Between Venus and Mars: Sources of Gender Differences in Instructional Leadership

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Abstract

Instructional leadership can be explained as an educational leadership approach whereby the school principal engages in a wide range of activities aiming to improve teaching and learning for all students. A recent meta-analysis found that female principals engaged in more active instructional leadership than male counterparts. The current qualitative study sought to understand this gender gap. Data were collected through 59 semi-structured interviews with 36 female principals and 23 male principals from Israel. Data analysis was a four-stage process – condensing, coding, categorizing, and theorizing. Findings showed that female participants, more frequently than their male counterparts, reported possessing two capabilities that are necessary for instructional leadership: (1) instructional expertise; (2) attention to relationships. Gender theories are employed to explain these findings. Practical implications and further research are discussed.

Keywords: gender differences, instructional leadership, principals, leadership

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In recent years, the role of the school principal has evolved and expanded (Murphy, Neumerski, Goldring, Grissom, & Porter, 2016). Most importantly, principals are now increasingly expected to demonstrate instructional leadership (Hallinger & Wang, 2015; May & Supovitz, 2011), which may be defined as "the effort to improve teaching and learning for PK–12 students by managing effectively, addressing the challenges of diversity, guiding teacher learning, and fostering organizational learning" (Brazer & Bauer, 2013, p. 650). Not too long ago, principals were mostly responsible for keeping students safe, enforcing school policies, and fostering relationships with the world outside school. Practical daily tasks such as ordering supplies and creating bus schedules were common (Author 3, 2006). Today, as instructional leaders, principals are asked to focus on promoting best practices in teaching and learning so that students achieve academic success (Hallinger, 2011; Neumerski, 2012). In fact, current school principals must combine traditional school management duties, such as budgeting, scheduling and facilities maintenance, with the additional challenge of deep involvement in teaching and learning, seeing instructional leadership and school improvement as their primary responsibility (DiPaola & Hoy, 2008; Rigby, 2014).

Interest in how gender shapes instructional leadership is linked to both equity and instrumental concerns (Shakeshaft, 2006), and may allow us to turn the differences to our advantage with respect to the effectiveness of school leadership. (Krüger, 2008). Comparing male and female principals, a recent meta-analysis examining 40 data sets drawn from 28 studies has indicated a small but statistically significant effect of gender on instructional leadership, where female principals revealed more active instructional leadership than male principals (Hallinger, Dongyu, & Wang, 2016). However, the existing literature has not yet addressed *why*

female principals may engage more actively in the instructional leadership role than their male counterparts. Considering that the testing of explanations for causes of gender differences is critical for policy and practice, the current qualitative study sought to reveal the sources of the gender differences found in principals' instructional leadership.

Instructional Leadership

Inasmuch as ensuring student learning and academic success is every school's main goal, school principals are expected to become instructional leaders who facilitate the improvement of teaching and learning (Hallinger & Wang, 2015; May & Supovitz, 2011; Walker & Slear, 2011). Research has established links between the principal's instructional leadership and students' achievements (Glickman, Gordon, & Ross-Gordon, 2014). The effect of instructional leadership on student outcomes was found to be three to four times as great as that of transformational leadership, where leaders inspire, empower, and stimulate followers (Robinson, Lloyd, & Rowe, 2008). Thus, scholars contend that contemporary school principals should see instructional leadership as their primary responsibility (Louis, Leithwood, Wahlstrom, & Anderson, 2010; Murphy & Torre, 2014; Neumerski, 2012). Accordingly, the requirement for principals to assume central responsibility for instructional leadership has been spreading across educational systems around the world (Rigby, 2014; Supovitz, Sirinides, & May, 2010).

Over the years, researchers have provided a multitude of frameworks to capture instructional leadership (Blase & Blase, 2004; Duke, 1987; May & Supovitz, 2011; Murphy et al., 2016; Sheppard, 1996; Supovitz et al., 2010). Summarizing existing research related to the methods that principals use to exhibit and harness instructional leadership to meet their school goals, Stronge, Richard, and Catano (2008) culled five core domains: (a) building and sustaining a school vision that establishes clear learning goals and garners schoolwide – and even

communitywide – commitment to these goals; (b) sharing leadership by developing and counting on the expertise of teacher leaders to improve school effectiveness; (c) leading a learning community that provides meaningful staff development; (d) gathering data for utilization in instructional decision-making; and (e) monitoring curriculum and instruction by spending time in classrooms in order to effectively encourage curriculum implementation and quality instructional practices.

The conceptual framework of instructional leadership presented by Hallinger and Murphy (1985) is one of the most widely used in research (Hallinger & Wang, 2015). This framework consists of three dimensions for this leadership role, which are delineated into ten instructional leadership functions: (1) The dimension of *defining the school mission* incorporates two functions: framing the school's goals and communicating the school's goals. The principal is responsible for ensuring a clear mission, which focuses on all students' academic progress, and for disseminating this mission carefully to staff. (2) The dimension of *managing the instructional program* includes three functions: coordinating curriculum, supervising and evaluating instruction, and monitoring student progress. This dimension focuses on the principal's role in coordinating and controlling the school academic program. (3) The dimension of *developing a positive school learning climate* is broadest in scope, including five functions: protecting instructional time, providing incentives for teachers, providing incentives for learning, promoting professional development, and maintaining high visibility.

