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YouTube musicians and self-perceived multimedia, hypermedia, intertextual and transmedia competencies

Abstract

YouTube has grown into an unprecedented music industry where informal learning practices converge among young musicians now considered authentic Internet (micro)celebrities. Due to the rise of music video trends on the platform and the educative demands to explore youth interaction on the Internet, this study analyses the self-perception of youtubers in terms of multimedia, hypermedia, intertextual and transmedia competencies. For this purpose, we developed a questionnaire on musical competencies (TransMuQ), in which 603 young youtubers from Spanish and English-speaking countries participated. We found that YouTube's performers consider themselves proficient in the aesthetics, participation and interaction, multimodal languages, technology, content creation and risk and individual management dimensions. After an extensive theory on the experimental analysis of these competencies in citizenship, we propose a new approach towards interactive codes of young YouTube musicians. The research provides a clarifying positivism about what youtubers themselves believe they are learning in the era of ephemeral digital content.

Keywords

Transmedia competence; hypermedia; multimedia; youtuber; music.

1. Introduction

Currently, youth are involved in the consumption and production of digital content through increasingly advanced digital sites (Establés, Guerrero-Pico, and Contreras-Espinosa 2019). In this context, new platforms are emerging to increase user-generated content (UGC) as the main consumer practice through different topics such as beauty, fashion, politics, music, among others. Within this creative experience, users develop a series of informal competencies, which are translated into images and videos belonging to the ephemeral content era (Chen and Cheung 2019).

YouTube influencers are taking part in this media context. Celebrities professionalized on digital social media who turn fame into full-time careers (Abidin 2018). Xiao, Wang, and Chan-Olmsted (2018) noted that youtubers represent the most powerful impact media industry due to their originality and creativity. They are video bloggers (vloggers) who regularly post content on their personal channel building up content, followers and engagement (Jerslev, 2016). In fact, these profiles are even more popular among youth than the mainstream celebrities. As Sette and Quelhas-Brito (2019) stated, their popularity is linked to the innovation and novelty of their content, considering them opinion leaders with the ability to persuade. In addition, Pérez-Torres, Pastor-Ruiz and Abarrou-Ben-Boubaker (2018) pointed out there are two main groups of youtubers on the platform: 'standard youtubers' (who create and share content with friends and family) and 'special youtubers' (who interact with a wider online community, generating interactions and subscribers). For this research we will consider the youtuber as the link between these two concepts, taking into account the conditions of celebrity and micro-celebrity. In other words, youtubers are users who pursue a video production through *Do it yourself* (DIY) dynamics to become professional content creators. Within a changing environment which combines career and leisure aspirations, youtubers should be

provided with a range of competencies to deal with such professional and social challenges.

Furthermore, music is currently the most popular topic on YouTube (Baños-González, Canorea-Tiralaso, and Rajas-Fernández 2020). An audio-visual format which has become highly relevant among amateur users, who are building new videos to teach, learn, share and create music (Cayari 2017; Vizcaíno-Verdú, Aguaded, and Contreras-Pulido 2021; Eke et al. 2020; Kapaniaris and Stogiannidou 2020). Considering the role of YouTube, music and (micro)influencers, this article aims to understand the self-perception in terms of multimedia, hypermedia, intertextual and transmedia competencies of Spanish-English young music youtubers. This topic has recently gained significant scholarly attention (Smith and Secoy 2019; Cayari 2017; Adeyinka, Okemute, and Tella 2018; Waldron 2013), although these studies have not explored youtubers' own perception of their competencies.

1.2. Musical performance on YouTube

The music industry began broadcasting its content through radio stations and MTV. A communication process that today has been replaced by online systems characterized by extensive intercultural dissemination. In this sense, music videos have become promotional tools for artists and major music labels in the digital society (Airoldi, Beraldo, and Gandini 2016). Music performance has changed the way society listens and watches music today: from concert hall to physical recording and now social media.

Such developments are leading the amateur, professional and corporation content creation (Burgess and Green 2009). As a result, YouTube, the world's most popular video streaming platform hosted by Google has been developed into a global music repository with a vast number of followers. So, as Cheon-Cha et al. (2020) pointed out, the current

structure of the music market has been decentralized. Artists and audiences around the world can now create and remix musical content through on-demand online service that Márquez (2017) called musical "youtubification". In just seven years, music videos take almost fifteen times less to reach one billion visits (Baños-González et al. 2020).

As an interactive mechanism that coordinates creativity and meaning, YouTube introduces identities related to the participatory culture (Sánchez-Olmos and Viñuela 2019). A site where, according to Park, Park, and Park (2018), UGC and company-generated content (CGC) are shared. In other words, we find two different approaches in the field of YouTube music: amateur and professional. Jost (2017) added that the platform originally intended to make the private public, creating great appeal for musicians around the world. So the platform has not only expanded the music industry, but has incorporated a new music market for all users (Viñuela 2020; Tan 2013).

Consequently, to post a music video on YouTube has turned into a contemporary process that Macchiarella (2019) describes as "musiking". This is an emerging procedure towards celebrity and interaction with audiences that have the potential to reshape learning and teaching about music mediated by technologies (Marone and Rodriguez 2019). In this context, Smith and Secoy (2019) referred to the fact that few studies have been carried out on the musical identity of people without a formal musical education.

1.2. Competence approaches in the digital era

When Buckingham (2006) asked why young people needed to know about the digital media, Scolari, Masanet, Guerrero-Pico and Establés (2018) introduced a new question into the field of media education: how can researchers know what young people are doing with digital media. Now we ask: Do young people feel themselves to be learning in the digital arena of ephemeral UGC? We are finding increasing numbers of vlogs, *stories*, *tiktoks*, memes and *likes* on the Net. Thus, it is clear that Generation Z young people are

today immersed in social media where they consume creative images and short-form videos (Álvarez-Ramos, Heredia-Ponce, and Romero-Oliva 2019).

The evolution in media ecology has modified the concept of media education, integrating numerous proposals with new ways of learning through technology. As Scolari (2018) pointed out, we have experienced a transition from the broadcasting to the networking ecosystem, where the inappropriate incorporation of technology into the teaching and learning processes increase pedagogical difficulties. That is, the relevant task of educators is understanding the way in which young people learn today.

According to Masanet, Guerrero-Pico, and Establés (2019), many skills related to digital technologies are currently known. The main issue is that many of these skills are developed through informal learning spaces connected to individual and collective experiences, business interests, relationships with peers and mentors, and civic contexts. Santoveña-Casal and Bernal-Bravo (2019) added that teaching and learning through social media is essential to build links with young people and bringing these experiences into the classroom.

