (2012). Our results support H8, as we found that recognizability and its subscales do not show correlations with age larger than a minimum substantial effect of $\Delta = .14$ (the smallest correlation between recognizability and other studied concepts we identified, see Table 2), $r_{\text{CRS-all}} = .01$, $p = .029$, $r_{\text{CRS-p}} = .01$, $p = .022$; $r_{\text{CRS-a}} = .01$, $p = .028$; $r_{\text{CRS-e}} = .02$, $p = .031$. In this way, we show evidence for the divergent construct validity.

There were also some unexpected findings. Only the entire scale and the Experiential Recognizability subscale showed a significant and positive correlation with exposure to LGBTQ characters: $r_{\text{CRS-all}} = .16$, $p = .019$; $r_{\text{CRS-e}} = .17$, $p = .014$. Against our expectations, the relationship was not significant for Personality Recognizability and Attitudinal Recognizability: $r_{\text{CRS-p}} = .13$, $p = .054$; $r_{\text{CRS-a}} = .10$, $p = .125$. Hence, we found mixed evidence for H6. Also, general TV exposure had a negative statistically significant correlation with the entire scale and both Personality and Experiential Recognizability, $r_{\text{CRS-all}} = -.14$, $p = .045$; $r_{\text{CRS-p}} = -.14$, $p = .044$; $r_{\text{CRS-e}} = -.15$, $p = .023$, while Attitudinal Recognizability showed no statistically significant correlation, $r_{\text{CRS-a}} = -.05$, $p = .485$, which led us to reject H5.

Study 2: Confirming the CRS' factorial structure

The second study involved a U.S.-based sample that was demographically representative of the United States in terms of age, sex, and ethnicities. Additionally, this second sample was intended to confirm the factorial structure of the CRS and replicate earlier validation results by checking correlations between the previously identified concepts. The ESHCC Institutional Review Board approved an amendment Study 1 to repeat the data collection among a U.S.-based sample, ETH2223-0239. The same survey design was used. Questions about participants' own nationality and the migration background of their parents were removed, as these were not relevant for our desired sample.

In January 2023, we recruited 301 participants through the platform Prolific. After data cleaning, which included the same procedures as in Study 1, the final sample was $N = 247$. The sample included 125 women, 114 men, 6 non-binary people, and 2 people who did not want to disclose their gender. There were 46 people who identified as either lesbian, gay, bisexual, queer, or transgender. The mean age of the

Table 3. Descriptive statistics of relevant variables in Study 2, N = 247.

Variable	<i>M</i>	<i>SD</i>	Cronbach's α
Recognizability CRS-all	4.45	1.11	.89
Personality Recognizability CRS-p	4.45	1.22	.88
Attitudinal Recognizability CRS-a	4.76	1.13	.92
Experiential Recognizability CRS-e	4.13	1.32	.92
Perceived Similarity	4.03	1.39	.93
Parasocial Friendship	4.07	1.51	.82
Character Liking	8.34	1.64	N/A
Wishful Identification	3.08	1.06	.91
General TV watching time	25.86	13.75	N/A
Exposure to LGBTQ characters	4.23	1.28	N/A
Exposure to well-written LGBTQ characters	4.96	1.14	N/A

participants was 46.06, $SD = 16.60$. Table 3 reports the descriptive statistics of the studied constructs. Importantly, the entire CRS and recognizability subscales had a good reliability, $\alpha > .80$, even approaching excellent reliability, $\alpha > .90$ (Lance et al., 2006).

Results

Confirmatory factor analysis

A confirmatory factor analysis in SPSS Amos 28 was conducted. We created a second-order factor model, where we entered recognizability composed of the three latent constructs, namely Personality Recognizability, Attitudinal Recognizability, and Experiential Recognizability, and used their respective items as observed factors. The model can be seen in Figure 1: $\chi^2 (167, N = 247) = 480.76, p < .001$. The ratio of chi-square to degrees of freedom was 2.88, which fell below the recommended upper threshold value of 5.00. RMSEA was equal to .087, which indicated insufficient model fit since it was above the recommended threshold of .080 and CFI equaled .91, which indicated an acceptable model fit since the value was above the recommended .90 (Kline, 2011).

