

Popular Music Media Literacy: A pilot study

Chrysalis L. Wright

University of Central Florida, USA

Reilly Branch

University of Central Florida, USA

Lesley-anne Ey

University of South Australia, Australia

K. Megan Hopper

Illinois State University, USA

Wayne Warburton

Macquarie University, Australia



Peer-reviewed article

Citation: Wright, C. L., Branch, R., Ey, L., Hopper, K. M., & Warburton, W. (2022). Popular music media literacy: A pilot study. *Journal of Media Literacy Education, 14*(3), 29-38. <https://doi.org/10.23860/JMLE-2022-14-3-3>

Corresponding Author:
Chrysalis L. Wright
chrysalis.wright@ucf.edu

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Received: September 11, 2021

Accepted: February 22, 2022

Published: December 20, 2022

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

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ABSTRACT

The current study pilot tested a popular music media literacy website that was developed based on the final report of the APA Division 46 Task Force on the Sexualization of Popular Music (2018). The study hypothesized that popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to music reflecting real life, viewing the self as similar to music portrayals, music skepticism, level of engagement with music, and self-reported self-esteem. It was also hypothesized that participants would report favorable attitudes regarding the popular music media literacy website being tested. Participants included 52 emerging adult college students who completed the baseline assessment and the post-literacy assessments after reviewing the popular music media literacy website. At baseline, participants reported moderate levels of music as reflecting real life, viewing themselves as similar to music representations and self-reported self-esteem. Participants also reported high levels of music skepticism and engagement with music at baseline. Results indicated that the popular music media literacy website was effective in increasing general music skepticism. The implications for future research and next directions are discussed.

Keywords: *music literacy, popular music, education.*

Journal of Media Literacy Education

THE OFFICIAL PUBLICATION OF THE

NATIONAL ASSOCIATION FOR MEDIA LITERACY EDUCATION (NAMLE)

Online at www.jmle.org



INTRODUCTION

The rapid and widespread changes in media over recent decades are driven by new technology that has drastically changed how information is produced, distributed, and consumed (Alvermann & Hagood, 2000; Hobbs & Jensen, 2009). For example, these technological advances have made music, which is the preferred media of teens and young people (Rideout, 2017) and connected to youth culture (North et al., 2000), highly accessible to consumers from all demographics, regardless of location (Warburton et al., 2014). Previous research has suggested that children and young people are heavy music consumers and that this consumption increases with age (Christenson & Peterson, 1998; Gonzalez de Rivas et al., 2009; Kaestle et al., 2007). Furthermore, music consumption has changed in modality (e.g., MTV music videos to internet viewing) and increased in frequency (Australian Communications and Media Authority, 2010; 2016; Christenson, 1992; Kaestle et al., 2007; Kaiser Family Foundation, 2003). Research has reported that children and young people spend about four hours daily listening to music (Recording Industry Association of America [RIAA], 2016). This is important considering that research indicates potential negative impacts from exposure to specific types of content in popular music among consumers.

Previous research has found an association between sexualized popular music and identity and gender role development (Gonzalez de Rivas et al., 2009), stereotypical gender role attitudes, sex role stereotypic schemas, and gender ideals (ter Bogt et al., 2010), as well as self-objectification (Vandenbosch & Eggermont, 2012), and body dissatisfaction (Bell et al., 2007) among young female consumers. Permissive sexual attitudes (ter Bogt et al., 2010) and engaging in risky sexual behaviors (Wright & Rubin, 2017) have also been associated with consumption of sexualized popular music. Sexual violence, sexually aggressive behavior, and gendered aggression (Aubrey et al., 2011) have also been associated with sexualized popular music.

Other research has examined the consumption of popular music and substance use. Overall, popular music has been found to play an important role in social beliefs around substance use, influencing both substance use attitudes and behaviors (Rigg & Estreet, 2018). For example, specific music preferences have been associated with positive beliefs and an increased likelihood of engaging in substance use (Russell et al., 2017). It is widely accepted that media content can

influence decision making in both positive and negative ways (Burt, 2018; Rigg & Estreet, 2018; Ward, 2016) and that distorted media portrayals can negatively impact the self-esteem of consumers, because musicians may falsely portray various behaviors (e.g., substance use) and consequences of such behaviors (e.g., addiction), leading to unrealistic expectations among consumers (Burt, 2018; Ward, 2016). Considering the plethora of research that has been conducted in this area, it is clear that the content of some popular music can have concerning effects on consumers.

