Abstract: Reviews of research have provided insights into the digital media production practices of youth in and out of school. Although such practices hold promise for the language and literacy education of refugee-background youth, no review has yet integrated findings across studies and different digital media production practices to explore this promise. This scoping review summarizes and discusses the key findings from research on varied types of digital media produced specifically by refugee-background youth in and out of school. It situates digital media production practices in the context of this diverse population, which experiences forced migration, and highlights 5 main themes from findings in 42 reviewed articles. Digital media production afforded refugee-background youth: (1) ownership of representations across time and space; (2) opportunity to expand, strengthen, or maintain social networks; (3) identity work; (4) visibility and engagement with audiences; and (5) communication and embodied learning through multimodal literacies.

Keywords: refugees; digital literacy; media production; media literacy; youth media

1. Introduction

The ubiquity of digital media consumption and production in youth's lives prompted the growth of education research that explores how learners access, analyze, evaluate, and produce media in multiple modes of communication, broadly defined as media literacy (Aufderheide 1993). The purpose of this scoping review is to situate scholarship relevant for language and literacy researchers and educators concerning digital media production in the context of its use by refugee-background youth, a diverse population with different language and literacy needs, challenges, and resources. This study analyzes the main themes of findings highlighted by peer-reviewed journal articles examining the digital media production of refugee-background youth. It maps available knowledge and gaps in research so that researchers and educators may gain a better understanding of the affordances of digital multimodal literacy practices for this population of learners and judiciously advance this area of inquiry. Such an enhanced understanding is useful for researchers studying refugee-background youth's literacy needs, challenges, and practices. It is also useful for educators in settlement contexts or refugee camps looking to advance their refugee-background learners through asset-based and culturally responsive pedagogical approaches, as detailed in subsequent sections. The study is guided by the following research question: What are the key findings across peer-reviewed articles pertaining to the affordances of digital media production by refugee-background youth?

1.1. Educational Affordances of Digital Media Production

In the field of language and literacy education, the widely cited argument from the New London Group (1996) posits that 21st century education should foster learners to become media-literate so that they can harness both the affordances of digital and nondigital communication in multiple modes (including multiple languages) and their own diverse social, linguistic, and cultural backgrounds. Through such a “pedagogy of
multiliteracies” (New London Group 1996) that connects multimodal communication (a central component of media literacy) with the salience of cultural and linguistic diversity and inclusion, learners from various backgrounds may become agentive, creative, and critical designers with access to social power, civic participation, economic gain, global citizenship, and diverse lifeworlds (Serfani and Gee 2017).

Studies in language and literacy education describe a multitude of affordances for media production inside and outside of the classroom. A prominent affordance is facilitating youth’s engagement in learning. Encouraged to produce media in multiple modes, youth are given more entry points to learning and texts (e.g., Jewitt 2008). They also gain enhanced opportunities to express, negotiate, and develop their identities as well as their authorial and expert voices (e.g., Jiang 2018; Smith 2014). Importantly, media production can be a highly collaborative effort, and in such cases it has been shown to enhance interaction and collaboration among youth (e.g., Vasudevan and Riina-Ferrie 2019). Indeed, for its potential to engage learners in thinking and interaction through multiple modes, researchers have suggested that media production can support academic content learning across the curriculum, which still represents an emerging area of research (Smith et al. 2020). Finally, studies have also shown how youth engagement in participatory media (e.g., participatory video, Photovoice, youth radio, among other types) can help them take up agentive stances against inequitable systems and collaboratively promote social change. Especially in such projects, media production can enhance youth’s capacity for reflexivity, meta-awareness, and critical thinking situated in different social, cultural, economic, and political contexts (e.g., Mitchell et al. 2017; Chávez and Soep 2005).

Media production could be particularly advantageous for second or additional language learners not only in all of the abovementioned ways (Smith et al. 2020), but also by facilitating learners’ investment (Norton 2013) in language and literacy learning. Allowing learners to express themselves in multiple modes (and multiple languages) could shed light on the social and cultural capital that they currently possess and that which they desire to obtain—their investment in language and literacy learning. If this social and cultural capital is then affirmed, students’ possibilities for realizing their investment and increasing their competence will be enhanced (Jiang 2018; Norton 2013). Furthermore, affirming students’ social and cultural capital through media production in multiple modes essentially highlights their communicative repertoires as resources rather than deficits (e.g., Darvin and Norton 2014; Emert 2013). In turn, this could help complicate stakeholders’ often reductive and stereotypical understandings of second or additional language learners from migrant backgrounds (e.g., upward mobility and reinvention for immigrants or victimhood and helplessness for refugees (Campano and Low 2011)). Finally, in the case of participatory media, inquiries that facilitate youth’s collective agency could foster social support and change (e.g., Brown et al. 2019).

1.2. Refugee-Background Youth

This study recognizes that the socially constructed category of youth, a broader concept than the development-oriented term ‘adolescence,’ is constructed differently across time and between societies. As such, it is tied to less specific age ranges than the term adolescence (Furlong 2013). The category of youth can thus be understood more broadly as “a period of semi-dependence that falls between the full dependency that characterizes childhood and the independence of adulthood” (Furlong 2013, p. 3). Therefore, studies that involved participants ranging from age 10 to 20 (young adolescence, late adolescence, young adulthood) were included in this review to accommodate this diversity in what might be categorized as youth in different contexts across the globe.

Importantly, the terms ‘second language learners’ or ‘additional language learners’ mask crucial differences between such learners related to the contexts of their migration experiences. One aspect that accounts for some of those differences is forced migration (or
Forced migration \(^1\) is a core component of the legal definition of a refugee, a person who “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership in a particular social group, or a political opinion, is outside the country of their nationality and cannot return” (United Nations 1951, p. 6). Forced migration is also crucial to the definition of asylum-seekers, who await the institutional evaluation of their forced displacement in the hope of acquiring the legal designation ‘refugee,’ as well as to unaccompanied children or youth, defined as refugees or asylum seekers who are forced to migrate without the protection and care of their parents or legal guardians (Rogers et al. 2018). Indeed, these terms are important for recognizing differences in learners’ migration backgrounds, yet it is also crucial to avoid using these terms in ways that essentialize learners.

This study follows other scholars in using the term ‘refugee-background youth’ (as opposed to ‘refugee youth’ or ‘refugee students’) to acknowledge that “the refugee condition is typically—and ideally—a short-term label rather than a permanent identity” (Shapiro et al. 2018, p. 24). Although the label ‘refugee’ describes the state of asylum (before resettlement), and may thus be accurately used to describe learners in refugee camps, the term ‘refugee’ is too often negatively and stereotypically associated with helplessness and victimization (e.g., Malkki 1996). The current study mainly uses the label ‘refugee-background youth’ to avoid such essentialization, while also acknowledging that this population merits a distinction from youth populations with other migration backgrounds. Admittedly, as labels are always limiting and relative, the label ‘refugee-background youth’ may still obscure some of the diversity of these youth’s experiences of migration and settlement, but an effort will be made to avoid such obscurity whenever possible.

As others have noted (e.g., Warriner et al. 2020), refugee-background youth differ in their migration experiences as well as in their experiences of schooling, levels of literacy in their first language(s) (L1), and proficiency and literacy in their additional language(s) (e.g., English). Refugee-background youth may face particularly grave educational challenges—as compared to youth from other migrant backgrounds—due to the forced nature of their migration and the likelihood of difficult experiences. These difficult experiences may include war, continuous lack of nutrition or adult care, separation from or loss of family members, trauma, interrupted schooling, limited literacy, and difficult transitions, as well as acculturation challenges (e.g., McBrien 2005; Reynolds and Bacon 2018). Refugee-background youth may also have a high dropout rate from schools, as studies in Canada have shown (e.g., Gunderson 2007).