To improve the model's RMSEA value, we decided to covary the error terms of items within one factor based on the modification indices, as items within one factor can have shared measurement error. The three pairs of items for which the items were allowed to correlate are items 25 and 26, items 24 and 25, and items 23 and 25. More information, including a full list, on the items is available in the Appendix; Figure 2 illustrates the observed model. After these minor modifications, the model fit was significantly better as $\Delta\chi^2 (3, N = 247) = 62.81, p < .001$, and an acceptable overall model fit, $\chi^2 (164, N = 247) = 417.95, p < .001$ was achieved. The ratio of chi-square to degrees of freedom was 2.55, RMSEA = .079 and CFI = .93.

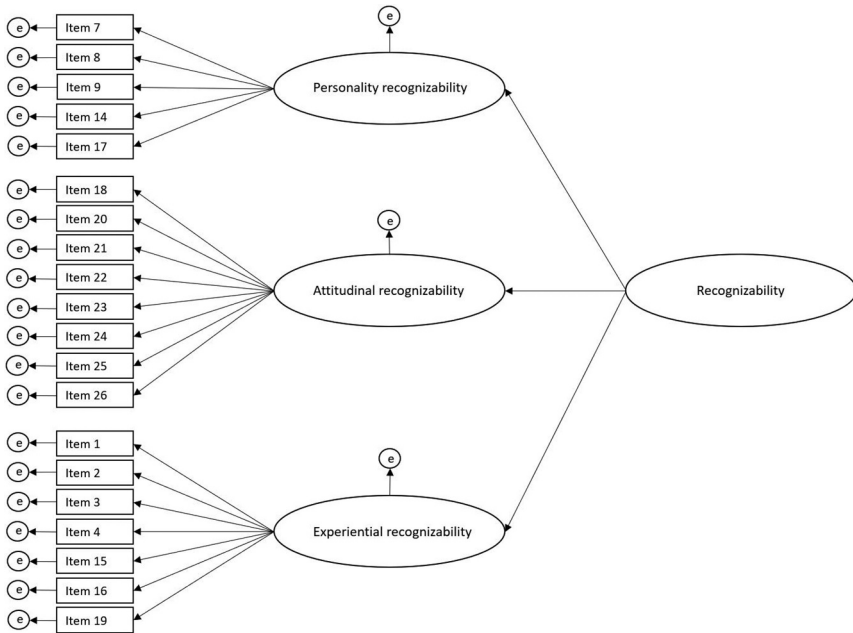


Figure 1. The first model tested in confirmatory factor analysis in Study 2.

CRS validation replicated

After confirming the three-factor solution for the CRS, we ran bivariate correlations between the entire scale, its subscales and the studied concepts to replicate our validation findings from Study 1, as shown in Table 4.

In line with H1, the CRS scale and all three types of recognizability had statistically significant and positive associations with perceived similarity ($r_{\text{CRS-all}} = .84$, $p < .001$; $r_{\text{CRS-p}} = .78$, $p < .001$; $r_{\text{CRS-a}} = .76$, $p < .001$; $r_{\text{CRS-e}} = .74$, $p < .001$), thus showing criterion validity. Moreover, as expected, we found positive and statistically significant associations between the entire CRS scale, three types of recognizability, and parasocial friendship ($r_{\text{CRS-all}} = .58$, $p < .001$; $r_{\text{CRS-p}} = .51$, $p < .001$; $r_{\text{CRS-a}} = .52$, $p < .001$; $r_{\text{CRS-e}} = .54$, $p < .001$), character liking ($r_{\text{CRS-all}} = .51$, $p < .001$; $r_{\text{CRS-p}} = .49$, $p < .001$; $r_{\text{CRS-a}} = .51$, $p < .001$; $r_{\text{CRS-e}} = .39$, $p < .001$), wishful identification ($r_{\text{CRS-all}} = .70$, $p < .001$; $r_{\text{CRS-p}} = .63$, $p < .001$; $r_{\text{CRS-a}} = .70$, $p < .001$; $r_{\text{CRS-e}} = .59$, $p < .001$), and exposure to well-written LGBTQ characters ($r_{\text{CRS-all}} = .51$, $p < .001$; $r_{\text{CRS-p}} = .51$, $p < .001$; $r_{\text{CRS-a}} = .49$, $p < .001$; $r_{\text{CRS-e}} = .39$, $p < .001$). Hence, we found support for H2, H3, H4, and H7. All these associations showed convergent construct validity. Based on an equivalence testing procedure for correlations (Weber & Popova, 2012), we found that the entire scale as well as attitudinal and experiential recognizabilities do not

