

Photography-Based Pedagogy in Relation to Social-Emotional Learning in Adolescents - Systematic Literature Review

Adi Gielgun-Katz, Alina S. Rusu, Miri Shacham

Photography-Based Pedagogy in Relation to Social-Emotional Learning in Adolescents - Systematic Literature Review

Adi Gielgun-Katz ^{a*}, Alina S. Rusu ^{a, b}, Miri Shacham ^c

^a Doctoral School "Education, Reflection, Development", Faculty of Psychology and Sciences of Education, Babes-Bolyai University, Cluj-Napoca, Romania

^{a, b} Faculty of Animal Science and Biotechnologies, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Calea Manastur Street, No. 3-5, Romania

^c Teaching Department, Braude College of Engineering, Karmiel, Israel

*Corresponding author: adigk1@gmail.com

Abstract

Keywords:

photography curriculum;
photography-based pedagogy; social and emotional skills; systematic literature review.

It is generally acknowledged that today's most important means of communication is the image, with its various forms of representation. The new visual language that is continuously developing due to available technologies in everyday lives, creates new ways of expressing thoughts and emotions, especially among adolescents. In parallel, the Social-Emotional Learning model (SEL) has been gaining more and more momentum in the education system in terms of the skills that can be improved: self and social awareness, responsible decision-making, self-management, and relationship skills. Despite the potential of integrating the visual language with the SEL, especially in adolescents, few studies have addressed the development and implementation of integrative curricula. The aim of this study is to investigate through a systematic literature review approach the methods and outcomes of using photography-based pedagogy integrated with SEL in adolescents. The variables refer to the aim of the studies, the pedagogical approach, the assessments, and the effect of the photographic tools on various SEL skills. All the reviewed studies referred to the self and social awareness of the students, but not all were conclusive about the effects of the photographic tools as the main influencing elements on the SEL skills.

Zusammenfassung

Schlüsselworte:

Fotografie Curriculum;
Fotografie gestützte Pädagogik;
soziale und emotionale Fähigkeiten; systematischer Forschungsüberblick.

Anerkanntermaßen ist das gegenwärtig bedeutendste Kommunikationsmittel das Bild und dessen verschiedenen Darstellungsformen. Die neue, dank der ständig weiterentwickelnden Techniken, im täglichen Leben verfügbare Bildsprache schafft neue Ausdrucksweisen für Gedanken und Gefühle, ganz besonders bei Heranwachsenden. Gleichzeitig gewinnt das Sozial-Emotionale Lernmodell (SEL) immer mehr Boden im Bildungswesen in Bezug auf die zu verbessernden Fähigkeiten: Selbst- und Sozialbewusstsein, verantwortliche Entscheidungsfindung, Selbstmanagement, Beziehungsfähigkeiten. Trotz des Potentials, die Bildsprache, besonders bei Heranwachsenden in SEL einzubeziehen, behandeln nur wenige Studien die Entwicklung und Anwendung von integrativen Curricula. Ziel dieser Studie ist es, durch systematischen Forschungsüberblick die Methoden und Ergebnisse bei der Anwendung von Fotografie gestützter Pädagogik in Verbindung mit SEL bei Heranwachsenden zu erforschen. Die Variablen beziehen sich auf das Ziel der Studien, den pädagogischen Ansatzpunkt, die Veranlagungen und die Auswirkung der fotografischen Mittel auf diverse SEL-Fähigkeiten. Alle geprüften Studien bezogen sich auf das Selbst- und Sozialbewusstsein der Schüler, wiesen jedoch nicht alle überzeugende Beweise der Wirkung der fotografischen Mittel als Haupteinflusselemente auf die SEL Fähigkeiten.

1. Introduction

Photography curriculum studies are documented back since the 50's and, as the visual communication and photography develop, it continues to multiply with the passing years (Hamlin, 1955; Orrick, 1969; Hammerman, 1973; Coleman, 1980; Greenberg, 1988; Hulick, 1992; Rigos & Salemme, 1999). According to Hannigan et al. (2023), visual art forms, particularly photography, are the most commonly used media in arts-based research. A person can receive about 80

percents of information visually (Smilkov & Jovanova-Mitkovska, 2022). It is generally acknowledged that today's most important means of communication is the image, with its various forms of representation. Visuals are considered by many experts in education as valuable and necessary communication material, especially in schools. Compared to verbal communication, the visual medium makes it possible to understand a concept



more quickly and efficiently. The period of the philosophers (from Gutenberg to Daguer) was characterized as the age of words (Smilkov & Jovanova-Mitkovska, 2022).

