

# The relationship between teachers' perceptions of transformational leadership practices and the social ecological model

## Universal vs national culture

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### Abstract

**Purpose** – The purpose of this paper is to examine an integrative model combining teachers' perceptions of transformational leadership practices (TLPs) and different subsystems of the social ecological model (SEM) within the context of country culture (US vs Israel).

**Design/methodology/approach** – A quantitative study was conducted among 615 Israeli teachers and 541 US teachers. The leadership practices inventory (LPI) questionnaire was used, and analyses focused on the interaction effects of ecological subsystems and country on teachers' perceptions of TLP.

**Findings** – Results indicated that some universal leadership aspects appear in both the USA and Israel, with modeling the way being most dominant and Challenging the Process least dominant. However, the findings also indicated some specific national leadership aspects. For example, Israeli teachers perceive their school principals' TLP to be significantly higher than do US teachers in all five dimensions. In addition, the study indicated significant differences between Israel and the USA regarding aspects of TLP, after taking school level into account. The results are explained by Hofstede's culture dimensions.

**Originality/value** – This study focuses on teachers' perceptions of TLP in relation to SEM, which has been largely ignored in educational leadership studies. The findings may help to develop an integrative policy related to both TLP and SEM, which will enhance the impact that school leadership may have in both countries, taking the cultural context into consideration.

**Keywords** Comparative study, Transformational leadership, Teachers  
**Paper type** Research paper

### Introduction

While some researchers argue that transformational leadership practices (TLPs) are universally effective across cultures with some TLP similarities across countries (e.g. Muenjohn and Armstrong, 2015), other researchers have found that TLP may not be equally likely to occur in all cultures (Leong and Fischer, 2011).

The motivation to investigate this subject is based on the tension between the universal culture vs the national culture approaches. Unlike most previous researches that focused mainly on TLP variations in different countries without evaluating their cultural dimensions (Ergeneli *et al.*, 2007), the goal of this study is to investigate an integrative model that includes the relationships between teachers' perceptions of TLP and different subsystems of the social ecological model (SEM) within the context of country culture (USA vs Israel).



In this study, factors such as teaching experience, school level and setting are considered representations of SEM subsystems that contribute to the development of an integrative approach.

This investigation will help to devise a model that takes both the universal culture and the national culture approaches into account. Such a model can lead to the development of policy that combines TLP and various SEM subsystems in order to increase the impact of school leadership in the USA and Israel.

## Overview of US and Israeli educational systems

### *The USA*

For the most part, public education is the domain of each state. Individual states oversee all levels of primary and secondary education and direct all of their political, administrative and fiscal aspects. The degree of an individual state's authority in education depends on both federal and state legislation. State education departments distribute federal and state funding, establish graduation and teacher certification requirements, provide curriculum guidance, conduct student assessments and are responsible for ensuring that efficient and effective school opportunities are made available to every eligible child in the state (Ravitch, 2011).

Individual states delegate the operation of elementary and secondary schools to local governments, and locally elected or appointed school boards are empowered to oversee the schools under their jurisdiction. Local school boards raise funds, establish policy and operating regulations, and hire superintendents to lead and manage the district. The school district is responsible for curriculum decisions, implementation of standards, construction and maintenance of facilities, and operation of school programs in elementary, middle and high schools (Mullis *et al.*, 2016).

### *Israel*

The education system in Israel is centralized under the supervision of the Ministry of Education, which determines the national curricula, including a compulsory core curriculum, and implements national and international educational testing policies (Tubin, 2011). The education system consists of three levels: elementary, middle and high school. Almost all schools in the education system are public. Schools generally are divided by their language of instruction – Hebrew in the Jewish sector and Arabic in the Arab sector.

Within each sector, schools are grouped under supervisory frameworks, each of which represents different cultural and religious subsectors in Israel. Within the Jewish sector, these frameworks include secular, religious and ultra-Orthodox supervision; within the Arab sector, there are separate supervisory bodies for the Arab, Bedouin, and Druze populations. The curriculum under each supervisory framework differs in content taught and the proportion of religious and cultural studies. However, the curriculum for core subjects, including mathematics and science, is intended to serve all students equally (Mullis *et al.*, 2016).

### *School leadership in the USA*

Each state is responsible for general oversight of K-12 as well as for training and certification for principals and teachers. Generally, states require principals to have a master's degree and specialized training in school administration. A principal must have a valid teaching certificate, experience in teaching, a Master's degree in education, successful completion of a university level school administration program and an administrative certificate issued by the state (Clark *et al.*, 2009).

Principals have authority to lead and manage schools in the local school district, which in turn must comply with state education laws, policies and regulations. In addition, the federal government, through the Department of Education, also has authority, but to a much lesser extent. The demand for effective schools in terms of student achievements has focused attention on the role that school principals play in terms of providing exemplary leadership.

As leaders and managers of the schools, principals are expected to oversee decision-making, resource management, curriculum and instruction, and the implementation of local, state and federal educational laws, regulations and policies (National Policy Board for Educational Administration, 2015).

#### *School leadership in Israel*

The national center for principal training (Avney Rosh) took upon itself the mission of improving the Israeli educational system by activating school principals as a leading professional community. The Israeli Ministry of Education requires principals to have a Master's degree and specialized training in school administration. Principals must have a valid teaching certificate and a minimum of five years' teaching experience.

Contemporary school principals in Israel are expected to perform multiple tasks. They are accountable to the various authorities, they must focus on improving instruction to promote pupil achievements, they are in charge of planning, allocating resources and making decisions; and they function within a competitive, market-oriented environment. Principals have opportunities to influence policy, allocate and mobilize resources and address community problems specific to the locale of each school (Yemini *et al.*, 2015).

