

Evaluation of Image Studies in the Field of Education: A Systematic Literature Review

Soner Polat 

Kocaeli University, Kocaeli, Türkiye

Abstract

In the present-day competitive landscape, the importance of image has increased significantly, whether it is on an individual level, within organizations, or on a larger scale. Image refers to the overall impression that a person holds in their mind regarding a concept, object, person, group, organization, institution, geographical region, or country. This mental representation is shaped by their past experiences and sensations, and it greatly influences the choices individuals make. The research aims to provide a systematic literature review on image research to promote image research. This research was carried out with a systematic review approach. The data of the research were obtained from the image articles published in the field of education in the journals scanned in Web of Science (SCIE, SSCI, AHCI). In the analysis of the data, bibliometric analysis and descriptive analysis technique, one of the content analysis techniques, were used. 48 research articles from 2002 to 2022 were critically reviewed and analyzed by applying a systematic literature review approach. The results showed that image studies were grouped under three themes: concept image, teacher image, and organizational image. The results also revealed what the inputs and outputs of corporate image were.

Article Info

Article History:

Received:

February 7, 2023

Accepted:

August 30, 2023

Keywords:

*image,
education,
teacher image,
organizational image,
university image,
systematic review.*

Cite as:

Polat, S. (2023). Evaluation of image studies in the field of education: A systematic literature review. *Research in Educational Administration & Leadership*, 8(3), 676-724. <https://doi.org/10.30828/real.1248610>

Introduction

In order to be recognized, attractive, reliable and reputable, individuals and organizations that want to make a difference in today's competitive environment need to create and maintain a positive image and revise and renew the existing image. Image is a phenomenon that describes people, organizations, cities, countries and objects positively or negatively (Aksoy & Bayramoğlu, 2008). Image is a summary picture in the mind of an individual of thoughts, perceptions, beliefs and attitudes that an individual creates based on voluntary or involuntary impressions as a result of planned or unplanned messages from an object, person, group or organization (Polat & Arslan, 2015).

The image perception of any person or organization in the individual or society affects the status of that person or organization (Çavuşoğlu, 2014), success (Bulduklu, 2015) and attitudes and behaviours towards the person or organization (Polat, 2011a). In this context, it is important for people or organizations to create a positive image both in their relations with their environment and in reaching their goals.

Conceptual Framework

When reviewing the literature, it becomes evident that the concept of image is explored from various perspectives. Epistemologically, image refers to the cognitive and psychological depiction that individuals construct in their minds about a person,

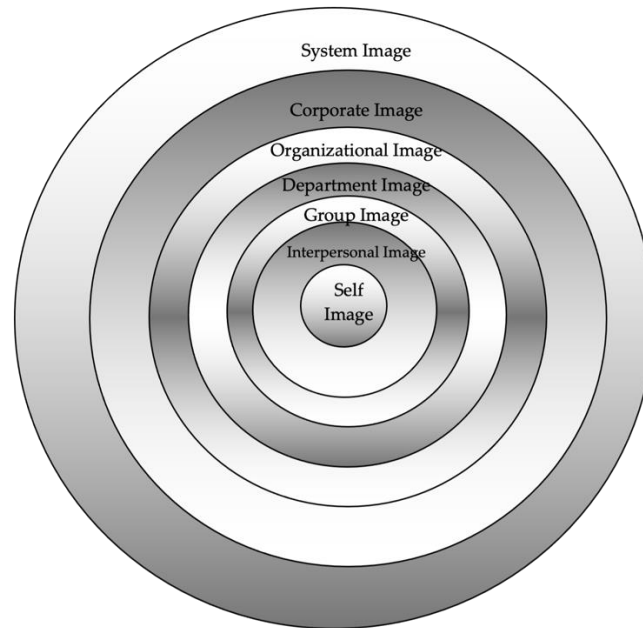
institution, product, event, and so on (Dinçer, 1998). It represents people's perceptions of an object, institution, or another individual, which may not always align with reality. Consequently, everyone holds their own image, but for it to be positive, proactive efforts must be undertaken to enhance it (Okay, 2002). Considering these definitions, it can be inferred that image is subject to change over time, is unique to each person, can be positive or negative, arises consciously or unconsciously, and emerges as a consequence of interaction.

Image studies were previously only limited to the field of marketing. In this period, the concept of image was generally studied as product image, brand image and retail sales image (Berner, 1994). Considering the concept of image in disciplines other than marketing has diversified image classifications, sometimes different classifications have been made in these studies and sometimes the same image type has been named in different ways. Factors such as the fact that image is a multidimensional and dynamic concept and the concept of image is handled by different disciplines have caused different image classifications that do not completely overlap with each other to take place in the literature.

Researchers working on the subject of image have divided the concept of image into different dimensions and therefore, concepts such as mirror image, current image, desired image, multiple image, corporate image, ultimate image, peculiar image, product image, derived or shared image, deceptive image and optimum image have emerged (Iheme, 2013). Huber (1987) classified image types as umbrella image, product image, brand image, self-perceived image of the institution, foreign image, current image, desired image, positive image, negative image, transfer image. While Jefkin (1998) divided the image into six: mirror image, current image, desired image, corporate



image, multiple image, good or bad image. Smith (2013) discussed image under five topics: self-image, corporate image, current image, desired image, and multiple images. On the other hand, Koschnick (1995), who works in the field of marketing, classified and conceptualized image types as ideal image, multiple image, mirror image, product image, corporate image, generic image, self-image, corporate image, branch image, brand image, store image, perceived image and wage image. By integrating different image classifications in different disciplines, Polat and Arslan (2015) classified image types as: present (current) image and desired (ideal) image according to the time of image perception; external image (perceived image of the institution) and internal image (the self-perceived image of the institution) according to the perceiver; abstract image and concrete image according to the nature of the message forming the image; positive image and negative image according to the quality of the perceived image; personal image, group image, department image, organizational image, corporate image and system image according to the levels of image perception; product image, brand image, transfer image and umbrella image according to the dominant factor in the formation of image perception.

Figure 1.*Image Types According to the Level of Image Perception*

(Polat & Arslan, 2015).

The concept of personal image can be further explored through two subcategories: self-image and interpersonal image. Self-image, akin to the concept of self-perception in psychology, refers to how an individual perceives themselves (Ker-Dinçer, 2001). In other words, self-image can be described as the way an individual sees themselves in their personal reflection (Polat & Arslan, 2015). On the other hand, interpersonal image pertains to the impressions formed when encountering an individual for the first time (Polat & Arslan, 2015). Ak (1998) posits that self-image, focusing on an individual, involves evaluating one's appearance, body language, communication style, achievements, and the reflection of their inner world. Conversely,



Vural (2002) suggests that an individual's image encompasses everything that others perceive and think about that person (as cited in: Okumuş, 2013). When discussing physical image, it becomes evident that it plays a role in shaping personal image, emphasizing elements such as physical appearance and traits (Clifford & Walster, 1973; Adams, 1975; Türkkahraman, 2004). The Oxford Psychology Dictionary (2016) defines physical image as "the visible characteristics of a person, including height, skin color, hair style, gender, and the outwardly manifested features of hereditary structure."

Occupational image refers to the collective perceptions held by relevant individuals, such as customers, superiors, subordinates, and friends, regarding an employee's competencies and character (Roberts, 2005). It can also encompass the generalizations individuals make about a specific profession (Gottfredson, 1981). Occupational image involves a wide range of generalizations formed by individuals about a particular occupation.

Group image refers to the overall mental picture individuals create based on their voluntary or involuntary impressions during planned or unplanned interactions with a group. It encompasses the thoughts, perceptions, beliefs, and attitudes formed by individuals regarding a particular group. In essence, group image represents the perceived image of groups as perceived by individuals. Similarly, department image denotes the summarized perception of a department or unit within an organization. It is formed in the minds of individuals through their planned or unplanned interactions. In other words, department image represents the perceived image of specific parts or units comprising groups within the organization (Polat & Arslan, 2015).

Organizational image refers to the immediate mental representation individuals hold about an organization. It encompasses the thoughts and associations that come to mind when individuals encounter the organization's name, logo, or other visual cues (Gray & Balmer, 1998). Organizational image is the collective perception of an organization, comprising positive, negative, or neutral ideas, as well as the impressions formed in various situations related to that organization (Dutton, Dukerich, & Harquail, 1994). Furthermore, Nguyen and LeBlanc (2001) suggest that organizational image consists of the combined perceptions of occupational image, behavioral image, and visual image.