In light of the different perspectives on media and digital competencies addressed by many studies, we need to understand the close relationship between education, communication technologies and competencies. For instance, in their study on the opportunities and risks of Internet use by teenagers, Livingstone and Helsper (2009) emphasized the relevant role of online skills by a questionnaire that collected items related to access, use, Internet literacy skills, self-efficacy, opportunities and risks. Then, Ferrés and Piscitelli (2012) presented a proposal articulated in six dimensions (languages, technology, interaction processes, production and dissemination processes, ideology and values and aesthetics), in order to research the audio-visual, multimedia and hypermedia competencies of the citizens. Mascheroni and Murru (2014) added the advancement of media literacy towards civic literacies through accessing, evaluating and creating content

as democratic self-expressions. Hobbs (2017) highlighted the need to analyze media competencies from different contexts and perspectives within the area of social sciences and humanities, especially the extensive research using performance-based measures. Finally, Pérez-Escoda, García-Ruiz and Aguaded (2019) compiled the five indicators of digital literacy assessment in such a way as to discuss the educational landscape and training interests related to technology-specific issues internationally. Currently, experts invite to develop skills adapted to the new streaming, para-social and social media influencing realities. As Lange (2014) indicated, YouTube is considered a potential place for informal learning between young people: their performative identity, media and technological disposition, interpersonal peer group dynamics, and experiences and viewpoints (Sulaimanu, Nelson, Emejulu, and Tunji, 2019). For this purpose, Scolari et al. (2018) introduced transmedia skills in order to understand the production, sharing and media consumption of youth citizenship.

1.3. Self-perception from literacies

From the perspective of (micro)celebrity identity, the narcissistic nature of social media profiles has been discussed extensively. Barry et al. (2017) emphasized that such narcissism comprises grandiose self-presentation, typified by vanity and a strong desire for feedback from other users. In contrast, Taber and Whittaker (2018) introduced personality (and not narcissism) as the central element for self-building. It could be understood as a pattern created in social media and composed of thoughts, feelings, social attitudes and behaviors, as well as expectations and values. In this sense, self-perception allows us to analyze people's reactions, problem-solving and well-being in digital platforms. Specifically on youtubers, Chen (2014) referred to these profiles as a cross-cultural and digital presentation of the self.

The self-awareness in terms of traditional media and digital platforms represents one of the most analyzed approaches in studies on media, informational and digital competencies in citizenship. From different sociodemographic scopes, media literacy experts have addressed how the citizens self-perceive their access to, use and understanding of both media scenarios. For instance, Rozukalne, Skulte and Stakle (2020) were interested in public perception of media systems. Akcayoglu and Daggol (2019) and Livingstone (2014) focused on self-perception in media competencies of students from childhood to higher educational levels. Mateus, Hernández-Baños and Figueras-Maz (2019) and Ortiz-Colón, Ortega-Tudela and Román-García (2019) focused on those of teachers and schools. And, finally, Mickles and Weare (2020) on the self-perception of subscribers of a YouTube channel dedicated to gameplays. However, none of these studies focused on the self-perception of the creators of the videos themselves, the youtubers.

2. Materials and method

In order to find out the self-perceived multimedia, hypermedia, intertextual and transmedia competencies of young YouTube musicians and the difference between Spanish and English content, we applied a quantitative analysis through a questionnaire.

2.1. Sample

We contacted an initial sample of 631 youtubers (300 English-content and 331 Spanish-content) according to the following inclusion criteria: (1) youtuber; (2) main content in English or Spanish; (3) age between 16 and 35; (4) mainly musical topic; (5) contact (email) available in the "information" section of YouTube. A total of 603 YouTube musicians completed the questionnaire. As noted previously, we considered users who create content on the platform, whether for a large or a small community, as

part of the 'youtuber' category. Accordingly, no parameters relating to followers or interactions were addressed in the inclusion criteria, although we noted the channel with the largest and smallest subscribers for both groups (3,870 to 3,05 million for Spanish, and 6,350 to 12,9 million for English).

They were collected via YouTube, adding the following search criteria: "cover + title of a song included in the MTV hits for the English sample, and the LOS40 hits for the Spanish sample (from December 2019 to February 2020)." Once we compiled all the contacts, we sent the same email requesting participation in the study to the whole sample during the months of March, May, July, September and November 2020.

2.2. Questionnaire creation and validation procedure

We developed the self-perception questionnaire in multimedia, hypermedia, intertextual and transmedia musical competencies (TransMuQ) by applying the variables according to the contributions of Livingstone and Helsper (2009), Jenkins et al. (2009), Ferrés and Piscitelli (2012), Mascheroni and Murru (2014) and Scolari et al. (2018). In parallel, the self-perception element was adopted as a concept of media competence self-evaluation based on the Likert-scale questionnaires of Akcayoglu and Daggol (2019) and Mateus et al. (2019).

The questionnaire included eight dimensions with 52 items, 6 socio-demographic issues and 46 Likert-scale questions. For all these scales, high self-perception of competence was understood as the highest values (e.g., on a scale of 1 to 4, 4 would be a high self-perception).

The items were structured by: (a) aesthetics; (b) participation and interaction; (c) multimodal languages; (d) technology; (e) critical attitude, ideology and citizenship; (f) creation, appropriation and dissemination of content; (g) performance, simulation and games; (h) risks and individual management (see full questionnaire at

<https://doi.org/10.6084/m9.figshare.13503372.v1>). At the same time, in view of the differences between the proposals, the items were discussed according to the type of competence performed. In this sense, we considered the classification of the questions by multimedia (using different physical or digital media to create or communicate information; item 2, 3, 11, 13 and 32), hypermedia (writing and creating content through different media in a navigation that connects some media with others; item 8, 9, 10 and 15), intertextual (relating a cultural product to a pre-existing cultural one; item 1, 4, 5, 12 and 38), transmedia (spreading a text across different media and platforms in a coordinated sequence targeted to engage audiences; item 6, 7, 14, 36 and 39), and others such as technical, ethical or civic competencies (item 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 37, 40, 41, 42, 43, 44, 45, 46).

The instrument was validated by 11 experts in media literacy with $\alpha=.958$, which indicated high reliability. Furthermore, it was translated into English and Spanish.

3. Results discussion

3.1. Sociodemographic data

From an initial sample of 631 individuals, 603 youtubers completed the questionnaire ($n=308$ Spanish-content and $n=295$ English-content). From the English-speaking sample, $n=158$ were women and $n=137$ men; and from the Spanish-speaking sample, $n=159$ women and $n=149$ men. As shown in Table 1, we found a series of outstanding sociodemographic characteristics.