Furthermore, principals have opportunities to implement innovations in terms of curriculum and instruction, while ensuring that they meet central governmental regulations for accountability and standardization of outcomes. Thus, Israeli school principals are considered key agents of change in schools (Avisar *et al.*, 2003). However, it has been found that Israeli school principals perceive this autonomy to be a limiting factor on their power to initiate change and design local policy because it entails greater accountability on their part (Yemini *et al.*, 2015).

#### **Leadership in a cross-cultural perspective**

In explaining the relationship between TLP and SEM, this study considers the four main dimensions of SEM developed by Hofstede (2001), which together have substantial face-validity and have been empirically demonstrated to be related to many aspects of leadership and organizations (e.g. Ergeneli *et al.*, 2007; Leong and Fischer, 2011). According to Hofstede's model, culture is the collective programming of the mind that distinguishes the members of one group of people from others. This model consists of the following main dimensions:

Power distance (PD): it indicates the extent to which a society accepts inequality in power among organizations and people. In terms of leadership, this distance reflects the amount of power a leader has, the power hierarchy, how decisions are made, and whether or not the leader is authoritative or collaborative.

Individualism–Collectivism (IC): it relates to the integration of individuals into primary groups and also the degree to which individuals are supposed to fend for themselves or remain integrated within groups. Autonomy, individual responsibility and individual level rewards are some of the characteristics of individualism whereas collective leadership practices emphasize work-unit solidarity and team-based rewards. In terms of leadership, in independent-oriented societies, leadership is not authoritative and is not significantly involved with its followers' individual way of life; leadership under collectivism plays a significant role in the social framework and entails a certain degree of control over its followers.

Masculinity vs Femininity (MS/FM): it indicates whether a society is influenced more by “masculine” traits (competition) or more by “feminine” traits (caring for others). In more “masculine” cultures, leaders are expected to be more direct, while in more “feminine” cultures, leaders are more likely to demonstrate greater consideration.

Uncertainty avoidance (UA): it describes how a culture deals with ambiguity, and prepares for the future. The more a culture is perceived as high in uncertainty avoidance, the more likely it is that leadership will demonstrate control, as leaders are expected to play a critical role in resolving ambiguity and preparing for the future.

### Transformational leadership practices

TLPs have been characterized as a process in which leaders take actions to increase their followers' awareness of what is valued and important. This process is exemplified by leaders motivating and influencing followers to perform “beyond expectations” and encouraging followers to look beyond their own self-interest for the good of others.

In this study the focus was on TLP, which according to Ergeneli *et al.* (2007) seem to expand the scope of leadership theory more than other approaches by recognizing the importance of highly motivating behaviors that appeal to followers' minds and hearts. It also achieves better results than other leadership approaches. Moreover, according to Muenjohn and Armstrong (2015) and Leong and Fischer (2011), transformational leaders are more effective than those who employ transactional or other leadership behaviors, regardless of the home culture, country or organization.

Kouzes and Posner (2005) developed the leadership practices inventory (LPI), which consists of five transformational leadership dimensions. In the school context, it may be reflected by:

- (1) Model the way (MTW) – school principals establish principles concerning how teachers should be treated and how goals should be pursued. They create standards of excellence and then set an example for others to follow.
- (2) Challenge the process (CTP) – school principals seek opportunities to change the status quo. They accept challenge. In doing so, they encourage themselves and their teachers to take risks, while accepting disappointments as learning opportunities.
- (3) Inspire a shared vision (ISV) – school principals passionately believe that they can make a difference. Their vision of the future creates a unique image of what the school can become. Through their magnetism and quiet persuasion, they breathe life into their visions and motivate others to see exciting possibilities for the future.
- (4) Enable others to act (EOA) – school principals treat others with trust and dignity. They allow others to make choices and decisions, support such actions, and constantly seek supportive avenues to help their teachers to succeed.
- (5) Encourage the heart (ETH) – school principals publically recognize their teachers' efforts in a manner that is consistent with the school's values, through rituals, ceremonies and celebrations.

According to the Hofstede Center (2016), Israel is very low in the power distance Index, DPI (13 points) as compared to the USA (40 points). In Israeli schools, the climate is informal. For example, direct communications between principals, teachers and students are on a first name basis. Moreover, Israel is also low on Individualism (54 points) in comparison to the USA (91 points). Most principals and teachers come from a collectivist society and extended families, which may explain their greater caring for and loyalty to others than their counterparts in the USA. In addition, in comparison to the USA (72 points), Israel (62 points)

is relatively low on Masculinity. In the school context, this may be represented by a more caring approach to leadership in terms of principal–teacher relations. These cultural dimensions may explain why Israeli teachers tend to perceive their school principals' TLP as higher than do US teachers. This is based on the assumption that Israeli school culture is characterized by low levels of power distance, individualism and masculinity which encourage school principals to: set an example for others to follow (MTW), accept challenge (CTP), motivate others (ISV), treat others with trust and dignity (EOA) and recognize teachers' efforts (ETH). Thus:

*H1.* Teachers in Israel will perceive their principals' TLP as higher than do teachers in the USA.

Since Israel's education is controlled centrally by the Minister of Education (Tubin, 2011), and the USA has now reverted to more state-controlled education (Minkov and Hofstede, 2013), it may be assumed that both of these controlled educational systems encourage masculinity and an uncertainty avoidance culture, both of which affect teachers' perceptions of their principals' TLP in both countries. These dimensions encourage principals to do as they are told through modeling, principles, and standards (MTW) and reduce their efforts to change the status quo or take risks (CTP), leading to:

*H2.* Both in the USA and Israel, teachers' perceptions of TLP will be most dominant in the dimension of MTW and least dominant in CTP.