Corporate image refers to the perception that institutions establish in the minds of their various target audiences. It involves managing the image through the interaction between corporate behavior and corporate communication. The concept of image encompasses physical image, corporate communication, and corporate behavior within an institution. Thus, corporate image comprises the overall impression formed by the corporate appearance, behavior, and communication (Peltekoğlu, 2009).

System image, on the other hand, refers to the perceived image of an entire system. It is formed by the collective impressions of individuals who interact with the system, whether directly or indirectly, through planned or unplanned interactions (Polat & Arslan, 2015).

It is seen that image studies are carried out both in the field of education and in other disciplines. However, no studies were found that evaluated the results of these studies holistically. Applications that classify and combine information obtained from multiple sensors are widespread. By combining information from multiple sensors, it

enables better analysis and decision making for the relevant situation than using a single sensor. Multi-sensors that analyse data by combining data to identify bottlenecks that cause problems in individual and organizational life will make significant contributions to productivity (Karakuş, 2018). According to Akarçay-Ulutaş and Boz (2019), bringing together the results and perspectives of different studies on similar subjects and seeing different dimensions on the subject together will contribute to the advancement of social sciences in a holistic structure.

It has been observed that systematic review studies, which are carried out by selecting and analysing existing researches aimed at revealing international knowledge in a more systematic way and within the framework of certain criteria, have increased in recent years (Hammad & Hallinger, 2017). However, few studies were found in the search made in databases on image, and there were very few studies that were not related to image studies in the field of education (Hu & Shen, 2022; Linsner, Sotiriadou, Hill, & Hallmann, 2021; Plumeyer, Kottemann, Böger, & Decker, 2019; Sageder, Mitter & Feldbauer-Durstmüller, 2018). Therefore, this research focused on evaluating image studies in the field of education holistically. Evaluation of image studies in the field of education with the systematic analysis method and descriptive content analysis will contribute to the field and will also be a source of inspiration for future research.

The aim of this study is to make a systematic analysis of image studies in the field of education scanned in Web of Science (SCIE, SSCI, AHCI). For this purpose, answers to the following questions will be sought:

- a) What are the bibliometric features of the articles?



- b) What image types do the articles cover?
- c) What is the thematic classification of the articles?
- d) What are the antecedents and outputs of the image in the articles?

Method

Research Design

The research aims to provide a systematic literature review on image in the field of education. This research was carried out with a systematic review approach. A systematic review is the synthesis of publications related to the research question by bringing them together within the framework of predetermined criteria in order to answer a specific research question. Systematic review studies aim to scan the scientific publications produced in a certain field or discipline in general or to make new analysis on the findings of studies on a particular subject (Higgins & Green, 2011).

Data collection

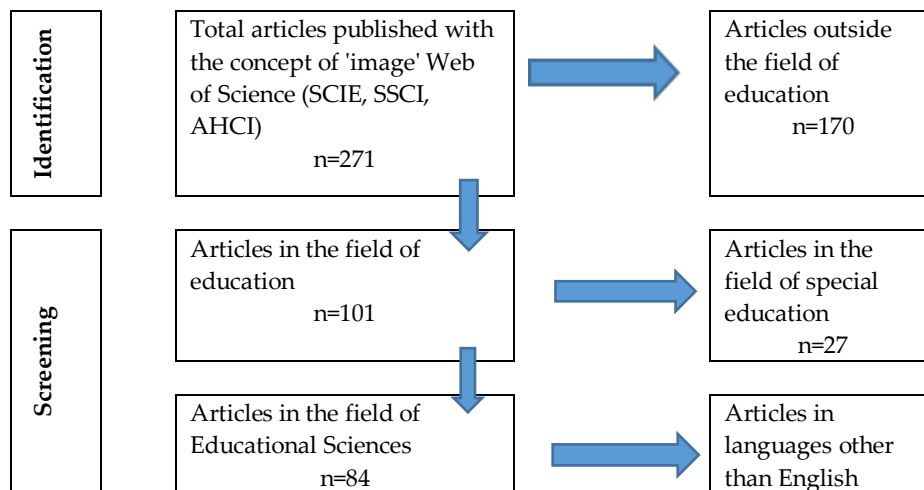
Articles about image published in the field of education in journals indexed in Web of Science (SCIE, SSCI, AHCI) formed the data set of the research. A search was made with predetermined keywords without entering the year range and it was seen that there were not many articles in the first search. Thus, the articles published between the year of the first article (2002) and the last date of the search (03.03.2022) were included in the study group. In this step, the type of articles to be analysed, the databases to search for articles and the date range of articles were determined. Research focuses on peer-reviewed journal articles published in Web of Science during 2002–2022. In this

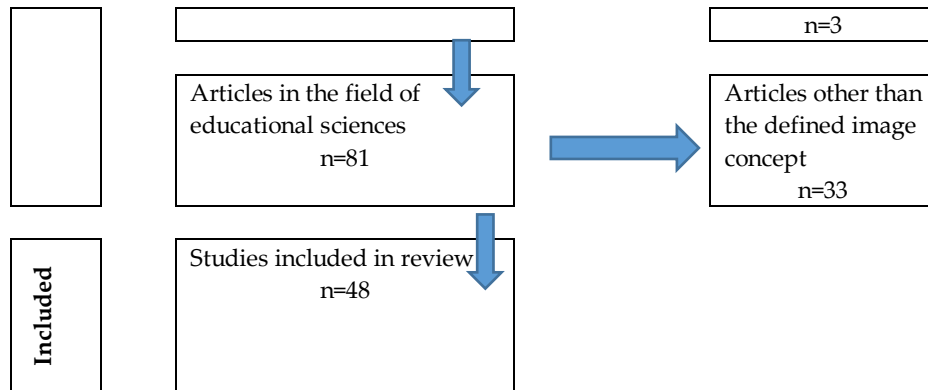
step, articles were identified by defining search terms, searching, removing duplicates, checking the relevance of the articles. Thus, articles containing one of the concepts of "image, organizational image, teacher image, manager image, university image, school image, image and education" were selected in the title, keywords or abstract. In this step, 271 articles published in Web of Science were identified. A total of 170 articles on the topic of image were excluded from the review as they fell outside the field of education. Among the remaining 101 articles in the field of education, 27 focused specifically on special education and were excluded. Additionally, 3 articles were excluded as they were written in languages other than English. As a result, 81 articles within the field of education were included in the content review. However, 33 articles were excluded because they were not directly related to education. Analyses were made on 48 articles.

The review selection process, adapted from Page et al. (2021), is illustrated in the PRISMA flow chart in Figure 2.

Figure 2.

PRISMA Flow Chart Diagram of Study Selection Process in the Review.





Data analysis

In the analysis of the data, bibliometric analysis and descriptive analysis technique, one of the content analysis techniques, were used. In systematic analysis studies, bibliometric analyses are used to quantitatively reveal the general status of existing publications related to a certain discipline or subject area. Bibliometric analyses focus on author, citation, journal, country and similar variables in order to reveal the roles of different stakeholders in scientific studies rather than examining the content of existing studies (Yalçın & Esen, 2016). Descriptive content analysis, on the other hand, is a systematic compilation method to reveal the general trends and results of research on any subject or discipline (Çalık & Sözbilir, 2014). Researches based on descriptive content analysis summarize the current situation regarding a particular subject and sheds light on future research to eliminate the deficiencies in the field (Gough, Oliver, & Thomas, 2017). Such studies have the potential to contribute to the knowledge in the field by increasing the quality of theoretical and empirical research (Hallinger, 2013).

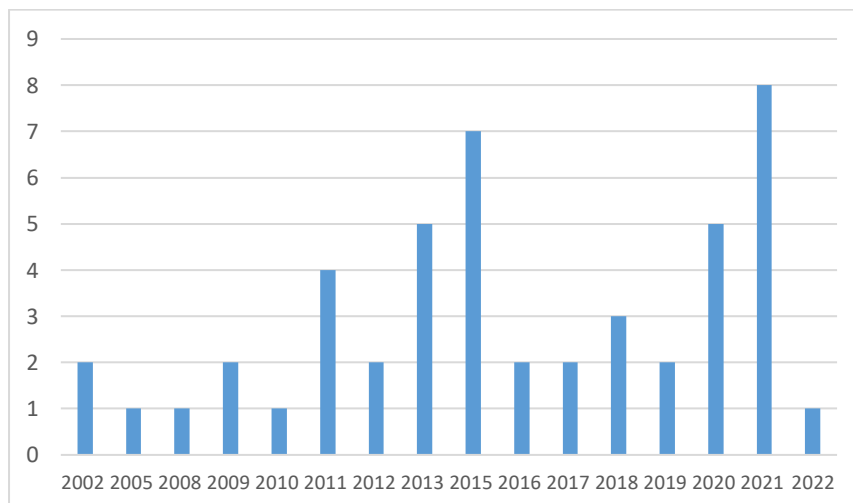
In this step, 48 articles were analyzed. For each article, information was collected about the authors, methodology, main results, and contributions. An Excel spreadsheet includes the authors' codes, the year of publication, the authors' country of origin, the research design, the field analyzed. The coding scheme was tested by sharing files with three scientists before being analyzed. In addition, techniques such as systematization, tabulation, and clustering are applied and main topics are determined based on a thematic analysis.