Today's image era, which began with the invention of photography, has completed and, in many cases, replaced the era of words (Licul, 2020). Modern textbooks are unimaginable without illustrations and photographs, which can play important roles in the active acquisition of knowledge during classes. The fact that photographs are not only found in our textbooks and digital presentations, but also permeate social networks and advertisements, provides excellent evidence of the importance of photography in formal and non-formal education from early ages, i.e., children use mobile phones with built-in cameras from a young age.

Youth express their daily lives, customs, culture, preferences, feelings and opinions, and practically share their lives and personal reflections with their friends and with whom it may concern their social lives (Buckingham, 2007; Gerodimos, 2018). A study by Bedi and Varga (2018) showed that high school students recognize the importance of photography in contemporary media. Also, visual tools facilitate a better connection with teenagers, especially with those teenagers who feel that no one sees them (Zenkov & Harmon, 2009; Burke et al., 2016). In today's world, photography has become an essential communication tool to define our multiple identities, stories, existence, culture, and the socio-political world (de los Ríos, 2020). The photographs can function as a language (visual language), expressing the personal world (cognitive and emotional), and helping to gain self-awareness and self-identity on the way (Paone et al., 2018).

In the recent years, there is a growing understanding that visual literacy education is one of the bases for media literacy in the 21st century. In an era where the digital camera has become available to every young person, an opportunity opens up to integrate photography as a tool for perfecting teaching, learning and assessment, developing Social and Emotional Learning (SEL) and imparting core values to the contemporary learner (Hemy & Halel-Lavian, 2022). Photography is an integral part of the world of art, thus, classes that learn through art are more engaged and go through an enjoyable study process, and are provided with SEL experience (Scicluna, 2020).

When students experience social and emotional struggles, these may negatively impact their school improvement, especially when they do not engage in verbal communication about their struggles. Arts education allows students to express knowledge, feelings, or thoughts without words, which can be transformed into a social-emotional curriculum. The awareness to the field of SEL had begun almost 30 years ago, and since then and over the past few years there is an increasing interest towards it in all types of forms of education, including outreach activities (Elksnin & Elksnin, 2003; Durlak et al., 2011; Waajid et al., 2013; Haymovitz et al., 2018; Araúz Ledezma et al., 2021; Xu et al., 2023).

According to the Collaborative for Academic, Social, and Emotional Learning – CASEL (2005, 2020), social and emotional learning is part of the process of human development. It is the process by which people of all ages acquire and apply knowledge, attitudes, and skills to develop identities, manage emotions, and achieve individual and group goals, demonstrate empathy for others, establish and strengthen stable relationships, and make responsible and caring decisions (CASEL, 2020). Elias et al. (2019) interpret SEL as a process through which people learn and apply critical skills that are necessary to be successful in school, work, interpersonal relationships and civic life. Those skills are considered the following: social, emotional, behavioural and personality skills. CASEL's model is based on Self-Awareness, Self-Management, Social-Awareness, Relationship skills and Responsible decision-making process.

It was found that using the arts in general, and photography in particular, is a very effective means of developing empathy skills, which is an essential component in SEL and defined as the ability to identify and understand the emotions and mental states of others (Ishaq, 2006), especially in special education classes and classes that include students with special needs. Activities that incorporate art offer those learners an opportunity to actively participate and express themselves in a better way (Brouillette, 2009). In a study performed by Stuhr et al. (2017), the participants had to create photo journals, according to the photovoice model (Wang & Burris, 1997), so that they can make meaning of personal experience. After taking the pictures, they could connect those experiences to how it had informed their SEL. The photovoice model offered the researchers a unique opportunity to collect data from the participants. Taking pictures helps participants to recognize the

nuances to which they previously did not pay attention (Howley et al., 2021), and, on the other hand, photography can be used to access and explore the memories and the emotions that are accompanying them. Looking at photos creates perceptions and reactions that indicate much about someone's identity and ways of feeling and behaving. Hence, these non-verbal techniques may help expressing emotional states, which sometimes are difficult to be manifested (Nave, 2017).

Although the process of combining photography with SEL seems natural, apparently, most of the studies were conducted only on a few categories of learners, such as kindergarten and elementary school children, and secondary education students (Chisholm & Whitmore, 2018; Whitmore et al., 2019; Irene & Athanasios, 2023; Larsen et al., 2023). Less attention was paid to adolescents and high school students. The present study aims to systematically review the literature addressing the photography-based SEL intervention programs for adolescents. Specifically, the study will focus on identifying the following variables of the studies that will be included in the analysis: research aims, pedagogical approaches, assessment tools and the effects of the photography-based pedagogy on the social-emotional learning targeting the adolescents. The rationale of this paper focuses on the need for an additional expressive tool for adolescents, in order to improve their social and emotional skills, especially the communication between them and their peers and teachers.