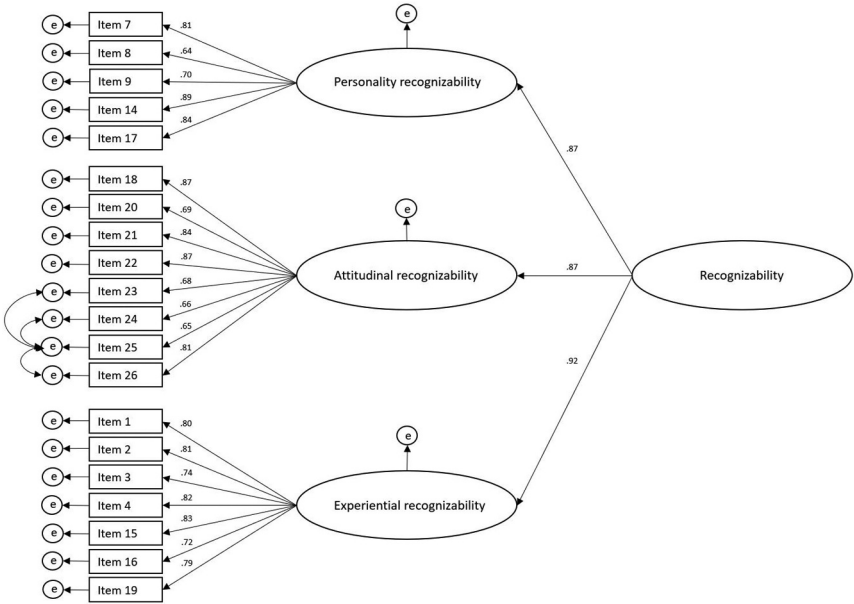


Figure 2. The final model obtained in confirmatory factor analysis in Study 2. Standardized regression coefficients given for each association. We covaried item 25 (recognizing opinions about what is good and bad) with three others, being item 23 (recognizing opinions about other people), item 24 (recognizing opinions about social problems), and item 26 (recognizing approach to life) as they are similarly worded and concern related concepts.

show correlations with age larger than a minimum substantial effect of $\Delta = .14$ ($r_{\text{CRS-all}} = -.01$, $p = .020$; $r_{\text{CRS-a}} = .01$, $p = .018$; $r_{\text{CRS-e}} = .01$, $p = .023$), which indicated divergent construct validity. Against our expectations, we did not find evidence that personality recognizability does not have a correlation with age larger than a minimum substantial effect of $\Delta = .14$, as $r_{\text{CRS-p}} = -.05$, $p = .078$. Thus, in Study 2, we found mixed evidence for H8. Besides, no associations between the entire CRS scale nor the three recognizabilities and general TV watching ($r_{\text{CRS-all}} = .09$, $p = .180$; $r_{\text{CRS-p}} = .07$, $p = .281$; $r_{\text{CRS-a}} = .06$, $p = .325$; $r_{\text{CRS-e}} = .10$, $p = .124$) or exposure to LGBTQ characters ($r_{\text{CRS-all}} = .08$, $p = .231$; $r_{\text{CRS-p}} = .12$, $p = .064$; $r_{\text{CRS-a}} = .06$, $p = .380$; $r_{\text{CRS-e}} = .04$, $p = .576$) were identified. Thus, we found no support for H5 and H6.

General discussion

In this article, we proposed a scale that measures deep-level similarities, namely the Character Recognizability Scale (CRS). We tested 26

Table 4. Bivariate correlations between the studied variables in Study 2, N = 247.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Recognizability CRS-all												
2. Personality Recognizability CRS-p												
3.Attitudinal Recognizability CRS-a												
4. Experiential Recognizability CRS-e												
5. Perceived Similarity												
6. Parasocial Friendship												
7. Character Liking												
8. Wishful Identification												
9. General TV watching time												
10. Exposure to LGBTQ characters												
11. Exposure to well-written LGBTQ characters												
12. Age												

***p < .001, **p < .01, *p < .05

items that focused on various aspects of character portrayal that viewers could recognize as similar to their own lives. Upon data analysis in Study 1, we retained 20 items, which clustered into three types of recognizability: Personality Recognizability (5 items), Attitudinal Recognizability (8 items), and Experiential Recognizability (7 items). We replicated these findings through a confirmatory factor analysis in Study 2. We propose that the CRS can be used as a composite score of all items, but also as separate concepts, which we call CRS-p, referring to Personality Recognizability; CRS-a, referring to Attitudinal Recognizability; and CRS-e referring to Experiential Recognizability. We have also shown initial evidence that both the overall scale and the subscales are valid instruments to predict other media engagement concepts. Below, we reflect on the scale's validity, future use of the scale in theory testing, discuss the limitations of our research, and propose future research.