### **The SEM**

With growing recognition that school leadership is a complex phenomenon influenced by multiple factors (Berkovich, 2014), this study examines the meaning of TLP through its relationship with the SEM, which based on previous studies includes a broad spectrum of subsystems (e.g. Swearer and Hymel, 2015). Using the SEM will help to develop an integrative approach that takes teachers' TLP into consideration and may thereby affect leadership policy.

The SEM includes the following subsystems (Bronfenbrenner and Bronfenbrenner, 2009): microsystem refers to the layer closest to the teacher. In this study, this subsystem contains factors such as teaching experience; mesosystem (interpersonal) provides the relationship between the subsystems of the teacher's world, for example, in the context of this study, teacher–principal relations; exosystem (organizational) defines the larger social system. In the study context, this refers to the school level; macrosystem (community) is composed of cultural values and norms, which in this study depends on setting; and public policy, which comprises policy and laws, referring in this study to educational systems (Israel and the USA) that may have a cascading influence upon interactions between all the other subsystems.

The following SEM subsystem variables are used in this study:

#### *School level (exo-subsystem)*

In the majority of schools, both in the USA and Israel, the advance in school level from elementary through middle to high school appears to have a corresponding increase in the distance between teachers and principals. This may be attributable to the growing size and complexity of the physical plant and the work involved which lead to larger staff circles surrounding the principals. As a result, the power distance between principals and teachers may increase, which may reduce the effect of TLP as reflected in the teachers' perceptions. Thus:

*H3.* A negative relationship will be found between school level (elementary to high school) and teachers' perceptions of their principal's TLP.

*Rural, suburban and urban schools (setting, macro-subsystem)*

Previous studies (e.g. DiPaola and Tschannen-Moran, 2014) found that schools in suburban and rural areas are more collaborative with greater social cohesion than in urban areas. This may be attributable to smaller suburban and rural school size, so that principals and teachers are better acquainted than in urban schools. Thus, the effect of the principals' TLP on their teachers in rural and suburban schools may be higher than in urban schools, as reflected in the teachers' perceptions. Therefore:

H4. In rural and suburban schools, teachers' perceptions regarding their principal's TLP will be more positive than in urban schools.

*Teaching experience (micro-subsystem)*

Previous studies (Sehgal *et al.*, 2017) indicate that with greater teaching experience, teachers gain more knowledge and skills to evaluate their leaders. Therefore, experienced teachers should be more appreciative of expressions of principals' TLP compared to novice teachers. Thus:

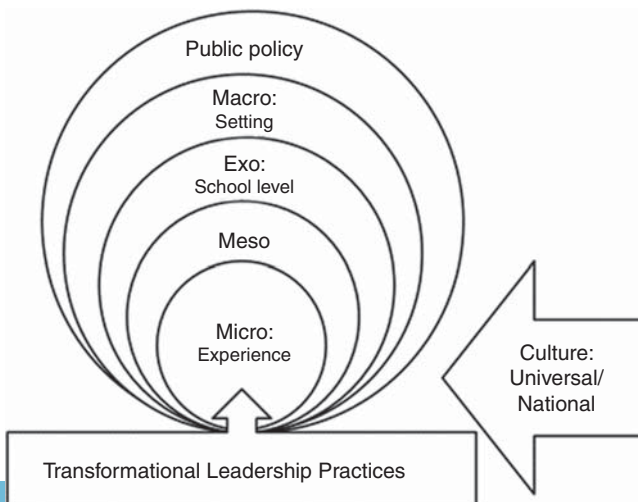
H5. A positive relationship will be found between work experience and teachers' perceptions of their principal's TLP.

Figure 1 illustrates the study's integrative model including the relationship between teachers' perceptions of TLP and SEM in the cultural context (universal/specific national)

**Method**

*Sample*

Overall, 541 teachers from the USA (Maryland) and 615 teachers from Israel, each from different schools, participated in this study. Table I presents a comparison of school size in terms of number of students. We compared Israel vs Maryland as representative of the USA, based on the fact that Israel and Maryland are similar in terms of the size of their educational system (Israel Central Bureau of Statistics, 2016; National Center for Education Statistics, 2016).



**Figure 1.**  
The study model

The percentage of female teachers in the sample was 74 percent in the USA and 79 percent in Israel. In the USA 26 percent were from urban areas, 66 percent from suburban areas and 8 percent from rural areas. In the Israel sample, 34 percent were from urban areas, 57 percent from suburban areas and 9 percent from rural areas. In the USA, the percentages of teachers from elementary, middle and high schools were 63, 26 and 11 percent, respectively. In Israel the percentages were 71, 19 and 10 percent from elementary, middle and high schools, respectively. In the USA sample, 10 percent of the participants had 1–5 years of school experience, 26 percent 6–10 years of experience, 21 percent 11–15 years, and 43 percent 16–20 years of school experience. In Israel 28 percent had 1–5 years of school experience, 25 percent had 6–10 years, 14 percent had 11–15 years, 13 percent had 16–20 years and 20 percent had 16–20 years of school experience.

These characteristics are typical of the teacher population in the two countries (Israel Central Bureau of Statistics, 2016; National Center for Education Statistics, 2016).