Theoretical perspective

The current study is grounded in cultivation and social cognitive theories. These two theoretical perspectives explain the relationship between exposure to popular music content and the impact on consumers documented in previous research. Based on cultivation theory, it may be that popular music can shape consumer's cognition in various ways based on media exposure. Specifically, cultivation theory proposes that the more a person is exposed to repetitive messages in the media, the more the person begins to believe that what they are exposed to is real (Cohen & Weimann, 2000; Gerbner et al., 1994). Consistent with cultivation theory, music artists create a false reality based on how they portray and endorse particular behaviors through their music (Beullens et al., 2012). Consumers may be more likely to make decisions, adopt thinking processes, and behave in ways similar to the content that they have been exposed to via the music media; considering these as 'the norm' (Knobloch-Westerwick et al., 2008).

According to social cognitive theory (Bandura, 1977; Bandura & Walters, 1963), people learn through observing others within the context of social interactions, experiences, and environmental influences, such as media. An individual does not need to specifically replicate a behavior they have observed to learn it, the learning can occur vicariously, including via vicarious reinforcement. For example, when an individual sees that a behavior receives a positive consequence, such as presenting sexually increases popularity, they conclude that to increase popularity, they need to present sexually. The information extracted from those observations will drive decisions about engaging in the behavior. Observational learning occurs through observing role models, which can include symbolic models presented in popular music. The degree of learning from such models is dependent on the

level of attention given to the model, which increases if consumers find the model similar to themselves.

Media literacy initiatives

Educators are often tasked with challenging dominant stereotypes and negative content in media. Educators have to find the best way to prepare students to be critical consumers of media, as the world around them is one of almost constant media consumption (Alvermann & Hagood, 2000). It is imperative to educate students about how some media content is affecting consumer's perceptions of reality of gender by addressing gender insensitive language found in some media, and by disrupting female and male stereotypes (Graydon, 1997). To this end, media literacy needs to become an important part of media education to prepare children, adolescents, and adult consumers to analyze the media they are exposed to with a critical view. Media literacy can be an effective tool to combat unrealistic perceptions portrayed in popular music content (Pinkleton et al., 2012). Media literacy education and campaigns have become more significantly studied, as media literacy has been shown to assist in the reduction of risky health behaviors, such as the use of tobacco, alcohol, or engaging in risky sexual behaviors (Vahedi et al., 2018). Warburton (2012) suggests that media literacy should be taught alongside health education in schools, with this curriculum being taught as a 'healthy media diet,' similar to the healthy food diet taught currently in schools.

Research on technology use and student's abilities to critically analyze and understand media has demonstrated the need for media literacy education. For example, although most participants in a recent study had access to media, a majority of the participants (52%) demonstrated competencies at the most basic and lowest level (Pereira & Moura, 2019). Many researchers have recommended that those who consume media should be able to question the intentions of the creator and the content of the media they are consuming (Ey, 2014; Rodesiler, 2010). Explanations on how music content is created by music artists and businesspeople are important to include within a media literacy curriculum, as well as consumerism (Ey, 2014) given the primary motive of creating musical content is to sell products (Tobias, 2014; Ey & McInnes, 2015). Though music media is considered an "older" form of media compared to social media, the lack of concrete studies on music

literacy and the continued popularity of music entertainment, especially among younger demographics, necessitates the current study (Brown et al., 2006; Brown & Bobkowski, 2011).

The current study

Wright and colleagues (2019) outlined specific recommendations regarding popular music media literacy in their APA Division 46 Task Force on the Sexualization of Popular Music report (2018). Recommendations specific to emerging adults and college students included: (1) popular music media literacy should include understanding, analysis, and reflection on media content related to depictions of gender, race, ethnicity, class, sexuality as well as social context, control, resistance, and pleasure related to consumption of popular music (Ey, 2014; Tobias, 2014); (2) popular music media literacy should include education regarding the music industry and should explain that music content comes from the music artist and businesspeople at the record labels (Tobias, 2014) with the aim to market and sell products (i.e., consumerism) (Ey, 2014; Ey & McInnes, 2015); (3) popular music media literacy should include demonstrations of effects related to autotune, photo-shop, and music creation with instruments and accompanying tools; and (4) popular music media literacy should examine the social functions of music (Hobbs, 2009) and the history behind music genres and the contexts that contribute to them (Tobias, 2014). Thus, the popular music media literacy examined in this study aimed to meet these specifications outlined in Wright and colleagues (2019).

