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# Multidimensional perception of the concept "school excellence"

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This research aims to conceptualize and define teachers' perception of school excellence (TPSE) and investigate the relationship between personal background, school role, organizational factors, and TPSE. The scale for TPSE was developed especially for this study. Elementary school teachers (N=197) participated during the 2018-2019 academic year. Data were analyzed using two quantitative approaches: The facet theory approach was selected for its ability to conceptualize phenomena, and the Structural Equation Modelling (SEM) approach. The variables in the SSA map in the radial configuration form three concentric circles of conditional perceptions: personal understanding of excellence, the perception of excellence reflected by their surrounding society, and the perception of the concept in the Western world. The school excellence components were deployed in an angular form showing three elements: leadership and management, students' achievement-related excellence, and pedagogical excellence. The measure of fit coefficients indicated good results: RMSEA=0.00, TLI=1.00, CFI=1.00, NFI=0.88,  $df=28, \chi^2=27.95, p=0.47$ . The implications of the study findings can be helpful for schools that wish to examine their excellence rankings to improve performance and maintain a constant level of school excellence.

KEYWORDS

teachers, school excellence, perceptions, facet theory, SEM, primary schools

#### Introduction

This section will focus on five issues directly related to perceptions of school excellence and enable a better understanding of the conceptual framework.

The first topic is "school discipline" since this is the issue the study focused on. The second topic is "the role of the school principal" since the principal has a significant role in developing school excellence. The third theme is "school climate" since climate is included in the definition of school excellence. The fourth issue is the teacher's perception of professional competence as a promoter of school excellence since it was found that the perception of teachers' professional competence promotes school excellence. The fifth theme, "Parents and school excellence," was also expanded since the position of parents and especially their involvement in the educational institution has an impact on school excellence. The fifth and last topic is "conditional perceptions." Conditional perceptions are an essential concept regarding perceptions in general and perceptions of school excellence in particular.

#### School excellence

A discussion of the notion of excellence must emphasize the difference between mentioning honorable distinction or merit and the phenomenon of excellence (which in Hebrew share the same root and are often confused or conflated). The former is defined as achievements that can be measured and compared with those of others. The latter refers to an

internal and personal process that allows one to realize one's full potential; its value can be measured only at a specific moment (Gonen, 1994). A distinguished achievement is defined according to external criteria that compare a particular school with other schools. These criteria are determined by factors external to the school, such as the Ministry of Education, the local authorities, international exams, etc. By contrast, excellence – and school excellence in particular – comprises elements unique to the school as an organization, and these criteria are not comparable among schools (Fisher, 2012).

In the last two decades, numerous researchers and organizations have attempted to define what should be considered an excellent school, as demonstrated by the studies conducted in the countries of the OECD (Schleicher, 2014). For the most part, there is an agreement in the Western world that academic excellence is a primary condition for recognizing a school as excellent.

Excellence is measured and documented using international tests such as the PIZA test, which examines higher-order thinking functions such as solving problems, conducting analyses, and drawing conclusions, and by mathematics examinations that compare comprehension and performance among math students from different countries. The Scottish Ministry of Education (2014) defined a school's academic excellence as consisting of a broad and varied study program that encompasses all learning styles, an up-to-date and innovative curriculum, as well as highly skilled teachers, where there is constant and careful monitoring and assessment of the learner, the learning process, and the pedagogical methods used. The students at such a school must be capable of studying independently and demonstrate positive involvement in all aspects of the learning process. The curriculum at such schools includes teaching study skills, daily living skills, and skills for future job searching (Transforming Lives Through Learning, 2015).

The research literature also includes holistic approaches to the notion of excellence, according to which an excellent school must guide its students to develop emotional and daily living skills; these are tools that have a direct effect on student's academic achievements, helping them realize their full potential within the school framework. Moreover, such skills will serve these students in their future as mature individuals and help them make decisions, integrate into society, and cope with real-life problems (Schleicher, 2014).

The following are some essential skills mentioned in the research literature: the development of self-confidence; the ability to conduct and engage in discussions, listen, and express oneself; critical thinking and problem-solving; social skills; and social responsibility. Furthermore, the school must play a role in students' acquisition of 21st-century skills, such as creativity, innovation, and thinking outside the box, as well as distinguishing between accurate and inaccurate information, effective use of technology, skills for solving multidimensional problems, developing flexibility, and the ability to work in cooperation with others (Gonzales and Lambert, 2001; Crowser, 2008; Mulford and Silins, 2011; Aldaihani, 2014; Transforming Lives Through Learning, 2015). In addition to the abovementioned skills, an excellent school must teach its students basic moral principles, including personal, familial, social, national, and universal ethics (Fisher, 2013).