Findings and Discussion

Descriptive Findings

Number of articles by year

In the analysis according to the publication years of the articles published in the ISI, it is seen that the first study was published in 2002 and the number is increasing gradually (Graph 1). The increase in 2015 and 2021 is remarkable.



Graph 1. Number of articles by year of publication

There were publications in 31 different journals scanned by ISI (WoS) (Table 3). The journal with the most publication (6 articles) is the Journal of Marketing for Higher Education. Three articles were also published in Education and Science and Journal of Baltic Science Education. In other journals, one or two articles were published. When the journals are examined in terms of Q order, the most published group is the journals in the Q4 group (10 articles). Six articles were published in the Q1, Q2 and Q3 groups. It was not determined which Q group the 3 articles belonged to. The effect values of the journals varied between 5.112 and 0.682 (the effect value of 4 journals could not be found). Few of the published journals had high impact value and most of the publications had low impact value.

Table 1.

Distribution of Articles by Published Journals

Journal	f	%	Q	Impact value*
Journal of Marketing for Higher Education	6	12,50	Q1	4.495
Journal of Baltic Science Education	3	6,25	Q4	1.075
Education and Science	3	6,25	Q4	0.822
Teaching and Teacher Education	2	4,17	Q1	5.112
Educational Research	2	4,17	Q2	3.415
Journal of Educational Research	2	4,17	Q4	2.647
Asia-Pacific Education Researcher	2	4,17	Q2	2.618
Asia Pacific Education Review	2	4,17	Q3	2.093
Research in Science & Technological Education	2	4,17	Q4	1.896
Paedagogica Historica	2	4,17	Q4	0.682
Eurasian Journal of Educational Research	2	4,17	--	--



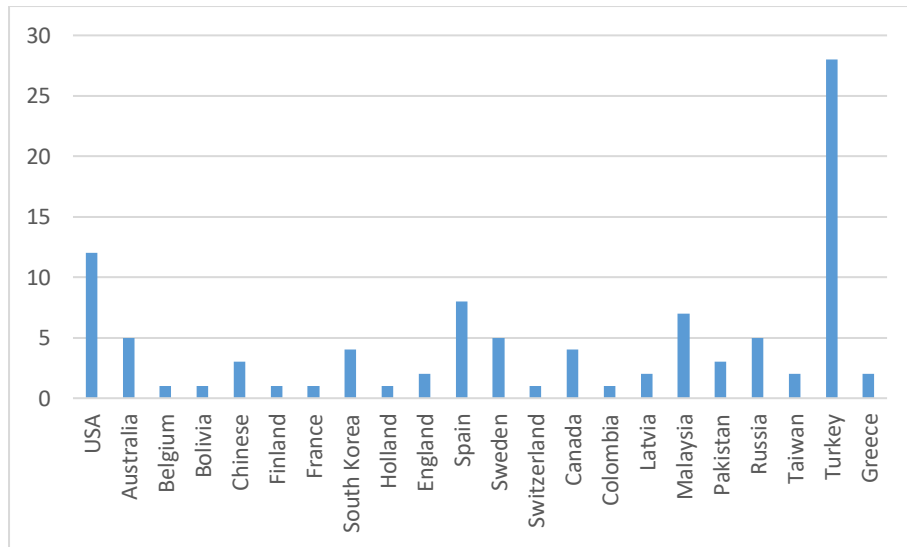
Journal of Teacher Education	1	2,08	Q1	4.923
Higher Education	1	2,08	Q1	4.767
Studies in Higher Education	1	2,08	Q1	4.536
Educational Review	1	2,08	Q1	3.585
International Review of Research in Open and Distributed Learning	1		Q2	3.487
		2,08		
Journal of Studies in International Education	1	2,08	Q2	3.466
Teaching in Higher Education	1	2,08	Q2	3.280
International Journal of Science and Mathematics Education	1		Q3	2.295
		2,08		
Research papers in education	1	2,08	Q3	2.268
International Journal of Technology and Design Education	1		Q3	2.209
		2,08		
Sage Open3	1	2,08	Q2	2.100
European Early Childhood Education Research Journal	1	2,08	Q3	2.074
Linguistics and Education	1	2,08	Q4	1.887
Education and Urban Society, Asia Pacific Journal of Education	1	2,08	Q4	1.524
	1	2,08	Q4	1.520
Educational sciences: Theory and practice	1	2,08	Q4	0.782
History of Education	1	2,08	Q4	0.718
EURASIA Journal of Mathematics, Science and Technology Education	1		Q3	--
		2,08		
British Journal of Religious Education	1	2,08	--	--
Energy Educ Sci Technol Part B	1	2,08	--	--
Total	48	100		

1- Impact factor for the last five years

2- Education & Educational Research in SSCI Edition

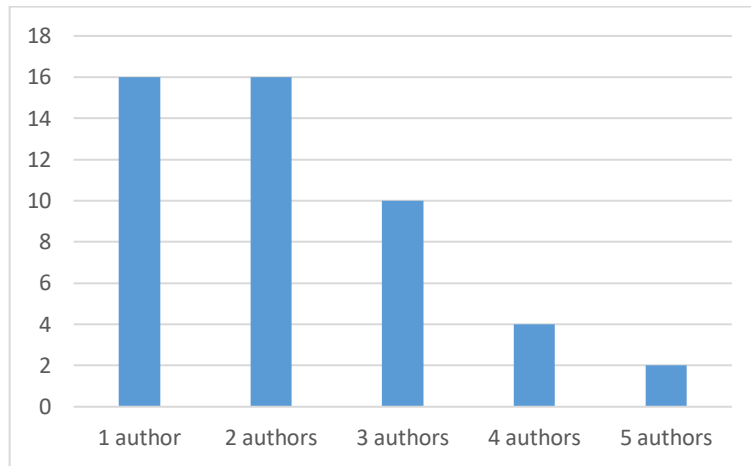
3-Social Sciences, Interdisciplinary in SSCI Edition

There have been publications on image from 22 different countries. Turkey has the most publications. Other countries with the highest number of publications are the USA, Spain, Malaysia, Sweden, Austria, and Russia.



Graph 2. Authors by country of employment

When the articles were examined in terms of the number of authors, it was seen that the articles with one and two authors were in the majority. The number of articles with collaborative work by authors from different countries is quite limited.

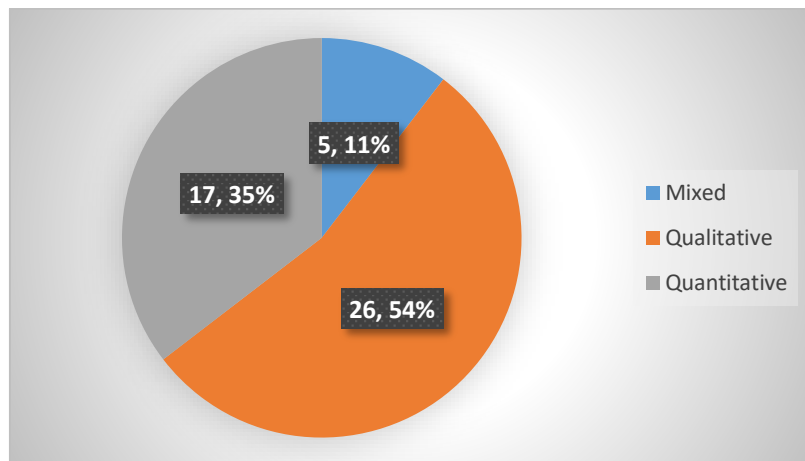


Graph 3. Articles by the numbers of authors

Research design Findings

Findings related to the method

Five of the studies (11%) were conducted in mixed design, 17 (35%) in quantitative design, and 26 (54%) in qualitative research design.



Graph 4. Articles by research design

Two of the studies in the mixed design were conducted in explanatory sequential design, two of them were conducted in exploratory sequential design and one of them was a case study. Most of the quantitative studies (12/17) were conducted as correlational research. Others were made in the descriptive model (5/17). In qualitative studies, mostly document analysis (11/26) was used. Content analysis was used in four studies, case studies in two studies, descriptive studies in two studies, embedded theory in two studies, metaphor analysis in one study, text analysis in one study, interview in one study, phenomenology in one study, and narrative research-narrative inquiry in another study.

