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# An empirical assessment of the loose-tight leadership model: quantitative and qualitative analyses

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#### **Summary**

Using questionnaire and interview data, this study attempted to find out whether the organizational loose (participative) and tight (directive) practices are compatible with or contradict each other. Using the theoretical framework of Sagie's (1997) loose-tight leadership approach, our hypotheses concerned the effects of both practices on the employee's work-related attitudes, and the mediating role of two variables, cognitive (information sharing) and motivational (exerting effort), in these effects. Data were analysed using two methodological approaches, quantitative and qualitative. Based on a quantitative analysis of the questionnaires given to 101 professional employees of a textile company, partial support was provided for the study hypotheses. A qualitative analysis of in-depth, semi-structured interviews with all the employees (n = 20) in one of the company divisions led to similar conclusions. Specifically, we found that although the loose and tight practices affected work attitudes, the interviewees attributed more impact to the tight practice. In addition, none of the study variables mediated the loose impact on attitudes, whereas information sharing (but not exerting effort) mediated the influence of tight practice. Finally, the qualitative analysis revealed a deeper insight into the nature of both leader practices and their possible integration in the decision-making processes in organizations, Copyright © 2002 John Wiley & Sons, Ltd.

#### Introduction

Participative decision-making (PDM) is one of the most researched organizational practices. Mitchell (1973) defined PDM as a process through which influence is shared among superiors and subordinates. Research has demonstrated that the effect of PDM on attitudinal and behavioral work outcomes, although not very high, is generally positive (Wagner, 1994). Typically, employee participation increases organizational commitment and job satisfaction, and during an organizational change it fosters higher levels of change acceptance and effectiveness (Sagie & Koslowsky, 1994, 1996). The

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process whereby PDM enhances work outcomes is, however, quite complex (Smith & Brannick, 1990). As shown by Latham, Winters, and Locke (1994) and Sagie and Koslowsky (2000), cognitive variables (e.g., information sharing, resonance of ideas) as well as motivational ones (commitment to joint decisions, enhanced goal level, readiness to exert effort) mediate the PDM impact on outcomes.

Leader directiveness, which we define as providing the members with a framework for decision-making and action in alignment with the leader's vision, is another well-researched organizational practice (Fiedler, 1989; Stogdill, 1974). As the leader vision sets direction for subordinates, both terms are often considered as equivalents (Yammarino, 1994, p. 28). Empirical studies have shown that directive leadership enhances employee performance and attitudes (Hogan, Curphy, & Hogan, 1994; Murphy & Fiedler, 1992; Sagie, 1996). Further, similar to the case of employee participation, motivational and cognitive variables are said to mediate the impact of this practice on work outcomes (Yukl, 1998). Based on the loose–tight model (presented below), the present study aimed to investigate the relation between both organizational practices and their attitudinal outcomes in the work environment.

#### The loose-tight model of leadership

Are both organizational practices, the loose (participation) and tight (directiveness), compatible or incompatible with each other? Building on the seemingly conflicting demands of the two practices, some researchers (e.g., Maier, 1963; McGregor, 1960; Murphy & Fiedler, 1992) supported the latter. Maier (1963), for example, proposed that group members led by a directive leader cannot fully contribute to task fulfillment; competent members are more likely to 'buy into' the task if their leader is participative. Kuhnert (1994) claimed, however, that PDM and directive leadership frequently fit one another. While discussing the phenomenon of transformational leadership, he argued that transformational leaders use both practices. They 'exhibit a strong sense of inner purpose and direction . . . [and] energize followers to take actions that support [this direction]' (p. 18). Vis-a-vis these directive characteristics, transformational leaders reveal participative orientation by granting autonomy to followers and developing their capabilities to pursue broad organizational goals. Similarly, Yammarino (1994) described these two key facets of the transformational leader, and called them communicating the vision and empowering the employees. In addition, the situational theories of leadership (cf. Fiedler, 1967; House, 1971; Likert, 1961; Vroom & Yetton, 1973) perceive the leader as one who employs either loose or tight practice according to the current circumstances and/or the qualities of the present subordinates.

The idea that PDM and leader directiveness can be integrated is quite natural in some non-Western cultural environments. For example, Hull, Azumi, and Wharton (1988) argued that in spite of his or her high directiveness, the Japanese manager is fully attentive to the workers' innovative ideas, and ready to adopt and implement their suggestions and recommendations for improvement. It appears that both Japanese management and labor believe that the superiors' directiveness is not necessarily the enemy of the subordinates' influence. Indeed, solidarity between management and workers is a basic premise in so many Japanese organizations (Hull *et al.*, 1988). Interestingly, there is evidence that the Japanese supervision style involving both participation and leader directiveness can be exported to the West. This was illustrated by the case of a New United Motors Manufacturing Inc. (NUMMI) plant, located in Fremont, California, and led by Japanese managers using their loose and tight practices (Adler, 1993).