The issue of excellence has preoccupied several countries. The education policies in the US have undergone several reforms over the years, starting with the No Child Left Behind Act, introduced during the presidency of George Bush Senior (No Child Left Behind Act,

2001) and ending with the latest reform enacted by President Obama, the Every Child Succeeds Act (Every Student Succeeds Act, 2015). Given the ever-increasing gaps between populations in the US and the fact that school excellence there is measured by the narrow definition of national test grades, several researchers have proposed other parameters for defining school excellence in the educational frameworks in the US (Schleicher, 2014). Their proposal was based on dividing excellence according to input and outcomes, whereby "input" includes the level of the teachers and the teaching environment, accompanied by the constant professional development of the staff; a school culture based on security, trust, a sense of belonging, academic challenge, positive teacher-student relationships, as well as a high level of study resources, based on community relationships and optimal parental involvement.

Other countries, such as Australia, usually include the community in the definition of school excellence. It could be defined as a continuous school improvement encompassing all school planning areas, ongoing self-assessment, reporting, and external validation (School Excellence and Accountability, n.d.). To demonstrate excellence, schools need to be specific about what they aim for in a practical and tangible sense. Schools that excel pride themselves on staff excellence and offer professional learning opportunities to their teachers. A school that achieves excellence sets out its expectations for students, staff, and parents – and they communicate that message regularly to their community (Excellence in Schools, Five Defining Factors, n.d.).

Finland is considered one of the world's most educationally advanced countries, and the underlying principles of its educational policies serve as a model for creating school excellence in other OECD countries. Their educational principles involve three areas: on the student level, the education system actively seeks to improve students' achievements in line with the state's welfare policies, which promote equity and fairness toward all citizens. The school principal and teaching staff are regarded as the school's leaders on the organizational level. Teachers must have at least one postgraduate degree emphasizing research, and their salaries are higher than the average in the other OECD countries. On the level of the educational system, the Finnish school system enjoys a high degree of decentralization, and the schools are self-managed for the most part. The publicly funded education system offers grants and scholarships to students of limited socioeconomic resources to ensure equity and fairness.

The common denominator among successful schools in education systems of developed countries such as England, New Zealand, Hong Kong, Scotland, and Singapore is the supervisory system that ensures the schools' constant improvement, efficacy, and high quality. In most schools, a combined system includes the school's self-assessment and outside supervision. Also, they used similar assessment and supervisory criteria, and the level of investment in the school and training and supporting the staff affected the extent of the changes that took place (Whithby, 2010).

In Israel, there have been several attempts to set national parameters by the Ministry of Education, as well as by other outside researchers; however, it is essential to note that when considering school excellence on a national level, this typically refers to the level of students, specifically, to students who belong to the top fifth percentile of the student population, who have a high IQ, strong academic, and extracurricular talents, strong personal characteristics, are creative and contribute to society in general (Alon et al., 2007).

The research literature also includes those who abstained from seeking excellence (James and Oplatka, 2014) but instead opted to borrow a term from the field of psychology, namely, "a good-enough mother," to introduce the concept of "a good-enough school." This concept suggests that providing proper teaching and organizational practices creates the necessary conditions for development and growth. A space that facilitates the growth potential evolves as students become more autonomous and independent. In contrast to the "good-enough school," in a school that is "not good enough," there is a risk that no learning will take place at all and that students will not be cared for; the potential space is too large, and the school is incapable of caring for the individual student. By contrast, in a perfect school, which many are apt to confuse with an excellent school mistakenly, there is no room for risk, or it is minimized; hence, students are deprived of autonomy, and there is no room for creativity.

#### The role of the school principal

Several models emphasize the role of the school principal as a significant role in the definition of school excellence (Fisher and Heimann, 2008; Aldaihani, 2014).

The role of a principal in developing school excellence is to ensure that students, teachers, and parents know what policies and procedures are in place and to hold each individual accountable for following them. School principals are central in recruiting and developing diverse and high-quality staff, including establishing a positive school climate. They work relentlessly to improve achievement by focusing on the quality of instruction. School principals' ability to lead the school toward excellence depends to a large extent on their identity as leaders, which in turn affects the clarity of their mission, their selfperception as educational leaders, and the acceptance of their authority by the other employees at the school (Tubin, 2017). Hence, they must have a comprehensive vision and take responsibility for the constant improvement of the school. School operations are subject to sudden changes, given the continuous input of new information into the system and the experience of uncertainty in decision-making (Chen-Levi and Shahar, 2015).

### The organizational culture and the school climate

The quality of the school can be defined using a term borrowed from the world of finance, namely, "organizational culture." This term was coined in the 1980s in the United States and indicated a conglomeration of implicit and explicit organizational characteristics (Shahzad et al., 2012).

The idea can also be adapted to schools based on the concept of organizational culture for organizations other than schools. The organizational culture is essential to the school's success and manifests first and foremost in the staff's development. Based on a shared sense of mission and mutual support and commitment, cooperation among the staff can lead to improved teaching methodologies, resulting in students' improved academic achievements. A thriving organizational culture provides a supportive structure and creates trust; it nurtures teachers' leadership and orientation toward excellence. The teachers are empowered by guided teamwork that follows the curriculum,

which is then implemented in the classroom and subject to evaluation (Tubin, 2015).