Capabilities of Instructional Leaders

What are the capabilities needed to engage in effective instructional leadership? Spillane and Louis (2002) claimed that "Without an understanding of the knowledge necessary for teachers to teach well – content knowledge, general pedagogical knowledge, content specific

pedagogical knowledge, curricular knowledge and knowledge of learners – school leaders will

be unable to perform essential school improvement functions such as monitoring instruction and

supporting teacher development" (p. 97). The "leadership content knowledge" required for

instructional leadership was defined by Stein and Nelson (2003) as "that knowledge of subjects

and how students learn them that is used by administrators when they function as instructional

leaders" (p. 445). Researchers reported that the greater their leadership content knowledge, the

better principals could attend to more aspects of instruction, moving beyond surface features of

instruction to underlying pedagogy and assessment (Lochmiller & Acker-Hocevar, 2016; Steele,

Johnson, Otten, Herbel-Eisenmann, & Carver, 2015).

The capacity to build good relationships may also be seen as vital for instructional

leadership. The influence of principals on students is mainly indirect (Murphy et al., 2016).

Principals who enact instructional leadership do so by influencing teachers' teaching strategies

and by increasing teachers' motivation, loyalty, satisfaction, and other factors that, in turn,

influence student outcomes (Blase & Kirby, 2009; Louis et al., 2010; Supovitz et al., 2010;

Thoonen, Sleegers, Oort, & Peetsma, 2012). Thus, healthy principal-teacher relationships

constitute the basis for effective instructional leadership (Robinson, 2010). Through such

positive relationships, instructional leaders can engage with teachers in productive and respectful

conversations about the quality of teaching and learning (Le Fevre & Robinson, 2015). Indeed,

positive principal-teacher relationships were shown to help teachers adopt more effective

teaching practices (Alsobaie, 2015), demonstrating a critical role in the improvement of student

achievements (Edgerson, Kritsonis, & Herrington, 2006; Price, 2015).

Good principal-teacher relationships may also allow for a distributed perspective in

school leadership, where an empowered group of talented teachers is specifically tasked with

leadership roles in the form of coaching and developing others (Spillane, Harris, Jones, & Mertz, 2015). In addition, good principal-teacher relations may manifest in the development of a strong professional learning community, where teachers work collaboratively toward common goals, co-construct and share knowledge, and reflect on individual practices (Hord, 2009; Wood, 2007). Beyond the teachers, principals' good relationships with other school stakeholders, both internal and external, are also important for successful instructional leadership (Ewy, 2009). Overall, the importance of relationships for instructional leadership "is evident from the fact that leadership is, by definition, a social process" (Robinson, 2010, p. 16).

In addition to the content knowledge and relationships mentioned above, Robinson (2010) also considered complex problem-solving as a capability needed for instructional leadership. She proposed a model of three interrelated leadership capabilities required for instructional leaders: (a) using deep leadership content knowledge to (b) solve complex school-based problems, while (c) building relational trust with staff, parents, and students. It should be noted that Brenninkmeyer and Spillane (2008) attempted to directly link differences in principal problem-solving with differences in instructional leadership practices and student outcomes, comparing expert instructional leaders with typical principals. Overall, they found fewer significant differences between the two groups' use of problem-solving processes than expected. However, Robinson (2010, p. 15) claimed that "While the links between capability in problem solving, leadership practices, and student outcomes have been suggested rather than convincingly demonstrated, an additional case can be made from the theoretical and empirical research on problem solving."

One more capability, which may be seen as a prerequisite for instructional leadership, is time management. Instructional leaders are increasingly expected to focus more of their time on

improving teaching and learning. However, principals face many challenges in attempting to shift their priorities to concentrate more on instruction. Organizational norms push principals away from instructional leadership, and the many demands on principals' time – spanning personnel, budgeting, student services, external relations, and a host of other areas – make it hard to focus on instruction (Goldring et al., 2015; Spillane & Hunt, 2010). Thus, effective time management skills may help principals meet instructional leadership demands (Donaldson, 2011; Horng, Klasik, & Loeb, 2010). However, Grissom, Loeb, and Mitani (2015) found that although principals with better time management skills did allocate more time to classrooms and to managing instruction in their schools, they spent less time on interpersonal relationship-building. Because of this tradeoff, the associations between principals' time management skills and subjective assessments of principals' performance were mixed.

Gender Differences in Instructional Leadership

Given the increasing importance assigned to instructional leadership in educational policy and practice, several researchers sought to identify principals' personal characteristics that influence instructional leadership practices (Goldring, Huff, May, & Camburn, 2008; Hallinger, 2011). Specifically, a few researchers explored how gender shapes male principals' versus female principals' enactment of instructional leadership (e.g., Kis & Konan, 2014; Krüger, 2008).