### Measures

This study used the LPI questionnaire, developed by Kouzes and Posner (2005) to measure TLPs. The choice was based on previous studies which indicated that with the LPI it is possible to test for the universality of transformational leadership using specific behavioral manifestations (e.g. Ergeneli *et al.*, 2007). Kouzes and Posner (1993) reported that LPI reliability ranged from 0.70 to 0.84 around the world. In a study of the leadership practices of higher education leaders, Tsend (2000) found no statements in the LPI that directly reflect US cultural values, which could potentially confuse respondents from other nations, in this context, Israel.

The LPI contains 30 items ( $\alpha = 0.82$ ) for the five practices, six items for each dimension: MTW – e.g. Behaves in a manner that sets a high standard for others to follow; ISV – e.g. Communicates and acts with a genuine conviction about the higher meaning and purpose of our work; CTP – e.g. Experiments and takes risks, even when there is a chance of failure; EOT – e.g. Actively and sincerely listens when others are speaking; ETH – e.g. Helps to create a spirit of community within the school/organization. The scale ranged from 1 to 5: 1 = almost never, 2 = seldom, 3 = sometimes, 4 = usually, 5 = almost always.

### Data collection

First the authors discussed the questionnaires, including translation issues to ensure that the questionnaires were similar in each country. Then, in each country the questionnaire was uploaded to Google Docs in the respective languages. After receiving authorization from the ethics committees at their universities, the authors distributed the questionnaires via an e-mail link to superintendents in Israel and in the state of Maryland.

The authors asked the superintendents to encourage their school principals to urge their teachers to respond to the questionnaires using the link sent by the authors. The response

Average number of students per school	Israel	SD	The USA (Maryland)	SD
General	547	267	827	250
Elementary	462	113	693	71
Middle	580	150	802	57
High school	632	195	1,276	220
Rural	410	262	818	250
Suburban	520	230	830	254
Urban	583	270	847	214

**Table I.**  
Comparison of school size: Israel and the US (Maryland)



rate was 68 percent in the USA (the initial number of participants was 796) and 71 percent in Israel (the initial number was 866). In both countries, the superintendents sent the questionnaire link randomly to schools in their districts (the link was sent to the principals who forwarded it to their teachers). The non-response bias may be explained by a lack of computer skills among some of the teachers.

## Results

In order to discuss and compare the different dimensions of TLP (USA vs Israel), the authors found the following five dimensions common to both the USA and Israel: MTW,  $a = 0.84$ ; ISV,  $a = 0.88$ ; CTP,  $a = 0.90$ ; EOA,  $a = 0.81$ ; and ETH,  $a = 0.82$ . This is supported by previous studies (e.g. Abu-Tineh *et al.*, 2008). Based on paired samples for TLP, the authors found significant differences in each country between the various dimensions of TLPs, supporting the existence of the five dimensions in each country.

Supporting *H1*, this study found that Israeli teachers perceived their schools' principals to be significantly higher on all five TLPs than did US teachers (Table II).

Supporting *H2*, the findings consistently indicated (based on Tables II–IV, Step 1), that the most dominant TLP dimensions among teachers' perceptions was MTW, while the least dominant was CTP, both in Israel and in the USA, at all school levels (elementary, middle, high school), in all settings (urban, suburban, rural), and for all teaching experience levels.

Based on a two-way ANOVA, the authors investigated the effect of the variables.

### School level

As can be seen (second step, Table III), the first row (school level) reflects significant differences for all TLP dimensions between school levels both in Israel and the USA ( $p \leq 0.05$ ). The second row (country) indicates significant differences between the countries regarding the average of the three school levels in each country ( $p = 0.001$ ). The third row (interaction) shows significant differences for TLP dimensions between Israel and the USA based on school level ( $p \leq 0.05$ ).

Figure 2 illustrates the significant interaction: different tendencies for TLP dimensions between countries according to school level. In Israel, there is a strong tendency toward a

Country	<i>n</i>	<i>M</i> (SE)	<i>t</i>	Sig.
<i>ETH</i>				
Israel	615	4.18 (0.75)		
USA	540	3.57 (1.02)	11.35	0.001
<i>MTW</i>				
Israel	615	4.23 (0.74)		
US	541	3.83 (0.86)	8.33	0.001
<i>EOA</i>				
Israel	615	4.21 (0.68)		
USA	541	3.70 (0.94)	10.36	0.001
<i>CTP</i>				
Israel	615	4.07 (0.77)		
USA	541	3.32 (0.92)	14.87	0.001
<i>ISV</i>				
Israel	615	4.02 (0.81)		
USA	541	3.53 (0.99)	9.25	0.001