### 1.3. Media Production in the Education of Refugee-Background Youth

Education is crucial in providing opportunities for refugee-background youth and for facilitating their integration in the settlement context. However, attending to the complexity of their experiences is a challenging feat for schools (see reviews in McBrien 2005; Reynolds and Bacon 2018). In practice, refugee-background learners may experience racism, discrimination, or devaluation (e.g., Ömerbašić 2015; Mendenhall et al. 2017), teachers may become overwhelmed by the diverse ways in which these youth’s lived experiences manifest in the classroom (e.g., Warriner et al. 2020), and limited research on this population may perpetuate the lack of teachers’ full preparedness to meet youth’s needs (e.g., Shapiro et al. 2018). Studies also noted the prevalence of deficit-oriented educational approaches that focus mostly on remediation (Emert 2013; Shapiro et al. 2018). Deficit-oriented approaches de-emphasize the agency, resilience, and the varied social, cultural, semiotic, and intellectual resources that refugee-background youth have, i.e., their funds of knowledge (Moll et al. 2005).

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\(^1\) In this study, forced migration does not refer to populations other than refugees whose migration was involuntary, e.g., through slavery, colonization, conquest, or forced labor (Ogbu 1992). In fact, refugees form a category that cannot fit within Ogbu’s (1992) typology of voluntary and involuntary migrants, which some scholars critiqued as potentially oversimplified (e.g., Cummins 2000).
Scholars advocate for other educational approaches to counter these challenges (e.g., Mendenhall et al. 2017). For example, asset-based and culturally responsive approaches value and develop refugee-background youth’s funds of knowledge (Warriner et al. 2020). Specifically, studies have highlighted the usefulness of building on refugee-background youth’s multimodal (including multilingual) communicative repertoires and funds of knowledge (e.g., Emert 2013; Shapiro et al. 2018; Reynolds and Bacon 2018; Mendenhall et al. 2017; Bigelow et al. 2017; Kennedy et al. 2019). Therefore, digital media production holds promise for the language and literacy education of refugee-background youth by making visible and unpacking the complexities of their experiences, while also enhancing refugee-background youth’s prospects of becoming agentive, creative, and critical designers with access to social power, economic gain, global citizenship, and diverse lifeworlds, no less than their migrant and nonmigrant background peers (e.g., Emert 2013; 2014b; Leurs et al. 2018).

A recent scoping review specifically explored digital storytelling as a means to promote sexual health and well-being of young migrants and refugees, determining that it can raise ethical challenges (e.g., identifiable images), and is often considerably time- and resource-intensive, limiting the number of organizations that have the capacity to undertake digital storytelling sustainably (Botfield et al. 2018). However, the study highlighted digital storytelling’s potential to empower participants in self-representation, develop their confidence in producing digital media, and facilitate social activism.

Reviews of research on digital media production have explored its affordances for learners in general, including second or additional language learners (Miller 2013; Smith 2014; Smith et al. 2020), but no research has yet summarized and discussed findings from peer-reviewed journal articles to explore the affordances of digital media production practices specifically in regard to refugee-background youth. The current study provides a scoping review of research, relevant for language and literacy researchers and educators, that goes beyond one form of digital media production. It synthesizes and discusses the main themes of findings related to the affordances of various kinds of digital media production specifically for refugee-background youth.

2. Theoretical Perspectives

The study considers refugee-background youth’s digital media productions as literacy practices, and is informed by three complementary theoretical perspectives: (1) A multiliteracies, sociocultural approach to literacy, which accounts for how meanings in multiple modes (and languages) are constructed socioculturally and historically; (2) an embodied cognition approach to meaning-making, which accounts for how abstract meanings are metaphorically constructed and understood through concrete representations; and (3) a transnational literacies approach, which accounts for how meaning-making practices are used to construct and maintain multistranded relationships across geographical and national boundaries. Each perspective is discussed in turn below.

A multiliteracies, sociocultural approach to literacy considers literacy practices not only as reading and writing in language, but also as processes of multimodal design that comprise the linguistic (including multiple languages) alongside the visual, spatial, gestural, and audial modes (New London Group 1996). The perspective is situated in sociocultural theories, according to which literate agents draw from and negotiate various socio-historically provided communicative resources, as opposed to autonomous skills that are similar across contexts (Street 1984). Those sociohistorically provided resources, which spread across multiple modes, serve as cultural tools that mediate—through their affordances and limitations—how agents represent meaning situated in and enacted as social action (e.g., Vygotsky 1978; Wertsch 2009).

Furthermore, the use of such cultural tools and resources in literacy practices constitutes—and is constituted by—agents’ (social) identities (Norton 2013). When learners engage in literacy practices, they invest in an identity, defined as “the way a person understands his or her relationship to the world, how that relationship is structured across time and
space, and how the person understands possibilities for the future” (Norton 2013, p. 4). Originally conceived through studies of language learners, these constructs of identity and investment have also been used to show how learners participate in multimodal literacy practices when the social, cultural, and semiotic capital that they currently possess, as well as that which they desire to obtain—i.e., their investment (Norton 2013)—is recognized and affirmed (e.g., Jiang 2018).

An embodied cognition approach to meaning-making posits that a continuity exists between ‘lower-level,’ i.e., “felt before known” (Johnson 2018, p. 15) sensory-motor (experiential) modes of interaction, and ‘higher-level’ cognitive functions, such as conceptualization and reasoning. According to embodied cognition theory, humans have evolved in such a way that basic structures used for perceiving space and moving within it, i.e., sensory-motor structures (such as the sense of warmth), could be applied to higher-order abstract thinking (e.g., understanding the abstract notion of affection through the experience of warmth). Central to the theory is that such conceptual connections are metaphorical because they are made across different domains (Johnson 2018).

Scholars have begun to employ the embodied cognition theory alongside multiliteracies approaches to literacy to unpack how learners understand and learn about abstract concepts in an embodied way, using concrete and multimodal representations situated in specific sociocultural circumstances (Miller 2013; McVee et al. 2017; Miller and McVee 2013). Arguably, this perspective is useful for educational approaches that seek ways to identify, describe, and then incorporate diverse learners’ funds of knowledge (Moll et al. 2005) in school learning and for approaches that aim to understand how learning takes place in multiple modes.

An embodied cognition approach to meaning-making directs researchers to unpack ways in which agents make use of concrete representations—metaphorically—to make sense of abstract concepts. The approach has the potential to reveal how learners use their embodied experience to understand abstract concepts inside or outside the curriculum. Such an enhanced understanding of embodied learning could help identify ways of better connecting refugee-background learners with diverse backgrounds to school learning.

A transnational approach to literacy values learners’ diverse backgrounds, particularly learners from migrant backgrounds, by focusing on exploring the connections between learners’ communicative practices and the relationships that learners develop across “cultural, ideological, linguistic, and geopolitical borders and boundaries of all types but especially those of nation states” (Duff 2015, p. 37). Increased movement of people across national borders due to lower travel costs, coupled with major advances in technology, has allowed for the mobile, immediate, and live exchange of information in multiple semiotic modes. In turn, this has given immigrants and sojourners the ability to (1) navigate multiple connections to different cultures and spaces, and (2) identify with lived or imagined experiences in different cultures and spaces (Duff 2015). These combined phenomena broadly define transnationalism (Appadurai 1996; Vertovec 2009). Additionally, these multistranded connections span more than the origin and settlement contexts “but also other sites around the world that connect migrants” (Lam and Warriner 2012, p. 193).

Scholars have previously advocated for a transnational literacies perspective to examine the literacy practices that learners engage in across national boundaries, so that cross-boundary activities can be incorporated into classroom practices, and thereby contribute to learners’ investment in language, literacy, and school learning (e.g., Darvin and Norton 2014; Duff 2015; Lam and Warriner 2012).