Studies have shown that the school principal is responsible for creating a positive school climate. The principals can improve the school climate by providing consistent support for the students and teachers while giving economic resources for the professional development of teachers and engaging their participation in school-based reforms (Crowser, 2008; Kutsyuruba et al., 2015).

It was also found that learning from successful school developments by revealing the hidden knowledge that led to these successful experiences is a process that creates a positive school climate, encourages dialog, and promotes change (Fisher and Heimann, 2008).

## Teachers' sense of professional self-efficacy as a promoter for school excellence

The outcome of an organizational culture that supports professional learning communities is a collective sense of self-efficacy. This term represents the community members' beliefs regarding their ability to function as a whole system and reflects their views about the organization's ability to reach its goals. Collective efficacy enables the group to take action; it is affected by the employees' satisfaction with the social, material, and personal benefits gained through the job. In addition, collective efficacy is affected by the employees' degree of responsibility and commitment, gender, the discipline they teach, and years of experience in the field (Shulman, 2014). When the educational pedagogical staff functions at a high degree of efficacy, it enjoys a sense of excellence, professionalism, and identification with the job and its role (Gilad (Chick), 2012).

In a school where the professional staff experiences success and the school reaches a point of optimal functioning, teachers consider themselves positive role models and offer to assist and demonstrate pedagogical practices to teachers who are newcomers to the profession. Reaching the point where teachers, school principals, and supervisors experience a sense of success requires a prolonged process of development and growth. This process is characterized by taking pleasure in learning, creating a solid ethical basis to serve the long term, and instilling a vision of the community's future success (Cox, 2009).

There is a direct relationship between an organizational atmosphere characterized by the staff's sense of shared responsibility, commitment, and mutual appreciation, on the one hand, and students' high level of academic achievements, on the other hand. The relationship between teacher self-efficacy and school excellence was also found in kindergartens; in other words, a high sense of self-efficacy among members of the organization helped them lead the organization to a level of excellence (Fisher and Seroussi, 2018).

#### Parents and school excellence

The role of the parents and the definition of their involvement in school processes is another important characteristic that defines excellent schools. Parental involvement in school is significant (Fisher and Heimann, 2008). Creating a relationship of cooperation and community involvement between the student's parents and the school

can increase students' learning efficacy. Conducting open and receptive communication with the parents enables them to become attentive partners in creating pedagogical models better suited for their children.

In most OECD countries, academic achievements constitute a significant part of defining an excellent school. A relationship was also found between parental involvement and students' improvement in academic achievements. When parents were involved in what went on at school, students' attendance rates increased, they were better prepared for class, they were more inspired to learn, and their achievements in subjects such as language, math, English, and other significant skills also improved (Epstein, 2008; Pasubillo and Asio, 2023).

#### Conditional perceptions

The current study presented a new concept based on a term borrowed from previous research (Fisher, 2015), namely, "conditional perceptions." This concept refers to the teachers' perceptions of a school's excellence, which depend on other factors. In other words, many factors can affect a teacher's perception of what it means to be an excellent school. This set of factors often reflects the perceptions common in the teacher's country of affiliation (in this case, Israel) and universal perceptions that characterize the community of teachers in the 21st-century Western world.

The complexity of teachers' perceptions of school excellence increases the more they view their perceptions as grounded in personal beliefs. In other words, the more teachers believe they possess a unique perception of school excellence compared to other teachers, the more complex their conceptualization of it. Perceptions based on social beliefs are less complex than those grounded in personal beliefs. Those based on universal perceptions are considered the simplest of the three types (personal, social, or universal). Thus, conditional perceptions can be measured on a three-part scale.

- (1) Personal conditional beliefs are affected by universal and official perceptions, and together, they form the teacher's worldview of what an excellent school means. This type of perception is occasionally affected by what is considered "politically correct" at the time. Given that the perception of school excellence reflects the educator's interpretation, this perception is perceived as more complex but less unique.
- (2) National or official conditional beliefs include the views stated by the Ministry of Education, which are affected by universal perceptions in the Western world. These are considered less complex than teachers' perceptions, yet at the same time, they are viewed as more unique.
- (3) Universal conditional beliefs these are accepted by most of the Western world and considered less complex than personal perceptions of excellence but much more unique.

#### The present study: objectives and hypotheses

This study concerns the concept of school excellence as perceived by teachers in the Israeli school system and has a dual goal. The first goal is to conceptualize the components of teachers' perceptions of school excellence. The second is to determine whether and how personal variables, role-related factors, and organizational variables affect the teachers' perceptions of school excellence.