Table 1
Sociodemographic characteristics

| | Country | Occupation | Age | Musical activity in digital platforms |
|-------------------------|-----------------------------|----------------------------|-----------------------|---------------------------------------|
| English-content sample | <i>n</i> =191 United States | | | <i>n</i> =295 YouTube |
| | <i>n</i> =40 United Kingdom | | | <i>n</i> =221 Instagram |
| | <i>n</i> =25 Canada | | | <i>n</i> =175 Twitter |
| | <i>n</i> =13 Australia | | | <i>n</i> =173 Facebook |
| | <i>n</i> =5 Netherlands | | | <i>n</i> =74 Discord |
| | <i>n</i> =5 Sweden | <i>n</i> =136 Employee | <i>n</i> =95 (16-21) | <i>n</i> =45 TikTok |
| | <i>n</i> =5 Norway | <i>n</i> =71 Self-employed | <i>n</i> =88 (22-25) | <i>n</i> =17 Patreon |
| | <i>n</i> =3 Ireland | <i>n</i> =69 Student | <i>n</i> =99 (26-30) | <i>n</i> =12 Spotify |
| | <i>n</i> =3 Belgium | <i>n</i> =19 Unemployed | <i>n</i> =13 (31-35) | |
| | <i>n</i> =1 Austria | | | |
| | <i>n</i> =1 Denmark | | | |
| | <i>n</i> =1 New Zealand | | | |
| | <i>n</i> =1 Finland | | | |
| <i>n</i> =1 Switzerland | | | | |
| Spanish-content sample | <i>n</i> =214 Spain | | | <i>n</i> =308 YouTube |
| | <i>n</i> =40 Mexico | | | <i>n</i> =198 Instagram |
| | <i>n</i> =17 Argentina | | | <i>n</i> =126 Facebook |
| | <i>n</i> =15 Chile | <i>n</i> =120 Employee | <i>n</i> =118 (16-21) | <i>n</i> =100 Twitter |
| | <i>n</i> =10 Colombia | <i>n</i> =109 Student | <i>n</i> =72 (22-25) | <i>n</i> =9 TikTok |
| | <i>n</i> =4 Ecuador | <i>n</i> =40 Self-employed | <i>n</i> =98 (26-30) | <i>n</i> =9 Twitch |
| | <i>n</i> =3 Venezuela | <i>n</i> =39 Unemployed | <i>n</i> =20 (31-35) | <i>n</i> =7 Spotify |
| | <i>n</i> =3 Peru | | | <i>n</i> =5 LBRY |
| | <i>n</i> =1 Guatemala | | | |
| | <i>n</i> =1 Bolivia | | | |

The English-speaking YouTube group was mainly located in the United States (*n*=191) and the United Kingdom (*n*=40), while the Spanish group was located in Spain (*n*=214) and Mexico (*n*=40). It was also found that the musical activity of these samples were primarily focused on YouTube, Instagram, Twitter and Facebook. As an additional proposal, the musicians incorporated other platforms such as TikTok, Twitch, Patreon, Discord, LBRY or Spotify. Then, we developed the analysis of competencies variables using the statistical SPSS 24.0 software.

3.2. Aesthetic dimension data

We started the analysis by the first dimension core with five items (Table 2).

Table 2
Aesthetic dimension

| | N | Min. | Max. | Mean | SD |
|----------|-----|------|------|------|------|
| Item 1.1 | 603 | 2 | 5 | 4.08 | .610 |
| Item 1.2 | 603 | 3 | 5 | 4.12 | .695 |
| Item 1.3 | 603 | 2 | 5 | 3.39 | .749 |
| Item 2.1 | 603 | 2 | 5 | 3.83 | .676 |
| Item 2.2 | 603 | 2 | 5 | 3.66 | .737 |
| Item 2.3 | 603 | 2 | 5 | 3.55 | .806 |

| | | | | | |
|----------|-----|---|---|------|-------|
| Item 2.4 | 603 | 2 | 5 | 3.68 | .905 |
| Item 2.5 | 603 | 3 | 5 | 4.26 | .764 |
| Item 2.6 | 603 | 2 | 5 | 3.82 | .800 |
| Item 2.7 | 603 | 1 | 5 | 3.72 | .874 |
| Item 2.8 | 603 | 2 | 5 | 3.63 | .954 |
| Item 3.1 | 603 | 2 | 5 | 4.30 | .838 |
| Item 3.2 | 603 | 2 | 5 | 4.10 | .937 |
| Item 3.3 | 603 | 2 | 5 | 3.57 | 1.000 |
| Item 3.4 | 603 | 1 | 5 | 3.52 | 1.105 |
| Item 3.5 | 603 | 3 | 5 | 4.46 | .596 |
| Item 3.6 | 603 | 2 | 5 | 4.31 | .949 |
| Item 3.7 | 603 | 1 | 5 | 4.35 | .976 |
| Item 3.8 | 603 | 1 | 5 | 3.79 | 1.228 |
| Item 3.9 | 603 | 2 | 5 | 4.11 | 1.052 |
| Item 4 | 603 | 1 | 4 | 2.81 | 1.006 |
| Item 5 | 603 | 1 | 4 | 2.49 | .879 |
| Valid N | 603 | | | | |

Item 1, "When you watch a music video, how often do you recognize...?", included three questions. The first one (item 1.1), "the topic of the video", introduced $M=4.08$ and $SD=.610$. The second one (item 1.2), "The musical genre", introduced $M=4.12$ and $SD=.695$. And the third one (item 1.3), "Visual aspects that accurately represent the text of the song", presented $M=3.39$ and $SD=.749$. In all three cases we observed a mean close to 4 with SD close to 1. It indicated a high self-perception in recognizing themes, music genres and audio-image concordance in music videos by youtubers, without statistical significance.

We analyzed eight questions for item 2, "When you watch a music video, how satisfied are you with...?". This section also revealed means close to 4 and SD to 1. Youtubers again emphasized the high satisfaction with the visual indicators observed in the music videos. Particularly significant were items 2.5, "Acoustic and visual quality", 2.6 "Musical style" and 2.7 "The performer."

The item 3, "When you create music videos, how much do you pay attention to...?", introduced nine cases. At this point, youtubers paid more attention with means above 4 and SD close to 1 (without statistical significance), for items 3.1, "Lighting"; 3.2, "Perspective and/or camera focus angle(s)"; 3.5, "Acoustic and visual quality"; 3.6, "Musical style"; 3.7, "The presence/absence of the performer(s)"; and 3.9, "The presence/absence of the instrument(s)".

Finally, in the item 4, "When you watch a music video, how often do you perceive pre-existing artistic trends (classical, renaissance, romantic, baroque, impressionist, modernist music...)", we observed $M=2.81$ with $SD=1.006$ (no statistical significance). Over a maximum of 4, we noted a high self-perception to recognize artistic trends in music videos. Also, in item 5, "When you watch a music video, how often do you perceive that it perpetuates or breaks the canons and/or pre-established types of artistic models in the world of video clips (new forms of video editing)?", we found a similar finding. This suggested that youtubers also perceived that they perpetuated or broke the canons and/or pre-established artistic styles in music videos.

3.3. Participation and interaction dimension data

In the "Participation and interaction" dimension we found five items summarized in Table 3.

Table 3
Participation and interaction dimension

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 6 | 603 | 2 | 4 | 3.08 | .651 |
| Item 7 | 603 | 2 | 4 | 3.38 | .571 |
| Item 8 | 603 | 1 | 4 | 2.65 | .862 |
| Item 9 | 603 | 2 | 4 | 3.68 | .574 |
| Item 10 | 603 | 1 | 4 | 1.72 | .944 |
| Valid N | 603 | | | | |

In the item 6, "When you create a music video, do you think that the production of the message can target audiences from different cultures?", the youtubers thought that their videos were mostly targeted to different cultures with a minimum statistical significance ($SD=.651$).