Whereas the multiliteracies, sociocultural perspective guided the literature search (see Table A1 in Appendix A), all three perspectives informed the analysis as complementary lenses through which emerging descriptive patterns were illuminated, brought into focus, and discerned. The perspectives are complementary in that an embodied cognition approach illuminates the experiential grounding of meaning-making practices; a multiliteracies, sociocultural approach highlights meaning-making’s sociocultural contexts; and
a transnational literacies approach focuses on how meaning-making practices can cross geopolitical borders to construct and maintain learners’ multiple connections to different cultures and spaces.

3. Methods

O’Brien et al. (2016) defined a scoping review as “a form of knowledge synthesis that addresses an exploratory research question aimed at mapping key concepts, types of evidence, and gaps in research related to an emerging area or field by systematically and iteratively searching, selecting, summarizing and potentially synthesizing existing knowledge” (p. 9). Different from systematic reviews, scoping reviews do not attempt to answer targeted questions by seeking the best available evidence (e.g., about the effectiveness of programs). Instead, they chart a field, provide increased conceptual clarity about findings and gaps in research, and are designed to include a variety of methodologies and study types (O’Brien et al. 2016; Arksey and O’Malley 2005). Therefore, in contrast to systematic reviews, scoping reviews do not assess the quality of evidence, a task that would necessitate narrowing down the scope to a specific intervention, program, or methodology (in qualitative studies, varying epistemologies may further require different approaches for assessing validity or trustworthiness). Rather, scoping reviews help identify shared findings and understandings arising from research with certain populations or contexts using a variety of methods in an uncharted area of inquiry, better placing researchers, policymakers, and practitioners to make further use of the findings (Arksey and O’Malley 2005).

This study methodically followed the 5-stage framework offered by Arksey and O’Malley (2005) for conducting a scoping review. Table A1 (see Appendix A) presents a comprehensive description of each stage, including the analytic procedures of the inductive thematic analysis (Braun and Clarke 2006), which was used to synthesize and analyze the key findings across the different articles.

4. Findings and Discussion

Section 4.1 details the characteristics of the studies and their participants. Sections 4.2–4.6 specify and discuss five prominent, interlocking, and mutually inclusive themes of findings related to the affordances of digital media production for refugee-background youth: (1) Ownership of representations across time and space; (2) expanding, strengthening, or maintaining social networks; (3) identity work; (4) visibility and engagement with audiences; and (5) communication and embodied learning through multimodal literacies. Each theme is discussed through the theoretical lenses of the multiliteracies, embodied cognition, and transnational approaches.

4.1. Characteristics of Studies and Participants

A total of 42 journal articles were included in this review based on the inclusion criteria in Table A1 (see Appendix A). They were published between 2001 and 2019, though year of publication was not a criterion in the search or inclusion criteria.

As explained in Section 1.2 and Table A1 (see Appendix A), all studies focused predominantly on participants aged 10–20. Most articles involved only participants aged 12 to 18 years. Of the articles, 12 also included participants over 18 (in addition to participants aged 12–18), and of these 12 articles, 2 included participants up to 30-years-old, and 1 included participants aged 34. Similarly, one article also included 5-year-olds, and two other articles also included 8-year-old participants. Seven articles did not specify exact ages of participants but referred to them as “young people,” “youth,” “adolescents,” or “middle school children.”

In the articles that reported some information about linguistic repertoires, participants used a variety of different languages as their L1(s), namely Amharic, Arabic, Burmese, Farsi, Karen languages (e.g., Poe, Sgaw), Kirundi, Kunama, Kurdish, Nuer, Somali, Spanish, Swahili, Thai, Tigrinya, and Vietnamese, including varying levels of proficiency and literacy in English as a second or additional language.
Accounting for the complexity of refugee-background youth’s experiences necessitates comprehensively documenting their diverse characteristics. Although information about the number of participants, their gender, and age was available in most articles, information about the amount of time participants had spent in the settlement or asylum context was available in only 48% of the articles (20), with four of those articles reporting participants spending more than 5 years in the settlement context. Furthermore, details regarding participants’ linguistic repertoires (i.e., their knowledge in speaking, listening, reading, and writing in different languages) were reported in only 33% of the articles (14), and descriptions of participants’ educational backgrounds was reported in only 24% of the articles (all 10 mentioned interrupted schooling and limited access to education). Studies that did provide detailed contextual information included Gilhooly and Lee (2014) and Omerbašic (2015).

Of the articles, 85% (36) were situated in refugee-background youth’s settlement context, and five articles were situated in refugee camps (one article included both contexts Guerrero and Tinkler (2010)). Furthermore, only three articles reported included asylum seekers (Rogers et al. 2018; Dattatreyan 2015; López-Bech and Zuñiga 2017).

Summaries of the articles’ characteristics—including additional information about participants—are presented in Table 1 below. Notably, few articles (11) specified how trustworthiness of analysis was established (e.g., member checks, multiple coders, triangulation, collaborative analysis, involvement of youth in interpretation of artifacts), and not all studies specified their methodological design, data types, and data analysis methods, although all were evidently qualitative.

Table 1. Characteristics of reviewed journal articles, participant characteristics, and themes of key findings (N = 42).

<table>
<thead>
<tr>
<th>Publication year</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015–2019</td>
<td>24</td>
<td>57</td>
</tr>
<tr>
<td>2010–2014</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>2001–2009</td>
<td>5</td>
<td>12</td>
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</table>

<table>
<thead>
<tr>
<th>Methodological design ¹</th>
<th>N = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participatory media</td>
<td>21</td>
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<tr>
<td>Ethnographic approach</td>
<td>12</td>
</tr>
<tr>
<td>Case study</td>
<td>6</td>
</tr>
<tr>
<td>Qualitative (generally)</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data types ¹</th>
<th>N = 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>25</td>
</tr>
<tr>
<td>Youth-produced media</td>
<td>24</td>
</tr>
<tr>
<td>Observations</td>
<td>13</td>
</tr>
<tr>
<td>Field notes</td>
<td>11</td>
</tr>
<tr>
<td>Focus groups</td>
<td>8</td>
</tr>
<tr>
<td>Video-recorded observations</td>
<td>6</td>
</tr>
<tr>
<td>Audio-recorded observations</td>
<td>2</td>
</tr>
<tr>
<td>Survey</td>
<td>1</td>
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<tr>
<td>Researcher-produced media</td>
<td>1</td>
</tr>
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<table>
<thead>
<tr>
<th>Description of data analysis approach</th>
<th>N = 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extracurricular ²</td>
<td>30</td>
</tr>
<tr>
<td>Non-instructional context ³</td>
<td>6</td>
</tr>
<tr>
<td>In school, as part of the curriculum</td>
<td>6</td>
</tr>
</tbody>
</table>

¹ Excluding Rogers et al. (2018) and López-Bech and Zuñiga (2017) who did not specify.
² Excluding López-Bech and Zuñiga (2017) who did not specify.
³ Excluding Rogers et al. (2018) who did not specify.
Table 1. Cont.