**Table II.**  
Transformational leadership practices: Israel and the USA



**Table III.**  
The effect of school level (grade) and country on transformational leadership practices

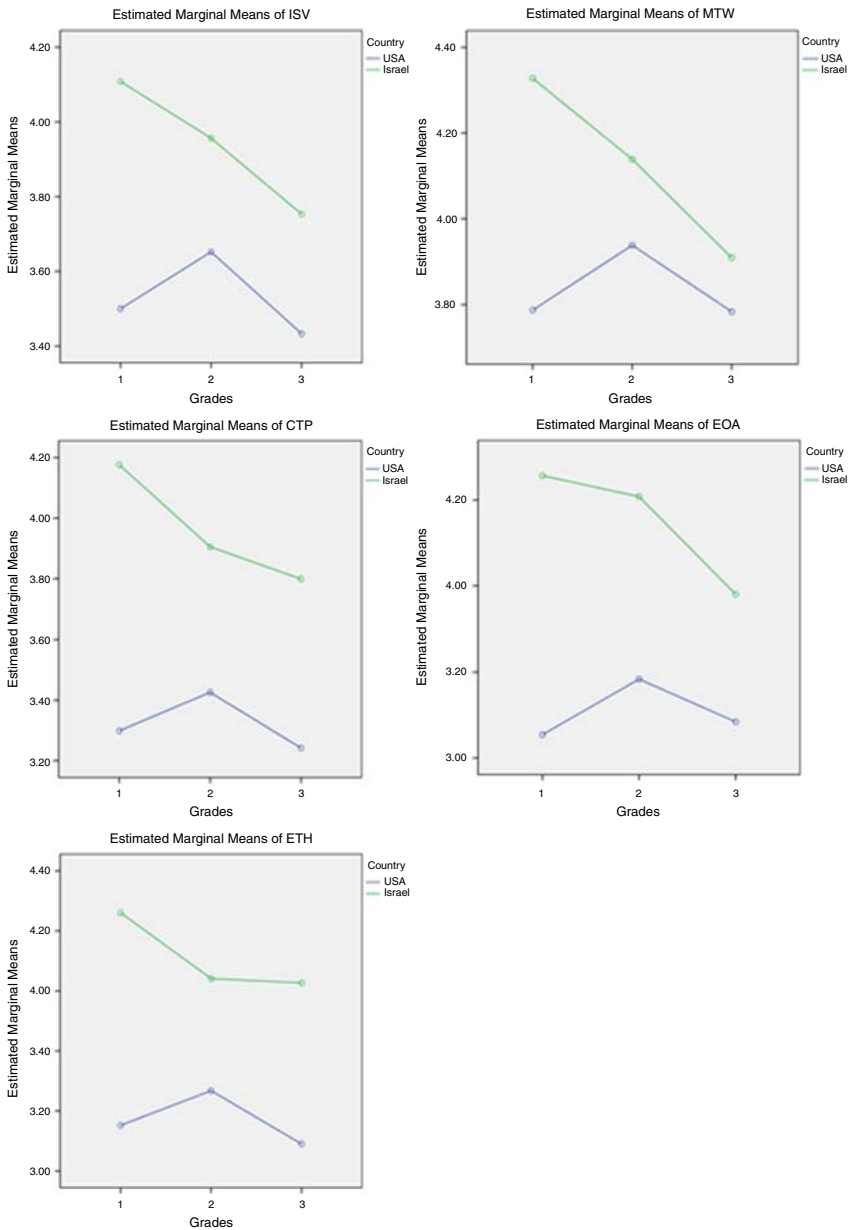
Step 1 School level (grade)	Israel		USA		Total		Israel		USA		Total		Israel		USA		Total			
	ISV	F	ISV	F	ISV	F	ETH	F	ETH	F	ETH	F	MTW	F	MTW	F	MTW	F		
Elementary	4.11 (0.81)	388	3.50 (0.98)	192	3.90 (0.91)	580	4.26 (0.70)	388	3.55 (1.04)	4.02 (0.89)	388	4.33 (0.69)	388	4.15 (0.80)	3.78 (0.88)	192	4.25 (0.67)	580	4.05 (0.82)	
Middle school	3.96 (0.79)	388	3.65 (0.99)	192	3.77 (0.93)	580	3.90 (0.73)	388	3.66 (1.05)	3.82 (0.98)	388	4.14 (0.71)	388	4.02 (0.81)	3.94 (0.86)	192	4.20 (0.65)	580	3.96 (0.88)	
High school	3.75 (0.88)	81	3.43 (0.99)	164	3.54 (0.97)	378	3.80 (0.89)	81	3.49 (0.97)	3.66 (0.97)	388	3.91 (0.95)	388	3.82 (0.87)	3.78 (0.84)	164	3.98 (0.82)	378	3.78 (0.87)	
Total	4.03 (0.82)	95	3.53 (0.99)	540	3.78 (0.92)	635	4.07 (0.78)	595	3.57 (1.02)	3.89 (0.95)	540	4.23 (0.75)	595	4.04 (0.82)	3.84 (0.86)	540	4.21 (0.69)	1,135	3.97 (0.86)	
Step 2	ISV	F	df	p	ISV	F	df	p	ISV	F	df	p	ISV	F	df	p	ISV	F	df	p
School level (row)	4.67	46.95	2	0.010	4.67	46.95	2	0.010	4.67	46.95	2	0.010	4.67	46.95	2	0.010	4.67	46.95	2	0.010
Country (col)	3.48	3.48	1	0.001	3.48	3.48	1	0.001	3.48	3.48	1	0.001	3.48	3.48	1	0.001	3.48	3.48	1	0.001
Interactions	3.48	3.48	2	0.030	3.48	3.48	2	0.030	3.48	3.48	2	0.030	3.48	3.48	2	0.030	3.48	3.48	2	0.030

Note: Step 1: the first line –  $M_i$ , the middle line (SD), the bottom line –  $N$