Regarding the item 7, "When you manage your YouTube channel, how much time do you spend caring for your fan community?", we noticed a high level of commitment to community care by YouTube influencers with a minimum statistical spread ($SD=.571$).

Item 8, "When you publish a music video on YouTube, how important is the suitability of the advertising inserts in your content?", showed a $M=2.65$ and $SD=.862$. These data showed that youtubers placed enough significance on the advertising included in their videos.

In the case of item 9, "How often do you broadcast your music videos through other social media or digital platforms?", we observed a very high mean of almost 4, with a minimal statistical dispersion ($SD=.574$). In this sense, music performers usually broadcast their videos through other platforms outside of YouTube.

We also found in item 10, "Do you collaborate with other types of media (TV, radio, print/digital press, etc.) to disseminate your music videos", that youtubers hardly ever disseminate their videos in traditional media ($M=1.72$ and $SD=.944$).

Thus, music youtubers showed a high self-perception of competence in cultural community participation and fan interaction, as well as an inherent concern for sharing their videos across different digital media.

3.4. Multimodal languages data

Table 4 provides the items analyzed for the "Multimodal languages" dimension.

Table 4
Multimodal languages dimension

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 11 | 603 | 1 | 4 | 2.82 | .819 |
| Item 12 | 603 | 3 | 4 | 3.79 | .410 |
| Valid N | 603 | | | | |

The item 11, "Do you choose an audio/video format according to the digital platform?", showed a high mean value. Youtubers pointed out that, in statistical agreement, they usually choose a video-audio format depending on the platform they use to broadcast it. Afterwards, item 12, "When you visualize covers, do you recognize the original piece of music?", showed a mean of almost 4 ($M=3.79$), with a minimum

statistical significance with a wide variation ($SD=.410$). Therefore, youtubers considered that they use and develop multimodal languages without any difficulty.

3.5. Technological dimension data

Regarding the technological issues, in Table 5 we observed the analysis of items related to digital environments, devices, etc.

Table 5
Technological dimension

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 13 | 603 | 1 | 4 | 3.28 | .740 |
| Item 14 | 603 | 1 | 4 | 3.21 | .716 |
| Item 15 | 603 | 1 | 4 | 3.15 | .664 |
| Item 16 | 603 | 2 | 4 | 3.83 | .444 |
| Item 17 | 603 | 1 | 4 | 3.38 | .999 |
| Item 18 | 603 | 1 | 4 | 3.56 | .785 |
| Valid N | 603 | | | | |

The item 13, “YouTube is a hypermedia environment that integrates hypertext (hyperlinked of content) with multimedia (combination of image, video, sound formats, etc.). How do you perform in this environment?”; the item 14, “The transmedia environment is the narration and expansion through different media and platforms. Do you manage adequately in this environment? How do you perform in this environment?”; the item 15, “How easily do you recognize similarities and differences between traditional media, social media, video games, mobile applications, technology industries, software/hardware?”; the item 16, “How often do you use software to edit your music videos (video and image editors, special effects, programming languages, etc.)?”; the item 17, “Do you use additional hardware to edit of your music videos (professional microphones, for example)?”; and the item 18, “How often do you use more than one digital device and/or social media platform simultaneously?”, presented high means for nearly 4 with SD around 1 (except item 16, where a minimum statistical significance of $SD=.444$ was observed). These data indicated that youtubers are considered to be highly

competent in technological and digital terms. The main emphasis in these cases is on editing music videos through image processing software, special effects, etc.

3.6. Critical attitude, ideology and citizenship dimension data

In Table 6 we analyzed the ten items relating to the critical, ideological and citizenship attitude of the youtubers.

Table 6
Dimension of critical attitude, ideology and citizenship

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 19 | 603 | 2 | 4 | 2.93 | .709 |
| Item 20 | 603 | 1 | 4 | 3.15 | .611 |
| Item 21 | 603 | 1 | 4 | 2.01 | .876 |
| Item 22 | 603 | 2 | 4 | 3.01 | .713 |
| Item 23 | 603 | 1 | 4 | 2.51 | .944 |
| Item 24 | 603 | 1 | 4 | 2.72 | .966 |
| Item 25 | 603 | 1 | 4 | 2.23 | 1.086 |
| Item 26 | 603 | 1 | 4 | 2.39 | .947 |
| Item 27 | 603 | 1 | 4 | 3.24 | .646 |
| Item 28 | 603 | 1 | 4 | 3.19 | .839 |
| Valid N | 603 | | | | |

This dimension generally showed a decreasing trend in means. In the item 19, “When you receive/search for information and watch videos in media and digital platforms, how often do you pay attention to the reliability and credibility of the source?”; the item 20, “How aware are you of the positive and/or negative effects that infoxication (information saturation) or disinformation can generate?”; the item 21, “When you produce music videos, how often do you intentionally reflect cultural, political and/or religious values?”; the item 22, “When you consume information on digital media and platforms, how often do you identify values and ideology?”; the item 23, “When you select one or another digital medium/platform, how often do you do so taking into account your values and ideology?”; the item 24, “How often do you actively participate in communities with virtual representation?”; the item 25, “Do you consider yourself part of a socially stereotyped virtual community?”; the item 26, “How often do you actively participate in

breaking established stereotypes?"; the item 27, "When you publish content on digital platforms, are you conscious of their ethical, legal and pre-established policies?"; and the item 28, "When you participate in virtual communities, how do you take into account the ethical and legal implications pre-established by industry and society?", we found means close to 3, which indicated a positive critical attitude. Nevertheless, compared to previous dimensions, self-perception of competence decreases in this case, demonstrating lower critical, ideological and citizenship skills in the youtubers' community. Especially relevant (with means close to 2) are the items about the reflection of ideological, religious and cultural values in music videos, and the items about considering oneself part of a stereotyped community or the reduced involvement in breaking stereotypes.

3.7. Creation, appropriation and dissemination of content dimension data

The dimension related to the contents developed by the youtubers is summarized in Table 7.