In a recent meta-analytic study, Hallinger et al. (2016) tested whether male and female principals would differ significantly in their perceptions of instructional leadership practices. This meta-analysis quantitatively integrated findings from 40 independent data sets drawn from 28 studies, which comprised perception data collected from principals and teachers pertaining to over 2,500 principals from three countries for over 30 years. Their results indicated a small but statistically significant effect of gender on instructional leadership, showing more active

instructional leadership from female principals. The gender differences were general, rather than concentrated in specific areas of leadership practice. They concluded that they "cautiously characterize the 'small effect' identified in this study as 'potentially meaningful'" (p. 593).

Hallinger et al. (2016) noted that their study expanded on earlier gender studies concerning transformational leadership, which found that in general and educational management, women demonstrated transformational leadership more than men (Barbuto, Fritz, Matkin, & Marz, 2007; Hyde, 2005). Among the five aspects of transformational leadership, women most surpassed men on individualized consideration, referring to supportive and encouraging treatment of subordinates (Eagly, 2007). More than their male counterparts, women routinely used the transformational leadership skills of participative decision-making, individualized consideration, and interpersonal interaction, especially in communication (Melero, 2011; see also Martin, 2015). Hallinger and his colleagues noted that their meta-analytic findings on instructional leadership extended the prior studies' assertion on transformational leadership to assert, too, about women's "stronger disposition to engage the principal's role as an instructional leader" (p. 594).

The goal of this study is to find out what enables female principals to enact their instructional leadership role. The research on gender differences has narrowed recently, as Grogan noted (2014, p. 6): "In education research, particularly in the educational leadership discourse, the nexus between gender and leadership appears to be less interesting than it was previously – not surprisingly – since the prevailing attitudes among many women and men is that gender is irrelevant." However, she saw this trend as unjustified: "Yet... gender seems to matter just as much today as it always has" (p. 6). Against this backdrop of uncertainty about the prevailing attitudes toward gender within the educational leadership context, the current study

undertook an in-depth qualitative investigation of possible sources of differences between men and women acting as instructional leaders.

Gender Roles and Gender Differences

To examine the sources of the gender-related differences in principal's instructional leadership, we turn to the literature about gender. One of the topics discussed in this literature is gender inequity in employment in general, and in leadership and management roles in particular. Connell (2009) asserted that organizations have gender regimes that describe who does what kind of work, the social arrangements within them, how emotional relations are developed, and how the organization relates to families and other social institutions. According to Martin (2003), "men and women socially construct each other at work by means of a two-sided dynamic" (p. 343), which often negatively affects female workers. Despite an increase in women demonstrating leadership in public roles, attention is always given to the fact that they are women, and they are often criticized for using stereotypically female leadership approaches (Grogan, 2014).

When it comes to school leadership, there is "a general belief that equity issues for women are no longer a problem" (Coleman, 2005, p. 16). However in the United States, although nearly 85% of elementary school teachers are women, women hold only slightly more elementary school principal positions than men (58.9%). In high schools, women hold less than one third of principal positions (28.5%). In superintendence positions, the rate is even lower: Women hold about only 24 percent of superintendence jobs (Kowalski, McCord, Petersen, Young, & Ellerson, 2011). Similarly in the OECD countries, the average percentage of female principals in lower secondary education is 44.6 (Organisation for Economic Co-operation and Development, 2016a). The percentage of female principals increased in recent decades at a very

slow pace (Hill, Ottem, & DeRoche, 2016; Krüger, 2008; Marczynski & Gates, 2013). Moreover, women tend to be hired into leadership positions and promoted at later ages, with more experience and with more education than men (Grogan & Shakeshaft, 2010; Roser, Brown, & Kelsey, 2009). That is, "women continue to be underrepresented, under-valued, and underutilized as leaders" (Marshall & Wynn, 2012, p. 884).

Another relevant topic discussed in the literature about gender involves differences in social styles. According to Chodorow (1978), boys come to deny and repress interpersonal relations and connections in the process of growing up, reducing "their primary love and sense of empathic tie" (p. 166). These early processes may explain gender differences among adults. As women develop through identifications and relationships whereas men's development involves "more emphatic individuation and a more defensive firming of boundaries" (Chodorow, 1978, p. 166), the ego boundaries of women are less solid. Thus, women cultivate affective relationships with others and tend to be much more empathic than men.

While Chodorow claimed that "the fact that everyone's primary caregiver is a woman must be important to children's gender development and to the relations between the sexes" (2012, p. 4), other researchers pointed to evolutional processes as the roots of gender differences in social styles. Men's tendency to form dominance hierarchies within groups is consistent with an evolutionary history of kin-based, male-male, coalitional competition. A related prediction is that men will maintain relationships with other in-group members using less one-on-one contact than women. Women's tendency to prefer equality in their relationships, as opposed to acceptance of dominance hierarchies, is consistent with the proposal that these biases evolved in the context of relationships more heavily dependent on reciprocal altruism in comparison with relationships among men (Geary, Byrd-Craven, Hoard, Vigil, & Numtee, 2003). Thus, divergent

social styles may reflect trade-offs between behaviors selected to maintain large, functional coalitions in men and intimate, secure relationships in women (Vigil, 2007).