Step 1 Setting	Israel		USA		Total		Israel		USA		Total		Israel		USA		Total			
	ISV	df	ISV	df	ISV	df	MTW	F	MTW	F	MTW	F	MTW	F	MTW	F	MTW	F		
Urban	4.01 (0.84)	352 (0.95)	4.08 (0.78)	332 (0.87)	4.05 (0.84)	358 (0.93)	4.21 (0.78)	3.83 (0.77)	4.12 (0.79)	4.18 (0.72)	373 (0.83)	4.08 (0.76)	4.18 (0.72)	4.36 (0.72)	373 (0.83)	4.08 (0.76)	4.12 (0.79)	4.18 (0.72)	373 (0.83)	
Suburban	4.02 (0.81)	354 (1.01)	3.99 (0.81)	334 (0.94)	3.68 (1.03)	356 (1.06)	4.24 (0.69)	3.86 (0.87)	3.94 (0.85)	4.23 (0.66)	370 (0.96)	3.83 (0.92)	4.23 (0.66)	4.23 (0.66)	370 (0.96)	3.83 (0.92)	3.94 (0.85)	4.23 (0.66)	370 (0.96)	
Rural	4.15 (0.64)	350 (1.06)	4.18 (0.57)	324 (0.90)	3.96 (0.88)	361 (1.01)	4.36 (0.43)	3.85 (0.98)	4.09 (0.81)	4.35 (0.44)	369 (1.02)	4.00 (0.86)	4.35 (0.44)	4.35 (0.44)	369 (1.02)	4.00 (0.86)	4.09 (0.81)	4.35 (0.44)	369 (1.02)	
Total	4.02 (0.82)	353 (0.99)	3.77 (0.77)	332 (0.92)	3.89 (0.94)	357 (1.02)	4.17 (0.75)	3.84 (0.86)	4.04 (0.82)	4.20 (0.68)	370 (0.94)	3.97 (0.85)	4.20 (0.68)	4.20 (0.68)	370 (0.94)	3.97 (0.85)	4.04 (0.82)	4.20 (0.68)	370 (0.94)	
Step 2	ISV		CTP		ETH		MTW		ETH		CTP		ETH		CTP		ETH		EOA	
Setting (row)	0.19		23.		1.71		0.512		1.71		0.512		0.512		2		0.599		2	
Country (col)	47.54		137.50		77.19		46.84		77.19		46.84		46.84		1		0.001		1	
Interactions	0.43		1.24		0.88		0.352		0.88		0.352		0.352		2		0.703		2	

Note: The first line – *M*, the middle line (SD), the bottom line – *N*

**Table IV.**  
The effect of setting and country on transformational leadership styles



**Figure 2.**  
The interaction effect of school level (grade) and country on transformational leadership practices

**Notes:** The upper graph – Israel, the lower graph – the US Grade 1=Elementary school; Grade 2=Middle school; Grade 3=High school

decline in TLP as school level rises, whereas in the USA, there is a “jump” in middle school as compared to elementary and high schools with respect to several aspects of TLP. In actual fact, Figure 2 shows that in Israel the slope for all TLP is much steeper than in the USA.

Thus, it may be stated that *H3*, which hypothesizes a negative relationship between school level and TLP, was supported, while the difference between the three school levels in each country varies significantly between Israel and the USA.

#### *Setting*

Based on the second step (Table IV), the first row (setting) reveals no significant differences between the various settings, either in Israel or in the USA, regarding TLP dimensions as a whole ( $p > 0.05$ ). The second row (country) reflects significant differences between countries regarding the average of the three settings in each country ( $p = 0.001$ ). The third row (interaction) shows no significant differences between Israel and USA regarding the different settings in relation to various dimensions of TLP ( $p > 0.05$ ).

Figure 3 indicates similar tendencies regarding the various dimensions of TLP for different settings in both Israel and the USA. In both countries, curve increments are very modest, with almost no change between settings. Therefore, it may be inferred that the difference between the three settings in Israel and the USA is not significant. Thus, *H4*, which contended that teachers' perceptions of principals' TLP would be greater in suburban/rural schools than in urban schools, was not supported.

#### *Teaching experience*

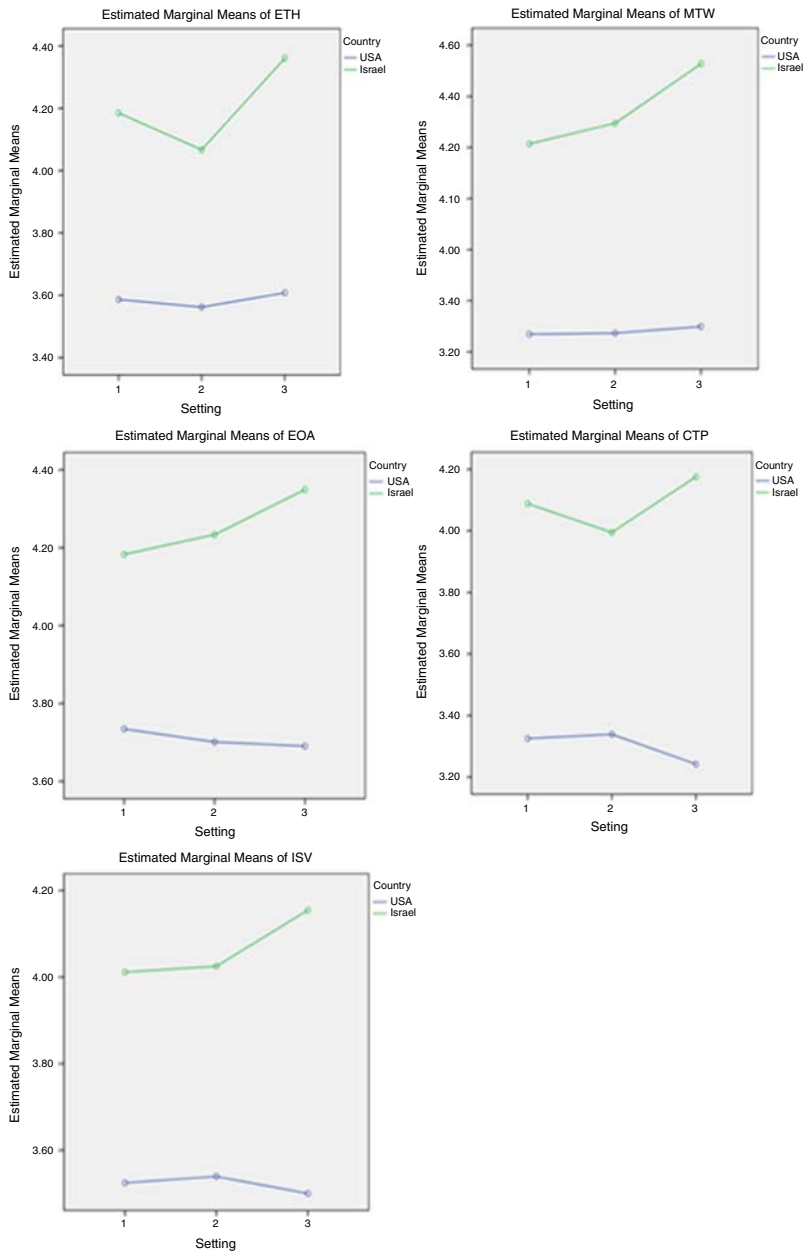
According to Step 2 (Table V), the first row (teaching experience) reveals no significant differences regarding all TLP dimensions between levels of teaching experience in either Israel or the USA ( $p > 0.05$ ). The second row (country) indicates significant differences between the countries regarding average teaching experience in each country ( $p = 0.001$ ). The third row (interaction) shows no significant differences between Israel and the US regarding levels of teaching experience with regard to different TLP dimensions ( $p > 0.05$ ).