The current pilot study evaluated a popular music media literacy website¹ created to help emerging adults develop critical thinking skills about popular music media and to motivate them to evaluate the content that they are exposed to via popular music. The website built upon the recommendations of the report of the Division 46 Task Force on the Sexualization of Popular Music and covers the role of consumers relative to music development, aspects of being a knowledgeable consumer, different music genres and their popularity over time, the use of social media by music artists, the use of autotune in creating music, building the image of the music artist and branding, impression management, artists' reflection and regret regarding their previous actions, the intent of popular music being for

¹ <https://collegemusiclit.weebly.com/>

entertainment, the major record labels in the music industry, and sociodemographic factors of those involved in the creation of and consumption of popular music. The website presents information on these topics using visual depictions, graphics, text, as well as videos.

Considering the recommendations of Wright and colleagues (2019) as well as the cultivation and social cognitive frameworks, our study had five hypotheses.

Hypothesis 1: Consistent with the cultivation theory (Cohen & Weimann, 2000; Gerbner et al., 1994), it was hypothesized that popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to viewing music as reflecting real life. If media literacy can reduce the realism of popular music portrayals among consumers, the potential negative effect of popular music content can be reduced.

Hypothesis 2: Consistent with social cognitive theory (Bandura & Walters, 1963; Bandura, 1977), it was hypothesized that popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to viewing the self as similar to music media portrayals. If media literacy can reduce how consumers view music portrayals as similar to themselves, they are less likely to vicariously learn and try to replicate false or unrealistic behaviors and image portrayals from popular music models, reducing the potential negative effect of popular music content on consumers.

Hypothesis 3: Consistent with the research of Burt (2018) and Ward (2016), it was hypothesized that popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to music skepticism. If media literacy can increase skepticism of popular music, then the likelihood of consumers developing unrealistic expectations will decrease, hindering the potential negative effect of popular music content on consumers.

Hypothesis 4: Considering the high level of popular music engagement (RIAA, 2016), it was hypothesized that popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to participants' level of engagement with music. Effective media literacy may reduce the level of engagement with popular music content.

Hypothesis 5: Considering the research of Burt (2018) and Ward (2016), it was hypothesized that

popular music media literacy education would produce significant differences between the baseline assessment and post-literacy assessment for outcomes related to participants' reported self-esteem. If media literacy efforts can provide a buffer of protection for consumers' self-esteem, the potential negative effects of popular music content can be reduced.

METHOD

Participants

Participants included a total of 99 college students of various majors from a large southeastern United States public research university who were recruited through their undergraduate general education psychology courses and received class credit for participating in the online study. Informed consent was obtained from all participants. Ninety-nine participants completed the baseline assessment and were provided with the popular music media literacy website link. Fifty-two participants completed the post-assessment. Data presented are for the 52 participants that completed both the baseline assessment and the post-assessment. The majority of participants were White ($n = 29$, 55.8%). The remaining participants identified as Hispanic ($n = 13$, 25%), and “other” ($n = 10$, 19.2%). Participants included 20 males (38.5%) and 32 females (61.5%). Participants were between the ages of 18 and 24 years ($M = 18.79$, $SD = 1.07$).

Measures

Participants completed demographic information (age, racial identification, biological sex) at baseline followed by measures related to participants' popular music consumption habits and attitudes regarding popular music and media influences. They also answered items about their daily and weekly popular music consumption. Participants spent around 12 minutes ($M = 11.78$, $SD = 8.79$) completing the baseline assessment. Measures are detailed below.

Realism. A total of ten items were adapted from Austin and Johnson (1997) and Scull and colleagues (2018) to assess if participants viewed music as reflecting real life. Example questions include “Real people act like music artists” and “Musicians and other people in music are as sexually experienced as young adults.” Items were scored on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree*. Items were averaged to derive a total score that was used

in analysis, with higher scores indicating viewing music as more of a reflection of real life. Cronbach's alpha reliability for the current study was .70 in the baseline assessment and .73 in the post-assessment.

Similarity. Seven items derived from Austin and Johnson (1997) and Scull and colleagues (2018) were used to determine how similar participants viewed music artists to themselves. Example questions include "I do things that music artists do" and "I feel like I am similar to music artists." Items were scored on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree*. Items were averaged to derive a total score that was used in analysis, with higher scores indicating participants identifying strong similarities between music artists and themselves. Cronbach's alpha reliability for the current study was .75 in the baseline assessment and .80 in the post-assessment.