<table>
<thead>
<tr>
<th>Country of study</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>13</td>
</tr>
<tr>
<td>Australia</td>
<td>12</td>
</tr>
<tr>
<td>Other 4</td>
<td>10</td>
</tr>
<tr>
<td>Canada</td>
<td>4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
</tr>
<tr>
<td>South Korea</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Type of digital media production</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photography</td>
<td>29</td>
</tr>
<tr>
<td>Video</td>
<td>26</td>
</tr>
<tr>
<td>Audio</td>
<td>8</td>
</tr>
<tr>
<td>Social media</td>
<td>6</td>
</tr>
<tr>
<td>Photo collage</td>
<td>4</td>
</tr>
<tr>
<td>Hypermedia</td>
<td>1</td>
</tr>
<tr>
<td>Website</td>
<td>1</td>
</tr>
<tr>
<td>Digital mapping</td>
<td>1</td>
</tr>
<tr>
<td>Presentation software</td>
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<table>
<thead>
<tr>
<th>Number of participants</th>
<th>N = 39</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–10</td>
<td>16</td>
<td>41</td>
</tr>
<tr>
<td>11–20</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>20–30</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>31–40</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>More than 40</td>
<td>6</td>
<td>15</td>
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<table>
<thead>
<tr>
<th>Gender representation</th>
<th>N = 31</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>18</td>
<td>58</td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Youth country of origin</th>
<th>% (of all countries in the articles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East 5</td>
<td>32</td>
</tr>
<tr>
<td>Northeast Africa 6</td>
<td>16</td>
</tr>
<tr>
<td>Southeast Asia 7</td>
<td>14</td>
</tr>
<tr>
<td>Other 5</td>
<td>10</td>
</tr>
<tr>
<td>East Africa 9</td>
<td>10</td>
</tr>
<tr>
<td>East Asia 10</td>
<td>5</td>
</tr>
<tr>
<td>West Africa 11</td>
<td>5</td>
</tr>
<tr>
<td>Southeast Europe 12</td>
<td>4</td>
</tr>
<tr>
<td>South America 13</td>
<td>4</td>
</tr>
</tbody>
</table>

Themes of key findings 1

Identity work (N = 33)

Asthana (2017); Barley and Russell (2019); Bau (2017); Berman et al. (2001); Bigelow et al. (2017); Rogers et al. (2018); Dattatreyan (2015); De Leeuw and Rydin (2007); Due et al. (2016); Emert (2013, 2014a, 2014b); Gifford and Wilding (2013); Gilhooly and Lee (2014); Green and Kloos (2009); Guerrero and Tinkler (2010); Harris (2011); Hepple et al. (2014); Jang and Kang (2019); Johnson and Kendrick (2017); Karam (2018); Lems et al. (2016); Leurs (2017); Leurs et al. (2018); López-Bech and Zúñiga (2017); Luchs and Miller (2016); McBrien (2005); Nunn (2010); Omerbašić (2015); Rodriguez-Jimenez and Gifford (2010); Shadduck-Hernández (2006); Vanek et al. (2018); Wilding (2012)
Table 1. Cont.

<table>
<thead>
<tr>
<th>Themes of key findings</th>
<th>Coded articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership of representations across time and space (N = 31)</td>
<td>Asthana (2017); Bui (2017); Berman et al. (2001); Bigelow et al. (2017); Rogers et al. (2018); Dattatreyan (2015); De Leeuw and Rydin (2007); Donald (2019); Due et al. (2016); Emert (2013, 2014b); Fairey (2018); Gifford and Wilding (2013); Gilhooly and Lee (2014); Green and Kloos (2009); Jang and Kang (2019); Kim et al. (2015); Lems et al. (2016); Leurs (2017); Leurs et al. (2018); McBrien and Day (2012); Nunn (2010); Omerbašic (2015); Robertson et al. (2016b); Robertson et al. (2016a); Rodríguez-Jiménez and Gifford (2010); Sastre et al. (2019); Shadduck-Hernández (2006); Sonn et al. (2013); Wilding (2012); Yohani (2008)</td>
</tr>
<tr>
<td>Communication and embodied learning through multimodal literacies (N = 23)</td>
<td>Asthana (2017); Barley and Russell (2019); Berman et al. (2001); Bigelow et al. (2017); Dattatreyan (2015); De Leeuw and Rydin (2007); Emert (2013, 2014b); Hepple et al. (2014); Jang and Kang (2019); Johnson and Kendrick (2017); Karam (2018); Kim et al. (2015); Lems et al. (2016); McBrien and Day (2012); Nunn (2010); Omerbašic (2015); Robertson et al. (2016a); Rodríguez-Jiménez and Gifford (2010); Shadduck-Hernández (2006); Vanek et al. (2018); Yohani (2008)</td>
</tr>
<tr>
<td>Visibility and engagement with audiences (N = 22)</td>
<td>Bui (2017); Rogers et al. (2018); Dattatreyan (2015); Emert (2013, 2014a, 2014b); Fairey (2018); Gifford and Wilding (2013); Harris (2011); Johnson and Kendrick (2017); Karam (2018); Leurs et al. (2018); López-Bech and Zúñiga (2017); Luchs and Miller (2016); McBrien and Day (2012); Nunn (2010); Rodríguez-Jiménez and Gifford (2010); Sastre et al. (2019); Shadduck-Hernández (2006); Vanek et al. (2018); Wilding (2012); Yohani (2008)</td>
</tr>
<tr>
<td>Expanding, strengthening, or maintaining social networks (N = 20)</td>
<td>Asthana (2017); Bui (2017); Dattatreyan (2015); De Leeuw and Rydin (2007); Gifford and Wilding (2013); Gilhooly and Lee (2014); Green and Kloos (2009); Hepple et al. (2014); Jang and Kang (2019); Karam (2018); Leurs (2017); Leurs et al. (2018); López-Bech and Zúñiga (2017); McBrien and Day (2012); O’Mara and Harris (2016); Omerbašic (2015); Robertson et al. (2016a); Sastre et al. (2019); Vanek et al. (2018); Wilding (2012)</td>
</tr>
</tbody>
</table>

1 Categories are not mutually exclusive. Some studies were coded for more than one category. 2 Including afterschool and community programs. 3 The research was conducted in a context where no program of study was provided to participants. 4 Nepal, Philippines, Palestine, Uganda, India, Belgium, Colombia, Germany, Greece, Italy. 5 Afghanistan, Iran, Iraq, Iraqi Kurdistan, Kuwait, Pakistan, Palestine, Syria, Turkey, Yemen. 6 Ethiopia, Somalia, Sudan. 7 Burma, Cambodia, Philippines, Vietnam. 8 South Asia: Bhutan, Nepal, Central Africa: Congo; Southern Africa: Zambia, Zimbabwe; Oceania: Samoa, Papa New Guinea; East Europe: Croatia. 9 Burundi, Djibouti, Eritrea, Kenya, Rwanda, Tanzania, Uganda. 10 China, Mongolia, North Korea, Taiwan. 11 Gambia, Ghana, Guinea, Liberia, Sierra Leone. 12 Bosnia, Romania, Albania, Kosovo. 13 Colombia, Ecuador, Peru.

4.2. Ownership of Representations Across Time and Space

Youth’s representations of space and time varied between showing the mundane and the difficult, yet they often expressed resolve to change how they were perceived by others, and their representations defied potential stereotypical conceptions of their experiences of different spaces and times. As such, many studies (see Table 1) have shown how digital media production, either initiated by researchers, educators, or by refugee-background youth, provides youth with opportunities to take up the “symbolic power” (Leurs et al. 2018, p. 442) afforded by framing their representations of themselves. For example, in a participatory (Photovoice) project, unaccompanied asylum-seeking youth in the United Kingdom, 7 boys aged 14 to 16 from Afghanistan and Albania, shared more than 100 images of everyday ordinary objects such as school buses, and skateboards. These images were interpreted as attempts to foreground their identities as ordinary youth over
their identities as asylum-seekers, opposing the ‘othering’ and stereotyping gaze of locals in the settlement context (Rogers et al. 2018). In another study showing youth defying stereotypical conceptions, Leurs (2017) reported a young man from Syria, resettled in the Netherlands who manipulated a photo of a fake Syrian welcome sign to include the negative wording “No internet, no phones, no flights, no water” (p. 692) and posted it to Instagram. The participant explained that he did this to critique stereotypical and historical conceptions of Syria as a faltering, uncivilized state before the war. In these examples and many other cases, refugee-background youth took ownership of their representations and utilized the symbolic power of digital media production in a way that defied potential stereotypical representations.