Table 7
Dimension of creation, appropriation and dissemination of content

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 29 | 603 | 1 | 4 | 3.18 | .935 |
| Item 30 | 603 | 2 | 4 | 3.56 | .520 |
| Item 31 | 603 | 1 | 4 | 3.14 | .858 |
| Item 32 | 603 | 1 | 4 | 3.24 | 1.044 |
| Item 33 | 603 | 1 | 4 | 3.21 | .922 |
| Item 34 | 603 | 1 | 4 | 3.36 | .789 |
| Item 35 | 603 | 1 | 4 | 3.41 | .616 |
| Item 36 | 603 | 1 | 4 | 2.04 | .911 |
| Item 37 | 603 | 1 | 4 | 1.86 | 1.031 |
| Valid N | 603 | | | | |

Once again, we observed a trend above the high mean (around 3), with two main exceptions. The item 29, "How often do you recognize the differences between an individual and/or a collective audio-visual production?"; the item 30, "How often do you recognize the differences between a professional and non-professional production?"; the item 31, "How often do you recognize the differences between content subject to creative

commons rights and those subject to copyright?"; the item 32, "Are you familiar with the current production systems, as well as the techniques for programming and broadcasting audio-visual content on social media and other digital platforms?"; the item 33, "When you produce, edit and/or audio-visual content in a digital media, are you concerned about infringing the authorship or intellectual property rights of third parties?"; the item 34, "When you produce and/or publish your own content, are you concerned about protecting it (Creative Commons, copyright, patents, etc.)?"; and the item 35, "When you are going to adapt or share content from third parties, how often do you take into account their intellectual property rights and/or reproduction possibilities on YouTube?", reported a mean according to SD which did not show remarkable statistical significance. However, the item 36, "How often do you adapt exiting audio-visual content to produce content with that conveys new meaning?" and the item 37, "How often do you create and/or design your own cosplays/costumes?" were the lowest means ($M=2.4$, $SD=.911$; and $M=1.86$, $SD=.1.031$). In short, youtubers presented a high mean competence in terms of proper source and copyright management. But they only sometimes generated content with new meanings, or created their own costumes.

3.8. Performance, simulation and games dimension data

For the "performance, simulation and games " dimension, we found very low means, as shown in Table 8.

Table 8
Performance, simulation and games dimension

| | N | Min. | Max. | Mean | SD |
|---------|----------|-------------|-------------|-------------|-----------|
| Item 38 | 603 | 1 | 4 | 2.84 | .975 |
| Item 39 | 603 | 1 | 4 | 1.69 | .963 |
| Item 40 | 603 | 1 | 4 | 1.27 | .554 |
| Valid N | 603 | | | | |

Music youtubers did not show a high self-perception about the competencies related to item 38, “How often do you use digital platforms (social media, blogs, wikis, etc.) as a sources to solve real and/or virtual problems?”, item 39, “How often do you adopt alternative virtual identities in order to achieve goals and discover new horizons?” and item 40, “How often do you break the rules of applications, software and hardware through cheating and modification?”. The use of digital media to simulate problems and solve them (or learn how to solve them), as well as adopting other identities to achieve goals or modify software/hardware patterns was not the modus operandi of this community. Thus, we found means around 2 with SD without remarkable statistical significance.

3.9. Risks and individual management dimension data

To conclude, we analyzed the dimension relating to risks, opportunities and individual management of youtubers (Table 9).

Table 9
Risks and individual management dimension

| | N | Min. | Max. | Mean | SD |
|-----------|----------|-------------|-------------|-------------|-----------|
| Item 41 | 603 | 1 | 4 | 2.57 | .771 |
| Item 42 | 603 | 1 | 4 | 2.91 | .877 |
| Item 43.1 | 603 | 1 | 4 | 3.53 | .588 |
| Item 43.2 | 603 | 1 | 4 | 2.34 | .729 |
| Item 43.3 | 603 | 1 | 4 | 3.02 | .687 |
| Item 44.1 | 603 | 2 | 5 | 4.03 | .931 |
| Item 44.2 | 603 | 1 | 5 | 3.52 | 1.183 |
| Item 44.3 | 603 | 1 | 5 | 3.75 | 1.304 |
| Item 44.4 | 603 | 1 | 5 | 3.24 | 1.061 |
| Item 45.1 | 603 | 2 | 4 | 3.23 | .687 |
| Item 45.2 | 603 | 2 | 4 | 3.50 | .542 |
| Item 45.3 | 603 | 1 | 4 | 3.65 | .578 |
| Item 45.4 | 603 | 1 | 4 | 2.70 | .741 |
| Item 45.5 | 603 | 1 | 4 | 2.71 | .715 |
| Item 46.1 | 603 | 1 | 4 | 2.55 | .806 |
| Item 46.2 | 603 | 1 | 4 | 2.15 | .806 |
| Item 46.3 | 603 | 1 | 4 | 3.19 | .655 |
| Item 46.4 | 603 | 1 | 4 | 2.32 | .840 |
| Item 46.5 | 603 | 1 | 4 | 2.96 | .539 |
| Item 46.6 | 603 | 1 | 4 | 1.97 | .743 |
| Item 46.7 | 603 | 1 | 4 | 2.01 | .844 |
| Valid N | 603 | | | | |

In this dimension we found wide disparities between the items. Firstly, we found that the items 43.2, “I am addicted to social media, digital platform(s) or video game(s)”, 46.2, “Creating alternative digital identity makes me feel better”, 46.4, “Following the content or information of unknown third parties makes me feel better”, 46.6, “Social media influences my life negatively” and 46.7, “Technological devices influence my life negatively” showed a mean close to 2 and below. These items reflected a positive attitude of youtubers towards technology and digital platforms. This means that they did not consider themselves addicted to these emerging platforms, nor did they have a negative influence on their lives. They also did not feel better about creating alternative identities or following other people' content (which indicated an interest in the authenticity of their person in the digital environment).

For items 41 (“How often do you use security systems available through software and hardware devices as well as digital platforms to protect your identity, data and privacy?”), 42 (“Are you aware of the risks involved in creating your digital identity on digital platforms?”), 43.3 (“Some family and/or friends are addicted to social media, digital platform(s) or video game(s)”), 44.4 (“Detect, read and accept/reject tracking cookies”), 42.1 (“I manage all my devices with agility and ease”), 45.4 (“I evaluate and manage the time spent using technology and digital platforms”), 45.5 (“I evaluate and manage time by learning about digital technologies and platforms”), 46.1 (“Using social media makes me feel better”), 46.3 (“I experience real emotions when perceiving information through digital and technological means (social media), instant messaging services, etc.”) and 46.5 (“Following the content or information from family/friends or relatives makes me feel better”), We found a higher mean, around 3. This indicated that youtubers were aware of digital identity, privacy and cookie policies, the negative effects of social media and digital platforms on society, the use and learning in these contexts, emotions...

Hence, with a mean around 4, we found the items 43.1 (“I am conscious that technology and digital media can generate different degrees of addiction”), 44.1 (“Indicates how often you are careful about digital content downloads through the Internet”), 44.2 (“Indicates how often you are careful about detect and block hackers on devices”), 44.3 (“Indicates how often you are careful about detect and block hackers on digital platforms”), 42.2 (“I manage online digital platforms with agility and ease”) and 45.3 (“I manage and am able to learn how to use new software/hardware”). To sum up, the last two data sequences (items 41 to 46.5, and 43.1 to 45.3) showed that youtubers perceived themselves as competent in managing the risks and opportunities of these platforms in their daily lives.

3.10. Self-perception contrast of multimedia, hypermedia, intertextual and transmedia competencies between English and Spanish content

After applying the Kolmogorov-Smirnova standard test to all items (as $n \geq 50$), we checked that the significance level is not higher than $K-S(603) = .469$, $p = .001$. Following this test, we applied Mann-Whitney U for non-parametric data.