Media skepticism. Seven questions (Scull et al., 2018) were used to determine how skeptical participants were of popular music. Another ten questions adapted from Pinkleton and colleagues (2012) were asked to determine participant's level of awareness regarding the potential influence of music. Example questions for media skepticism include "Music misrepresents what might happen if people have sex" and "Music misrepresents what might happen if people use drugs or alcohol." Example items for media awareness were "Messages in music affect the way people my age think about gender" and "The way race is shown in music affect the way people my age behave." Items were scored on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree*. Both scales were highly correlated, indicating that they were measuring the same underlying construct, and combined in the current study for a score on media skepticism. Items were averaged to derive a total score that was used in analysis, with higher scores indicating more skepticism related to music. Cronbach's alpha reliability for the current study was .80 in the baseline assessment and .84 in the post-assessment.

Engagement with music. A total of twelve items adapted from Vanstone and colleagues (2016) were used to assess participants' level of engagement with music. Example items include "I listen to music while I perform chores or boring tasks" and "I am usually excited by the chance to hear the music that I like." Items were scored on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree*. Items were averaged to derive a total score that was used in analysis, with higher

scores indicating more engagement with music. Cronbach's alpha reliability for the current study was .86 in the baseline assessment and .88 in the post-assessment.

Self-Esteem. Participants completed the Rosenberg Self-Esteem scale (Rosenberg et al., 2020) at both baseline and post-assessment. This is a ten-item questionnaire. Example items include "I feel that I have a number of good qualities" and "I take a positive attitude toward myself." Items were scored on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree*. Five items were reverse coded. Items were averaged to derive a total score that was used in analysis, with higher scores indicating higher levels of self-esteem. Cronbach's alpha reliability for the current study was .91 in the baseline assessment and .91 in the post-assessment.

Demographics. Participants answered three questions regarding their age, racial identification, and biological sex.

Popular music media literacy

After completing the baseline assessment, participants were provided with a link² to the popular music media literacy website that was created for the purposes of this study. Participants viewed the website online from their location as this study was conducted completely remote. It was expected that participants would spend approximately 90 minutes reviewing the content contained on the popular music media literacy website.

Post-assessment measures

The post-assessment contained the same measures as the baseline assessment, with the exception of the demographic questions. Participants were also asked to evaluate the popular music media literacy website that they reviewed for this study. Participants spent almost 10 minutes ($M = 9.52$, $SD = 6.64$) completing the post-assessment.

Procedure

Ethics approval was given by the Institutional Review Board (approval number 00001655). Participants were invited to take part in a study to evaluate popular music media literacy. They completed

² <https://collegemusiclit.weebly.com/>

all aspects of the study online in which they signed up to participate via the SONA system, which then directed them to the online Qualtrics questionnaire. At the end of the assessment, participants were provided with a link to the popular music media literacy website, followed by a link to the post-assessment, which was also administered via the SONA system and Qualtrics. Participants took an average of 2.04 days to review the popular music media literacy website prior to completing the post-assessment. The baseline and post-literacy assessments were matched according to the unique participant identification code that was assigned to them when they signed up to participate in the study.

RESULTS

Data analysis

Preliminary analyses were conducted to assess the reliability of scales, distributional characteristics, and the extent of missing data. Missing data for the current study were minimal (< 5%), therefore a simple mean substitution method was used (Kline, 2005). This method of handling missing data is preferable to deletion methods as it allows for complete case analyses, does not reduce the statistical power of tests, and takes into consideration the reason for missing data (Twala, 2009). Moreover, this method of data imputation is a good representation of the original data as long as the missing data are less than 20%, which was the case in this study (Downey & King, 1998).

Analyses in the current study included: (a) intercorrelations of baseline and post-literacy outcome measures and (b) mean comparisons for baseline measures. To test the hypotheses in the current study (c) paired samples *t*-tests were conducted to assess the

effectiveness of popular music media literacy for realism, similarity, skepticism, engagement, and self-esteem.

Intercorrelations

Intercorrelations among outcome measures at baseline assessment and post-literacy can be found in Table 1. Significant correlations were found for many of the outcome measures taken during both time points. For instance, realism scores taken at the baseline assessment were significantly correlated to realism scores at the post-literacy assessment ($r = .70, p < .001$). The same trend occurred for baseline and post-literacy similarity ($r = .70, p < .001$), skepticism ($r = .67, p < .001$), engagement ($r = .83, p < .001$), and self-esteem ($r = .84, p < .001$).