#### The methodological approaches

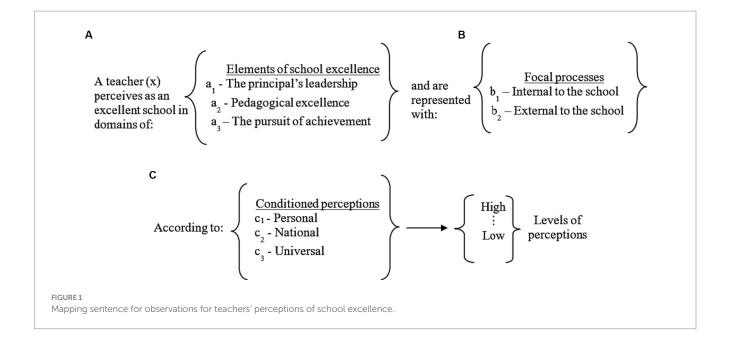
The study used two quantitative methodological approaches: One applied facet theory (Guttman, 1959; Borg and Shye, 1995), and the second used structural equation modeling (SEM).

Facet Theory is a theoretical framework and methodology for studying complex, multidimensional phenomena. It analyzes and organizes a phenomenon's various dimensions or facets into a coherent and meaningful structure (Levy, 1994; Shye and Elizur, 1994). Facet Theory assumes that every phenomenon can be described in terms of multiple facets and that these facets are interrelated in complex ways. Therefore, the analysis of a phenomenon should consider the entire range of its facets rather than focusing on just one or two. To facilitate this process, Facet Theory provides a systematic approach to identifying and measuring the facets of a phenomenon. The key idea is that analyzing and integrating these facets can generate a more complete and accurate picture of the phenomenon.

A primary tool used in this approach is the mapping sentence (see Figure 1), which defines the relationships between the facets being analyzed: the facet of the research population (in this case, the teachers), three content facets (in this case, features of school excellence A, focal activity areas B, and conditional perceptions C), and the range-measuring facet (high-to-low perceptions of excellence). The mapping sentence is similar to the hypotheses presented in more standard statistical approaches, and all the hypotheses presented in this research are exploratory.

Teachers' perceptions of school excellence can be categorized into three content facets.

- (1) Components of school excellence: An unordered facet because each component of school excellence exists independently of the others, and there is no hierarchy between them. Accordingly, the variables will be distributed in the SSA map in a polarizing structure representing three components.
- The principal as the organization's leader: Elements related to the school principal's leadership role and organizational excellence.
- Pedagogy: Elements related to innovation in teaching methods and teachers' professionalism.
- The pursuit of achievement: A strong relationship with the community positively affects the student's academic outcomes and the teachers' tendency to engage in professional development and learning.
- (2) Focal processes and school characteristics: An ordered and axial facet with an internal hierarchy. The variables in this facet suggest that the points on the map will create a continuum and will not intersect. The pre-existing hierarchy among the variables means that the distance of each point from the axis is significant.
- Processes and characteristics internal to the school These processes make the school a place of excellence and are related to



the excellent functioning of the school as an organization. They focus on factors internal to the school and internal social activities.

- Processes and characteristics outside the school These are
  processes related to the excellent functioning of the school as an
  organization. Compared with other schools, the focus is on
  external factors (primarily pedagogical and academic data).
- (3) Conditional perceptions: An ordered facet with a modulating function and an internal hierarchy determined by the extent of the condition. In this facet, the variables are scattered in the SSA map in the form of three radials:
- Personal perceptions are also based on national and universal perceptions, which are the most complex and form the inner radial.
- National or state-wide perceptions promoted by the Ministry of Education and its branches are affected by universal perceptions.
- Universal perceptions are widely accepted throughout the Western world and, as such, are considered non-complex and thus form the outermost radial.

The method of data analysis involves smallest space analysis (SSA), a statistical model in which the correlation coefficients are represented in terms of the distance between the variables as shown in a two-dimensional space. In other words, the variables appear as points on the map, and the correlation coefficient determines the distance between them. The closer the variables are on the map, the stronger the correlation between them. In this manner, the method reveals relationships between the variables that might remain obscure.

#### Methodology

#### The study population

Participants were 192 school teachers with diverse personal and demographic backgrounds. The reason for a unique reference to

teachers is that it is not possible in primary research to address multiple populations. Still, a preferred option is first to test each population separately: the perception of the teachers, the perception of the parents, and the perception of the students. The possibility of first addressing the teacher population was because they are the ones who directly implement the development of excellence within the classrooms. Consolidating the concept by testing the teachers' perception will allow tests to be carried out in future studies of additional populations.