Refugee-background youth recorded a variety of spaces, such as their homes (e.g., Jang and Kang 2019), classrooms (Due et al. 2016), favorite playgrounds or beaches (e.g., Gifford and Wilding 2013; Guerrero and Tinkler 2010), refugee camps and home countries (as inhabitants, visitors, or through online media; e.g., Omerbašić 2015; Green and Kloos 2009), virtual gaming spaces (e.g., Karam 2018), and migration routes (e.g., Lems et al. 2016). Youth documented themselves (e.g., Emert 2014b; Leurs et al. 2018); their families, friends, and relatives (e.g., Robertson et al. 2016a); their experiences of military oppression (e.g., Asthana 2017); or their cultural and linguistic practices (e.g., Omerbašić 2015; Gilhooly and Lee 2014; Wilding 2012). For example, Gilhooly and Lee (2014) showed how three 15- and 18-year-old Karen brothers who resettled in the United States in the preceding 2 to 3 years skillfully crafted images and videos using different languages to represent the political struggle of the Karen people against the Burmese government, to share experiences from their lives in refugee camps, and to refashion traditional Karen songs.

Furthermore, refugee-background youth used media to share personally significant past, present, or future moments in time. For example, in a photo novella study (Berman et al. 2001) involving 11- to 14-year-old youth from Bosnia who resettled in Canada, a participant filmed a bridge near her Canadian home that opened a conversation about the unforgettable bombing of a major bridge in Mostar, Bosnia, an event that was recalled by all youth in the study. In another study, situated in an afterschool media club for youth from North Korea who resettled in South Korea (Jang and Kang 2019), participants used images to convey and process emotions and stories about their past, present, or future lives. In this case, an image of a local hospital represented one participant’s aspiration to become a doctor, accompanied by an image of moving cars that illustrated her determination to fulfill that aspiration.

In capturing and curating audio and/or visual recordings of these different spaces and times, youth invited researchers, educators, and community members to see how they perceived their past and current lives, how they were trying to integrate their varied experiences, and how they hoped to transform the precariousness of their settlement contexts or refugee camps to a sense of familiarity and safety. In affording them the symbolic power of owning their representations across time and space, digital media production helped refugee-background youth defy potential stereotypical representations of themselves and “remake, reimagine and reconstitute places as a way to garner a sense of belonging and security” (Robertson et al. 2016b, p. 40).

Considered through the lens of a multiliteracies, sociocultural approach to literacy (New London Group 1996), refugee-background youth in these studies were agentic users of multimodal (and multilingual) literacies, harnessing their situated social, cultural, and semiotic capital (Jiang 2018; Norton 2013), such as their knowledge of political conflicts and migration processes and their strategic, agentive use of media forms and platforms, as shown in the examples above. Considered through a transnational literacies perspective, refugee-background youth’s representations revealed how their lived experiences were strewn with multiple strands of connections to a variety of places (e.g., their home countries, settlement contexts, refugee camps, and places where their family, friends, or people resided), and how invested they were in literacy practices that maintained and developed those connections (Darvin and Norton 2014). Considered through the lens of embodied
cognition, the value of refugee-background youth’s concrete representations is recognized in that those representations formed visible traces of how youth experientially understood and communicated abstract ideas (Johnson 2018), e.g., a girl’s steadfast investment in an imagined identity of a doctor represented by an image of moving cars (Jang and Kang 2019). Such visible traces of refugee-background youth’s embodied experiences proved invaluable for educators, researchers, and community members in trying to understand how youth perceived their various environments, relationships, lived experiences, and hopes for the future.

4.3. Expanding, Strengthening, or Maintaining Social Networks

The capacity to produce media has been argued in many studies to support the efforts of refugee-background youth in maintaining transnational connections to their home, family and friends, or to existing or new communities and relationships in their settlement locations or refugee camps (see Table 1). As an example of maintaining transnational connections through media production, two different studies discussed similar practices of Karen youth. One study involved 13- to 17-year-old girls resettled in the United States in the preceding 2 to 6 years (Omerbašic 2015), and another study involved 16- to 30-year-old young men and women resettled in Australia (Robertson et al. 2016a). Youth in both of these studies digitally manipulated photographs to include family members from different photos and locations together in one image to represent in digital form the physical presence that they could not make manifest in their settlement locations. As Robertson et al. (2016a) argued, “in spite of their separation, [through these manipulated photos] they remain a ‘connected presence’ in the family imaginary” (Robertson et al. 2016a, p. 28).

These attempts to maintain transnational connections were also evident in refugee-background youth’s production of media to share and exchange multimodal information about their current lives and to inform and be informed by their friends and family in different locations across the globe. In Leurs’s (2017) study of refugee-background youth’s digital ‘pocket archives,’ he reported a young man resettled in the Netherlands who, in a filmed TEDxYouth talk, told of his dark room in war-torn Syria, where he would go on Facebook to alleviate his feeling of loneliness. However, he would ultimately feel worse by witnessing how his peers were enjoying their youth while he was living through war and violence. For this young man, his ‘connected presence’ (Diminescu 2008) meant that he was “reminded of his own state of ontological insecurity” (Leurs 2017, p. 687). This outcome was addressed in another study in which Leurs et al. (2018) reminded educators that, alongside opportunities for reassurance and social support, digital forms of connected presence might cause refugee-background youth emotional distress.

Finally, studies have shown that digital media production can invite collaborative engagement among youth, researchers, and instructors, as well as users of social media sites such as YouTube, often leading to the creation of new relationships and communities in the youth’s current location as well as transnationally. For example, in a study exploring a media club of North Korean refugee-background youth in South Korea, Jang and Kang (2019) explained that “the music video making played a critical role in promoting students’ collaboration and their development of a sense of belonging” (Jang and Kang 2019, p. 89). Similarly, Karam (2018) showed how incorporating a videogame produced by a 14-year-old boy from Iraq, who resettled in the United States in the preceding year, in his English Language Learning class facilitated not only his engagement in school learning and his connection with his peers in class, but also new relationships with multilingual gamers who viewed and responded to his game-streaming videos on YouTube.

Understood from a multiliteracies, sociocultural perspective, the recording and editing tools that refugee-background youth employed to expand, strengthen, or maintain social networks served as cultural tools (Vygotsky 1978; Wertsch 2009). Through their affordances, these tools mediated particular ways in which youth collaborated with others (a recognized affordance of media production (Vasudevan and Riina-Ferrie 2019)) and connected across national, cultural, and geographical boundaries. Considered from a transnational literacies
perspective, these multimodal literacy practices were implicated in multistranded and boundary-crossing relationships that need to be recognized for their value (Lam and Warriner 2012)—notwithstanding Leurs et al.’s (2018) caution—in classroom learning and in supporting resettlement and community building. Finally, considered through an embodied cognition perspective, the affordances of the multimodal meaning-making process itself become evident (Johnson 2018), as refugee-background youth produced media to express abstract ideas through concrete representations, for example, when Karen youth expressed their experiential understanding of the abstract notions of yearning and affection by bringing family members from different locations together in ‘physical’ proximity through their remixing of family photos (Omerbašić 2015; Robertson et al. 2016a). Digital media production thus afforded refugee-background youth a variety of possibilities for expanding, strengthening, or maintaining their social networks in and across different contexts. Educators, researchers, and community members could consider designing their digital media production projects with refugee-background youth with an intention to promote and elevate this powerful affordance.

4.4. Identity Work

In many of the reviewed studies, digital composition with multiple modes afforded refugee-background youth opportunities to express and narrate their life experiences, attain awareness of multiple ways in which they could perceive those experiences, and see the role these experiences played in the shaping and negotiation of their identities. This pattern is also consistent with findings from media production projects with other youth populations (Smith 2014; Smith et al. 2020).

As an example of identity work in the reviewed studies, Emert (2013) conducted a digital storytelling project (autobiographical poems) in a summer literacy program for seventy 8- to 18-year-old boys who resettled in the United States and were originally from the Middle East and various parts of Africa. Emert explains how one boy used the visual metaphor of grass in his film to express both his low social standing but also to argue how his resilience—in light of experiences of adversity—defined him and manifested in his ability to regenerate like grass (Emert 2013).