Additionally, several of the outcome measures assessed at baseline were significantly correlated with each other. The results indicated that baseline realism was related to both baseline similarity ($r = .54, p < .001$) and self-esteem ($r = -.28, p < .05$). Several of the outcome measures assessed at post-literacy assessment were also significantly correlated with each other. The results indicated that post-literacy realism was associated with post-literacy similarity ($r = .57, p < .001$) and skepticism ($r = -.33, p < .05$). Post-literacy engagement was associated with post-literacy self-esteem ($r = .30, p < .05$).

Finally, there were significant correlations between several baseline and post-literacy assessments. Baseline realism was positively correlated with post-literacy similarity ($r = .46, p < .001$), and baseline similarity was positively correlated with post-literacy realism ($r = .70, p < .001$). Additionally, baseline engagement ($r = .34, p < .05$) was correlated with post-literacy skepticism.

Table 1. *Intercorrelations of study variables*

	1	2	3	4	5	6	7	8	9	10
1.T1.Realism		.70**	.54**	.46**	-.02	-.17	-.21	-.07	-.28*	-.25
2.T2.Realism			.40**	.57**	-.18	-.33*	-.11	-.00	-.21	-.24
3.T1.Similarity				.70**	-.06	.00	-.14	.00	-.03	-.02
4.T2.Similarity					-.09	-.19	-.12	.07	-.16	-.12
5.T1.Skepticism						.67**	.24	.13	-.10	-.17
6.T2.Skepticism							.34*	.23	.08	.08
7.T1.Engagement								.83**	.11	.21
8.T2.Engagement									.06	.30*
9.T1.Self-Esteem										.84**
10.T2.Self-Esteem										

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

Table 2. *Baseline and post-literacy assessment*

	Skepticism		Realism		Similarity		Engagement		Self-Esteem	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Baseline	3.55	.65	2.85	.52	2.88	.65	4.38	.56	3.65	.86
Post-Literacy	3.79	.73	2.83	.57	2.86	.70	4.35	.59	3.69	.90

Baseline assessment

At baseline, participants reported moderate levels of viewing music as real ($M = 2.85$, $SD = .52$), viewing themselves as similar to music representations ($M = 2.88$, $SD = .65$) and self-esteem ($M = 3.65$, $SD = .86$). They also reported high levels of music skepticism ($M = 3.55$, $SD = .65$) and engagement with music ($M = 4.38$, $SD = .56$).

Effect of popular music media literacy

Paired samples *t* tests were conducted to determine if there was an effect on the outcome variables after engaging with the popular music media literacy. Results indicated a significant difference for music skepticism, $t = -3.11$, $df = 51$, $p = .003$, $d = -.43$, with participants reporting an increase in music skepticism. No other significant differences were found between baseline and post-literacy assessment. Descriptive statistics for baseline and post-literacy measures can be found in Table 2.

DISCUSSION

The current pilot study evaluated a popular music media literacy website that was developed for the purposes of this study with the aim of meeting the guidelines outlined in Wright and colleagues (2019) regarding popular music media literacy. The goal of the popular music media literacy website was to help emerging adults develop critical thinking skills related to popular music media and to motivate emerging adults to evaluate the purpose and production of music media (i.e., the use of autotune as an effect in creating music), marketing strategies used by music artists' (i.e., the use of social media by music artists, building the image of the music artist and branding, and impression management) and the content contained in popular music..

At baseline, participants reported moderate levels of viewing music as real and viewing themselves as similar to music representations. Participants also reported high

levels of music skepticism, engagement with music, as well as moderate levels of self-esteem at baseline.

Popular music media literacy

The current study hypothesized that there would be significant differences between the baseline assessment and post-literacy assessment regarding perceptions that music reflects real life (hypothesis 1), viewing the self as similar to music portrayals (hypothesis 2), general music skepticism (hypothesis 3), level of engagement with music (hypothesis 4), and reported self-esteem (hypothesis 5). Results of the current study partially supported our hypotheses.

Results indicated that the popular music media literacy website was effective in increasing general music skepticism (hypothesis 3). Increasing consumer skepticism related to popular music is exceptionally important as it can decrease the likelihood that consumers believe the distorted media portrayals that are often presented via popular music (Burt, 2018; Ward, 2016). This will help consumers view popular music media representations critically and identify unrealistic portrayals of behaviors and personas, which has associated with a decrease in self-esteem and negative decision making (Burt, 2018; Pinkleton et al., 2012). This is why many researchers recommend that consumers develop the skills needed to question the intentions and content contained in the media that they are consuming (Ey, 2014; Rodesiler, 2010).