Personal and demographic backgrounds 0.85% (164) identified themselves as women, 14% (26) as men, and 1% (2) failed to disclose their gender; 21% (41) were young (aged 20–30), 35% (68) were semiyoung (aged 31–45), 42% (80) were over 45 and 2% (3) failed to disclose their gender; 49% (95) had BA or B. Ed degrees, 47% (91) had MA or M. Ed degrees, and 3% (6) failed to disclose their level of Education; 44% (85) teachers teach in elementary schools, 53% (101) teachers teach middle and high schools, 3% (6%) teachers refrained from stating their type of school;

#### The research instruments

The research instrument was an anonymous quantitative self-report questionnaire titled "Teachers' Perceptions of School Excellence" (TPSE) designed especially for the current study but based on qualitative findings of a previous study (Fisher and Heimann, 2008). The questionnaire contained two sections. The first section included an opening letter to the teachers explaining the aims and objectives of the research, committing to maintain responders' anonymity, and asking for their sincere cooperation. The second part, The TPSE scale, consisted of 27 items assessed along a five-point Likert-like scale, ranging from "never" (= 1) to "always" (= 5).

The TPES scale included three subscales: *pedagogy* (PD), *principal's leadership* (PL), and *academic achievements* (AE). Reliability for the total scale was 0.95 Cronbach's alpha, 0.94, 0.90, and 0.78 Cronbach's alpha for the subscales, respectively.

The following are examples of items included in the questionnaire. Regarding pedagogy (PD): The school has innovative curricula and many high-quality study programs. On principal's leadership (PL): Everyone sees the principal as a leader who leads educational, organizational, and social processes. The principal has a proven ability to deal with problems (failures and partial successes). On the subject of academic achievements (AE): Twelfth-grade grades and matriculation averages are high and are above the national average (high schools only); K-9 grades average end-grade grades are high and are above the national average (elementary and junior high schools only) (see Table 1).

#### Data collection and analysis

The study was conducted during the 2018–2019 academic year. First, basic questions were formulated using the qualitative findings from the previous research (Fisher, 2007). Next, a preliminary interview was conducted by phone with 10 teachers recruited through personal acquaintance with the researchers. The goal was to identify additional aspects of teachers' perceptions of school excellence and then add to the basic questions. Then, the finalized questionnaire and the proposed research questions were submitted to the ethical committee of the relevant college (removed for blinded submission) for approval.

In the next step, between March, April, and May 2018, 210 questionnaires were distributed, and 192 were returned. These were distributed in centers for teacher development (affiliated with the Ministry of Education) and various schools nationwide, coordinating with the centers' managers and school principals, respectively. Before handing out the questionnaires, a short explanation was given to prospective participants about the research and its goals. Questionnaires were collected immediately after the participants completed them. The data were analyzed and reported between October 2018 and December 2019.

Data collected from the questionnaires were analyzed using various statistical methods: frequencies were calculated in terms of means and statistical deviations; relationships among the variables (personal background variables and school excellence variables) were examined using factor analysis, facet theory (SSA), and SEM. This analysis is used to analyze complex models containing numerous variables or a variety of conditional relationships among the variables. It provides the results of multivariate analysis in a graphic context, thus expanding upon the general linear multivariate models. This analysis allows for the simultaneous examination of a set of regression equations that includes the error measured, thus providing better estimates than other conventional correlation analyses (e.g., multiple regressions).

Furthermore, another advantage of this analysis is the presentation of variables and the relationships among them in a single model. This analysis treats the model as a system of equations and directly estimates all the structural coefficients. This method thus demonstrates whether there is a correlation between the empirical and theoretical models and provides an estimate of the degree of correlation or noncorrelation (Byrne, 2001).

Smallest Space Analysis (SSA) was applied to analyze the structure of the Parental Involvement domain, using the Hebrew University Data Analysis Program (HUDAP) (Borg and Shye,

1995) based on the calculated correlation matrix. Descriptive statistics, including means, variance, and reliability analysis, were computed using SPSS 21. Amos5 was used for structural equation modeling (SEM).

#### Adhering to the rules of ethics

The survey form did not ask participants for identifying information such as name, street or email address, or phone number. If a teacher decided not to participate, he did not complete the questionnaire. Incomplete questionnaires (indicating that the teacher had agreed to withdraw through completing them) were shredded, and the associated data did not form part of the study results. The participants were not compensated for completing the questionnaire, and there was no cost to teachers to participate in the study.

#### Results

As mentioned above, there were three levels of statistical processing. The first level involved the computation of descriptive statistics, including means, variance, and item-total correlation for each item. The correlation matrix of the scale's item scores was subjected to factor analysis. The number of factors extracted is based primarily on the hypotheses presented in the mapping sentence (see Figure 1). Factor analysis was intended to assist with first-stage confirmation of the facet concerning the elements of school excellence. Kaiser's rule (Nunnally, 1978), Cattell's (1966) scree test, and a comparison of the observed correlation matrix were used for verification. The scale's reliability was tested using Cronbach's alpha coefficient. Cronbach's alpha coefficients for the scores in the whole scale (school excellence) and the three subscales: Pedagogy (PD), the principal's leadership (PL), and academic achievements (AE), as described above, were 0.95, 0.94, 0.90, and 0.78, respectively.