The CRS showed a good criterion validity, due to substantial correlations with perceived similarity. Moreover, we were able to establish construct validity. The CRS with its subscales showed associations with other media engagement measures such as parasocial friendship, character liking, and wishful identification in Studies 1 and 2. These findings suggest that the CRS may facilitate theory testing and development within communication science and media psychology. Future research could use the CRS, and especially the CRS-e, to establish whether resonance with a given media content takes place, thus facilitating a biographic resonance theory testing (Klimmt & Rieger, 2021). Such a project could also establish whether the CRS scores predict eudaimonic media enjoyment. Furthermore, Moyer-Gusé and Wilson (2023) proposed that meaningful media content can be a key to overcoming resistance to narrative persuasion. Thus, studying deep-level similarities with the help of our scale could also be beneficial in persuasive communication research. We also hope that the CRS can help researchers to further develop mediated intergroup contact theories (Wong et al., 2022) by providing additional predictors of positive outgroup character engagement. Possibly, identifying which deep-level similarities are associated the most with positive character evaluations could also be useful in advancing affective disposition theory, which studies how media users make character evaluations (Raney, 2017).

Besides media engagement, we also examined media exposure. In line with expectations, exposure to well-written portrayals of LGBTQ characters was related to higher levels of all three types of recognizability and the entire scale. Audiences who recalled exposure to complex, well-written LGBTQ characters in general also saw themselves the most in their selected LGBTQ character. This finding suggests that perceiving deep-level similarity may be supported by repeated exposure to given characters. While

seeing a character once may be sufficient for the comparison, repeated exposure can help viewers internalize the characters' plots and evaluate similarity more accurately. However, it is also important to consider that recognizability may depend on how consistent a given character is presented. It is possible that some viewers who initially perceived themselves to be similar to a media persona may change their mind due to an introduction of new plot twists.

Against our expectations, we found mixed results as to the effects of general exposure to LGBTQ characters, general TV watching, and age. In Study 1, we found two negative associations with general TV watching and only one positive one with exposure to LGBTQ characters. In contrast, we found no statistically significant correlations in Study 2. These findings could be explained with the varied representation of LGBTQ characters on TV. While more positive depictions are increasingly available, there are still many subpar minority characters (Stone, 2020). Thus, a high level of TV watching in general or watching any LGBTQ characters can result in a mixed media diet with both attractive and unattractive minority characters. Such mixed messages can make it harder to connect with characters, which, in turn, could explain the negative and statistically non-significant correlations we have found.

To test the lack of effect of age on recognizability, we conducted 8 equivalence tests. In 7 cases, we found evidence that the magnitude of association between age and recognizability and its subscales is negligible, and thus not likely to exist. In Study 2, in the case of personality recognizability and age, we did not find sufficient evidence for the lack of association. Thus, while we demonstrated some proof for our assumption that recognizability does not depend on age, definitive conclusions should be established based on future research.

Limitations and suggestions for future research

This research was not free of limitations. First, our samples comprised international media and communication students and people in the United States. Considering the multicultural and multiethnic composition of both groups and the intercultural experiences of the international students, these two groups may be more open to mediated contact with minority characters than other populations. Future research should repeat our design to check whether our findings are replicable in other groups where minority acceptance is lower. Moreover, cross-cultural research could further examine invariance of our scale across different national or cultural contexts.

Second, our samples counted a relatively high percentage of LGBTQ individuals (26.0% in the student sample and 18.6% in the U.S.-based

sample). A recent Gallup survey reported that 7.1% of Americans identified as LGBTQ, and the number has been growing in recent years (Jones, 2022), indicating a substantial response bias in our samples. International study programs may attract a diverse range of individuals due to an accepting diversity climate. As for the sample in the United States, Prolific panelists choose which surveys to complete. The call for participants in this research revealed that the survey focuses on LGBTQ TV characters, which could have attracted more LGBTQ people. Future research could specifically investigate possible differences between recognizability with LGBTQ characters between LGBTQ audience members and heterosexual audience members. Such research would require a quota sample with equal amounts of audience members representing different sexual and gender orientations. While the CRS is designed to measure engagement with all types of characters among various audiences, it is possible that when viewers and characters match on sexuality or gender, the levels of recognizability are higher.