Table 10

Self-perception differences in competencies between English-Spanish YouTube musicians

| Variables | English-content | Spanish-content | Z | U | p | 1-β | d |
|--|-----------------|-----------------|--------|-----|------|-----|-------|
| | n=295 | n=308 | | | | | |
| Dimensions | Mean Rank | Mean Rank | | | | | |
| Aesthetics | 240.42 | 360.98 | -8.495 | 272 | .001 | 1 | .75* |
| Participation and interaction | 326 | 279.01 | -3.372 | 383 | .001 | .95 | .30** |
| Multimodal languages | 317.18 | 287.46 | -2.293 | 409 | .022 | .96 | .31** |
| Technology | 356.43 | 249.87 | -7.625 | 293 | .001 | 1 | .67* |
| Critical attitude, ideology and citizenship | 308.38 | 295.89 | -.887 | 435 | .375 | .27 | .11 |
| Creation, appropriation and dissemination of content | 299.65 | 304.25 | -.325 | 447 | .745 | .06 | .03 |
| Performance, simulation and games | 296.59 | 307.18 | -.765 | 438 | .444 | .11 | .06 |
| Risks and individual management | 286.75 | 316.61 | -2.112 | 409 | .035 | .77 | .22 |

Note. *High probability. **Medium probability.

To understand the differences between dimensions for youtubers with content in English and Spanish, we examined Table 10. Considering the dimension as an independent variable and the English-Spanish sample as a dependent one, we detected two dimensions with significant statistical differences: (a) aesthetic dimension ($U(N_{\text{english-content}}=295, N_{\text{spanish-content}}=308)=27263.0, z=-8.495, p<.001$); (b) technological dimension ($U(N_{\text{english-content}}=295, N_{\text{spanish-content}}=308)=29373.5, z=-7.625, p<.001$). Both cases were close, but dispersed ($M_{\text{aesthetics-english}}=3.3, SD=.27$ and $M_{\text{aesthetics-spanish}}=3.5, SD=.26$; $M_{\text{technology-english}}=3.5, SD=.22$ and $M_{\text{technology-spanish}}=3.3, SD=.32$).

We also found a significant statistical mean difference in the cases of: (c) participation and interaction ($U(N_{\text{english-content}}=295, N_{\text{spanish-content}}=308)=38350.0, z=-3.372, p<.001$); (d) multimodal languages ($U(N_{\text{english-content}}=295, N_{\text{spanish-content}}=308)=40951.5, z=-2.293, p<.022$). One more time, we found close but dispersed means ($M_{\text{participation-english}}=2.9, SD=.26$. and $M_{\text{participation-spanish}}=2.8, SD=.35$; $M_{\text{languages-english}}=3.4, SD=.22$ and $M_{\text{languages-spanish}}=3.2, SD=.59$).

For the other dimensions, the differences were not particularly significant, so minimal fluctuations were introduced between English and Spanish self-perception: (e) critical attitude, ideology and citizenship ($M_{\text{attitude-english}}=2.7, SD=.23$; $M_{\text{attitude-spanish}}=2.7, SD=.29$); (f) Creation, appropriation and dissemination of content ($M_{\text{content-english}}=2.8, SD=.29$; $M_{\text{content-spanish}}=2.7, SD=.29$); (g) Performance, simulation and games ($M_{\text{performance-english}}=1.9, SD=.39$; $M_{\text{performance-spanish}}=1.9, SD=.37$); (h) Risks and individual management ($M_{\text{management-english}}=2.9, SD=.15$; $M_{\text{management-spanish}}=2.9, SD=.20$).

4. Conclusions

The growth of platforms and the rise of social media such as YouTube have uncovered young profiles born in the digital age. In this environment, UGC created from all over the world with just a smartphone and Internet access, has changed the way we

understand education today. From total amateurism to corporate expertise, the new generations are learning to produce, share, remix and manage communities of thousands and millions of followers (Abidin 2018).

In this sense, we found that much of the research in the area of media education conducted to date about youth dynamics focused exclusively on defining and analyzing pedagogical-technological competencies and strategies (Ferrés and Piscitelli 2012; Hobbs 2017; Pérez-Escoda et al. 2019; Scolari et al. 2018). This study provides a further step forward by offering a self-perception of the youtuber as the main user of the platform. So, through a questionnaire with more than fifty items, we have explored what YouTube musicians think they have learned on the Net through music videos. In other words, we have implemented the Lange's (2014) proposal: understand the point of view of youtubers.

From an essentially musical perspective, considering one of the platform's most performed topics (Cheon-Cha et al. 2020), we asked new questions about the development of multimedia, hypermedia, intertextual and transmedia competencies by non-professional youtubers. We consider that a youtuber, as an Internet (micro)celebrity par excellence, is a highly competent profile on a media, digital, interactive and social scale. This fact increases its significance in our results, but it shows some divergences.

In this case, we looked at a comparative, but equally dedicated sample of youtubers producing videos in English and Spanish. In general terms, these (micro)influencers are self-considered significantly competent in several multimedia, hypermedia, intertextual and transmedia competencies. For example, we analyzed how from an intertextual perspective, they considered themselves highly proficient in recognizing themes, genres and images rooted in music. They were also highly satisfied with content that featured better acoustics and visual quality, as well as videos with a defined musical style and outstanding performer, characteristic of MTV's mainstream music videos (Airoldi et al.

2016). They also believed themselves mainly competent in recognizing artistic trends, along with the transmedia ability to perpetuate or break such canons with new storylines (Sánchez-Olmos and Viñuela, 2019).

Concerning the participating and interactive dimension, musical youtubers are presented as natural members of the digital era, as pointed out by Álvarez-Ramos et al. (2019). For this reason, they prioritized their hypermedia interactions on digital stages, where they target a vast intercultural community, avoiding their immersion in traditional media landscapes. In fact, as a complement to this online trend, youtubers declared that their music videos are indeed designed and adapted for the digital platforms. That is indicative of a high degree of awareness about multimodal languages and identity of the young people (Viñuela 2020; Tan 2013).

Regarding the technological competence to perform in hypermedia, transmedia, video games and social media environments, this group is considered highly proficient. Indeed, they are particularly experienced in editing music videos using software processing systems. Similarly, they also believed themselves extremely transmedia and technical qualified to create, appropriate and disseminate online content, taking into account copyright. In contrast, we found that they considered themselves less skilled in critical attitude, ideology and citizenship, and performance, simulation and games' dimensions. While traditional broadcasting models strongly stereotyped musical genres and artists (Monedero-Morales 2020), in the musical field of YouTube this phenomenon is decreasing. They prioritized technical and transmedia creativity rather than cultural reflection on their music videos. We also found that creating and assuming identities was not their interaction style on the Internet, in contrast to what Pérez-Torres et al. (2018) stated.