Digital media production also helped youth develop a sense of agency in being able to express and negotiate their identities as teenagers, young men and women, refugee-background youth, and as members of different cultures, nations, and peoples. For example, Karen youth in Melbourne, aged 16 to 25, who resettled in the preceding 5 years, participated in a community development program and produced a film, See You at the Beach (Lems et al., 2016). In their film, they depicted themselves hanging out at the beach to signal their belonging to Australian society and the local youth culture, as well as to defy their potential stereotypical positioning as victims. At the same time, they overlaid this visual imagery with a soundtrack of a Karen song—which they did not translate to English—to signal their distinct cultural identities (Lems et al. 2016). In another article, Gifford and Wilding (2013) showed how young Karen men playfully experimented with an alternative hypermasculine identity through their production of a music video where they portrayed themselves as risk-taking and dangerous, a stark contrast to their composed and polite behavior in the project’s workshops. The importance of playfulness for negotiating identities in digital media production was explicitly mentioned in other reviewed studies as well (e.g., De Leeuw and Rydin 2007; Karam 2018).

Importantly, youth’s explorations of self through media also afforded them opportunities to imagine themselves as members of different professional and online communities. Learning how to utilize multimodal literacies in producing media fostered a vision of themselves not as victims, but as “capable actors in their world” (Guerrero and Tinkler 2010, p. 71). Leurs et al. (2018) provide an example of 16- to 18-year-old boys and girls resettled in the Netherlands, many from the Middle East, who created video CVs in a transition class through which they formulated their interests, skills, and professional aspirations. In some cases, the video CVs supported youth’s acceptance to college.
From a multiliteracies, sociocultural perspective, refugee-background youth’s identity work in digital media production is usefully illuminated as a strategic investment of resources—social, cultural, and semiotic capital that they possess—designed to enhance their possibilities for the future and their relationship to the world (Norton 2013). Recognizing this work as identity investment clarifies why youth narrated their life experiences and how they developed their agency, as well as how they reimagined themselves through digital media production. A transnational literacies perspective sets these identity negotiations in the backdrop of youth’s multiple ties to different cultures, spaces, and lived experiences (Duff 2015), which contributed to the richness and complexity of these youth’s identity work (e.g., negotiating their multi-faceted identities as members of different cultures, Lems et al. 2016). An embodied cognition perspective highlights these identity negotiations as they manifested in concrete representations, and emphasizes the importance of this link for revealing youth’s experiential understandings of abstract aspects of their identity (Johnson 2018). For example, this perspective emphasizes that if a refugee-background boy communicated the abstract concept of his resilience through the concrete representation of grass (Emert 2013), then unpacking the features of grass can be particularly informative for understanding how this boy constructed his identity.

4.5. Visibility and Engagement with Audiences

The production of digital media, inside or outside the classroom, always assumes some form of audience. In many of the studies, youth were passionate about sharing their work with family, friends, and peers, but also with broader audiences through online distribution. In some studies, presenting youth’s work to live audiences was designed as part of the learning experience and was reported as contributing to youth’s language and literacy education, their social skills, and their sense of belonging in school, as well as to their sense of agency as advocates of their chosen issues of interest (e.g., Due et al. 2016; Emert 2014a; Luchs and Miller 2016; Rodriguez-Jimenez and Gifford 2010).

Participatory media studies often highlight the persuasive power of multimodal rhetoric for influencing audiences’ perceptions (e.g., Berman et al. 2001). In their participatory media study, Rodriguez-Jimenez and Gifford (2010) led sixteen 14- to 18-year-old boys from Afghanistan, resettled in Australia in the preceding 2 years, in producing a short film about their settlement experiences. The film garnered enthusiastic and empowering responses from the audience, including the vice principal and schoolteachers. As the authors argued, “the film itself provided a space in which the voices of these young men were made visible—visible to themselves, their families and to the wider Australian community within which they are making their lives” (Rodriguez-Jimenez and Gifford 2010, p. 40).

However, one study (Fairey 2018) extensively highlighted the limitations of participatory work (Photovoice) with refugee-background youth when the work is expropriated by organizations (such as NGOs) who have a vested interest in targeting specific audiences (e.g., funders). Situated in southeastern Nepal, the study brought forth previously unpublished photos taken by a 17-year-old Llhotshampa youth in a Bhutanese refugee camp. Fairey (2018) cogently used this youth’s unpublished photos, in which the youth depicted a re-enactment of the abuse and torture that he had suffered from the Bhutanese army as a child, to illustrate contrast with the previously published and curated political, decontextualized, and stereotypical photos of children in closeup, which show the NGO’s tendency to avoid “delving into the specific politics in which these people are immersed” (Fairey 2018, p. 119). As the youth’s attempts to represent themselves were somewhat diverted by the organization, Fairey (2018) emphasized the need to develop a complex understanding of listening practices alongside the emphasis on facilitating the expression of participant voice, a call similarly made by Donald (2019) and Luchs and Miller (2016). The latter articles described similar political constraints on self-representation in the form of curation or stereotypical conceptions of refugee-background youth. These concerns echo and add to the cautions raised by Blum-Ross (2012, 2015), who has studied media production among other youth populations and has highlighted how various requirements
(e.g., narrow evaluation metrics) and external, potentially untenable objectives encouraged by funding agencies often subvert youth’s priorities and self-expression, as youth media projects struggle to get funding in “a political economic ‘food-chain’ in which priorities are established at the funding level and are passed down to organizations and later to young people.” (Blum-Ross 2012, p. 280). In school settings, pressures to abide by decontextualized and standardized instruction and evaluation may also leave little time for following youth interests and their out-of-school multimodal literacy practices (Campano 2007; Vasudevan 2006), similarly stifling youth’s self-expression, creativity, and visibility.

Patterns of visibility and engagement with audiences are usefully illuminated through a multiliteracies, sociocultural lens, which highlights how the cultural tools that refugee-background youth used in digital media production were both situated in and enacted as social action (Vygotsky 1978; Wertsch 2009). It is imperative that researchers and educators see refugee-background youth’s digital media production as social action, and examine whether their identity investment (Norton 2013) is recognized and affirmed by the audiences they target, as Fairey (2018), Donald (2019), and Luchs and Miller (2016) stressed. This affirmation is crucial for refugee-background youth’s engagement in multimodal literacy practices and their sense of belonging. Considered through a transnational literacies perspective, the aforementioned affinities and disruptions in visibility (e.g., enthusiastic audience responses versus manipulative curation of youth’s representations) derived from harmonious or conflicting strands of transnational and local connections (Lam and Warriner 2012). Finally, from an embodied cognition perspective, visibility can be understood as emerging from a nuanced and situated understanding (that refugee-background youth, educators, researchers, and community members were able to develop) of how specific multimodal, experiential representations structured youth’s perceptions of abstract concepts, ideas, and emotions (Johnson 2018).

4.6. Communication and Embodied Learning through Multimodal Literacies

Many of the reviewed studies explicitly mentioned multimodal meaning-making practices as central to the youth’s enthusiastic, positive, and educational engagement with digital media production (see Table 1). Youth used images and sounds of concrete objects to express themselves, often inquiring about abstract ideas (e.g., life changes) and emotions, as well as difficult knowledge related to their experiences. Metaphorical representations, i.e., the use of concrete sensory-motor experiences to explain abstract concepts, were central in the articles that included in-depth discussions of youth’s media artifacts, and they provided insights into youth’s embodied lived experiences. In a Photovoice project with ten 13- to 20-year-old youth from North Korea, resettled in South Korea in the preceding 1 to 9 years, participants chose topics (e.g., friends) for their photographic inquiry and utilized visual metaphors to convey their experiences in their new home. For example, “Sungil expressed feeling excluded and isolated by using a metaphor of a goose flying alone in the sky [. . . ] Flocks of geese are easily seen during summer in North Korea. Sungil added that he missed living in North Korea, affiliating with people who are similar, like thousand flocks of geese” (Kim et al. 2015, p. 828).