Third, the pattern of associations found is only cross-sectional, implying no causality. Rather than exposure predicting recognizability, existing levels of recognizability may predict exposure to well-written LGBTQ TV personas. Future research should check the identified relationships in a longitudinal design to establish the direction of causality. Another strand of research can employ an experimental design, manipulate deep-level traits of the media characters presented in the stimulus material, and see whether exposure to highly similar characters produce different outcomes (e.g., minority attitudes, behavioral intentions, media engagement) in viewers than exposure to the low-level similarity condition. In such a design, the CRS can be used as a manipulation check to confirm that the intended change in characters from the stimulus materials results in different perceptions of similarity among the respondents.

Fourth, the current study did not explore possible relations between the studied concepts besides the bivariate correlations. Now that the subscales have been validated, our instrument may be used to examine whether the three identified types of recognizability connect differently to media exposure and engagement measurements. It is possible that media characters do not have to be recognizable on all three dimensions to be likable. Whereas some TV shows aim to portray accurate, real-life situations, which viewers may readily recognize, other shows take place in unrealistic settings (e.g., fantasy or sci-fi worlds), which could make it hard for audiences to report Experiential Recognizability. Still, the fact that these genres attract viewers suggests that some recognizability processes with the characters may be taking place. Future research could compare recognizability scores for characters in different TV content genres. Furthermore, Tukachinsky and Stever (2019) proposed that different types of similarities are relevant for different stages of parasocial relationships development. They argued that visible, obvious similarities can

raise initial interest in the character, but stronger attachments to media personas require deeper-level similarities. Future research could test how different recognizabilities connect to different stages of parasocial relationship development.

Fifth, while this project tested character recognizability with LGBTQ characters, similar research can examine recognizability of characters on different dimensions of diversity, such as race, ethnicity, religion, political views, or ability. Future research could compare whether characters from different social minorities cause different levels of recognizability among audiences. Notably, such comparisons could include characters who belong to two or more minority groups, for instance those who are Black and gay. This way the CRS could help researchers identify whether intersectional representation of characters results in different recognizability levels when compared to characters who belong to one minority group.

Sixth, since recognizability is associated with different media engagement measurements not exclusive to minority characters, future research could examine recognizability of characters from social majorities. Audience members might find it easier to report actual recognizability with characters based on specific items of our scale, rather than reporting a general sense of similarity. Future research can prompt participants to think about any type of character, ask the respondents to indicate the character's name and, in the case of a digital survey, pipe it into subsequent items. Moreover, it is worth exploring whether recognizability scales can be used to measure engagement with groups of characters. Committed fans of TV shows may compare themselves to multiple minority characters across different shows they watch, or with the same type of characters within fantasy, sci-fi, or true crime shows. Such engagement with a group of characters could explain genre preferences.

Seventh, our research demonstrated that respondents can answer the questions in our scale when considering recently seen characters that they chose. Still, reporting deep-level similarities depends on viewers' ability to recall the characters well. Such recall can be facilitated by focusing on characters that audiences selected, focusing on characters that are popular (e.g., by studying fans of given characters), focusing on characters that audiences saw recently, choosing characters that the viewers saw repeatedly, or reminding viewers about the plots of the studied characters. Since the CRS contains some items that prompt specific comparisons with characters, future research could examine the recognizability scores in relation to the time passed between exposure and engagement measurement.

Conclusions

Despite its limitations, our research provides both academic and social contributions. The CRS showed good reliability and validity. The scale focuses on various aspects of characters' portrayal such as personalities, attitudes, and

experiences that viewers can recognize in themselves. Previous research has established that perceived similarity with media characters is important for media engagement. The CRS scale nuances the scholarly understanding of similarity by providing more detailed comparisons. Furthermore, it taps into finding commonalities with all the characters, even those that might not appear immediately similar, such as ethnic, racial, sexual, and religious minorities or people with different disabilities. Previous scales did not capture this wide range of possible dimensions of similarity or focused on commonalities with diverse characters. Understanding media engagement processes with various characters is critical in the digital media landscape, which showcases diverse identities (Smith et al., 2021). Lastly, research into when and how audiences connect with minority characters is socially relevant because mediated contact can have positive social effects, such as improvements in diversity attitudes and prejudice reduction (Banas et al., 2020; Wong et al., 2022; Żerebecki et al., 2021).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Bartosz G. Żerebecki (MSc, Erasmus University Rotterdam) is a PhD candidate and a lecturer in the Department of Media and Communication at the Erasmus School of History, Culture and Communication in Rotterdam. His research focuses on media effects, representations of minorities, and diversity attitudes.