The second level included subjecting the data to an SSA (Smallest Space Analysis) procedure. Data deployment was examined in a two-dimensional space, and the coefficient of alienation was 0.18, presenting a reasonably good fit between the data in the correlation matrix and the graphic presentation of data deployment. The rationality coefficients (a measure of goodness of fit between observed and expected item spatial deployment) were 1.000 for all three facets. A reliable interpretation could be made quite confidently based on the alienation and the rationality coefficients.

The rationality coefficients (a measure of goodness of fit between observed and expected item spatial deployment) were 1.000 for all three facets. A reliable interpretation could be made quite confidently based on the alienation and the rationality coefficients. Figure 2 shows the Small Space Analysis solution for Facets A, B, and C.

The third level of statistical processing included testing the validity of the theoretical model. The relationship system among all the research variables was examined by applying SEM analysis using AMOS 5, which allows for examining complex systems that include numerous variables and relationships among them. The SPSS 21 software and Amos software programs were also used to analyze structural equations, including confirmatory factor analysis (CFA), exploratory factor analysis (EFA), and path analysis. This approach renders models that are more precise than those achieved using

TABLE 1 Factor structure of the TPSE.

Item no.	Item content	Loading of component 1	Loading of component 2	Loading of component 3
Component 1: Ped	lagogy			
(13 items, $\alpha = 0.94$	t; Explained Variance = 46.52%; Eigenvalue = 12.56)			
25	Students feel good at school	0.752	0.206	0.311
23	Students acquire tools and skills for the real world	0.744	0.270	0.245
21	Proper treatment of differences among students	0.727	0.315	0.236
11	Teachers enjoy good working relationships	0.720	0.390	0.081
12	Teachers feel good at school	0.685	0.414	0.086
13	Teachers are driven by a sense of mission	0.685	0.327	0.052
10	The teachers function as a team	0.649	0.435	0.206
22	There is a variety of social activities	0.623	0.275	0.268
17	There is no violence at school	0.615	0.130	0.248
20	Use of innovative curriculum	0.587	0.326	0.391
18	A variety of study concentration areas are available	0.552	0.121	0.381
26	Parents have a special relationship with the school	0.537	0.219	0.502
24	Activities are held for the benefit of the entire community	0.517	0.292	0.269
*	ncipal as leader of the organization Explained Variance = 6.24%; Eigenvalue = 1.69)			
6	The principal makes decisions after examining the data	0.331	0.726	0.208
1	The principal initiates and leads processes	0.161	0.725	0.266
4	The school functions in an organized manner	0.406	0.686	0.257
8	The principal can cope with problems	0.196	0.674	0.360
2	The principal is humble and courteous	0.230	0.662	-0.106
5	The school has set goals for pedagogical, organizational, and social excellence	0.519	0.599	0.278
3	The principal involves teachers in decision-making	0.179	0.574	0.148
9	Teachers identify with the principal's leadership	0.467	0.566	0.042
7	The school has a strategy for defining success	0.370	0.517	0.345

traditional variance analysis or multivariable regressions, thus allowing for better insight into the causal relationships and the effect size of the model's variables (Ullman and Bentler, 2013).

The measure of fit coefficients indicated good results: RMSEA = 0.00, TLI = 1.00, CFI = 1.00, NFI = 0.88, df = 28,  $\chi^2$  = 27.95, p = 0.47. In particular, the  $\chi^2/df$ =0.99 value was smaller than 3, indicating a good fit; the TLI, CFI, and NFI results were in the range between 0.9 and 1, and the RMSEA value was smaller than 0.1.

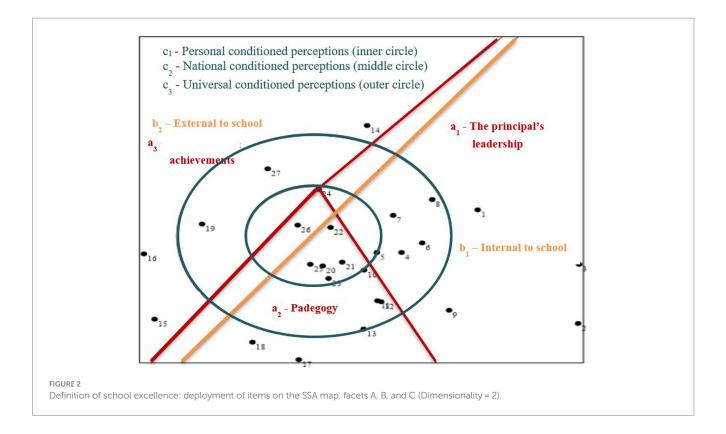
All of the findings from the SEM analysis confirmed the theoretical model, constructed based on correlation and regression analysis, indicating a good fit with the empirical model (Furthermore, all the findings confirmed the research hypotheses regarding the relationships between the teachers' background variables and their perceptions of school excellence.