Consistent with the theoretical perspectives considered in this study, if consumers develop increased skepticism regarding popular music content, they are less likely to believe that the content portrayed via popular music is a reflection of reality (Cohen & Weimann, 2000; Gerbner et al., 1994) and are less likely to learn vicariously from popular music media models (Bandura & Walters, 1963; Bandura, 1977).

The hypotheses that there would be differences in perceptions that music reflects real life (hypothesis 1), viewing the self as similar to music portrayals (hypothesis 2), the level of engagement with music (hypothesis 4), and reported self-esteem (hypothesis 5)

between baseline assessment and post-literacy assessment were not supported by the current data. These null results may be a reflection of the small sample size utilized in this pilot study. Even so, our results still reinforce the recommendations of Wright and colleagues (2019).

The Task Force on the Sexualization of Popular Music (2018) concluded that popular music media literacy should provide tools to critically analyze music, and thus allow skepticism of the media being consumed, as well as provide awareness of potential effects of exposure and the best practices for consuming popular media (see also Wright et al., 2019). Previous research in media and music literacy has focused on providing more awareness and raising skepticism towards the content being consumed to allow for effective evaluation of the source (Austin et al., 2005; Van de Vord, 2010). The increase in music skepticism post-literacy found in the current study may be related to a ceiling effect, as general skepticism is well-developed before adolescence (Austin et al., 2005).

Limitations and implications for future research

Like other studies, this study has some limitations that should be considered when interpreting the results. One limitation of the current study is the small sample size and the fact that the sample was derived from one geographic location. Replicating this study with a larger, more diverse sample may yield more widespread and conclusive results. The skepticism effect size result is approaching the medium effect size. The small sample size within this study may have affected the effect size. It is predicted that if this study were to be conducted on larger sample sizes, the significance level would be lower, thus producing stronger effect size results. Additionally, this study was conducted online, limiting the amount of control researchers had over the study. Nevertheless, this study contributes to understanding about the impact music media literacy programs can have regarding music skepticism among consumers. Future research efforts should focus on examining popular music media and how it relates to various populations. The limitation in sample size of the current study precluded analyzing results based on sociodemographic factors.

ACKNOWLEDGEMENTS

The data presented, the statements made, and the views expressed are solely the responsibility of the

authors. Correspondence concerning this article should be addressed to Chrysalis L. Wright, Department of Psychology, University of Central Florida, 4000 Central Florida Blvd, Orlando, FL 32816. E-mail: Chrysalis.Wright@ucf.edu. We thank the following individuals for their contribution to this research project through the web-based development of the popular music media literacy that was examined in this study: Delaney Rust (University of Central Florida) and Samira Youssef (University of Central Florida).

REFERENCES

- Alvermann, D. E., & Hagood, M. C. (2000). Critical media literacy: Research, theory, and practice in "new times", *The Journal of Educational Research*, 93:3, 193-205.
<https://doi.org/10.1080/00220670009598707>
- Aubrey, J. S., Hopper, K. M., & Mbure, W. G. (2011). Check that body! The effects of sexually objectifying music videos on college men's sexual beliefs. *Journal of Broadcasting & Electronic Media*, 55, 360-379.
<https://doi.org/10.1080/08838151.2011.597469>
- Austin, E. W., Pinkleton, B. E., Hust, S. J. T., & Cohen, M. (2005). Evaluation of an American Legacy Foundation/Washington State Department of Health media literacy pilot study. *Health Communication*, 18(1), 75-95.
https://doi.org/10.1207/s15327027hc1801_4
- Australian Communications and Media Authority. (2010). *Trends in media use by children and young people: Insights from the Kaiser family foundation's generation M2 2009 (USA), and results from the ACMA'S media and communications in Australian families 2007*. Melbourne, ACT.
- Australian Communications and Media Authority. (2016, February 5). *Aussie teens and kids online*. <http://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Aussie-teens-and-kids-online>
- Austin, E. W., & Johnson, K. K. (1997). Immediate and delayed effects of media literacy training on third grader's decision making for alcohol. *Health Communication*, 9(4), 323.
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bandura, A. & Walters, R. H. (1963). *Social learning and personality development*. Hold, Rinehart & Wilson.