Despite their different perspectives about the origins of gender differences, both the early development and the evolutional approaches view close interpersonal relationships as characterizing women more than men. Exploring moral development, Gilligan (1982) also argued that to make an ethical decision, women give special importance and prominence to the protection of interpersonal relationships. Thus, while the masculine moral voice is logical and individualistic, emphasizing protection of people's rights and assurance that justice is upheld, the feminine moral voice focuses on taking care of other people. Similarly, Noddings' (1984) feminine approach to the ethics of care also prioritizes concern for relationships. Ethical caring means acting caringly out of a belief that caring is the appropriate way of relating to people rather than because caring for another is natural, which would not require an ethical effort to motivate it. For Noddings, education is central to the cultivation of caring in society. Her approach reflects a feminine view in "the deep classical sense – rooted in receptivity, relatedness, and responsiveness" (p. 2). On the other hand, about the masculine view Noddings asserted: "The approach through law and principle is not the approach of the mother. It is the approach of the detached one, of the father" (p. 2).

One more area that is often linked to gender differences is multitasking. The notion that women are better at the simultaneous execution of more than one task has already become part of common folk knowledge, which has been widely accepted (e.g., Pease & Pease, 2003). However, differences in multitasking seem to have no scientific basis. For example, Hambrick and his colleagues (2010) completed an extensive search of the literature but "could not find a single scientific report to support this view" (p. 1164). Strayer, Medeiros-Ward, and Watson (2013)

noted that "the weight of the empirical evidence overwhelmingly suggests gender invariance in multitasking" (p. 810).

Altogether, the present study utilized these literatures on instructional leaders' capabilities and on gender role development to understand gender differences in instructional leadership, aiming to clarify why female principals undertake the instructional leadership role more actively than male principals.

Method

This study was qualitative in nature, to provide rich textual descriptions of the complexities depicting participants' instructional leadership. Thus, interview methodology and content analysis explored the meanings that male and female school principals attach to their instructional leadership role (Taylor, Bogdan, & DeVault, 2016). Principals' disclosures concerning themselves as instructional leaders were used to infer about the sources of gender differences in instructional leadership.

Research Context

The current study focused on Israeli school principals. The national school system in Israel serves about 1.6 million students, with approximately 73% in the Jewish sector and 27% in the Arab sector (Israeli Central Bureau of Statistics, 2013). According to the Gini coefficient for measuring a nation's distributive inequality, Israel is among the countries with the broadest gap between rich and poor, alongside the United States and Mexico (Organisation for Economic Co-operation and Development, 2011, 2016b). Mindful of the great diversity among school populations, recent educational policy in Israel has been directed toward achieving high levels of equality in educational outcomes across the board, thus aiming to narrow the achievement gap upward through growing performance pressure. In practice, however, Israeli student

achievements are still characterized by a rising achievement gap, as evidenced in various

international comparative examination studies (BenDavid-Hadar, 2016).

The primary role of Israeli school principals as articulated by Capstones, the institute that

spearheads school principals' development in Israel, is to serve as instructional leaders in order to

improve the education and learning of all students (Capstones, 2008). Four additional areas of

management support this function: designing the school's future image – developing a vision and

bringing about change; leading the staff and nurturing its professional development; focusing on

the individual; and managing the relationship between the school and the surrounding

community (Capstones, 2008).

Participants

Seeking to maximize the depth and richness of data, maximal differentiation sampling

(Creswell, 2014), also known as heterogeneous sampling, was used. This purposive sampling

technique captures a wide range of perspectives, gaining greater insights into a phenomenon by

contemplating it from various angles (Merriam, 2009). Maximal differentiation sampling was

implemented in this study regarding principals' gender, age, years of experience, education,

ethnicity, school level (elementary, middle, high), school community's socioeconomic status, and

school district. The study sample did not begin with a rigid number of participants, developing

on an ongoing basis as the study progressed (Taylor et al., 2016). Altogether, 81 school

principals were approached, until obtaining 36 female principals and 23 male principals who

could represent diverse sampling. On average, female principals (27 from the Jewish sector and 9

from the Arab sector) had an average of 25 years of educational experience ($SD = 6.88$; range: 9-

40), of which 9 years of experience were as principals ($SD = 5.87$; range: 2-27). Most of these

female principals ($n = 32$) had a master's degree, 3 had only a bachelor's, and 1 had a doctorate.

They were principals of elementary schools ($n = 22$), junior high schools ($n = 1$), and high

schools ($n = 1$), working in all seven Israeli school districts. Male principals (18 from the Jewish

sector and 5 from the Arab sector) had 22 years of educational experience ($SD = 7.74$; range: 4-

36), of which 11 years of experience were as principals ($SD = 7.15$; range: 1-35). Most of these

male principals ($n = 19$) had a master's degree, 3 had only a bachelor's, and 1 had a doctorate.