#### Discussion

School excellence has long been a subject of interest to many educators and researchers. However, there is no consensus regarding the definition of school excellence and whether it is culture-bound or universal. The common perception is that academic achievements are the significant component defining school excellence. This perception also manifests in prior research conducted in OECD countries, which treats students' grades as crucial in determining school excellence (Whithby, 2010; Mulford and Silins, 2011; The Scottish Ministry of Education, 2014). It is shown that in the last decade, there has been a tendency to include components related to the principal's leadership and the pedagogical processes that take place at schools in the definition of school excellence (Fisher, 2007).

This current study had two primary goals: the first was to conceptualize school excellence as understood by teachers in Israel, and the other was to determine whether certain factors— and if so, which ones—can predict teachers' perceptions of school excellence.

The current study, which—as mentioned—was based on a previous qualitative study (Fisher, 2007), demonstrates that it is indeed possible to conceptualize such a complex notion as teachers perceive it. The study's results indicate that school excellence comprises three major dimensions: the school principal as a leader of an organization, structured pedagogical processes, and academic achievements. The components of these dimensions can exist within the confines of the school and beyond. They depend on the personal perceptions of each



teacher, the nationwide perceptions acceptable in Israel, and universal perceptions accepted in the Western world. Deriving such a definition was possible only using facet theory analysis, which merged three facets into a single coherent definition. Facet A describes the aspects of excellence that characterize the principal's leadership of the organization, pedagogical excellence, and academic achievements. Facet B describes the physical environment where excellence is exercised, within and outside the school perimeter. The third facet, C, termed "conditional perceptions," is a newly introduced component in the definition of school excellence (although it was borrowed from a different realm of research; Fisher, 2015). The term "conditional perceptions" emphasizes that teachers' perceptions regarding school excellence are not based solely on their personal views. Instead, these are formed based on what they know in the Western world, its translation and interpretation in a given country (as determined by its Ministry of Education), and the personal conclusions drawn by the teachers.

Teachers construct their perception of school excellence based on these three conditional perceptions, which can be viewed as a continuum between three complex levels, which increase in complexity as the continuum moves from the larger universal sphere toward the smaller national sphere, and even more so in the most complex form, the teachers' perceptions of school excellence. The complexity increases as the process of perception is refined; that is, the individual teacher working in a particular school selects certain aspects from the universally and nationally accepted perceptions, which together create their unique understanding of school excellence.

The findings show that the items of the principal's role as the leader of the organization are closely related, based on their distribution on the SSA map and also in terms of their shared contents, as part of teachers' perception of school excellence (see the SSA map

in Figure 3). Similar findings have also been emphasized in research conducted by the Avnei Rosha Institute (Oreg and Berzon, 2013). It may be concluded that teachers perceive the principal as possessing the wand to lead the organization to pedagogical excellence. When teachers find the school's objectives clearly defined and based on the principal's conclusions following a comprehensive search and examination process, they can perform their complex job optimally, and the outcomes benefit students' achievements.

Teachers did not believe innovative school curricula or dealing appropriately with student differences were part of school excellence. This finding is a surprise, especially given that these two topics are of significant concern in the public discourse in Israel (Naot-Ofarim and Arazi-Chatab, 2014; Keshet-Maor, 2017; Zohar, 2019).

At the same time, teachers see a clear connection between school excellence and the school's relationships with parents and the community (e.g., community centers, the local authority, youth movements, etc.) In other words, these teachers acknowledged the existing link between parental involvement and improved academic achievements, a finding that aligns with those of other studies conducted in Israel and other locations worldwide (Fisher and Heimann, 2008; Garbacz, 2018). Moreover, this finding supports a survey conducted by the Israeli Ministry of Education's evaluation division (Avital and Raz, 2018), in which teachers reported that their satisfaction with the school was strongly related to the quality of their relationship with the student's parents and the community. Furthermore, the importance of the school's relationship with parents and the community is also an aspect of the teachers' conditional perceptions.