2. Problem statement

Based on the importance of photography as an expression tool for adolescents who use the visual language in their daily communication, the aim of this systematic review is to identify studies that relate to the subject of photography-based pedagogy and have the maximum common ground with the social-emotional learning variable.

3. Research questions

In searching for intervention educational programs incorporating photography to promote SEL, the following research questions were formulated:

1. What are the aims of the studies?
2. What was the pedagogical approach in these studies?
3. What were the assessment tools in these studies?

4. What were the effects of the photography-based pedagogy on the social-emotional learning, if any?

4. Purpose of the study

The purpose of this study is to analyze intervention educational programs that combine photography and SEL for adolescents and identify their aims, structure, methods of assessments and outcomes.

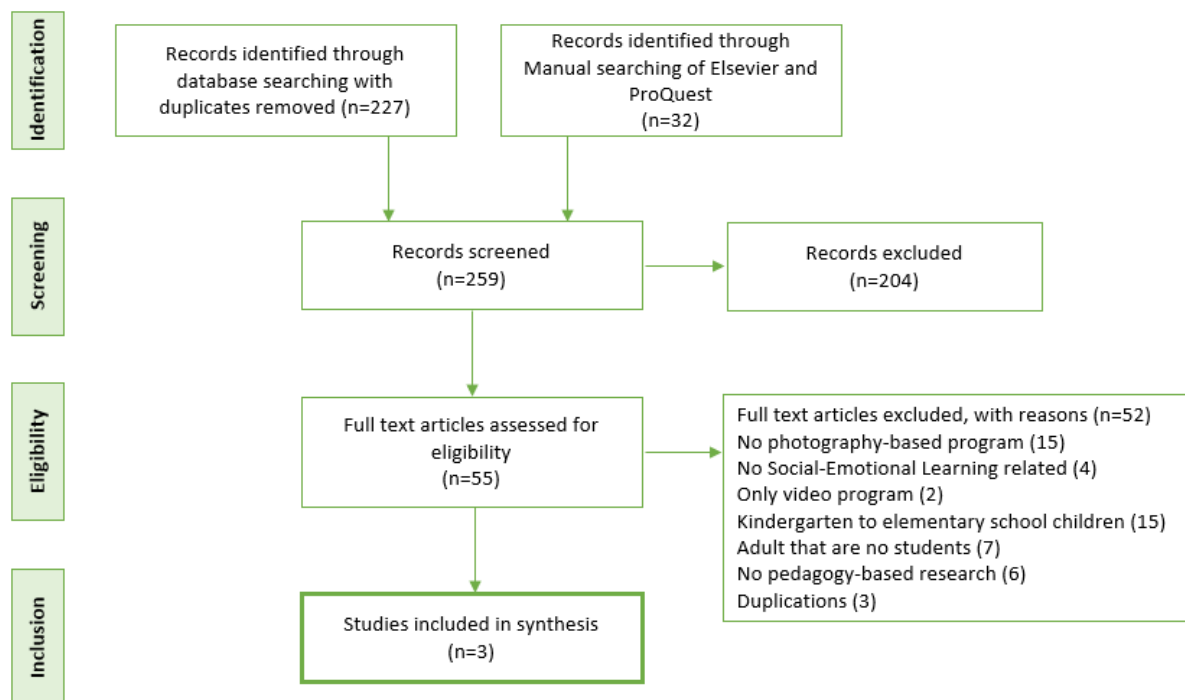
5. Research methods

In order to answer the research questions, the method used in this paper was the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to conduct a systematic review of the literature (Page et al., 2021). The study and the stages of the current systematic analysis of the literature were designed according to the procedural guidelines of Uman (2011). The original search used the following databases: EBSCOHost, SocINDEX, Proquest-Education database, ERIC, PsycArticles, Complementary Index, Academic Search Complete, Supplemental Index, Directory of Open Access Journals, and Elsevier.

The literature search was based on the following keywords and combinations: "Photography" or "Photos" or "Picture or Camera"; "Social-Emotional Learning" or "Social and Emotional Learning". Based on the search of each criterion, a number of 1,643,095 articles were found. The combination of all keywords revealed 259 results. The inclusion criteria were the following: studies had to be published in English, studies had to be published between 2012 and 2023 in academic and peer review journals; studies had to allow full text access.