Researchers generally conducted their research by collecting data from the countries in which they work. However, in the studies that collected data from different countries of the country where they work, the studies were generally conducted by collecting data from one country. However, while data were collected from two different countries in 5 studies, data were collected from 3 countries in one study.

Most of the research data were collected from university students (23/48) and 8 of them from students receiving teacher training and two studies from international students. 5 studies were conducted with secondary school students, 4 studies with high school students, one study with both secondary and high school students, and one study with data collected from primary school students. Five studies were conducted with the data collected from teachers. One study was conducted with imam-hatip high school teachers, one study was conducted with postgraduate teachers, and 3 studies were conducted with data collected from teachers working in schools at all levels. While two studies were conducted with graduate university students,



one study was conducted with the people around the school. Most of the qualitative studies have been made by analyzing magazines, newspapers, newspaper advertisements, government reports, textbooks, course catalogues, cartoons, photograph archives, novels, and musical pieces.

In the quantitative part of the studies, data were collected using questionnaires and scales. To collect qualitative data, interview forms, semi-structured and structured questionnaires, reports, documents, written texts, stories, newspapers, magazines, web pages, internet forums, visuals, novels, cartoons, drawings, advertisements, songs, DAST (Draw a Scientist Test), metaform forms, observations were used as data sources.

In the analysis of the data, the structural equation model (9/17) was mostly used for quantitative research. EFA and CFA were used for scale development studies. Other analyses used in quantitative studies are descriptive statistics (X , %, f). In qualitative research, the most used analysis technique is DASTT-C (Draw a Science Teacher Test – Checklist), rubric (8/26), content analysis (6/26), descriptive analysis (5/26), discourse analysis (3/26), inductive analysis (3/26) and Draw-An-Inventor Test – Checklist (DAIT-C) (1/26) were used.

Results for image types

According to the time of image perception, almost all of the studies (47/48) are about the current image. Only one study focused on the ideal image (Cuddapah & Stanford, 2015). When the studies are examined according to the quality of the message that creates the image, it has been seen that studies based on both concrete and abstract images are made. When the studies were examined according to the quality of the perceived image, it was seen that the studies generally

focused on the positive image (46/48), and only 2 (2/48) studies included the negative image. When we look at the studies in terms of image classification according to the perceiver, it has been seen that all of the studies are based on internal stakeholders, and no external image studies have been found.

According to the levels of image perception, 14 of the studies focused on group image, one on department image, 9 on organizational image, 11 on corporate image, and one study on system image. It can be said that 14 conceptual image studies are related to personal image.

When the studies were examined according to the dominant factor in the formation of image perception, it was seen that most of the studies were based on the product image perception, and a few studies were focused on the image of the brand. There are no studies based on transfer and umbrella image perception.

Thematic analysis results

The selected articles were examined in terms of content and it was seen that they were gathered under three main themes. Of the 48 studies conducted, 13 are related to concept image, 14 to teacher image, and 21 to organizational image (Table 2). As can be seen, most of the studies are about organizational image.

Table 2.

Thematic Analysis Results

Main Themes	Sub Themes	Code	Author/-s (Year)	f
Concept image	Images of scientists	Images of scientists	Kaya, O. N., Doğan, A. & Öcal, E. (2008)	6

		Medina-Jerez, W., Middleton, K. V., & Orihuela-Rabaza, W. (2011). Subramaniam, K., Esprivalo Harrell, P., & Wojnowski, D. (2013). Toğrol, A. Y. (2013). McCarthy, D. (2015). Emvalotis, A., & Koutsianou, A. (2018).	
	Environmental scientist images	Dikmenli, M., Cardak, O., Oztas, F., & Yakistan, M. (2010).	1
	The images of the inventor	Lee, E., & Kwon, H. (2019).	1
Image of education- teaching concepts	Mental images of science teaching	Duban, N. Y. (2013).	1
	Images about classroom management	Akar, H., & Yildirim, A. (2009).	1
	The progressive image of education.	Braster, S., & del Pozo Andrés, M. D. M. (2020)	1
Teacher image	Place image	National images Åkerlund, A. (2015).	1
		City image Ma, A. H. S. (2021).	1
	Teacher's image	Images of science teachers Hulings, M. (2022) Tatar, N. (2015).	2
		General teacher's image Andrews, D., & Lewis, M. (2002) Gordon, J. A. (2005).	8

			Craig, C. J. (2012)	
			Aslan, N. (2016).	
			Grunder, H. U. (2016).	
			Chang-Kredl, S., &	
			Colannino, D. (2017).	
			Kestere, I., & Kalke, B.	
			(2018).	
			So, K., & Park, N.	
			(2022)	
		Ideal teacher image	Cuddapah, J. L., &	1
			Stanford, B. H. (2015)	
	Images of	Student teachers'	Fung, L., & Chow, L. P.	1
	teacher	pedagogical images	(2002)	
	students	Images of teacher	Niikko, A. (2020).	1
		students		
	images of	Images of academic	Brodin, E. M., Rydén, J.	1
	academic	teachers	B., Ljungqvist, M., &	
			Sonesson, A. (2021)	
Organizational	Image of the	Organisational	Akman, Y., & Ozdemir,	2
image	schools	image of the school	M. (2019).	
			Kalkan, Ü., Altınay	
			Aksal, F., Altınay Gazi,	
			Z., Atasoy, R., & Dağlı,	
			G. (2020).	
		Image of basic	Ereş, F. (2011)	1
		schools		
	Image of	University brand	Chen, Y. C. (2015).	4
	higher	image	Schlesinger, W.,	
	education		Cervera-Taulet, A., &	
			Wymer, W. (2021)	

	Alcaide-Pulido, P., O'Sullivan, H., & Chapleo, C. (2021). Zaman, U., Aktan, M., Baber, H., & Nawaz, S. (2021).	
Prestigious image	Draelants, H. (2012).	1
Image of higher education institutions	Brown, R. M., & Mazzarol, T. W. (2009). Polat, S. (2011a). Polat, S. (2011b). Atabek, G. Ş., & Atabek, Ü. (2015). Wilkins, S., & Huisman, J. (2015). Alcaide-Pulido, P., Alves, H., & Gutiérrez- Villar, B. (2017). Vinichenko, M., Kirillov, A., Frolova, E., Pochinok, N., & Kaurova, O. (2018). bin Mohd Amin, M. R., Kumar Piaralal, S., Rosli bin Daud, Y., & Bin Mohamed, B. (2020). Bae, S., Grimm, A. T., & Kim, D. (2021). Erkan, I., Unal, S., & Acikgoz, F. (2021)	11

	Manzoor, S. R., Ho, J. S. Y., & Al Mahmud, A. (2021).	
Higher education	Li, J., Liu, F., & Rojas-	1
country image	Méndez, J. I. (2013)	
University Image	Wilkins, S., &	1
Attractiveness	Huisman, J. (2013).	

Findings about concept image

Most of the studies on concept image are related to scientist image (8). In addition, there were three studies on education and training concepts and two studies on geographical location image.

Most of the studies on the scientist (Emvalotis, A., & Koutsianou, 2018; Kaya, Doğan & Öcal, 2008; McCarthy, 2015; Medina-Jerez, Middleton, & Orihuela-Rabaza, 2011; Subramaniam, K., Esprivalo Harrell, & Wojnowski, 2013; Toğrol, 2013) intended to describe the general scientist. One study (Dikmenli, Cardak, Oztas & Yakisan, 2010) focuses on describing the scientist. One study (Dikmenli, Çardak, Öztaş & Yakışan, 2010) focuses on the environmental scientist image, while another study (Lee & Kwon, 2019) focuses on describing the image of the inventor.

Table 3.
Studies on Concept Image

Author/-s (Year)	Main findings
Kaya, O. N., Doğan, A. & Öcal, E. (2008)	Most of the students have a stereotypical male scientist image who wears eyeglasses and lab coats.
Medina-Jerez, W., Middleton, K. V., & Orihuela-Rabaza, W. (2011)	Students perceive image of scientists differs according to nationality, grade and school type.
Subramaniam, K., Esprivalo Harrell, P., & Wojnowski, D. (2013)	The image of the scientist differs according to the ethnicity of the participant. The amount of the indications of danger in the drawings are related to gender. Male participants draw these images more often than females.
Toğrol, A. Y. (2013)	Women and men do not see a female scientist as a stereotypical scientist image in the society. The stereotypical image of scientists is: a smiling bald man wearing a lab coat and glasses, with facial hair, and works indoors alone.
McCarthy, D. (2015)	Female scientists appear in almost 48% of the drawings. Smiling scientists are common.
Emvalotis, A., & Koutsianou, A. (2018)	Greek primary school students have common stereotypical images related to the scientist's activities, not to their appearance.
Dikmenli, M., Cardak, O., Oztas, F., & Yakisan, M. (2010)	High school students draw displaying both positive and negative images of a scientist.
Lee, E., & Kwon, H. (2019)	Students have stereotypical images of inventors.