They were principals of elementary schools ($n = 8$), junior high schools ($n = 1$), and high schools

($n = 14$), working in all seven Israeli school districts.

Data Collection

Data were collected through semi-structured interviews, where the interviewer develops

and uses an "interview guide" (i.e., a list of questions and topics that need to be covered) but

which also "allows the researcher to respond to the situation at hand, to the emerging worldview

of the respondent, and to new ideas on the topic" (Merriam, 2009, p. 90). Key questions were

preplanned, but the interviews were also conversational, with questions flowing from previous

responses when possible.

The interview concerned the practices that principals designed to improve teaching and

learning. During the interviews, the term "instructional leadership" was intentionally not

mentioned, to prevent priming interviewees to frame their discussions in this light. In addition,

the questions did not directly query about how gender may have influenced capacities for or

practices of instructional leadership; instead, interviewees were asked about their engagement in

activities aiming to improve instruction, without any direct consideration of whether being a

woman or being a man was related. Thus, the interview included questions such as: As a

principal, what are your priorities in your work? If you could, what would you omit from your

work as a principal? Who is responsible for improving teachers' practices in your school – and how is that done? As a principal, how do you rank instruction among the various areas requiring your attention – and why?

For ethical reasons, all participants were informed that their participation was voluntary and that they could exit the study at any point in time. They were assured of anonymity and confidentiality (pseudo-names were assigned) and were asked to provide written consent based on understanding of the research aim. Interviews, which generally lasted one hour, were audiotaped for later transcription and analysis.

Data Analysis

Data analysis was a four-stage process – condensing, coding, categorizing, and theorizing. First, the necessary sorting and condensing were performed (Miles, Huberman, & Saldaña, 2014), seeking out the relevant male and female study participants' utterances about instructional leadership, which may be compared in order to identify gender differences. At the second stage – coding – each segment of data (utterance) was coded according to the aspect it represented (Tracy, 2013). This stage, in contrast to the previous one, was data-driven and not theory-driven, as it was not based on a priori codes but rather on inductive ones, developed by direct examination of the perspectives articulated by participants regarding instructional leadership (Flick, 2009; Marshall & Rossman, 2011; Rossman & Rallis, 2012). After having captured the essence of utterances in the second stage, the third stage – categorizing – consisted of similar utterances that were assembled into clusters in order to generalize their meanings and derive categories. Finally, the theorizing stage aimed to reach a conceptual construct of the categories derived in the previous stage, and to see how they were interconnected and influenced each other as parts of one abstract construct (Richards & Morse, 2013).

To properly evaluate the soundness of the data, a member check (Koelsch, 2013) was also conducted: All participants' transcripts were sent back to them along with a request that they evaluate their responses and make any necessary additions or modifications. This strategy allowed for examination of the descriptive data versus participants' reactions, thus endorsing and solidifying principals' perceptions regarding instructional leadership. During the member check procedure, 16 out of 59 interviewees (27.1%) changed their answers, clarifying their former remarks or adding to them.

In addition, as in any qualitative exploration, attention was directed to how the researchers' background and personal experience might inform theoretical and methodological perceptions concerning the inquiry. As reflective journals have been recognized as an important aspect of qualitative research (Etherington, 2004; Ortlipp, 2008), the researchers wrote a personal reflective research log throughout the study to ensure critical thinking. Furthermore, a panel of three educational leadership professors was created, who evaluated and critiqued the researchers' assumptions, providing additional perspectives regarding data interpretation.

Findings

The qualitative data analysis seeking possible sources of differences in instructional leadership exercised by male and female principals revealed that, more frequently than male principals, female principals described themselves as possessing two capabilities necessary for instructional leadership: (a) instructional expertise; and (b) attention to relationships. The interview data regarding these capabilities are presented next, supported by excerpts typifying participants' own voices.

Instructional Expertise

Participants' utterances revealed that the first capability needed for principals'

instructional leadership, which more female participants reported possessing than male participants, was instructional knowledge and experience. As mentioned above, to enact instructional leadership, principals must draw on a wide knowledge base regarding teaching and learning. Put differently, any leader's instructional leadership practices are constrained by his or her knowledge of relevant disciplinary and pedagogical content. The current findings indicated that almost two thirds of the female principals interviewed (61%; $n = 22$) perceived themselves as having instructional proficiency that enabled them to actively engage their instructional leadership role. On the other hand, only about one fourth of male principals mentioned their acquaintance with instruction (only 26%; $n = 6$). Moreover, several male interviewees (21%; $n = 5$) even noted explicitly that their instructional understanding was limited or inadequate, whereas none of the female interviewees mentioned such limitations.

In line with these gender trends, many female principals highlighted the centrality of their instructional expertise for their leadership practices. Barbara, an elementary school principal with 14 years of experience as principal, for example, said that because of her mastery of instruction, she deals mainly with this area: "No principle is a specialist in all the areas that school leadership involves. I'm a specialist in teaching and learning; thus, this is the area where most of my scheduled time is allocated." Lisa, a high school principal who took office 11 years ago, used her instructional expertise to engage in supervision: "I know very well what a good lesson is and how it looks. So, I do a lot of first-hand observation in classrooms. I often share 'gold nuggets' of exemplary practices, which are next steps for improvement."