After applying all the inclusion criteria, a number of 204 records were excluded. A number of 15 studies were removed since they did not use photography in the conducted programs. 4 studies were removed for not being related to the SEL aspect. Another 2 studies were excluded since they used only video-based pedagogy. 15 studies were conducted the program on kindergarten and elementary school children and therefore were excluded, along with seven studies that were conducted on adults. Six studies were not actual pedagogy-based studies, and three were excluded due to duplication. In the end, three studies were included in the review. The search sorting process and findings can be seen in the following PRISMA flow chart (Fig. 1).

Figure 1. PRISMA flow chart for the search sorting process and findings.



6. Results

All the studies included in the analysis were conducted in the US and they used a qualitative methodology. All the participants were defined as youth, though not within the same age-division, i.e., middle school children (Chisholm & Whitmore, 2018), ages 14-15 (Howley et al., 2021), and high school students at the mid age of 15 (Felt et al., 2012). The methods of data collection were not similar, i.e., photography taken by researchers (of the class), guided analysis questions, students' reflection (Chisholm & Whitmore, 2018), focus group interviews, students' personal biographies, timelines, digital and written reflections, photovoice, and class artifacts (Howley et al., 2021), and surveys, ethnographic field notes, participatory evaluation, photographs, videos, feedback and examples of participants' work (Felt et al., 2012). The facilitators were either the researchers themselves, or instructors who were trained by researchers. The settings in which the study took place were diverse, i.e., in two of the studies' settings were formal (Chisholm & Whitmore, 2018; Howley et al., 2021), and in one of the studies, the settings were nonformal (Felt et al., 2012). The length of the programs was diverse, i.e., Chisholm & Whitmore (2018) described the program's stages, though did not mention the length of them, while the other two programs spread it into 12 weeks (Howley et al., 2021) and 15 weeks time periods (Felt et al., 2012).

Research question 1: What are the aims of the research studies?

Although all the three studies included the SEL model with the joint of photography among youth, they all had different aims (Table 1). One of the aims was Visual means as a language to express SEL and as an assessment in the classroom (Chisholm & Whitmore, 2018), i.e., the aim was to examine how digital images, which extend beyond language, can change the way we think about multimodal assessment in the classroom. In other words, the goal was to investigate how the visual means can illustrate SEL and student engagement in the classroom, considering that learning is also achieved through extra-linguistic means, such as visual gestures. Another aim was Photography as an expression of SEL in physical education (Howley et al., 2021), i.e., the aim was to explore how the students experience different learning. The program was designed to make their voices heard and its purpose was to promote SEL and meaningful physical education. Participatory culture as a useful knowledge in education (Felt et al., 2012) was another aim, which was directed to the participatory culture of the youth. This aim was to clarify the methodological and pedagogical framework of a participatory culture, which allows schools to take advantage of the way youth produce knowledge and share in a formal setting, as well as presenting an application designed according to this approach in a community school (Table 1).

Table 1. Identified aims of photography-based SEL pedagogical programs for adolescents

Aims
<ul style="list-style-type: none"> ▪ Examine how digital images, which extend beyond language, can change the way we think about assessment in the classroom, with the purpose of how the visual means can illustrate SEL and student engagement in the classroom, considering that learning is also achieved through extra-linguistic means, such as visual gestures. ▪ Explore how the students experience different learning, designed to make their voices heard, and its purpose is to promote SEL and meaningful physical education. ▪ Clarify the methodological and pedagogical framework of a participatory culture, which allows schools to take advantage of the way youth produce knowledge and share in a formal setting, as well as presenting an application designed according to this approach in a community school.

Research question 2: What is the pedagogical approach in the studies?

When using photography as a pedagogical tool, there can be various creative approaches for implementing it. Visual Learning Analysis (VLA) is one method that has been used as a pedagogical tool (Chisholm & Whitmore, 2018; Miller et al., 2019; Whitmore & Chisholm, 2020). Its purpose is to develop a creative and safe space, in which the students can reveal to their teachers how they learn through various layers. According to Chisholm & Whitmore (2018), VLA helps the teachers and students to reflect on their own learning and access non-linguistic ways of making meaning. Howley et al. (2021) used the Student Voice Pedagogy (SVP) in the form of photography, to promote SEL and meaningful physical education. According to Howley et al. (2021), the educators who implement the SVP pedagogy must be aware of the following aspects: (1) learner-centered and democratically based pedagogies that enable participants to understand and take ownership and responsibility for their learning; (2) processes that create learning communities, the norm of which is cooperation and collaboration, and as a result students have opportunities to participate in decision-making; and (3) allow students a continuum of influence on analyses, decisions and work practices, while providing opportunities to share and reflect on their learning experiences. Felt et al. (2012) used a triangulated research methodology that included "Explore Locally, Excel Digitally" (ELED) approach integrated with photography, in which the students were regarded as "action researchers", that were empowered to consider community issues and digital techniques, as well as to produce personal digital portfolios illustrating their comprehension of skills and practices related to digital citizenship.