	Tools which are used for building and fixing things such as hammers, spanners, and screwdrivers are used as symbols of inventors by students.
Akar, H., & Yildirim, A. (2009)	The constructivist learning process may change of the image in teacher candidates' conceptions of classroom management.
Duban, N. Y. (2013)	13.08% of the pre-service teachers of science and technology courses have student centered images. 62.62% of the pre-service teachers have images between student-centered science teaching and traditional science teaching. 24.30% of the pre-service teachers have traditional science teaching images.
Braster, S., & del Pozo Andrés, M. D. M. (2020)	Elements of the image of new progressive education are being creative, expressive and including physical activities; including students' peer-working; not just receiving instruction; and students' working both inside and outside of the school.
Åkerlund, A. (2015)	To transfer the national images internationally, two important factors are language education and education system. In Germany, Swedish is taught as a foreign language to pass on the Swedish national self-image to Germany.
Ma, A. H. S. (2021)	The city image is as important as university reputation in international student destination choice in the Asian context.

Studies on education concept image are related to mental images of science teaching (Duban, 2013), images about classroom management (Akar & Yildirim, 2009) and the progressive image of education (Braster & del Pozo Andrés, 2020).



There are two studies about the geographical places where education is given. One of these studies (Åkerlund, 2015) is about the Swedish image (national images) of students learning Swedish in Germany, and the other study (Ma, 2021) is about the university attractiveness of the city image of higher education.

Findings about teacher image

Of the 48 studies, 14 were related to teacher image. Eight of the 14 studies described the current image of teachers (Andrews, & Lewis, 2002; Aslan, 2016; Chang-Kredln & Colannino, 2017; Craig, 2012; Gordon, 2005; Grunder, 2016; Kestere, & Kalke, 2018; So & Park, 2022). One study focused on the ideal image of teachers (Cuddapah, & Stanford, 2015).

Two studies specifically focused on the image of science teachers (Hulings, 2022; Tatar, 2015). Two studies examined the image of the candidate teacher (Fung, & Chow, 2002; Niikko, 2020) and one study examined the image of the academician. As can be seen, the majority of the studies focused on the general image of the teacher, regardless of the branch.

Table 4.

Studies on Teacher Image

Author/-s (Year)	Main findings
Andrews, D., & Lewis, M. (2002)	Teachers create a professional group by taking part in the process of creating image.
Gordon, J. A. (2005)	The studies between 1996 and 2001 put forward the fact that there are changes in teacher image and the respect for teachers in Japan.



- Craig, C. J. (2012) The image of “butterfly under a pin” is defined as an unwelcome image of a teacher and a curriculum maker, by feeling not being in charge but being answerable to administrators and consultant decrees.
- Aslan, N. (2016) The concept of “teacher” is described as a guide to society, citizenship and democratic values by Spanish participants. Turkish participants describe “teacher” as a guide to dedication, traditional values, emotional support and enlightenment.
- Grunder, H. U. (2016) Good teachers are capable of designing and delivering instruction for their students to acquire sufficient content in an atmosphere suitable for learning.
- Chang-Kredl, S., & Colannino, D. (2017) The best teachers have subject knowledge and how to present that knowledge very well, have respectable personal qualities, are affectionate towards relationships with the students, and have a lasting impact on the student's life.
- The worst teachers are not qualified, not fair or incapable of their teaching skills, does not have pleasant personality traits, are indifferent or damaging towards students, and does not have a long-lasting impact on the students.
- Kestere, I., & Kalke, B. (2018) The ideal Soviet teacher image is defined as a modest, serious, asexual young and middle-aged female.
- So, K., & Park, N. (2022) The specific teacher images are formed by educational policies related to non-discursive situations. The particular teacher images can affect teachers’ everyday practices.
- Tatar, N. (2015) The image of science teachers was thought to be teacher-centered, however it turns out student-centered later on.
- Hulings, M. (2022) A good science teacher is described as patient, well-informed in his/her subject, leader to help students explore and investigate, beside showing their expectations openly.
-



	A bad science teacher is described as a teacher who is unfriendly and controlling, monotonous, assigns exercises only on paper and does not teach in-depth.
Fung, L., & Chow, L. P. (2002)	Student teachers have an image of a Nurturing image about themselves, which is a more child-centered approach, however their practices in classrooms show they have a mix image of the Apprenticeship and the Transmission image, which are teacher-centered approaches.
Niikko, A. (2020)	The teacher students' images about themselves as teachers and about children emphasize teachers' and children's social and emotional features. They have traditional and stereotypical images.
Brodin, E. M., Rydén, J. B., Ljungqvist, M., & Sonesson, A. (2021)	The four dominant ideologies of academic teaching which are teaching as moulding students, processing students, benefitting from students, scholarly responsibility, contributed to constructing eight discursive images of teachers which are superior man, inadaptable academics, all-round labourers, political critics, incompetent teacher, teaching researcher, disciplinary experts, and societal critic.
Cuddapah, J. L., & Stanford, B. H. (2015)	The ideal teachers are the ones who are knowledgeable, enthusiastic, caring and student-centered in a grounded, organized yet flexible, not romanticized. The teachers of student teachers influence their ideal teacher images.

Findings on organizational image

While only three of the 21 studies on organizational image are related to the image of schools, the majority of them are related to the image of higher education institutions. One of the studies on the organizational image of schools is about the image of primary education schools (Ereş, 2011), and the other two (Akman, & Ozdemir,

2019; Kalkan, Altınay Aksal, Altınay Gazi, Atasoy & Dağlı, 2020) focused on the organizational image of the school at all levels.

When the studies on higher education institutions are examined, the majority of the studies (11/18) focuses on the general institutional image of higher education institutions (Alcaide-Pulido, Alves & Gutiérrez-Villar, 2017; Atabek, & Atabek, 2015; Bae, Grimm, & Kim, 2021; bin Mohd Amin, Kumar Piaralal, Rosli bin Daud & Bin Mohamed, 2020; Brown, & Mazzarol, 2009; Erkan, Unal, & Acikgoz, 2021; Manzoor, Ho, & Al Mahmud, 2021; Polat, 2011a; Polat, 2011b; Vinichenko, Kirillov, Frolova, Pochinok & Kaurova, 2018; Wilkins, & Huisman, 2015). One study focuses on the prestigious image (Draelants, 2012) and four studies focus on the university brand image (Alcaide-Pulido, O'Sullivan & Chapleo, 2021; Chen, 2015; Schlesinger, Cervera-Taulet & Wymer, 2021; Zaman, Aktan, Baber & Nawaz, 2021). In addition, one study focuses on university image attractiveness and one study focused on higher education country image (Li, Liu & Rojas-Méndez, 2013).

Table 5.

Studies on Organizational Change

Author/s (Year)	Main findings
Ereş, F. (2011)	The visual image of school building, principal and teachers, professional image, and behavioural image have an important value when compared to the visual appearances of the principals and teachers.
Akman, Y., & Ozdemir, M. (2019)	The organizational attractiveness has a partial mediating role between the variables of organizational image and organizational loyalty.
Kalkan, Ü., Altınay Aksal, F., Altınay	The leadership style of school principals predicted school culture, and school culture predicted organizational image. Along with these, school



-
- Gazi, Z., Atasoy, R., & Dağlı, G. (2020) culture has a mediating role of organizational image and leadership styles.
- Chen, Y. C. (2015) Service recovery is positively associated with a university's brand image; and relationship quality is positively associated with a university's brand image.
- Alcaide-Pulido, P., O'Sullivan, H., & Chapleo, C. (2021) There are some cultural differences in terms of shaping brand image of universities. For example, communication through institutional website is important for English and Portuguese undergraduate students while social issues and ethical concerns is more important for Spanish students. Also, the campus facilities are important for English and Spanish students.
- Schlesinger, W., Cervera-Taulet, A., & Wymer, W. (2021) University brand image is an effective impact of a positive word-of-mouth intentions among graduated students. The influence of university brand on students' satisfaction and university identification affects alumni word-of-mouth positively.
- Zaman, U., Aktan, M., Baber, H., & Nawaz, S. (2021) Forced-shift to online learning has a significant positive affect on international students' learning engagement and university brand image. International students' learning engagement has a partial mediating role between forced-shift to online learning and university brand image.
- Draelants, H. (2012) The prestigious image exerts an undeniable attraction on numerous students, however prestigious image affects its effect on their feeling of accessibility is not clear.
- Wilkins, S., & Huisman, J. (2013) Feedback resulting from personal affairs and recommendations are the most effective aspect creating the images of universities formed by students.
Elite institutions can take advantage of the positive home campus images they have which is based on heritage and prestige, and this influences the images which form the international branch campuses positively.
-