In contrast, George, a middle school principal for 12 years, described himself as shying away from teaching and learning even after his long experience as principal, because of his "incomprehension" of classroom teaching: "As a former physical education teacher, I know

mainly how to teach in the gym. Thus I prefer to delegate the responsibility for curriculum and standards to someone who knows more than me about teaching in a classroom." Likewise, David depicted himself as having only limited relevant instructional knowledge after his 4 years of experience as an elementary school principal: "Before I was appointed here, I was a high school teacher, and the truth is that it's very different. Today I already know how to talk with younger children, but I'm still not really familiar with what and how they learn." He explained that as a result: "All the instructional issues are treated by my deputy."

It should be noted that Barbara and Lisa, mentioned above, represented the female principals who perceived themselves as having instructional proficiency. However, there were also female principals who did not describe themselves as instructional experts (although none of the women depicted themselves as lacking knowledge about instruction). Similarly, George and David represented the male principals who described themselves as non-specialists in teaching and learning. However, there were also male principals who noted that they possessed rich instructional experience and understanding. Thus, although the principals' utterances excerpted here did reflect the group trends for men and women, these gender distinctions were not sweeping.

The example of David's knowledge deficits about elementary school teaching practices as possibly related to his instructional experiences raises a question about men's and women's conceivably divergent career trajectories as possibly linked with gender differences in instructional expertise. While almost half of the female principals (47%; $n = 17$) mentioned that they had been teachers for many years before moving to a principal position, several male principals (17%; $n = 4$) noted that they were appointed as principals after only a few years of teaching experience. The characteristics of this study's participants indeed show that the duration

of teaching experience before leadership was longer among female principals compared to male

principals. As mentioned above, the female interviewees had an average of 16 years of

educational experience before becoming a principal. The male interviewees, on the other hand,

had significantly fewer years of educational experience – an average of only 11 years – before

being appointed as principal.

Moreover, about one fourth of the male principals (26%; $n = 6$) described themselves as

being interested in leadership from the beginning of their educational career, in contrast to only

two (5%) of the female interviewees. Robert, a middle school principal with 6 years of

experience, explained: "Since I started working as a teacher, I had a managerial orientation. I

was a member of the school's management team, fulfilled middle management positions, and

frequently engaged in whole-school issues." Similarly, Charles, a high school principal with 14

years of experience, revealed: "From the moment I entered the field of education I knew I

wanted to be a school principal. I had to work as a teacher for several years, but my goal was to

reach principalship." Such interview data indicated that, even when some male principals were

working as teachers, they were already focusing their sights on school leadership, perhaps rather

than on mastering a fine-tuned expertise of teaching and learning practices.

Gender difference in instructional expertise may be explained also by the fact that males

dominated the interviews from high schools (61%) and women dominated the interviews from

elementary schools (92%). The high school level requires content knowledge that is more

specific and expertise driven while at the elementary level content knowledge is more general.

Thus, the content knowledge of elementary school principals may enable them building more

bridges to support students moving forward in curriculum.

In sum, female principals' reflections on their leadership role revealed their frequent

reliance on instructional experiences and knowledge, whereas male principals noted that due to their limited instructional expertise they preferred to leave the improvement of teaching and learning to others. This gap in instructional expertise may be seen as one source of gender differences in principals' active instructional leadership practices.

Attention to Relationships

Analysis of the current data suggested an additional capability needed for instructional leadership – attention to relationships – which more female participants reported possessing than male participants. As mentioned above, instructional leadership requires the principal to maintain good relationships with and among teachers, as well as with other stakeholders. Without positive interpersonal relationships, improvement in teaching quality and student accomplishments would be difficult to attain. Female principals often (39%; $n = 14$) described themselves as enacting their instructional leadership through awareness of relationships, whereas male principals rarely (17%; $n = 4$) described themselves as cultivating good interpersonal relations in order to improve instruction.

When study participants mentioned relationships in the context of instructional leadership, they mostly referred to principal-teacher relationships. Ruth, a high school principal who started in the position 14 years ago, claimed that good principal-teacher relationships are necessary in order to increase teachers' commitment and work efforts. She explained: "As a principal, I've learned that interpersonal relationship spur motivation, which is a prerequisite for high quality instruction." Dorothy, a high school principal with 9 years of experience, viewed good principal-teacher relationships as the foundation for effective supervision: "My supervision practices are not an evaluation seeking to give a score. They are based on the good will of both sides to create opportunities for teachers to expand their capacity to teach effectively and to care

for students." For Dorothy, the practice of professional supervision by school principals should involve supportive dialogue rather than judgment, thus requiring positive principal-teacher relationships. Quite differently, Jacob, an elementary school principal with 22 years of experience, downplayed the significance of healthy principal-teacher relationships at school: "The teachers and I are not here with the goal of being friends; we have a task, and it is my responsibility to see that this task is carried out in the best way possible." During the interview, Jacob also asserted: "I don't know what teachers feel towards me, and it is not of much interest to me. [However,] I certainly know that the school works well."