Table 2. Pedagogical approach in the studies included in the systematic review

Pedagogical approach
<ul style="list-style-type: none"> ▪ Visual Learning Analysis (VLA) - photographing classroom action broadly during arts-based literacy instruction, select photos that the researcher understands will engage students and teachers in inquiry and potentially promote exciting discussions. Students analyse selected photos through the VLA reflection in a four levels process: (1) spreading the colour photographs and asking basic observation questions; (2) selecting one or two images to draw or write on and process; (3) analysing the photos; and (4) sharing the analysing with the rest of the group. ▪ Student Voice Pedagogy (SVP) – by using participatory action research (PAR) approach, with focusing on behavioral interventions. At the beginning, the program included full value contract and personal biography. Timeline and taster sessions followed and then photovoice tasks, ending with overall digital reflection. During the program period, students practiced cooperative learning and group processing along with continuous class consultation and negotiation. ▪ Explore Locally, Excel Digitally (ELED) – the activities were based on five theoretical categories (New Media Literacies, SEL, Characteristics for Participatory Learning, ethics, and mapping), and the students chose to which they relate more and acted as the "action researchers" due to their participatory role in data collection, and the nature of action research as a public, non-hierarchical situation that links reflection and action. The session integrated various activities: taking pictures, discussions, digital projects, role-play, impromptu debate and more, all related to the five theoretical categories.

Different tools were used to assess the educational programs, mostly qualitative ones (Table 3). Chisholm & Whitmore (2018) used observation and digital photographs analyses. They assumed that digital photographs can change the way of thinking about assessment multimodally in classrooms, and that the story is in the image for everyone to see, interview upon and understand what student think and feel. Another assessment tool, which was used by Howley et al. (2021), is the focus group. All the data collected about the students participating in the study (students' personal biographies, timelines, digital and written reflections, photovoice, and class artifacts) were transcribed and presented to them as part of the focus group held at the end of the course, in order to reflect on their experiences. Howley et al. (2021), in line with Chisholm & Whitmore (2018), assume that the assessment should be in the hands of the students who learn how to assess themselves via SEL skills. In comparison, Felt et al. (2012) used qualitative assessment and quantitative ones, such as two multi-paged, pre-/post-intervention surveys, which evaluated variables such as the New Media Literacies and SEL proficiency, respectively. The qualitative methods they used were observation, ethnographic

field notes and completion of an engagement index that captured session flow, key moments, and participants' attention across activities, along with the photographs that the participants took that were used to illustrate program activities (Felt et al., 2012). The purpose of these assessments' tools was to examine the levels of involvement of the students throughout the sessions, and to identify correlations between activity characteristics, levels of involvement and learning outcomes. The instructors met with the research partners as part of weekly meetings where they critically reflected on the effectiveness of each meeting, and also through collaborative notes on GoogleDocs.

Table 3. Assessment tools in the studies included in the systematic review

Assessment tools
<ul style="list-style-type: none"> ▪ Observation and digital photographs analyses. ▪ Focus group, in which all the data collected from the participants (students' personal biographies, timelines, digital and written reflections, photovoice, and class artifacts) were transcribed and presented to them in order to reflect on their experiences. ▪ Pre-/post-intervention surveys, observation, ethnographic field notes and completion of an engagement index, photographs taken by the participants, critically meetings with research partners and GoogleDocs notes shared with instructors and research partners.

Research question 4: What were the effects of the photography-based pedagogy on the social-emotional learning, if any?

Chisholm & Whitmore (2018) found that apart from the enjoyable process of sharing photographs the students expresses, the students are those to teach the facilitators about their social-emotional learning through photographs. The teachers can notice the individual students within the classroom community and effectively use arts-based and movement infused instructional strategies which help them to engage their entire bodies to relate to the literature content. The digital photos help with learning about students' interactions, SEL and engagements within the classroom by affording them to use nonlinguistic modes, movements, and their bodies to make meanings with literature, photographs and each other (Chisholm & Whitmore, 2018).

According to Howley et al. (2021), the use of photography and other tools in their study gave the student the opportunity to critique and modify the class content and make caring and constructive choices with regarding to social interactions in various situations and personal behavior and by that practice their responsible decision making. In the SEL's self

and social awareness aspects, the pedagogies that stimulate personal and group reflection helped the students to develop a sense of self and social awareness in relation to their relationships and collective experiences. Through considering and sharing the variety of emotional experiences they encountered in the past when they engaged in physical activity, the reflective tasks allowed the students to consider the connection and influence of emotions in past experiences and how they positively and/or negatively affect the experiences of movement in the present. Part of the trigger for achieving that were the photography tasks that helped students identify the nuanced ways in which they were physically active versus the fact that they previously did not see themselves as such (Howley et al., 2021).