Figure 4 illustrates that the tendency of different levels of teaching experience in each country with regard to TLP dimensions is similar in Israel and in the USA. Therefore, it may be concluded that the difference between levels of teaching experience in Israel and the USA is not significant. Thus, *H5*, which posits that as teaching experience increases, teachers' perceptions of principals' TLP will increase, was not supported.

### **Discussion**

In light of the tension between researchers who advocate the universal culture vs the specific national culture approach, this study investigated an integrative model that combines relationships between teachers' perceptions of TLP and different subsystems of the SEM within the context of a country's culture (USA vs Israel). The findings indicated that some universal leadership aspects, such as the most dominant practice (MTW) and the least dominant practice (CTP), were found both in the US and Israel. This universal aspect appearing both in the USA and Israel may be explained by the characteristics shared by both educational systems. Both are centralized. In Israel the system is controlled by the Ministry of Education and in the US by the different state authorities. This may suggest dimensions of masculinity and uncertainty avoidance culture, which could have an impact on principals' leadership – they would tend to encourage their teachers to act as they do and not take risks or attempt new challenges. At the same time, differences between the three settings and teaching experience in Israel and the USA were not significant.

However, the findings also indicate that certain specific leadership aspects are probably culture-dependent. For example, it was found that Israeli teachers perceive their school principals' TLP to be significantly higher than do US teachers in all five dimensions (Table II), findings that may be explained by low levels of power distance, individualism, and masculinity in Israel as compared to the USA. In addition, the study indicates



**Figure 3.**  
The interaction effect of setting and country on transformational leadership practices

**Note:** The upper graph – Israel, the lower graph – the US

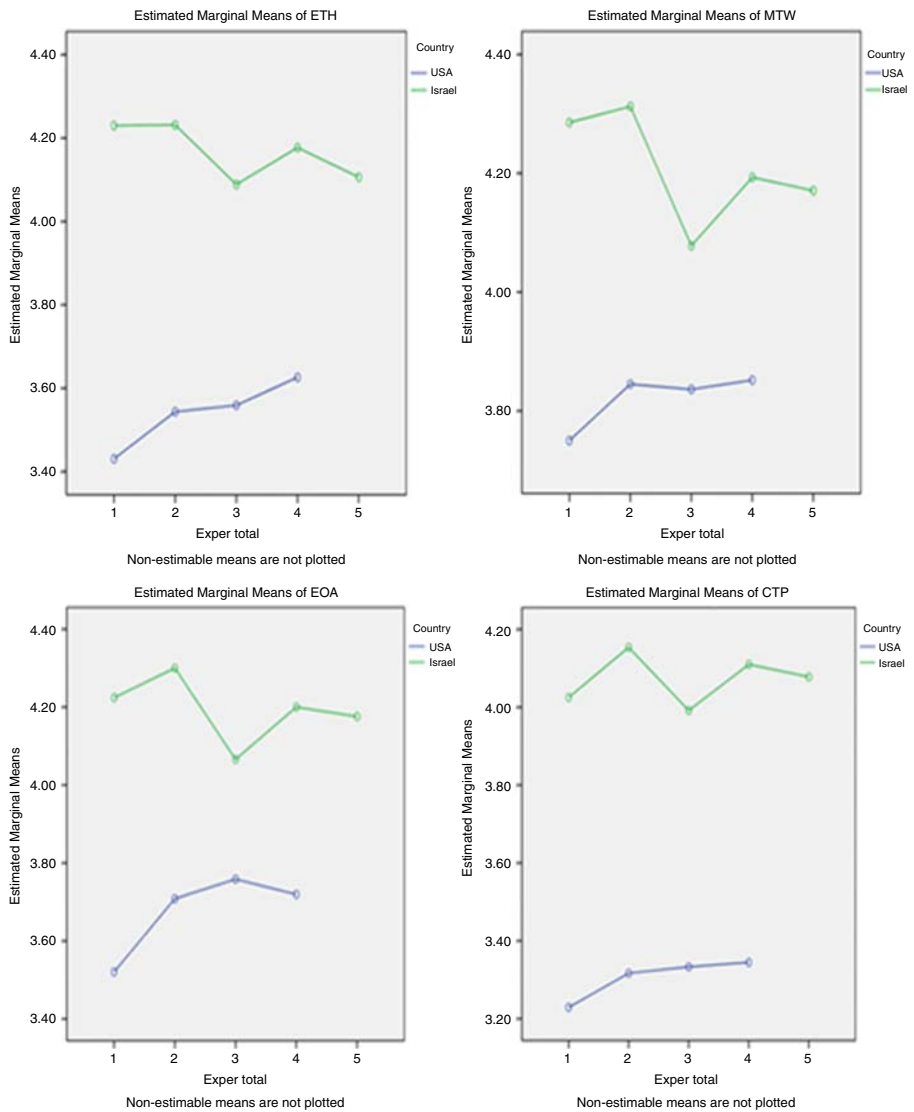
significant differences between Israel and the USA regarding various TLP dimensions, taking school level into account ( $p < 05$ ).