- Bell, B.T., Lawton, R., & Dittmar, H. (2007). The impact of thin models in music videos on adolescent girls' body dissatisfaction. *Body Image, 4*, 137-145.
- Beullens, K., Roe, K., & Van den Bulck, J. (2012). Music video viewing as a marker of driving after the consumption of alcohol. *Substance Use & Misuse, 47*, 155-165.
- Brown, J. D., & Bobkowski, P. S. (2011). Older and Newer Media: Patterns of Use and Effects on Adolescents' Health and Well-Being. *Journal of Research on Adolescence, 21*(1), 95-113. <https://doi.org/10.1111/j.1532-7795.2010.00717.x>
- Brown, J. D., L'Engle, K., Pardun, C. J., Guo, G., Kenneavy, K., & Jackson, C. (2006). Sexy media matter: Exposure to sexual content in music, movies, television, and magazines predicts Black and White adolescents' sexual behavior, *Pediatrics, 117*, 1018-1027. <https://doi.org/10.1542/peds.2005-1406>
- Burt, I. (2018). Media's influence on self-image and romantic relationship decision-making in college-age clients: What mental health counselors should know. *Creativity in Mental Health, 13*(3), 275-287. <https://doi.org/10.1080/15401383.2018.1426508>
- Christenson, P. (1992). Preadolescent perceptions and interpretations of music videos. *Popular Music & Society, 16*(3), 63-74. <https://doi.org/10.1080/03007769208591488>
- Christenson, P. G., & Peterson, J. B. (1988). Genre and gender in the structure of music preferences. *Communication Research, 15*(3), 282-301.
- Cohen, J., & Weimann, G. (2000). Cultivation revisited: Some genres have some effects on some viewers. *Communication Reports, 13*, 99-114.
- Downey, R. G., & King, C. (1998). Missing data in Likert ratings: A comparison of replacement methods. *Journal of General Psychology, 125*, 175-191.
- Ey, L. (2014). *Young children's engagement with contemporary music media and their gender role and self-identity*. University of South Australia, Dissertations.
- Ey, L., & McInnes, E. (2015). Sexualised Music Videos broadcast on Australian free-to-air television in child friendly time-periods. *Children Australia, 40*(1), 58-68.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1994). Growing up with television: The cultivation perspective. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research* (pp. 17-41). Erlbaum.
- Graydon, S. (1997). Overcoming Impossible Bodies: Using Media Literacy to Challenge Popular Culture. *Emergency Librarian, 24*(3), 15-18. <https://eric.ed.gov/?id=EJ538038>
- Gonzalez de Rivas, M. R., Fuld, G. L., Mulligan, D. A., Altmann, T. R., Brown, A., Christakis, D. A., Wilocox, B. (2009). Impact of music, music lyrics, and music videos on children and youth. *Pediatrics, 124*(5), 1488-1494. <https://doi.org/10.1542/peds.2009-2145>
- Hobbs, R. & Jensen, A. (2009). The past, present, and future of media literacy education. *Journal of Media Literacy Education, 1*, 1-11.
- Kaestle, C. E., Halpern, C. T., & Brown, J. D. (2007). Music videos, pro wrestling, and acceptance of date rape among middle school males and females: An exploratory analysis. *Journal of Adolescent Health, 40*, 185-187.
- Kaiser Family Foundation. (2003). *Reaching the MTV generation: Recent research on the impact of the Kaiser Foundation/MTV public education campaign on sexual health*. www.kff.org/entmedia/Reaching-the-MTV-Generation-Report.cfm.
- Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling*. The Guildford Press.
- Knobloch-Westerwick, S., Musto, P., & Shaw, K. (2008). Rebellion in the top music charts: Defiant messages in rap/hip-hop and rock music 1993 and 2003. *Journal of Media Psychology: Theories, Methods, and Applications, 20*, 15-23. <https://doi.org/10.1027/18641105.20.1.15>
- North, A. C., Hargreaves, D. J., O'Neill, S. A. (2000). The importance of music to adolescents. *British Journal of Educational Psychology, 70*, 255-272.
- Pereira, S. & Moura, P. (2019). Assessing media literacy competences: A study with Portuguese young people. *European Journal of Communication, 34*(1), 20-37. <https://doi.org/10.1177/0267323118784821>
- Pinkleton, B. E., Austin, E. W., Chen, Y.-C. Y., & Cohen, M. (2012). The role of media literacy in shaping adolescents' understanding of and responses to sexual portrayals in mass media. *Journal of Health Communication, 17*(4), 460-476. <https://doi.org/10.1080/10810730.2011.635770>
- Recording Industry Association of America (2016). www.riaa.com
- Rideout, V. (2017). *The common sense census: Media use by kids age zero to eight*. San Francisco, California. <https://www.common sense media.org/research/the->