The effect of the photographic tool on the SEL in Felt et al. (2012) was not very clear. In a few cases, even though the students used their cameras in ways that demonstrated deficiency in responsible decision-making and self-management, they used them as a trigger to initiate a discussion relevant to the situation captured on camera. They also took photos of their boundaries, suggesting beginner and intermediate social awareness proficiency. It also helped students with poor communication skills to express themselves and make their voices visually heard. The participants cultivated their relationship skills through a predominance of group activities and a heavy emphasis on collaboration and collective intelligence. The study also found several parallel and equivalent skills: the ethical thinking skill of perspective taking versus the New Media Literacies skill of performance plus the SEL skill of social awareness; consideration of potential benefit and harm to communities versus the New Media Literacies skill of negotiation plus the SEL skill of responsible decision making. There was no specific conclusion regarding the level of importance of photography as a tool that helps develop or improve SEL.

Table 4. Photography-based pedagogy effect on the SEL

The effects of the photography-based pedagogy on the social-emotional learning
<ul style="list-style-type: none"> ▪ The students teach the facilitators about their SEL with the help of the pictures taken in class. ▪ The digital photos help with learning about students' interactions, SEL and engagements within the classroom by affording them to use nonlinguistic modes, movements, and their bodies. ▪ Using photography gives the student the opportunity to critique and modify class content and make caring and constructive choices with regarding to social interactions in various situations and personal behavior and by that practice their responsible decision making.

-
- Photography tasks can help students identify the nuanced ways in which they are physically active.
 - Photographs taken by students can use as a trigger for initiate a discussion, relevant to the situation captured on camera.
 - Photographs taken by students can help those who are having communicational difficulties to express themselves in a way the class understands.
-

7. Conclusions

The present research used the systematic literature review method to analyse studies of photography-based pedagogies integrated with social and emotional learning for adolescents. The review included studies that were conducted over the last decade (2012-2023). The findings refer to the aim of the studies, the pedagogical approach, the assessment tools, and the effect of the photographic tool on SEL skills. Only three studies matched all the criteria of photography-based pedagogy, which used the SEL model with adolescents and were published in English. Although all three studies used the photographs as a pedagogical tool, each study used it differently, as an extra data collection tool or as the primary expression tool. All the studies used digital images

The purpose of all studies was to integrate photography-based pedagogy as a part of an educational framework, either formal or nonformal, as long as it can help the educational team. Reviewing the pedagogical approach, it appeared that all studies refer in some way to cooperative learning and group processing, in which the students took an active part and emphasized self and social awareness, two of the five SEL aspects. In Felt et al. (2012), there was a reference to all five SEL aspects as a part of the research process and findings.

Due to photography as a part of the art discipline, all studies naturally used the qualitative assessment approach and made observations, whether in class or through the pictures themselves as the storyteller. When it comes to the effect of the photography-based pedagogy on the SEL aspect, all studies mentioned the contribution to the class as a group or to the individual student, as well as to the teachers, who can use it as a nonformal tool to communicate and understand their students better and to apply new knowledge to their interest-driven experience. However, Felt et al. (2012) did not directly connect photography with the SEL results but mentioned it as one of the tools that they used in their study.

Based on the findings, the study of Chisholm & Whitmore (2018) was the only one that used photography as the primary and only tool. Therefore,

it is difficult to judge from these studies the level of influence of photography alone, although a specific reference was made to the contribution of photography in various parts of the other two studies (Felt et al., 2012; Howley et al., 2021). Adolescent identities deeply develop and mature, especially as a part of a group (Dörnyei & Muir, 2019). Communicating through social networks is a very common practice and has already become a language in itself (mainly because most social networks are now in the palm of every student's hand when using a mobile phone). As a result, photography is one of the tools a teacher can access to make meaning and collective interpretation through reflective social interactions between the teacher and the pupils (Niemi et al., 2015). Therefore, there is a need for further studies of this old-new language with adolescents and its influence on the SEL skills that are known to be essential for improving well-being.

Authors note:

Adi Gielgun-Katz (Photo-therapist, special education instructor and group facilitator) is currently a PhD student at the Faculty of Psychology and Sciences of Education, Babes-Bolyai University, Cluj-Napoca, Romania. Her professional and research interests are: integrating photography into curriculum as a communication added value.