Suzanna J. Oprea (PhD, University of Amsterdam) is an associate professor of Quantitative Methods in the Department of Media and Communication at the Erasmus School of History, Culture and Communication in Rotterdam. Her research line, “The good(s) life,” focuses on the effects of advertising and commercial media on materialism and well-being.

Joep Hofhuis (PhD, University of Groningen) is an associate professor at Amsterdam School of International Business (AMSIB), Amsterdam University of Applied Sciences. He is also a researcher at the Department of Media and Communication at Erasmus University Rotterdam. His research focuses on intercultural communication and diversity in the workplace.

Susanne Janssen (PhD, University of Tilburg) is a professor of Sociology of Media and Culture in the Department of Media and Communication at the Erasmus School of History, Culture and Communication in Rotterdam. Her current research projects focus on the consequences of increased diversity and digitalization for agents, institutions, structures, processes and practices in the fields of media, culture, education, and politics.

ORCID

Bartosz G. Żerebecki  <http://orcid.org/0000-0001-5735-9506>

Suzanna J. Oprea  <http://orcid.org/0000-0001-7509-8311>

Joep Hofhuis  <http://orcid.org/0000-0001-7531-8644>

Susanne Janssen  <http://orcid.org/0000-0002-8984-3498>

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Appendix

Full list of the tested items.

We have presented the following items to our respondents. Before the blocks on recognizability they saw the following instruction:

“We know that situations in TV shows are fictional. Sometimes the situations from TV are not likely to happen in the exact same way in real life, for instance, in case of fantasy or science-fiction plots. Still, even if you picked a character from such a genre, I would like you to consider whether you recognize something familiar (something that could happen or be applied in your own life) when watching those impossible or improbable situations.

Also, it is true that LGBTQ characters could have very specific experiences but perhaps you recall moments when you see things you have in common, even if you are not a member of LGBTQ community. Thus, think about all the moments in which you see your character, including ordinary, daily events.”

Then, the following questions were asked: “I recognize ... ”

- (1) ... the situations that <chosen character> encounters as situations that could also happen to me.
- (2) ... the past experiences of <chosen character> as similar to my past experiences.
- (3) ... the places, in which I see <chosen character> as the places I could be in
- (4) ... the problems that <chosen character> has as the problems that I could have.
- (5) ... the people that <chosen character> meets as the sort of people I could meet.
- (6) ... the emotions of my <chosen character> as the emotions that I could feel.
- (7) ... the personality traits of <chosen character> as traits that I have.
- (8) ... the weaknesses of <chosen character> as weaknesses that I have.
- (9) ... the strengths of <chosen character> as strengths that I have.
- (10) ... the reasons why <chosen character> is happy as reasons I could be happy about in my life.
- (11) ... the reasons for which <chosen character> is sad as reasons I could be sad about in my life.
- (12) ... the reasons for which <chosen character> is angry as reasons I could be angry about in my life.
- (13) ... the things that <chosen character> finds funny as things I find funny myself.
- (14) ... myself in <chosen character>.
- (15) ... my life in the life of <chosen character>.
- (16) ... the topics that <chosen character> discusses with others as the topics I could discuss with other people in my life.
- (17) ... the behaviors of <chosen character> as behaviors that I could show.
- (18) ... the decisions of <chosen character> as decisions that I could make.
- (19) ... the life changes <chosen character> experiences as life changes that could happen to me.
- (20) ... the reactions to stressful situations of <chosen character> as reactions that I could have.
- (21) ... the solutions to problems of <chosen character> as solutions I could follow.
- (22) ... the thought processes before decisions of <chosen character> as thought processes I have.
- (23) ... <chosen character>'s opinions about other people as opinions I have.
- (24) ... <chosen character>'s opinions about social problems as opinions I have.
- (25) ... <chosen character>'s opinions about what is good and bad as opinions I have.
- (26) ... <chosen character>'s approach to life as an approach to life that I have.