- common-sense-census-media-use-by-kids-age-zero-to-eight-2017
- Rigg, K. K., & Estreet, A. T. (2018). MDMA (ecstasy/molly) use among African Americans: The perceived influence of hip-hop/rap music. *Journal of Ethnicity in Substance Abuse, 18*, 667-677. <https://doi.org/10.1080/15332640.2018.1430646>
- Rodesiler, L. (2010). Empowering students through critical media literacy: This means war. *Clearing House, 83*(5), 164-167.
- Rosenberg, M., Kielkiewicz, K., Mathuna, C. O., & McLaughlin, C. (2020). Rosenberg Self-Esteem Scale. *Journal of Religion and Health, 59*, 381-398.
- Russell, C. A., Regnier-Denois, V., Chapoton, B., & Buhrau, D. (2017). Impact of substance messages in music videos on youth: Beware the influence of connectedness and its potential prevention-shielding effect. *Journal of Studies on Alcohol and Drugs, 78*(5), 674-683. <https://doi.org/10.15288/jsad.2017.78.674>
- Scull, T. M., Kupersmidt, J. B., Malik, C. V., & Keefe, E. M. (2018). Examining the efficacy of a health media literacy education program for sexual health promotion in older adolescents attending community college. *Journal of American College Health, 66*(3), 165-177. <https://doi.org/10.1080/07448481.2017.1393822>
- Task Force on the Sexualization of Popular Music. (2018). Washington, DC: Division 46 (Society for Media Psychology & Technology) of the American Psychological Association.
- ter Bogt, T. F., Engels, R. C., Bogers, S., & Kloosterman, M. (2010). "Shake it baby, shake it": Media preferences, sexual attitudes and gender stereotypes among adolescents. *Sex Roles, 63*(11-12), 844-859. <https://doi.org/10.1007/s11199-010-9815-1>
- Tobias, E. (2014). Flipping the misogynist script: Gender, agency, hip hop and music education. *Action, Criticism, and Theory for Music Education, 13*(2), 48-83.
- Twala, B. (2009). An empirical comparison for techniques for handling incomplete data using decision trees. *Applied Artificial Intelligence, 23*, 373-405. <https://doi.org/10.1080/08839510902872223>
- Vahedi, Z., Sibalis, A., & Sutherland, J. E. (2018). Are media literacy interventions effective at changing attitudes and intentions towards risky health behaviors in adolescents? A metaanalytic review. *Journal of Adolescence, 67*, 140-152. <https://doi.org/10.1016/j.adolescence.2018.06.007>
- Vandenbosch, L., & Eggermont, S. (2012). Understanding sexual objectification: A comprehensive approach toward media exposure and girls' internalization of beauty ideals, self-objectification, and body surveillance. *Journal of Communication, 62*, 869-887.
- Van de Vord, R. (2010). Distance students and online research: Promoting information literacy through media literacy. *The Internet and Higher Education, 13*(3), 170-175. <https://doi.org/10.1016/j.iheduc.2010.03.001>
- Vanstone, A., Wolf, M., Poon, T., & Cuddy, L. (2016). Measuring engagement with music: Development of an informant-report questionnaire. *Aging & Mental Health, 20*, 474-484. <https://doi.org/10.1080/13607863.2015.1021750>
- Warburton, W. A. (2012). The impact of violent video games: An overview. In W. A. Warburton & D. Braunstein [Eds.], *Growing up fast and furious: Reviewing the impacts of violent and sexualised media on children* (pp. 1-33). The Federation Press.
- Warburton, W. A., Roberts, D. F., & Christensen, P. G. (2014). The effects of violent and antisocial music on children and adolescents. In D. Gentile (Ed.), *Media violence and children* (2nd ed.) (pp. 301-328). Praeger.
- Ward, L. M. (2016). Media and sexualization: State of empirical research, 1995-2015. *The Journal of Sex Research, 53*(4-5), 560-577. <https://doi.org/10.1080/00224499.2016.1142496>
- Wright, C. L., Carpentier, F. D., Ey, L., Hall, C., Hopper, K. M., & Warburton, W. (2019). Popular music media literacy: Recommendations for the education curriculum. *Policy Insights from the Behavioral and Brain Sciences, 6*(2), 186-193. <https://doi.org/10.1177/2372732219858631>
- Wright, C. L., & Rubin, M. (2017). "Get lucky!" Sexual content in music lyrics, videos and social media and sexual cognitions and risk among emerging adults in the USA and Australia. *Sex Education, 17*, 41-56. <https://doi.org/10.1080/14681811.2016.1242402>