<p>Li, J., Liu, F., & Rojas-Méndez, J. I. (2013)</p>	<p>The country in which the higher education institution is located has an insignificant influence on students' selection of the institution, alone. However, together with the local partner institution image, it has a significant influence.</p>
<p>Brown, R. M., & Mazzarol, T. W. (2009)</p>	<p>The loyalty of students is predicted by student satisfaction and student satisfaction is predicted by the perceived image of university in Australia.</p>
<p>Polat, S. (2011b)</p>	<p>The perceived organizational image predicts university students' academic achievement.</p> <p>The perceptions of quality image, social environment image, sports image, general outlook, entertainment image, and physical infrastructure image and are positively related with academic achievement,</p> <p>The perception of accommodation-food image have no influence on students' academic achievement.</p>
<p>Polat, S. (2011a)</p>	<p>Perceived organizational image of the university according to students is at "moderate level".</p> <p>While students' perceptions of general outlook and physical infrastructure image, social atmosphere image, program image and entertainment image are at "moderate level", their perceptions of sports image and accommodation-food image is at "low level"</p>
<p>Atabek, G. Ş., & Atabek, Ü. (2015)</p>	<p>Turkish universities have been at the first stages of their image building process.</p> <p>Newspaper advertisements are an important aspect for universities' image building process.</p>
<p>Wilkins, S., & Huisman, J. (2015)</p>	<p>Information and opinions gathered with the help of personal relationships and the media, which form the organizational image of the university, is quite effective on the membership intentions of prospective students.</p>



-
- Alcaide-Pulido, P.,
Alves, H., &
Gutiérrez-Villar, B.
(2017)
- Image of a university is formed by four aspects, which are national and international recognition, external communication and values, facilities, and economic value.
- Vinichenko, M.,
Kirillov, A.,
Frolova, E.,
Pochinok, N., &
Kaurova, O. (2018)
- In order to solve the problems related to forming of a favorable image for universities; it is important to increase teachers' level of satisfaction and motivation, teachers' scientific and research function, to improve attractiveness and trust for teachers and students.
- bin Mohd Amin,
M. R., Kumar
Piaralal, S., Rosli
bin Daud, Y., & Bin
Mohamed, B.
(2020)
- University image does not have a moderating effect on the relationship between service recovery satisfaction and justice dimensions.
- Bae, S., Grimm, A.
T., & Kim, D. (2021)
- On universities' websites, there are some little differences in the text and visual images, even though the organizational and national settings are different.
- Erkan, I., Unal, S.,
& Acikgoz, F.
(2021)
- All of the factors that are quality of academics, education, research, and physical conditions affect university image positively.
The quality of research affects the university image mostly.
University image is really effective on students' supportive attitudes.
- Manzoor, S. R., Ho,
J. S. Y., & Al
Mahmud, A. (2021)
- Image extends the university image model and recreate image variables, which in turn builds satisfaction among students, contributes to students' citizenship behaviors such as advocacy, feedback, helping and tolerance.
-

Findings on the antecedents and outcomes of organizational image

The studies were also examined in terms of the models established in terms of the antecedents and outputs of the image, and only some of the studies on organizational image (14/48) were made by establishing a model. In the model of 9 studies (Akman, & Ozdemir, 2019; bin Mohd Amin, Kumar Piaralal, Rosli bin Daud & Bin Mohamed, 2020; Brown & Mazzarol, 2009; Li, Liu & Rojas-Méndez, 2013; Ma, 2021; Manzoor, Ho & Al Mahmud, 2021; Polat, 2011b; Schlesinger, Cervera-Taulet & Wymer, 2021; Wilkins & Huisman, 2015), image was considered as an antecedent and independent variable, while in the model of 5 studies, image was considered as the output variable (Åkerlund, 2015; Alcaide-Pulido, O'Sullivan & Chapleo, 2021; Chen, 2015; Kalkan, Altınay Aksal, Altınay Gazi, Atasoy & Dağlı, 2020; Zaman, Aktan, Baber & Nawaz, 2021). In only one study, image was considered as a mediating variable (Erkan, Unal & Acikgoz, 2021).

Table 6.

Antecedents and Outputs of Organizational Image

Author/-s (Year)	Independent variable	Moderator variable	Dependent variable
Akman, Y., & Ozdemir, M. (2019)	Organisational image	Organisational attraction	Organisational loyalty
Kalkan, Ü., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., & Dağlı, G. (2020)	Leadership styles	School culture	Organisational image
Chen, Y. C. (2015)	Service recovery	Relationship quality	Brand image



Alcaide-Pulido, P.,	University facilities		Brand image
O'Sullivan, H., & Chapleo, C. (2021)	National and international recognition and awareness, Economic value External communications and values		
Schlesinger, W., Cervera-Taulet, A., & Wymer, W. (2021)	University brand image	Satisfaction identification	Positive word-of-mouth
Zaman, U., Aktan, M., Baber, H., & Nawaz, S. (2021)	Forced-shift to online learning Perceived harm	International students' learning engagement	University brand image
Li, J., Liu, F., & Rojas-Méndez, J. I. (2013)	Country image Higher education country image Local institution image Attitude toward behaviour Subject norm Received behavioural control		Enrolment intention
Brown, R. M., & Mazzarol, T. W. (2009)	Image	Perceived value Customer satisfaction	Customer loyalty

Polat, S. (2011b)	Organizational image		Academic achievement
Wilkins, S., & Huisman, J. (2015)	University image		Attachment to institutions
bin Mohd Amin, M. R., Kumar Piaralal, S., Rosli bin Daud, Y., & Bin Mohamed, B. (2020)	Image of university	Organizational justice Service Recovery Satisfaction	Repurchase intention Word of mouth Trust Loyalty
Erkan, I., Unal, S., & Acikgoz, F. (2021)	Quality of academics Quality of education Quality of research Quality of physical conditions	University image	Supportive attitudes
Manzoor, S. R., Ho, J. S. Y., & Al Mahmud, A. (2021)	University image	Satisfaction	Citizenship behaviour
Åkerlund, A. (2015)	Foreign language curriculum and textbooks		Country image
Ma, A. H. S. (2021)	Academic reputation, city image.		International student Destination choice

As seen in Table 6, the antecedents of the image in the studies conducted are leadership styles, school culture, service recovery, relationship quality, university facilities, national and international recognition and awareness, economic value, external communications and values, forced-shift to online learning, perceived harm,



international students' learning engagement, quality of academics, quality of education, quality of research, quality of physical conditions, foreign language curriculum and textbooks. The outputs of the image in the studies are organizational attraction, organizational loyalty, satisfaction, identification, positive word-of-mouth, enrolment intention, customer loyalty, perceived value, customer satisfaction, academic achievement, attachment to institutions, organizational justice, service recovery, repurchase intention, word of mouth, trust, loyalty, supportive attitudes, citizenship behaviour, international student destination choice.

Conclusions and Further Research Directions

As a result of the research, an increasing trend was observed in the number of journals scanned in the Web of Science database in the field of education. It is estimated that this number will increase even more with the internationalization of education in the future. Although the number of image articles is increasing, it is difficult to say that the quality of the articles is that high when the Q and Impact values of the published journals are examined. For this reason, publishing in journals with a lower Q value and a higher impact value will make the image issue more important. Image has been studied by a limited number of academics in a limited country in the world, usually with one or two authors. Conducting collaborative studies in different countries will allow comparisons at the world and regional scale.

When we look at the studies in terms of method, quantitative studies are in the majority, whereas studies in mixed design are very few. The need for mixed research method designs has also increased to eliminate the deficiencies of a single method and to conduct more qualified research (Greene, 2005). Therefore, there is a greater need for

mixed-pattern research in future studies in terms of establishing and testing an image-related model. In addition, a single type of data collection and analysis technique was used in the studies. Theories developed with data obtained with small, homogeneous study groups are subject to criticism. Over time, it is possible to reach conceptualizations covering a large number of cases and people with different characteristics, by clustering these studies or by diversifying data and methods (Estabrooks, Field, & Morse, 1994). Diversification in research is the use of different methods, data sources, researchers, and perspectives to cross-check data and interpretations (Denzin & Lincoln, 2005). Conducting studies in which different data collection and analysis techniques are used together will further increase the validity and reliability of articles on image. Very few studies have been observed in which the views of the data collected groups were compared. Collecting data from multiple groups will facilitate comparisons.