Then, in the individual management dimension we verified that young musicians agree worldwide on a technical and ethical self-management skill for responsible content

in social media. That is, as opposed to what they believed with respect to other people (friends, family, followers...), they considered using social media such a positive process to avoid risks and enhance opportunities (Livingstone and Helsper 2009).

Finally, we compared the self-perception of youtubers who produce music videos in Spanish and English, in order to clarify whether these insights are reproduced in a similar way internationally. As commented in the results, the data showed significant differences in aesthetic, technological, participation and interaction competencies, and in multimodal languages. Less relevant differences were found in the case of ideological and citizenship competencies, content creation, performance and risk and individual management. For the first cases, we found the self-perception of young youtubers with English content to be mainly higher compared to Spanish content (except in the case of technical and intertextual aesthetics). Consequently, international youtubers from the United States, United Kingdom, Canada, Australia... feel themselves more skilled than those from Spain, Mexico, Argentina, Chile... The most interesting point of this study, however, is to prove that in both cases youtubers are considered highly multimedia, hypermedia, intertextual and transmedia proficient. This means that although we noticed that some dimensions highlighted more than others, the means trended towards digital optimism.

In short, we present a research that argues for emerging practices from an international musical influencer's amateur-professional perspective, where there are new ways to understand the digital-media experiences requested by Sulaimanu et al. (2019) and others (Livingstone 2014). Although the sample may be considered limited, we propose the basis for a wider research. The study provides the TransMuQ questionnaire with new insights into how these perceptions are reflected or opposed in other key areas such as music (e.g. fashion, parenting vlogs, gamers, etc.), allowing whether self-perception analysis is consistent with the presented competencies of YouTube musicians.

References

- Abidin, Crystal. 2018. *Internet celebrity. Understanding fame online*. Bingley, UK: Emerald Publishing Limited.
- Adeyinka, Tella, Okemute, Felix, and Tella, Adedeji. 2018. "Perception and use of YouTube by music lecturers and librarians in selected tertiary institutions in Kwara State, Nigeria." *International Information and Library Review* 50 (2): 108-128. doi:10.1080/10572317.2018.1435148.
- Airoldi, Massimo, Beraldo, Davide, and Gandini, Alessandro. 2015. "Follow the algorithm: An exploratory investigation of music on YouTube." *Poetics* 57: 1-13. doi:10.1016/j.poetic.2016.05.001.
- Akcayoglu, Duygu-Ispinar, and Daggol, Gokce-Dislen. 2019. "A study on the perceived media literacy level of preparatory year students in a university setting." *Contemporary Educational Technology* 10 (4): 416-429. doi:10.30935/cet.634195.
- Alonso-López, Nadia, and Terol-Bolinches, Raúl. 2020. "Transmedia literacy and social networks: Case study on Instagram as a teaching tool in the university classroom." *Icono 14* 18 (2): 138-161. doi:10.7195/ri14.v18i2.1518.
- Álvarez-Ramos, Eva, Heredia-Ponce, Hugo, and Romero-Oliva, Manuel-F. 2019. "La Generación Z y las redes sociales. Una visión desde los adolescentes en España." *Revista Espacio* 20 (40): 1-13.
- Baños-González, Miguel, Canorea-Tiralaso, Héctor, and Rajas-Fernández, Mario. 2020. "The broadcast of the music video on YouTube. Analysis of the viral capacity of the video clip." *Revista Latina de Comunicación Social* 77: 117-141. doi:10.4185/RLCS-2020-1452.
- Barry, Christopher-T., Reiter, Shari-R., Anderson, Alexandra, Schoessler, Mackenzie, and Sidoti, Chloe. 2017. "Let me take another selfie: Further examination of the

relation between narcissism, self-perception, and Instagram posts.” *Psychology of Popular Media Culture* 8 (1): 22-23. doi: 10.1037/ppm0000155.

Burgess, Jean, and Green, Joshua. 2009. “The entrepreneurial vlogger: Participatory culture beyond the professional-amateur divide.” In *The YouTube reader*, edited by Pelle Snickars, and Patrick Vonderau, 89-107. Stockholm, SE: National Library of Sweden.

Cayari, Christopher. 2017. “Connecting music education and virtual performance practices from YouTube.” *Music Education Research* 20 (3): 360-376. doi:10.1080/14613808.2017.1383374

Chen, Chih-Ping. 2014. “Forming digital self and parasocial relationships on YouTube.” *Journal of Consumer Culture* 0 (0): 1-23. doi: 10.1177/1469540514521081.

Chen, Kuanju, and Cheung, Hoi-Ling. 2019. “Unlocking the power of ephemeral content: The roles of motivations, gratification, need for closure, and engagement.” *Computers in Human Behavior* 97: 67-74. doi:10.1016/j.chb.2019.03.007.

Cheon-Cha, Kyoung, Suh, Minah, Kwon, Gusang, Yang, Seungeun, and Ju-Lee, Eun. 2020. “Young consumers’ brain responses to pop music on YouTube.” *Asia Pacific Journal of Marketing and Logistics* 32 (5): 1132-1148. doi:10.1108/APJML-04-2019-0247.

Eke, Ransome, Li, Tong, Bond, Kiersten, Ho, Arlene, and Graves, Lisa. 2020. “Viewing trends and users’ perceptions of the effect of sleep-aiding music on YouTube: Quantification and thematic content analysis.” *Journal of Medical Internet Research* 22 (8): e15697. doi:10.2196/15697.

Establés, María-José, Guerrero-Pico, Mar, and Contreras-Espinosa, Ruuth-S. 2019. “Jugadores, escritores e influencers en redes sociales: Procesos de

- profesionalización entre adolescentes.” *Revista Latina de Comunicación Social* 74: 214-236. doi:10.4185/RLCS-2019-1328.
- Ferrés, Joan, and Piscitelli, Alejandro. 2012. “Media competence. Articulated proposal of dimensions and indicators.” *Comunicar* 38: 75-82. doi: 10.3916/C38-2012-02-08.
- Hobbs, Renee. 2017. “Measuring the digital and media literacy competencies of children and teens”. *Cognitive Development in Digital Contexts*: 253-274. doi:10.1016/B978-0-12-809481-5.00013-4.
- Jenkins, Henry, Clinton, Katie, Purushotma, Ravi, Robison Alice J, and Weigel, Margaret. 2009. *Confronting the challenges of participatory culture: Media education for the 21st Century*. Chicago: The McArthur Foundation.
- Jerslev, Anne. 2016. “In the time of the microcelebrity: Celebrification and the YouTuber Zoella.” *International Journal of Communication* 10: 5233-5251.
- Jost, Christofer. 2017. “Professionalism as style. Music amateurs on YouTube and the transformation of production techniques.” *Song and Popular Culture* 62: 55-69.
- Kapaniaris, Alexandros, and Stogiannidou, Aggeliki. 2020. “Digital storytelling via YouTube: Traditional orchestras, and musicians.” *World Wide Journal of Multidisciplinary Research and Development* 6 (3): 37-40.
- Lange, Patricia. 2014. *Kids on YouTube: Technical identities and digital literacies*. Walnut Creek, CA: Left Coast Press.
- Livingstone, Sonia, and Helsper, Ellen. 2009. “Balancing opportunities and risks in teenagers’ use of the Internet: The role of online skills and internet self-efficacy.” *New Media & Society* 12 (2): 309-329. doi:10.1177/1461444809342697.
- Livingstone, Sonia. 2014. “Developing social media literacy: How children learn to interpret risky opportunities on social network sites.” *Communications* 39 (3): 283-303. doi: 10.1515/commun-2014-0113.