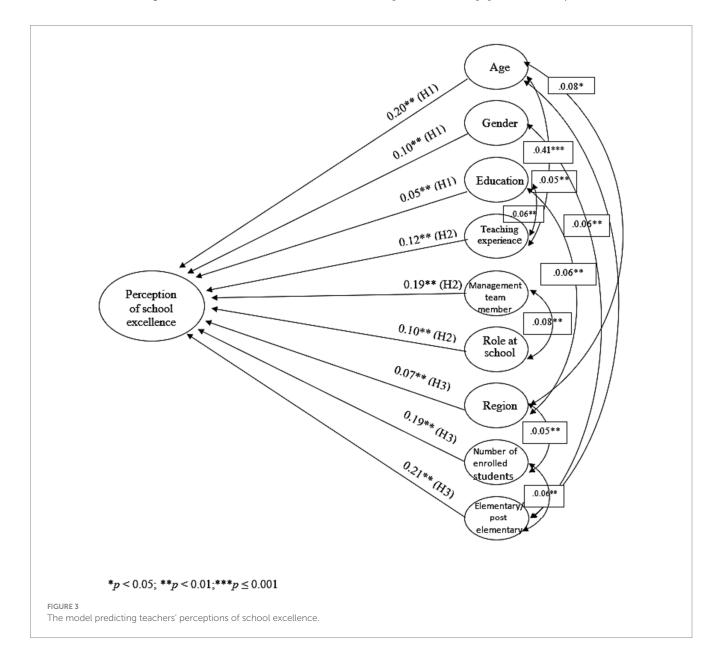
The fact that teachers perceive the team's functioning at a high level as part of school excellence and the team's relationship as a characteristic of excellence corresponds to similar findings in the

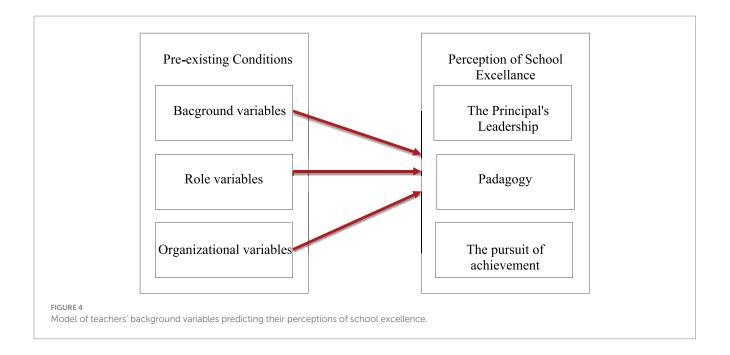
professional literature (Fisher and Heimann, 2008). In other words, this result indicates that the teachers perceived a positive and relaxed team atmosphere and professional cohesion related to a shared sense of mission (specifically, to advance and improve students' achievements) to be characteristics of pedagogical, organizational, and achievement-related excellence (Ben-Peretz and Sheinman, 2013).

Examining the results of the SEM analysis (see Figure 8) allows us to add another layer to our understanding of school excellence. The model shown confirmed all of the hypotheses; in other words, the background variables, the role-related variables, and the organizational structure predicted the perception of school excellence, with good measures of fit (RMSEA = 0.00, TLI = 1.00, CFI = 1.00, NFI = 0.88, df = 28,  $\chi^2 = 27.95$ , p = 0.47). According to the resulting model, teachers' background variables (H1), age, gender, and level of Education predicted their perceptions of school excellence. Specifically, the older and more educated the female teachers (in more significant numbers than their male counterparts) were, the more demanding their criteria for school excellence were.

Likewise, the variable related to their role in the school (educators, management team members, or in a different professional capacity) (A substrate that confirms hypothesis H2) and the variable of years of teaching experience predicted their perception of school excellence. Specifically, teachers holding an official or professional role at the school and with a long teaching career had higher demands in their definition of school excellence. Finally, the school's characteristics as an organization (A substrate that confirms hypothesis H3), i.e., the size of the school and the level taught, predicted teachers' perceptions of school excellence (Figure 4).

It should be noted that strong correlations were found when the model (the scale of perceptions of school excellence) was examined. However, attempts to identify predictive factors for each subscale could have rendered stronger correlations. Most likely, this is related to the sample size (N=192), and additional correlations could have been found with a larger sample. It leads us to consider a broader perspective for future studies. In other words, there is an acute need to expand the research population, not only in terms of its size but also





in terms of its distribution throughout the country's geographic regions, the types of schools, and their sectorial affiliation.

students. Further expansion will allow the concept to be understood as broadly as possible.

#### The contribution of the current study

A broad definition of school excellence can provide a solid basis for a common language shared by teachers, parents, and educational policymakers in Israel. Furthermore, the precise scale created for this study, i.e., this questionnaire, will enable each school to map its position regarding its excellence practices and make decisions on improving the school's work and the system. This type of evaluation can help hone teachers' perceptions in Israel and formulate a more specific national policy regarding the overall goals of schools that aim for excellence.

#### Limitations of the current study

The study has two main limitations:

The first limitation is that only 197 teachers were tested, even though the distribution is very similar to that of teachers in the studied country. A larger sample could have represented the findings better.

The second limitation is that only primary school teachers were tested. Expanding the research to other populations: managers, parents, and even students is necessary.

Although the study only examined teachers' perceptions of school excellence, learning their perceptions can undoubtedly reflect a broader concept of school excellence. At the same time, it should be considered that this is a first study, and follow-up studies are required for additional populations such as managers, parents, and

#### Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

#### **Author contributions**

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

#### Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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