According to Akay (2005), organizational image management is a systematic, multi-faceted process that includes plans and policies for the organization to display a positive image in the internal and external environment and to eliminate negative thoughts towards itself. The greater the harmony between the external image and the internal image, the stronger the personality and image of the organization get now and, in the future, and the organization will be more effective against the outside (Bakan, 2004; Köktürk, Yalçın, & Çobanoğlu, 2008). In this sense, organizations should constantly compare their external images with their internal images, and they should direct their image management activities according to the results (Polat & Arslan, 2017). For this reason, in content image studies, external image measurements should be made and evaluated together,



as well as internal image studies. The positive organizational image formed as a result of effective image management can make the organization more original than other organizations. In addition, a positive organizational image may cause the products and services offered by the organization to be more attractive to stakeholders (Polat & Arslan, 2017). In terms of image management, it is necessary to look at the negative image features as well as the positive image features. When the studies are examined in terms of image types, the studies generally focus on one type of image (e.g., current image, positive image, interior image). In order to obtain more accurate results and comments on image, studies should be conducted with different types of images are considered together (e.g., current image-ideal image, positive-negative image, interior-external image).

Studies on concept image in the field of education mostly focus on the image of scientist. The results obtained from the drawings of the studies conducted in different countries and times show that the drawings are formed based on stereotypes and in a similar way. For this reason, it requires new researches with different techniques to create a more realistic image. In addition, the image of other concepts such as teacher, academician etc. can be studied in future research, apart from the concept of scientist. Studies on teacher image have focused on general teacher image without branch and education level. Image studies based on teachers' branches and studies based on the image of teachers at different levels (e.g., primary school, secondary school, high school, university) will both allow the comparison of research and shed light on professional development. Organizational image studies mostly focus on the image of higher education institutions. The number of studies focusing on the organizational image of schools is very few. Conducting research that will reveal the



organizational image of schools at different levels will contribute to the literature.

Knowing what the antecedents and outputs of organizational image are makes the work of managers easier and provides an effective image management opportunity for managers. Knowing the factors that play a role in the formation of image perception can contribute to the realization of organizational goals by providing managers with an effective image management opportunity (Polat & Arslan, 2017). While studies on the antecedents and outputs of image were not preferred in studies on the theme of conceptual image and teacher image, they were carried out in studies on the theme of organizational image, especially in studies focusing on the image of higher education institutions. Making a study based on the conceptual image-based model may be difficult due to its content, but the model can be established and tested by determining the antecedent and output variables for the formation and effects of the teacher image. In addition, based on the antecedents and outputs of organizational image, the models in these studies can be tested in different countries or new models can be established and tested.

As with any research, this study also has limitations. This research is based on articles about image based on educational topics in the Web of Science database. Books, papers and fields other than education in this database are excluded. With the same method, future studies can be done to cover other databases, fields of science, books and papers.

References

Akar, H., & Yıldırım, A. (2009). Change in teacher candidates' metaphorical images about classroom management in a social

constructivist learning environment. *Teaching in Higher Education*, 14(4), 401-415.

- Åkerlund, A. (2015). Ambassadors of the Swedish nation: national images in the teaching of the Swedish lecturers in Germany 1918–1945. *Paedagogica Historica*, 51(5), 595-613.
- Akman, Y., & Özdemir, M. (2019). Examining the relations between organisational attraction, organisational image and organisational loyalty: An investigation with teachers. *Education and Science*, 44, (198), 1-16.
- Aksoy, R. & Bayramoğlu, V. (2008). Sağlık işletmeleri için kurumsal imajın temel belirleyicileri: Tüketici Değerlendirmeleri, *Bülent Ecevit Üniversitesi Sosyal Bilimler Dergisi* [Bulent Ecevit University Journal of Social Sciences], 4(7), 85-96.
- Alcaide-Pulido, P., Alves, H., & Gutiérrez-Villar, B. (2017). Development of a model to analyze HEI image: A case based on a private and a public university. *Journal of Marketing for Higher Education*, 27(2), 162-187.
- Alcaide-Pulido, P., O'Sullivan, H., & Chapleo, C. (2021). The application of an innovative model to measure university brand image. Differences between English, Spanish and Portuguese undergraduate students. *Journal of Marketing for Higher Education*, 1-18.
- Andrews, D., & Lewis, M. (2002). The experience of a professional community: Teachers developing a new image of themselves and their workplace. *Educational Research*, 44(3), 237-254.
- Aslan, N. (2016). Teacher images in Spain and Turkey: a cross-cultural study. *Asia Pacific Education Review*, 17(2), 253-266.

- Atabek, G. Ş., & Atabek, Ü. (2015). Images of Turkish Universities: A Study on University Print Advertisements. *Education & Science, 40*(180), 155-168.
- Bae, S., Grimm, A. T., & Kim, D. (2021). Only one way to be a world-class university? Comparative analysis on the texts and visual images on websites of universities in China and South Korea. *Asia Pacific Journal of Education, 43*(1), 144-159.
- Berner, M. F. (1994). *Measuring corporate image in the print media: an application of multidimensional scaling and content analysis methodologies*. Unpublished master thesis. Simon Fraser University, Canada.
- bin Mohd Amin, M. R., Kumar Piaralal, S., Rosli bin Daud, Y., & Bin Mohamed, B. (2020). An empirical study on service recovery satisfaction in an open and distance learning higher education institution in Malaysia. *International Review of Research in Open and Distributed Learning, 21*(2), 36-60.
- Braster, S., & del Pozo Andrés, M. D. M. (2020). From savages to capitalists: progressive images of education in the UK and the USA (1920–1939). *History of Education, 49*(4), 571-595.
- Brodin, E. M., Rydén, J. B., Ljungqvist, M., & Sonesson, A. (2021). Historical images of teachers and their underlying ideologies in Swedish academia: Multimodal discourses from 1950 and 1980. *Linguistics and Education, 63*, 1-16.
- Brown, R. M., & Mazzarol, T. W. (2009). The importance of institutional image to student satisfaction and loyalty within higher education. *Higher education, 58*(1), 81-95.
- Çalik, M., & Sözbilir, M. (2014). Parameters of content analysis. *Education and Science, 39*(174), 33-38.

- Chang-Kredl, S., & Colannino, D. (2017). Constructing the image of the teacher on Reddit: Best and worst teachers. *Teaching and Teacher Education*, 64, 43-51.
- Chen, Y. C. (2015). A study of the interrelationships among service recovery, relationship quality, and brand image in higher education industries. *The Asia-Pacific Education Researcher*, 24(1), 81-89.
- Craig, C. J. (2012). "Butterfly under a pin": An emergent teacher image amid mandated curriculum reform. *The Journal of Educational Research*, 105(2), 90-101.
- Cuddapah, J. L., & Stanford, B. H. (2015). Career-changers' ideal teacher images and grounded classroom perspectives. *Teaching and teacher education*, 51, 27-37.
- Denzin, N. K. & Lincoln, Y. S. (2005). Introduction: The Discipline and Practice of Qualitative Research. In N. K. Denzin and Y. S. Lincoln (Ed.). *The Sage Handbook of Qualitative Research* (3rd). (s. 1-32). Thousand Oaks, CA: SAGE Publications, Inc.
- Dikmenli, M., Çardak, O., Öztas, F., & Yakışan, M. (2010). High school students' images of an environmental scientist. *Energy Educ Sci Technol Part B*, 2, 187-210.
- Dinçer, K. M. (1998). *Kişisel imaj* [Personal Image]. İstanbul: Alfa Yayınları.
- Draelants, H. (2012). A prestigious image: advantage or obstacle in attracting candidates to French elite higher education? *Research Papers in Education*, 27(5), 555-579.
- Duban, N. Y. (2013). Pre-service Science and Technology Teachers' Mental Images of Science Teaching. *Eurasian Journal of Educational Research*, 50, 107-126.