- Macchiarella, Ignazio. 2017. "Making music in the time of YouTube. Introduction." *Philomusica On-line*: 1-11.
- Marone, Vittorio, and Rodriguez, Ruben-C. 2019. "What's so awesome with YouTube: Learning music with social media celebrities." *Online Journal of Communication and Media Technologies* 9 (4): 1-15.
- Masanet, Maria-Jose, Guerrero-Pico, Mar, and Establés, María-José. 2019. "From digital native to digital apprentice. A case study of the transmedia skills and informal learning strategies of adolescents in Spain." *Learning, Media and Technology* 44 (4): 400-413. doi:10.1080/17439884.2019.1641513.
- Mascheroni, Giovanna, and Murru, Maria-Francesca. 2014. "Digital literacies and civic literacies: Theoretical issues, research questions and methodological approaches". *Hrcak* 20 (2): 31-51.
- Mateus, Julio-César, Hernández-Breña, Wilson, and Figueras-Maz, Mònica. 2019. "Validation of a self-perceived media competence instrument for pre-service teachers." *Culture and Education* 31 (2): 436-464. doi: 10.1080/11356405.2019.1597440.
- Mickles, Maria-S., and Weare, Andrea-M. 2020. "Trying to save the game(r): Understanding the self-disclosure of YouTube subscribers surrounding mental health in video-game vlog comments." *Southern Communication Journal* 85 (4): 231-243. doi: 10.1080/1041794X.2020.1798494.
- Monedero-Morales, Carmen-del-Rocío. 2020. "A proposal for the analysis of female stereotypes in Reggaeton videoclips: Case study of the four most viewed videos in 2018 on YouTube." *Visual Review* 7 (1): 13-26. doi:10.37467/gka-revvisual.v7.2280

- Ortiz-Colón, Ana-M., Ortega-Tudela, Juana-M., and Román-García, Sara. "Percepciones del profesorado ante la alfabetización mediática." *Revista de Ciencias Sociales* 25 (1): 11-20.
- Park, JiHye, Park, JooSeok, and Park, JaeHong. 2018. "The effects of user engagements for user and company generated videos on music sales: Empirical evidence from YouTube." *Frontiers in Psychology* 9 (1880): 1-10. doi:10.3389/fpsyg.2018.01880.
- Pérez-Escoda, Ana, García-Ruiz, Rosa, and Aguaded, Ignacio. 2019. "Dimensions and digital literacy based on five models of development". *Culture & Education* 31 (2): 232-266. doi:10.1080/11356405.2019.1603274.
- Pérez-Torres, Vanesa, Pastor-Ruiz, Yolanda, and Abarrou-Ben-Boubaker, Sara. 2018. "Youtuber videos and the construction of adolescent identity." *Comunicar* 55: 61-70. doi:10.3916/C55-2018-06.
- Rozukalne, Anda, Skulte, Ilva, Stakle, Alnis. 2020. "Media education in the common interest: Public perceptions of media literacy policy in Latvia." *Central European Journal of Communication* 2: 202-229. doi: 10.19195/1899-5101.13.2(26).4.
- Sánchez-Olmos, Cande, and Viñuela, Eduardo. 2019. "Transmedia storytelling, music and videogames: The case of Los Ríos de Alice by Vetusta Morla and Delirium Studios." *Icono 14* 14 (17): 60-82. doi:10.7195/ri14.v17i1.1242.
- Santoveña-Casal, Sonia, and Bernal-Bravo, César. 2019. "Exploring the influence of the teacher: Social participation on Twitter and academic perception." *Comunicar* 58: 75-84. doi:10.3916/C58-2019-07.
- Scolari, Carlos-Alberto. 2018. *Teens, media, and collaborative cultures. Exploiting teens' transmedia skills in the classroom*. Barcelona: H2020 Transliteracy Research Project/Pompeu Fabra University.

- Scolari, Carlos-Alberto, Masanet, Maria-Jose, Guerrero-Pico, Mar, and Establés, María-José. 2018. "Transmedia literacy in the new media ecology: Teens' transmedia skills and informal learning strategies." *El Profesional de la Información* 27 (4): 801-812. doi:10.3145/epi.2018.jul.09.
- Sette, Guilherme, and Quelhas-Brito, Pedro. 2019. "To what extent are digital influencers creative?" *Creativity and Innovation Management* 29 (1): 1-13. doi:10.1111/caim.12365.
- Smith, Raychl, and Secoy, Jacqueline. 2019. "Exploring the music identity development of elementary education majors using ukulele and YouTube." *Journal of Music Teacher Education* 29 (1): 71-85. doi:10.1177/1057083719871026.
- Sulaimanu, Usaini, Nelson, Okorie, Emejulu, Chinenye, and Tunji, Oyedepo. 2019. "Internet, YouTube and informal learning among undergraduate students." *International Journal of Education and Information Technologies* 13: 1-5. doi:10.1080/17439884.2013.783594.
- Tan, Elaine. 2013. "Informal learning on YouTube: Exploring digital literacy in independent online learning." *Learning, Media and Technology* 38 (4): 463-477. doi:10.1080/17439884.2013.783594.
- Taber, Lee, and Whittaker, Steve. 2018. "Personality depends on the medium: Differences in self-perception on Snapchat, Facebook, and Offline." In *In Conference on Human Factors in Computing Systems*, 1-13. Montreal, Canada: ACM. doi: 10.1145/3173574.3174181.
- Viñuela, Eduardo. 2020. "Metanarratives and storytelling in contemporary mainstream popular music: Romeo and Juliet in the making of the star persona." *Text Matters* 10: 1-14. doi:10.18778/2083-2931.10.13.

- Vizcaíno-Verdú, Arantxa, Aguaded, Ignacio, and Contreras-Pulido, Paloma. 2021. "Understanding transmedia music on YouTube through Disney storytelling." *Sustainability* 13 (7): 3667. doi: 10.3390/su13073667.
- Waldron, Janice. 2013. "User-generated content, YouTube and participatory culture on the Web: Music learning and teaching in two contrasting online communities." *Music Education Research* 15 (3): 257-274. doi:10.1080/14613808.2013.772131.
- Xiao, Min, Wang, Rang, and Chan-Olmsted, Sylvia. 2018. "Factors affecting YouTube influencer marketing credibility: A heuristic-systematic model." *Journal of Media Business* 15 (3): 188-213. doi:10.1080/16522354.2018.1501146.