Thus, it can be assumed, as has been indicated in a few studies (e.g. Ergeneli *et al.*, 2007), that some leadership aspects are universal. At the same time, cultural differences may

Step 1	Teaching experience	Israel		USA		Total		Israel		USA		Total		Israel		USA		Total																			
		ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F																		
1-5 years		4.03	(0.78)	3.48	(1.06)	3.92	(0.88)	4.03	(0.75)	3.22	(1.07)	3.85	(0.88)	4.22	(0.69)	3.43	(1.07)	4.29	(0.66)	4.17	(0.77)	4.22	(0.63)	4.22	(0.80)												
		174		48		222		174		48		222		174		48		174		48		222		48		222											
		4.07	(0.78)	3.51	(1.00)	3.80	(0.94)	4.15	(0.78)	3.32	(1.07)	3.74	(0.93)	4.23	(0.67)	3.54	(1.00)	4.31	(0.66)	4.08	(0.79)	4.30	(0.60)	4.01	(0.82)												
6-10 years		152		142		294		152		142		294		152		142		152		294		152		142		294											
		3.91	(0.88)	3.57	(1.01)	3.71	(0.97)	3.99	(0.84)	3.33	(1.07)	3.60	(0.94)	4.08	(0.85)	3.56	(1.07)	4.07	(0.89)	3.93	(0.86)	4.06	(0.83)	3.88	(0.91)												
		79		116		195		79		116		195		79		116		79		116		195		116		195											
11-15 years		4.06	(0.81)	3.52	(0.97)	3.66	(0.96)	4.11	(0.72)	3.34	(0.92)	3.54	(0.93)	4.17	(0.81)	3.62	(0.92)	4.19	(0.71)	3.94	(0.84)	4.20	(0.66)	3.84	(0.88)												
		82		234		316		82		234		316		82		234		82		234		316		82		316											
		4.01	(0.87)	3.57	(0.97)	3.71	(0.96)	4.07	(0.80)	3.33	(0.92)	3.66	(0.93)	4.10	(0.81)	3.62	(0.92)	4.19	(0.71)	3.94	(0.84)	4.20	(0.66)	3.84	(0.88)												
> 20 years		79,124		79,124		124		124		124		124		124		124		124		124		124		124		124											
		4.02	(0.82)	3.53	(0.99)	3.79	(0.94)	4.07	(0.77)	3.32	(0.92)	3.72	(0.93)	4.17	(0.75)	3.57	(0.92)	4.23	(0.74)	4.04	(0.82)	4.20	(0.68)	3.97	(0.85)												
		611		540		1,151		611		540		1,151		611		540		611		540		1,151		540		1,151											
Total		ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F										
		0.12		4		0.97		4		0.56		4		0.69		4		0.47		4		0.75		4		0.527		4		0.80		4		0.52			
		50.19		1		0.001		165.63		1		0.001		105.77		1		0.001		50.44		1		0.001		1		0.001		84.18		1		0.001			
Interactions		0.69		3		0.55		0.43		3		0.73		0.91		3		0.44		3		0.289		3		0.289		3		1.95		3		0.12			
		ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F	ISV	F
		0.12		4		0.97		4		0.56		4		0.69		4		0.47		4		0.75		4		0.527		4		0.80		4		0.52		4	

Note: The first line - M, the middle line (SD), the bottom line - N

Table V. The effect of school experience and country on transformational leadership styles



**Figure 4.**  
The interaction effect of teaching experience and country on transformational leadership practices

**Notes:** The upper graph – Israel, the lower graph – the USA

account for the theories of leadership that are adopted (Leong and Fischer, 2011). As a result it may be said that universality does not totally negate the effect of culture, and universal effectiveness of TLP may often be found side by side with relative cultural variations in leadership attributes.

**Conclusion, contribution for school leaders and future research**

This study focused on an integrative model combining teachers’ perceptions of TLP and the SEM within the context of universal culture and specific national culture, which has largely been ignored in educational leadership studies. By adding SEM to educational leadership



research, this study demonstrates the role of the transformational leader in improving educational systems in the USA and Israel. Future research should develop an integrative approach that considers the study limitations mentioned in the Method section (e.g. translating issues, potential non-response bias) and additional subsystems of SEM based on teachers' perceptions.

In practical terms, these findings may help educational leaders and policy makers in the USA and Israel to design educational policy and training programs for school principals in terms of both TLP and SEM. These policies and programs could have a significant impact on the development of effective school leaders in terms of the TLP they use with their teachers. Appropriate ways should be formulated to train school principals to develop leadership abilities appropriate to their specific culture while also taking universal culture aspects into consideration.

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