Robertson et al. (2016b) showed how 15- to 16-year-old boys and girls from Iraq, Sudan, and Croatia in their early resettlement in Australia expressed abstract feelings such as alienation, desolation, depression, loneliness, and social isolation using concrete visual imagery in their settlement context, including shadows, dark-lit spaces, and empty suburban neighborhoods among others, which all facilitated insightful discussion with the researchers. Contrarily, other 14- to 16-year-old boys and girls in the study from Iraq, Sudan, and Ethiopia, provided images of their understanding of belonging and security through colorful murals and material objects from their home countries. The authors contended that all of these visual representations “offer a more nuanced perspective of the migration process and have the capacity to show the interior lives and reflections of settlement in a third country that are, more often than not, silent or unstated experiences” (Robertson et al. 2016b, p. 46). Shedding light in this way on the interior lives of youth
from refugee-backgrounds through concrete representations in different modes of meaning-making arguably lies at the heart of digital media production’s promise to facilitate youth’s communication and embodied learning through multimodal literacies.

A further example of communication and embodied learning through multimodal literacies is a digital storytelling project situated in a transitional adult education class. Johnson and Kendrick (2017) discussed how an 18-year-old young man from Iraq, who lived through the recent war in Syria and eventually resettled in Canada, expressed his experience of the outset of the Syrian war in his digital story through musical notes that “swell in a dramatic crescendo” (Johnson and Kendrick 2017, p. 670). The authors additionally demonstrated how this young man was able to inquire about the abstract notion of hopelessness through the visual image of a man walking in a barren desert. In another slide of his digital story, a black-and-white image of a man sitting at the bottom of the frame, cross-legged with his face lying on his folded arms facing down, was used by the youth to express his anger, “an emotion that Yaqub explained he had difficulty expressing in words” (Johnson and Kendrick 2017, p. 672). Encouraging Yaqub to express himself through extralinguistic modes allowed the researchers, and potentially Yakub himself, to gain a deeper understanding of his embodied experience of abstract concepts such as hopelessness, anger, and conflict.

In the previously discussed study of a South Korean media club for recently settled youth from North Korea, researchers framed youth’s multimodal inquiries, which often included metaphorical connections, as “polycontextual learning environments” (Jang and Kang 2019, p. 88), allowing youth to project their lived experiences onto concrete visual and audial representations. As the authors claimed, “their lives and themselves were objectified in the images and photos [. . .] this helps students feel less vulnerable [. . .] they did not have to confess their traumatic past but to picture their stories at their own disposal in the safe space” (Jang and Kang 2019, p. 88). Such a distancing effect using extralinguistic and concrete representations arguably played a key role in refugee-background youth’s enthusiastic, educational, and insightful engagement with digital media production in studies where this theme was represented (see Table 1).

An embodied cognition perspective crucially highlights how youth communicated and inquired about abstract concepts, ideas, and emotions pertaining to their migration, settlement, or other aspects of their lives, using a variety of concrete—often ineffable—representations that they experienced (bodily) in their environments. Whether the studies elaborated on analyses of these representations or used them more to develop meaningful and media-driven discussions with youth, these visible representations played a key role in helping all stakeholders gain awareness about youth’s understanding and learning—in an embodied way—of abstract notions such as anger, loneliness, belonging, security, uncertainty, emotional connectedness, and so on, as they were situated in youth’s particular concrete, bodily experiences (Johnson 2018). Highlighting the link between these concrete representations and the abstract concepts they were utilized to explain, we can unpack—and learn—how these concrete representations structure the ways refugee-background youth think, understand, and make sense of their experiences. Considered from a multiliteracies, sociocultural perspective, youth’s metaphorical representations signaled their situated understanding of their sociocultural environments, such as when they rendered what researchers might otherwise have considered a peaceful, middle-class suburban environment as strange, empty, and lifeless (Robertson et al. 2016b). Finally, considered from a transnational literacies perspective, the embodied and socioculturally constructed resources that youth used, such as murals to understand belonging or geese to understand loneliness, signaled their ongoing and deep relationships to different places and times (Lam and Warriner 2012).

5. Recommendations for Future Research

Digital media production has promising affordances for refugee-background youth. Whereas published peer-reviewed journal articles in this area have been increasing, their
current paucity necessitates that future studies examine these affordances in different countries, contexts, and communities, with increased description of methodological procedures to facilitate future systematic reviews of best available evidence.

Furthermore, refugee-background youth’s diversity requires that future studies provide more contextual information about youth’s educational backgrounds, levels of literacy and proficiency in their L1s and additional languages, socioeconomic status, degree of separation from family members, length of time in the settlement context or refugee camp, and gender identities, as well as how these aspects might affect the affordances of their digital media productions and generate various challenges and constraints. More studies are needed that explore refugee-background youth producing media in schools as part of the curriculum, in refugee camps, as well as youth with different immigration statuses (e.g., asylum seekers and unaccompanied youth), different degrees of interrupted schooling, and varying levels of language proficiency and literacy in their L1(s) and second or additional languages (e.g., those spoken in their settlement context).

Finally, future studies could include greater in-depth analysis of digital media production as it dovetails with refugee-background youth’s language and literacy learning and content learning across the curriculum. Future studies could also focus on how meanings are expressed using the affordances of different modes, how youth’s work is taken up by audiences, how their work circulates in online or offline spaces, the ethical challenges raised by refugee-background youth’s digital media production, and the actual learning processes that are involved in producing their digital media as compared to an exclusive focus on artifacts.

6. Conclusions

This scoping review identified five prominent, interlocking, and mutually inclusive thematic patterns that synthesize the affordances of digital media production for refugee-background youth from findings across 42 peer-reviewed journal articles relevant for language and literacy educators and researchers. Refugee-background youth employed digital media production to (1) own representations of themselves across time and space; (2) expand, strengthen, or maintain social networks; (3) construct their identities; (4) engage with audiences and increase their visibility; and (5) communicate and learn in an embodied way through multimodal literacies. The study also mapped the characteristics of available studies and provided recommendations for future research to advance this emerging area of inquiry.

The review clarifies for language and literacy researchers and educators the evident promise of digital media production for developing refugee-background youth’s authorial and expert voices in representing and advocating for themselves, provided their funds of knowledge are harnessed in asset-based or culturally responsive approaches. The review also clarifies how the transnational and local connections that refugee-background youth expand, strengthen, or maintain through digital media production, are linked with the cultural tools that youth have in hand, situated in their particular circumstances, and understood through their concrete experiences.

The review further underscores that refugee-background youth’s identity work through digital media production is a form of investment, that their transnational relationships are a major backdrop for this work, and that their chosen representations can reveal much about how they construct their identities. It highlights that refugee-background youth produce media and engage with audiences to enact social action with an array of cultural tools that accentuate their experiential understandings of abstract concepts, ideas, and emotions. Importantly, the review encourages researchers and educators to continuously assess the degree to which this social action is recognized and affirmed across different strands of transnational and local spaces. In other words, to what extent do top-down or external priorities and discourses determine the processes, outcomes, and visibility of youth’s digital media productions?
This review also highlights the embodied quality of learning and communicative practices that digital media production affords refugee-background youth. It emphasizes that youth’s multimodal literacy practices are specific to situated understandings of their sociocultural environments, and further, that embodied representations of transnational relationships are prominent in literacy practices that help refugee-background youth adapt to their environments.

This scoping review thus encourages researchers and educators, particularly in the field of language and literacy education, to further employ digital media production to help refugee-background youth and society at large to represent, communicate, and value the unique lived experiences of these youth, framing the diversity of their challenges and resources alike as their locus of wisdom and knowledge in the classroom and beyond.

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**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The author declares no conflict of interest.