While Ruth, Dorothy, and Jacob focused on principal-teacher relationships, Gloria, a high school principal with 17 years of experience, referred to relationships with various stakeholders: "I had a clear vision of learning for all, ever since I was appointed as principal. However, you cannot establish a vision without inviting others to share in its development. The creation of our vision, which focuses on all students' academic progress, was a slow process, involving a broad group of stakeholders." In contrast to Gloria's approach of looking for partners while creating the school's instructional vision, Richard, an elementary school principal with 9 years of experience, described a different process: "I mistakenly rushed our vision statement. It led to skepticism, stress, and distrust. Eventually the vision statement was ignored. Today, most of my teachers are turned off by the mere mention of the word vision." Richard's mistake, which he recognized in hindsight, reflected low awareness about the teachers' needs and low interest in their partnership.

Other principals pinpointed collaboration as an important interpersonal aspect of leadership. For example, Margaret, a high school principal who took office 5 years ago, said: "Reaching instructional goals alone is impossible, so I collaborate with teachers to evaluate issues related to curriculum, instruction, and assessment. In fact, I depend on teacher leaders who

provide me with valuable insights and ideas." Margaret may be seen as leading from the center, rather than from the top. She did not enforce her own, predetermined notions. Instead, she respected the teachers' voices and worked collaboratively to establish a common path. Moreover, her description may reflect a professional learning community, where teachers work together to solve a problem or to achieve a common goal, based on the knowledge that learning takes place through authentic tasks embedded in real life. In a related vein, Diana, a high school principal with 17 years of experience, emphasized collaboration not only between herself and the teachers but also among the teachers themselves: "I led my teachers to recognize that they must work together to achieve our collective purpose of learning for all. Therefore, we created structures to promote a collaborative culture."

In sum, the cultivation of relationships may be considered another source of gender-related differences important for active instructional leadership because female principals depicted themselves as performing their instructional leadership role through attention to good relationships and collaboration, whereas male principals less frequently described themselves as integrating good relationships together with leading the school toward instructional improvement. Yet, as mentioned for the prior finding, there were also male and female principals who expressed different perspectives. Indeed, the excerpts presented here supported the group trends for the gender distinction found regarding principals' emphasis on attention to relationships. However, the reality of male and female principals should not be perceived as dichotomous.

Discussion

Following the meta-analysis by Hallinger and his colleagues (2016), which found gender differences showing more operative instructional leadership as characterizing female principals,

the current study sought to understand why these differences may occur among school principals. Based on qualitative analysis of principals' interviews concerning their engagement in instructional leadership, two gender gaps emerged, indicating that female principals seem to possess stronger instructional expertise and invest greater attention to relationships than their male counterparts. These two gaps are compatible with two of the capabilities noted in the literature as necessary to engage in effective instructional leadership. Without an understanding of the knowledge needed for teachers to teach well, principals are unable to become influential instructional leaders (Lochmiller & Acker-Hocevar, 2016; Spillane & Louis, 2002). Put differently, instructional leadership requires "leadership content knowledge," which is the knowledge of subjects and of how students learn them (Steele et al., 2015; Stein & Nelson, 2003). In addition, to be effective instructional leaders, principals must be able to build positive relationships with teachers (Robinson, 2010). Healthy principal-teacher relationships enable teachers to adopt more effective teaching practices (Alsobaie, 2015; Edgerson, Kritsonis, & Herrington, 2006). Good relationships with other stakeholders are also important (Ewy, 2009). Thus, these two areas of gender gaps found in this study may be considered as sources of the gender differences that emerge in instructional leadership.

At the same time, this study did not find gender differences in additional capabilities needed for instructional leadership, such as problem solving (Robinson, 2010) and time management (Donaldson, 2011; Grissom et al., 2015; Horng et al., 2010). Although Botha's (2013) case study suggested that male principals have less effective time management skills and abilities as compared to their female counterparts, the current study did not confirm this gender difference. Nor were Botha's findings supported by other literature, which found no gender differences in time-use patterns related to multitasking (Hambrick, Oswald, Darowski, Rench, &

Brou, 2010; Strayer et al., 2013).

The gender differences found in this study regarding instructional expertise and attention to relationships should not be seen as a strict dichotomy, which considers male and female principals as two polar opposites. Some male principals hold instructional expertise and cultivate good relationships with teachers, and some female principals did not describe themselves as having instructional proficiency and did not ascribe importance to healthy interpersonal connections with teachers. Moreover, these capabilities may be developed and changed over time. Thus, the various styles of instructional leadership are not limited to two binary gender categories. However, we found that instructional knowledge and close relationships with teachers did characterize female principals more than males.