Alina S. Rusu (biologist and psychologist) is currently a Professor at the Faculty of Animal Science and Biotechnologies, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania. She is also PhD coordinator affiliated to the Doctoral School "Education, Reflection, Development" (domain: Sciences of Education). Her professional and research interests are: humane education, interdisciplinary curriculum development, applied values of human-animal interactions and the multidimensional study of Service-Learning and other forms of civic engagement in Higher Education.

Miri Shacham is a senior lecturer and researcher in the Teaching Department at Braude College of Engineering in Karmiel, Israel. She is also a coacher of school managers in the Ministry of Education and running special program of "Personal- Academic Coaching" to stude

References

- Araúz Ledezma, A. B., Massar, K., & Kok, G. (2021). Social emotional learning and the promotion of equal personal relationships among adolescents in Panama: A study protocol. *Health Promotion International*, 36(3), 741-752.
- Bedi, K., & Varga, M. (2018). Visual perception and attitudes of students toward the role and importance of photography – students' creative and artistic photographic works through project- based learning. *Media Dialogues. Journal for research of the media and society*, 30(11), 5–17.
- Brouillette, L. (2009). How the arts help children to create healthy social scripts: Exploring the perceptions of elementary teachers. *Arts Education Policy Review*, 111(1), 16-24.
- Buckingham, D. (2007). *Youth, identity, and digital media* (p.216). the MIT Press.
- Burke, K. J., Greene, S., & McKenna, M. K. (2016). A critical geographic approach to youth civic engagement: Reframing educational opportunity zones and the use of public spaces. *Urban Education*, 51(2), 143–169.
- Chisholm, J. S., & Whitmore, K. F. (2018). Visual Learning Analysis: Using Digital Photography to Analyze Middle Level Students' Social-Emotional Learning and Engagement. *Voices from the Middle*, 25(4), 34–38.
- Chisholm, J. S., & Whitmore, K. F. (2018). Seeing the Text. In *Reading Challenging Texts* (pp. 18-37). Routledge.
- Coleman, A. D. (1980). *Light Readings: A Photography Critic's Writings*, 1968-1978, 88-92.
- Collaborative for Academic, Social, and Emotional Learning [CASEL] (2020), *Sell is...* <https://casel.org/what-is-sel>
- Collaborative for Academic, Social, and Emotional Learning [CASEL]. (2005). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs* – Illinois edition. Chicago, IL: Author
- Curran, W. J., & Hamlin, R. H. (1955). Medico-Legal Problems Seminar at Harvard Law School, The. *Journal of Legal Education*, 8(4), 499–502.
- de los Ríos, C. V. (2020). Writing Oneself into the Curriculum: Photovoice Journaling in a Secondary Ethnic Studies Course. *Written Communication*, 37(4), 487–511.
- Dörnyei, Z., & Muir, C. (2019). Creating a Motivating Classroom Environment. In X. Gao (Ed.), *Second Handbook of English Language Teaching* (pp. 719–736). Springer.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D& ., Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432. doi:10.1111/j.1467-Elias, M. J., Brackett, M. A., Miller, R., Jones, S., Kahn, J., Mahoney, J. L., Weissberg, R. P., & Chung, S. Y. (2019). Developing social and emotional skills and attitudes and ecological assets. In D. Osher, M. J. Mayer, R. J. Jagers, K. Kendziora, & L. Wood (Eds.), *Keeping students safe and helping them thrive: A collaborative handbook on school safety, mental health, and wellness*, 185-209. Santa Barbara, CA: Praeger/ABC-CLIO.
- Elksnin, L. K., & Elksnin, N. (2003). Fostering social-emotional learning in the classroom. *Education*, 124(1).
- Felt, L. J., Vartabedian, V., Literat, I., & Mehta, R. (2012). Explore Locally, Excel Digitally: A Participatory Learning After-School Program for Enriching Citizenship On- and Offline. *Journal of Media Literacy Education*, 4(3), 213–228.
- Gerodimos, R. (2018). Youth and the city: Reflective photography as a tool of urban voice. *Journal of Media Literacy Education*, 10(1), 82-103.
- Greenberg, B. (1988). Art in chemistry: An interdisciplinary approach to teaching art and chemistry. *Journal of Chemical Education*, 65(2), 148.
- Hammerman, D. R. (1973). *Research in Outdoor Education: (Summaries of Doctoral Studies)*. American Association of Health, Physical Education, and Recreation
- Hannigan, A., Garry, F., Byrne, C., & Phelan, H. (2023). The role of the arts in enhancing data literacy: A scoping review protocol. *PLoS ONE*, 17(2), 1–9.
- Haymovitz, E., Houseal-Allport, P., Lee, R. S., & Svistova, J. (2018). Exploring the Perceived Benefits and Limitations of a School-Based Social-Emotional Learning Program: A Concept Map Evaluation. *Children & Schools*, 40(1), 45–54.
- Hemy, A., & Halel-Lavian, R. (2022). Developing pedagogical, emotional and social abilities of teachers through photography. *The Mofet Institute Journal*, (68). <https://bitaon.macam.ac.il/articles/14165>
- Howley, D., Dyson, B., Baek, S., Fowler, J., & Shen, Y. (2021). “This Is Not Gym”: Enacting Student Voice Pedagogies to Promote Social and Emotional Learning and Meaningful Physical Education. *Frontiers in Sports and Active Living*, 3.
- Hulick, D. E. (1992). Photography: Modernism's stepchild. *Journal of Aesthetic Education*, 26(1), 75-81.
- Irene, C., & Athanasios, D. (2023). Social-Emotional Learning, Autism Spectrum Disorder, And ROBOTS. *Journal of Positive School Psychology*, 155-175.
- Ishaq, A. (2006). Essay: Development of children's creativity to foster peace. *The Lancet*, 368, S26-S27.
- Larsen, N., Pyle, A., Danniels, E., Marzouca, M., & Nazeem, R. (2023). Kindergarten teachers' facilitation of social and emotional learning in classroom play contexts. *Education Inquiry*, 1-22.
- Licul, N. (2020). Teachers' views on the use of photography in teaching arts in Croatian primary schools. *CEPS Journal*, 10(4), 187-205.
- Miller, S., Pruitt, J., Angleton, C., & Whitmore, K. F. (2019). Classroom Voices - Zooming in on the Details. *Talking points*, 30(2).