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### Appendix A

#### Table A1. Five stages used to conduct the scoping review, based on Arksey and O’Malley (2005).

<table>
<thead>
<tr>
<th>(1) Identifying the research question</th>
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<td>What are the key findings across peer-reviewed articles pertaining to the affordances of digital media production by refugee-background youth?</td>
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<table>
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<tr>
<th>(2) Identifying relevant studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searches in electronic databases were conducted on October 19th, 2019 for peer-reviewed journal articles published during or before 2019, followed by another search in all the collected studies’ reference lists.</td>
</tr>
</tbody>
</table>

| Following are the databases along with the number of results in each search: ERIC (61), ProQuest (236; searched anywhere except full text), Education Source (91), PsychINFO (192), and Academic Search Premier (170). |

<table>
<thead>
<tr>
<th>Some keywords were guided by this study’s multiliteracies, sociocultural theoretical approach to literacy; those are marked in <strong>bold</strong> below. The following search terms were used:</th>
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<tbody>
<tr>
<td>(&quot;participatory media&quot; OR &quot;participatory video&quot; OR &quot;participatory&quot; OR &quot;digital media&quot; OR &quot;digital storytelling&quot; OR &quot;digital stories&quot; OR &quot;media&quot; OR &quot;digital&quot; OR &quot;music&quot; OR &quot;audio&quot; OR &quot;video technology&quot; OR &quot;animation&quot; OR &quot;media production&quot; OR &quot;<strong>multimodal composition</strong>&quot; OR &quot;<strong>multiple literacies</strong>&quot; OR &quot;learning modalities&quot; OR &quot;photography&quot; OR &quot;filmmaking&quot; OR &quot;multimedia instruction&quot; OR &quot;multimedia materials&quot; OR &quot;technology uses in education&quot; OR &quot;<strong>multimodal literacy</strong>&quot; OR &quot;<strong>multimodal literacies</strong>&quot; OR &quot;<strong>digital literacy</strong>&quot; OR &quot;<strong>multiliteracies</strong>&quot; OR &quot;<strong>multimodality</strong>&quot; OR &quot;<strong>media literacy</strong>&quot; OR &quot;multimedia&quot; OR &quot;video&quot; OR &quot;graphic novel&quot; OR &quot;PowerPoint&quot; OR &quot;hypermedia&quot; OR &quot;visual&quot; OR &quot;video game&quot; OR &quot;game&quot; OR &quot;Photoshop&quot;) AND (&quot;refugee&quot; OR &quot;refugee background&quot; OR &quot;refugee-background&quot; OR &quot;asylum&quot; OR &quot;asylum seeker&quot; OR &quot;asylum-seeker&quot; OR &quot;displaced&quot;) AND (&quot;young people&quot; OR &quot;young person&quot; OR &quot;youth&quot; OR &quot;adolescent&quot;)</td>
</tr>
</tbody>
</table>

An additional search in Google Scholar was conducted using the term "(refugee OR asylum) AND youth" in titles, which resulted in 490 hits.

Additional manual searches in articles’ reference lists were conducted to find articles that the search terms did not reveal.

<table>
<thead>
<tr>
<th>(3) Study selection</th>
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<tr>
<td>The process of article selection began with reviewing all the titles of results from database searches. In some cases, abstracts were also read, if relevance could not be determined from the title. The final selection of articles consisted of reading the full texts of 52 articles imported into ATLAS.ti 8.</td>
</tr>
</tbody>
</table>

Fifty-two articles were imported into Zotero reference manager and from there to ATLAS.ti 8.

A further review of articles (including their reference lists) resulted in a final selection of 42 articles to be included in the review.


Table A1. Cont.

(3) Study selection

The individual studies’ theoretical frameworks did not play a role in their selection.

Selection was based on the following inclusion and exclusion criteria:
(1) Participants had to include youth, ranging broadly from ages 10 to 20 (see Section 1.2 for the rationale). Some studies that fit this requirement, i.e., involved participants ranging from age 10 to 20, also included young adults between the ages of 21–30; as those few studies were still predominantly about youth in the 10–20 age range, they were not excluded. The same applied to the few studies mentioned in Section 4.1 that included some participants aged below 10, but were still predominantly about youth in the 10–20 age range.
(2) Active digital production by refugee-background youth had to be a non-marginal part of the study in order to address the research question of this review, thereby excluding articles such as Mendenhall et al. (2017) and Sirriyeh (2010). Studies needed to explore production in more than the linguistic mode, thereby excluding, for example, Kennedy et al. (2019).
(3) Photography was included whether it was digital or film. The research question does not narrowly address photography, but many studies utilized this medium (see Table 1) before digital photography became ubiquitous as it is today. This necessitated a choice to include or exclude film photography. As the differences between digital and film photography are marginal for the purpose of this study, it was decided to include both and to explicitly mention this choice in the selection criteria.
(4) Participants had to be first-generation displaced youth or youth residing in refugee camps.
(5) Studies in art-therapy were excluded due to the therapeutic focus of the field (this would arguably necessitate a separate review with separate theoretical lenses).
(6) Also, studies that did not have a specific focus on refugee-background youth, but rather English Language Learners (ELLs) in general, were excluded (e.g., Smythe and Neufeld 2010).

(4) Charting the data

Descriptive information was collected on each article and categorized in ATLAS.ti 8 through manual coding of texts in each article.

Examples of descriptive codes in ATLAS.ti used to chart the data: “participants” (“number of participants”, “age”, “gender”, “educational backgrounds”, “legal status”, “time in research context”, “language repertoires”, “countries of origin”), “methodology type”, “analysis procedures”, “data types”, “study context”, “country of study”, “type of digital media production”.

(5) Collating, summarizing and reporting the results

Inductive thematic analysis (Braun and Clarke 2006) was conducted in ATLAS.ti 8. Analysis was predominantly inductive, i.e., it did not begin by applying theoretical concepts and their relationships to the data, but those were rather identified at a later stage to interpret emerging descriptive patterns collected in codes and their intersections. Analysis was directed toward identifying themes, i.e., patterns of meaning in the data that are broader, more abstract and/or theoretical than descriptive codes, relevant to the research question, and fairly pervasive in the data (Braun and Clarke 2012).

Stages of the thematic analysis:
(1) Initial bottom-up and descriptive codes were generated to collect relevant quotes of findings from the articles. Quotes were re-read and re-sorted among the codes in multiple rounds of coding that included revising the definitions of codes, until the codes reflected the five themes reported in the findings and discussion section.
For example, the theme “ownership of representations across time and space” was generated from the codes: “youth spacial representations” (spaces, people, and practices that youth recorded), “youth representations of times” (past, present, or future moments of significance to them), “mundane representations” (representations of day-to-day life), and “difficult representations” (representations of difficult experiences, such as abuse, family loss, or bereavement).
(2) At a later stage, concept maps (networks in ATLAS.ti) were created to visually organize themes and their constituent codes in relation to the theoretical perspectives.
(3) While drafting the findings section, repeated queries in ATLAS.ti 8 were run, exploring how themes were discussed in the different articles and identifying particularly useful quotes. Filters were used in subsequent queries to highlight quotes that were coded as rich quotes (i.e., quotes that were especially articulate).
(4) Every analytic stage of the process involved reflective writing, be it in comments on codes (where definitions of codes and ideas for potential themes were noted), or running memos (e.g., the research journal memo, where the process of conducting each stage of the review was recorded, including the development of themes). A crucial memo was written at a later phase to explore how the themes could be understood through the theoretical perspectives.

Trustworthiness and validity-related questions were integral to the continuous analytic and reflective writing and were used to consistently interrogate emerging inferences: How might inferences be wrong? What are some possible alternative explanations, and how can those be addressed? How are different studies supporting or challenging the inferences made? (Maxwell 2012). Those questions were addressed by (1) looking for disconfirming evidence, rival explanations, and outliers, and (2) checking for representativeness of patterns across studies (Miles et al. 2020).

References

References marked with an asterisk indicate studies included in the scoping review.


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