As noted above, researchers have provided a multitude of frameworks to capture the components of instructional leadership. Hallinger and his colleagues (2016) pointed out that the gender differences in principals' instructional leadership were broadly distributed, rather than concentrated in particular instructional-leadership dimensions and functions. The gender differences found in the current study – instructional expertise and attention to relationships – were related to a wide range of instructional leadership elements mentioned in the literature, such as framing the school vision, communicating the school vision, motivating teachers, observing teachers, and leading a learning community (Blase & Blase, 2004; Duke, 1987; Hallinger & Murphy, 1985; May & Supovitz, 2011; Murphy et al., 2016; Sheppard, 1996; Stronge et al., 2008; Supovitz et al., 2010). However, several previously identified domains of instructional leadership were not mentioned by the current study participants in the context of these gender differences, such as sharing leadership, protecting instructional time, and promoting professional development.

The literature about gender roles and gender differences reviewed above may help explain why female principals, more than their male counterparts, appear to possess the aforementioned two capabilities needed for instructional leadership. The first capability, teaching expertise, may result from the interviewed men's and women's educational and vocational trajectories. As mentioned above, among the current participants, the duration of teaching experience before leadership was longer among female principals compared to male principals. The different career characteristics of female and male principals are not unique to this study's participants. Women are usually selected as principals after more years of teaching experience and after more academic and professional studies (Grogan & Shakeshaft, 2010). They are appointed into leadership positions and promoted at later ages, with more experience and with more education than men (Roser et al., 2009). Thus, female principals' more in-depth firsthand knowledge about teaching and learning – a capacity identified as central for implementing instructional leadership practices – may likely have its roots in their greater number of years as an active teacher tackling everyday classroom situations before being appointed as a principal.

It may be argued that women's longer teaching period and broader education than men reflect slower promotion processes based on gender inequality. In the 21st century, women are still underrepresented in educational leadership, and the low percentage of women in school leadership roles has not changed significantly during the past decade (Krüger, 2008; Marczynski & Gates, 2013). Yet the current findings indicates that when female principals finally receive an appointment as principal, they appear to possess a stronger ability to implement effective instructional leadership then male principals. The latter's shortcomings in instructional knowledge seem to stem not only from their smaller number of teaching years but also perhaps from their early leadership aspirations, which may possibly direct a certain part of their attention

away from accumulating instructional expertise and toward managerial issues.

The second identified source of gender differences, building good relationships, may be explained by the literature about gender differences in social styles. As reviewed above, researchers consider the cultivation of close relationships to characterize women more than men. Women nurture affective relationships with others and tend to demonstrate empathy much more than men, giving special importance and prominence to the protection of interpersonal relationships (Gilligan, 1982). The gender differences in this area may be explained from several perspectives, such as evolutional (Geary et al., 2003; Vigil, 2007) and psychoanalytical (Chodorow, 1978, 2012). According to the current study's findings, a substantial proportion of female principals attribute many aspects of their ability to carry out instructional leadership to their capacity to maintain positive relationships with the teaching staff, which involves partnership, empowerment, and collaboration. Comparatively, few of the male principals highlighted interpersonal relationships as an important aspect of their leadership role.

Turning to practice, one implication of this study's findings that may be speculated would involve a possible preference for women in principal recruitment and selection. All over the world, the percentage of females in the population of school principals, particularly in high schools, is consistently much lower than the percentage of females in the population of teachers (Krüger, 2008; Marczynski & Gates, 2013). In addition to equity-based arguments for increasing the percentage of female principals, the current outcomes suggest that female principals may increase the likelihood of effective instructional leadership practices, which have been found to positively affect students' results. Another consideration that should be taken into account in principal selection is instructional experience. The findings of this study emphasize the role of instructional knowledge and experience gained over the years. School leadership candidates who

were focused on instructional work in classrooms and while holding instructional positions within the school for many years (e.g., grade-level coordinators, pedagogical coordinators) would apparently be more likely to become active instructional leaders. In addition, the present qualitative findings imply that principals of both genders should consciously cultivate good interpersonal relationships with teachers. A focus on this capacity among teachers' learning communities, which contain potential future school leaders, and among preservice principals during professional training could enable them to better overcome the obstacles that stand in the way of a principal who aspires to be an instructional leader, leading to genuine improvements in student outcomes.

Compared with prior research, this study provides new data on sources of gender differences in instructional leadership, a topic that has not been studied yet. However, the study has several limitations. First, inasmuch as the findings were collected within the Israeli context, their cross-cultural validity is not proven. This study should be replicated in various sociocultural contexts, exploring the findings' international validity in order to make a more universal statement. In addition, this study attempts to provide causal effects from qualitative, self-report data. As with any self-reporting, there is little control over the possibility that respondents provide socially desirable responses. Further research could complement principals' self-reporting with more objective measures of principals' instructional leadership practices, such as direct observations. Quantitative data could also be used for generalization of qualitative findings. Moreover, further research should explore if the gender differences found here in instructional leadership can be explained by gender differences in other variables such as age, education, or school characteristics, like the gender difference regarding years of teaching experience discussed above. Longitudinal studies, including repeated data collection among the

same female and male school principals at different phases of their career, would also be useful

to explore their instructional leadership development.

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