- Nave, C. (2017). Designing self-monitoring technologies for emotional self-awareness and wellbeing. *Electronic Visualisation and the Arts (EVA 2017)*, 1-6.
- Niemi, R., Kumpulainen, K., Lipponen, L., & Hilppö, J. (2015). Pupils' perspectives on the lived pedagogy of the classroom. *Education 3-13*, 43(6), 683-699.
- Orrick, W. H., Jr. (1969). *Shut It Down! A College in Crisis, San Francisco State College, October, 1968 to April, 1969. A Staff Report to the National Commission on the Causes and Prevention of Violence.*
- Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *bmj*, 372.
- Paone, T. R., Malott, K. M., Pulliam, N., & Gao, J. (2018). Use of Photovoice in Processing Race-Based Topics in a Multicultural Counseling Course. *Journal of Creativity in Mental Health*, 13(1), 92-105.
- Rigos, A. A., & Salemme, K. (1999). Photochemistry and Pinhole Photography: An Interdisciplinary Experiment. *Journal of Chemical Education*, 76(6), 736A.
- Sciicluna, D. (2020). *Integration of Social and Emotional Learning within a Photography Curriculum to Improve Student Resiliency* (Doctoral dissertation, The University of the Arts). 8624.2010.01564.x
- Smilkov, N., & Jovanova-Mitkovska, S. (2022) *A comparative review of the art education curriculum in class teaching in the Republic of North Macedonia and other countries. Thematic Proceedings of an International Conference*, 76-90.
- Stuhr, P. T., Lecomte, H., & Sutherland, S. (2017). A Portrait of Social and Emotional Learning within Sequoia National Park. *Journal of Outdoor Recreation, Education, and Leadership*, 9(4), 403-424.
- Uman, L. S. (2011). Systematic reviews and meta-analyses. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 20(1), 57-59.
- Waajid, B., Garner, P. W., & Owen, J. E. (2013). Infusing Social Emotional Learning into the Teacher Education Curriculum. *International Journal of Emotional Education*, 5(2), 31-48.
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health education & behavior*, 24(3), 369-387.
- Whitmore, K. F., & Chisholm, J. S. (2020). Emotional engagement as manifested in students' bodies: The visual learning analysis. In *Reclaiming Literacies as Meaning Making* (pp. 23-32). Routledge.
- Whitmore, K. F., Angleton, C., Pruitt, J., & Miller-Crimes, S. (2019). Putting a Focus on Social Emotional and Embodied Learning with the Visual Learning Analysis (VLA). *Early Childhood Education Journal*, 47(5), 549-558.
- Xu, M., MacDonnell, M., Wang, A., & Elias, M. J. (2023). Exploring social-emotional learning, school climate, and social network analysis. *Journal of Community Psychology*, 51(1), 84-102.
- Zenkov, K., & Harmon, J. (2009). Picturing a writing process: Photovoice and teaching writing to urban youth. *Journal of Adolescent and Adult Literacy*, 52(7), 575-584.