- Emvalotis, A., & Koutsianou, A. (2018). Greek primary school students' images of scientists and their work: has anything changed? *Research in Science & Technological Education*, 36(1), 69-85.
- Ereş, F. (2011). Image of Turkish basic schools: A reflection from the province of Ankara. *The Journal of Educational Research*, 104(6), 431-441.
- Erkan, I., Unal, S., & Acikgoz, F. (2021). What affects university image and students' supportive attitudes: the 4Q Model. *Journal of Marketing for Higher Education*, 1-18.
- Estabrooks, C. A., Field, P. A., & Morse, J. M. (1994). Aggregating qualitative findings: an approach to theory development. *Qualitative Health Research*, 4(4), 503-511.
- Fung, L., & Chow, L. P. (2002). Congruence of student teachers' pedagogical images and actual classroom practices. *Educational Research*, 44(3), 313-321.
- Gordon, J. A. (2005). The crumbling pedestal: Changing images of Japanese teachers. *Journal of Teacher Education*, 56(5), 459-470.
- Gough, D., Oliver, S. & Thomas, J. (2017). *Introducing systematic reviews*. In D. Gough, S. Oliver & J. Thomas (Eds.), *An introduction to systematic reviews* (2nd edition, pp. 1-18). London: Sage.
- Greene, J. C. (2005). The generative potential of mixed methods inquiry. *International Journal of Research & Method in Education*, 28(2): 207-211.
- Grunder, H. U. (2016). The image of teachers: The perception of others as impulses for the professionalisation of teaching. *British Journal of Religious Education*, 38(2), 152-162.

- Hallinger, P. (2013). A conceptual framework for systematic reviews of research in educational leadership and management. *Journal of Educational Administration*, 51(2), 126-149.
- Hammad, W., & Hallinger, P. (2017). A systematic review of conceptual models and methods used in research on educational leadership and management in Arab societies. *School Leadership & Management*, 37(5), 434-456.
- Higgins, J. P. T., & Green, S. (Eds). (2011). Cochrane handbook for systematic reviews of interventions. <http://handbook-5-1.cochrane.org/> Erişim:13.09.2022.
- Hu, F., & Shen, H. (2022). Destination food image: A systematic literature review to assess future perspectives. *Chinese Outbound Tourist Behaviour*, 146-164.
- Hulings, M. (2022). What are they bringing with them? Understanding past science experiences of preservice elementary teachers and what they mean for the science methods course. *Journal of Research in Science Teaching*, 59(8), 1465-1488.
- Iheme, A. (2013). Corporate Image, Identity and Strategy. II. *International Conference on Communication, Media, Technology and Design*, 02-04 May 2013 Famagusta – North Cyprus.
- Jefkins, F. (1998). *Public Relations*. London: Heinemann Publications.
- Kalkan, Ü., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., & Dağlı, G. (2020). The relationship between school administrators' leadership styles, school culture, and organizational image. *Sage Open*, 10(1), 2158244020902081.

- Karakuş, C. (2018). *Araştırma yöntemleri* [Research methods]. Erişim Adresi: <http://ckk.com.tr/ders/arastirmayon/00%20Ara%C5%9Ft%C4%B1rma%20Y%C3%B6ntemleri.pdf>
- Kaya, O. N., Doğan, A. & Öcal, E. (2008). Turkish elementary school students' images of scientists. *Eurasian Journal of Educational Research*, 32, 83-100.
- Kestere, I., & Kalke, B. (2018). Controlling the image of the teacher's body under authoritarianism: the case of Soviet Latvia (1953–1984). *Paedagogica Historica*, 54(1-2), 184-203.
- Koschnick, W. J. (1995). *Dictionary of marketing*. England: Gower.
- Kurt, H. (1987). *Image: Global image, Corporate image, Marken-Image, Produkt-Image*. Landsberg am Lech: Verlag Moderne Industrie.
- Lee, E., & Kwon, H. (2019). How Korean middle school students see inventors: the images of the inventor. *International Journal of Technology and Design Education*, 29(4), 655-668.
- Li, J., Liu, F., & Rojas-Méndez, J. I. (2013). How international students select offshore programs: The influence of image, attitude, subject norm, and perceived behavioral control. *Asia Pacific Education Review*, 14(3), 381-390.
- Linsner, A., Sotiriadou, P., Hill, B., & Hallmann, K. (2021). Athlete brand identity, image and congruence: a systematic literature review. *International Journal of Sport Management and Marketing*, 21(1-2), 103-133.
- Ma, A. H. S. (2021). Assessing the Effects of University Reputation and City Image on International Student Destination Choice: Evidence from a Flagship University in Taipei. *Education and Urban Society*, 54(8), 992–1009.

- Manzoor, S. R., Ho, J. S. Y., & Al Mahmud, A. (2021). Revisiting the 'university image model' for higher education institutions' sustainability. *Journal of Marketing for Higher Education*, 31(2), 220-239.
- McCarthy, D. (2015). Teacher candidates' perceptions of scientists: images and attributes. *Educational Review*, 67(4), 389-413.
- Medina-Jerez, W., Middleton, K. V., & Orihuela-Rabaza, W. (2011). Using the dast-c to explore Colombian and Bolivian students' images of scientists. *International Journal of Science and Mathematics Education*, 9(3), 657-690.
- Niikko, A. (2020). Examining images of teacher students. *European Early Childhood Education Research Journal*, 28(6), 884-897.
- Okay, A. (2000). *Kurum kimliği* [Corporate identity]. Ankara: Media Cat.
- Page M.J., McKenzie J.E., Bossuyt P.M., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, 1-4.
- Plumeyer, A., Kottemann, P., Böger, D., & Decker, R. (2019). Measuring brand image: a systematic review, practical guidance, and future research directions. *Review of Managerial Science*, 13(2), 227-265.
- Polat, S. (2011a). The Relationship between University Students' Academic Achievement and Perceived Organizational Image. *Educational sciences: Theory and practice*, 11(1), 257-262.
- Polat, S. (2011b). University students by the organizational image of Kocaeli University. *Education and Science*, 36(160), 105-119.

- Polat, S., & Arslan, Y. (2015). Örgütsel yaşamda imaj: İmaj geliştirme ve yönetim [Image in organizational life: Image development and management]. Ankara: Nobel Akademik Yayıncılık.
- Sageder, M., Mitter, C., & Feldbauer-Durstmüller, B. (2018). Image and reputation of family firms: a systematic literature review of the state of research. *Review of Managerial Science*, 12(1), 335-377.
- Schlesinger, W., Cervera-Taulet, A., & Wymer, W. (2021). The influence of university brand image, satisfaction, and university identification on alumni WOM intentions. *Journal of Marketing for Higher Education*, 33(1), 1-19.
- Smith, G. B. (2013). Living in a Barbie World. <http://emuprssa.com/2013/07/23/#content>. Erişim tarihi 07.09.2022.
- So, K., & Park, N. (2022). Can teachers be change agents? A critical analysis of teacher images in school reform policies. *The Asia-Pacific Education Researcher*, 31, 39-48.
- Subramaniam, K., Esprivalo Harrell, P., & Wojnowski, D. (2013). Analyzing prospective teachers' images of scientists using positive, negative and stereotypical images of scientists. *Research in Science & Technological Education*, 31(1), 66-89.
- Tatar, N. (2015). Pre-service teachers' beliefs about the image of a science teacher and science teaching. *Journal of Baltic Science Education*, 14(1), 34.
- Toğrol, A. Y. (2013). Turkish students' images of scientists. *Journal of Baltic Science Education*, 12(3), 289-298.
- Vinichenko, M., Kirillov, A., Frolova, E., Pochinok, N., & Kaurova, O. (2018). The formation of training and occupational safety conditions as a factor in the creation of a favorable image of an

educational organization. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(4), 1229-1237.

Wilkins, S., & Huisman, J. (2013). Student evaluation of university image attractiveness and its impact on student attachment to international branch campuses. *Journal of Studies in International Education*, 17(5), 607-623.

Wilkins, S., & Huisman, J. (2015). Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Studies in higher education*, 40(7), 1256-1272.

Yalçın, H. & Esen, M. (2016). *Bilimi ölçümlemek: Bilimin metrisi. Bilim, teknoloji ve inovasyon çağında araştırma üniversitesi olmak* [Measuring science: The metric of science. To be a research university in the age of science, technology and innovation]. Ankara: Pegem.

Zaman, U., Aktan, M., Baber, H., & Nawaz, S. (2021). Does forced-shift to online learning affect university brand image in South Korea? Role of perceived harm and international students' learning engagement. *Journal of Marketing for Higher Education*, 1-25. Published online: 12 Nov 2021

About the author:

Soner Polat received his master's degree in Education Management from İnönü University in 2000, he completed his PhD degree on Education Management from Kocaeli University in 2007. He has 25 years of experience in various academic positions, also worked as a teacher in various levels of education. His research interests are organisational justice, trust, diversity management, peace education,



Polat (2023). Evaluation of image studies in the field of education: A systematic literature review.

organisational image and intergenerational learning. He is currently working at Kocaeli University in Kocaeli, Turkey.

E-mail: spolat@kocaeli.edu.