In accordance with these theoretical sources and empirical observations, Sagie's (1997) loose–tight theory of leadership suggests that leader directiveness and PDM may often complement each other. The term 'loose–tight', that implies a combination of central directive and individual freedom, was borrowed from Peters and Waterman's (1982) bestseller on leadership. As opposed to the theory of transformational leadership, Sagie indicated that the integration of the loose and tight practices does not necessarily yield a coherent, static leader's style, but rather a dynamic one in which either PDM or

directiveness becomes more prominent depending on transient situational factors. For example, leaders tend to be looser when a high technical quality solution is required or when member commitment is considered essential for decision accomplishment, and tighter when they have sufficient information for making the decision (Vroom & Jago, 1988, 1995). Additionally, leaders may employ more directiveness when they expect a conflict among subordinates (Vroom & Jago, 1995). Similarly, when the organizational vision or strategy is articulated, leaders tend to be directive, and when tactical or operational decisions are required they adopt PDM (Sagie, Elizur, & Koslowsky, 1990, 1995; Tichy & Devanna, 1990).

The loose–tight model goes further than most of the situational (or contingency) approaches to leadership by implying that PDM and direction are frequently relevant to different aspects of the same interaction. For example, the leader may direct the *framework* of the decision-making process by initiating problem-oriented dialogues, requiring solutions, eliciting employee ideas and suggestions, ensuring that the responses are aligned with the underlying vision and providing the members with feedback. The *substance* (or contents) of the decisions may remain open, however, to worker involvement (Sagie, 1997). To summarize, the loose–tight approach proposes a two-level synthesis. First, it integrates elements of the traditional participative (*cf.* Smith & Brannick, 1990) and directive (*cf.* Fiedler, 1989) approaches, indicating that both practices are required. Second, the new theory borrows variables and concepts from the transformational and contingency leadership models. In accordance with the former, the loose–tight approach implies that a leader can be simultaneously loose (in substance) and tight (with regard to framework). Similar to the latter, the balance between leader directiveness and PDM may vary dynamically. As only few attempts have been made to date to test the loose–tight theory (e.g., Cassar, 1999; Sagie, 1997), the present study was designed in order to assess some of its propositions in a field setting.

### Cognitive and motivational mediators

As shown by Latham *et al.* (1994), PDM arouses cognitive processes that enhance the decisions' quality and, ultimately, task performance. These processes include clarification of problems, information seeking, data sharing, resonance of ideas, and synthesis of viewpoints (Sagie & Koslowsky, 2000). Interestingly, leader directiveness also arouses cognitive processes. In a series of studies, Fiedler and his colleagues (Fiedler, 1989, 1995; Fiedler & Garcia, 1987; Murphy & Fiedler, 1992) showed that organizational or technical knowledge and intellectual abilities of directive leaders improve group performance. Conversely, when the leader is non-directive, then members' knowledge and skills affect group performance. The aggregated research implies, therefore, that leader directiveness and employee participation can generate similar processes, namely, acquisition and diffusion of information, which may enhance productivity.

Another mediating path through which PDM influences work outcomes includes motivation-related variables such as goal commitment, self-efficacy, leader–follower mutual trust, and identification with management (Erez & Arad, 1986; Locke, Latham, & Erez, 1988; Sagie & Koslowsky, 2000; Vroom & Yetton, 1973; Wagner, Leana, Locke, & Schweiger, 1997). Similarly, motivation-related variables mediate the influence of leader directiveness on work outcomes (Fiedler & Garcia, 1987; House, 1971; Sagie, 1997). One of the most important motivation-related variables using either the participative process or directive one is the willingness to exert effort at work. In fact, Campbell (1990) defined the construct of motivation as the combined effects of two choices pertaining to exerting effort on behavior; namely, the choice as to whether or not one should exert an effort and the choice as to how much effort he or she would exert. Hence, choosing to exert intensive effort implies high motivation and choosing to exert low level of effort or no effort at all reflects low motivation.

Building upon these notions, we propose that motivation-related and cognitive processes mediate the relationships of both the leader's loose and tight practices with work outcomes. Cognitive processes (e.g., information sharing) allow organizational members to comprehend the leader's vision and to be involved in decision-making and problem solving. Motivation-related processes (e.g., exerting effort) allow members to be committed to the leader's vision and be empowered by internalizing it (Spreitzer, 1995). These two types of processes are required, therefore, in order to achieve better attitudinal and behavioral work outcomes. Naturally, not every potential cognitive or motivational process operates in every situation. Hence, even if we cannot expect the loose–tight leadership to arouse *all* varieties of the aforementioned mediators, the model allows us to predict that some basic cognitive and motivational processes, especially information sharing and exerting effort, will arise.

#### Work-related attitudes

Leader directiveness, especially with regard to the decision-making framework, and PDM, especially with regard to the decisions' substance, are expected to impact a wide range of attitudinal and behavioral outcomes through cognitive and motivational mediators. In the present study, we tapped only two employee attitudes: job satisfaction and affective organizational commitment. Although both are considerably correlated, they constitute empirically distinct constructs (Shore, Newton, & Thornton, 1990). The first attitude reflects the extent of one's satisfaction with the various components of the job (e.g., interest, autonomy) as well as the job setting (e.g., salary, superior, colleagues, work conditions). Affective organizational commitment reflects an attachment to the overall organization rather than to some part of it (e.g., job). Whereas job considerations, including the leader's loose and/or tight practices, have an impact on job satisfaction, organizational commitment could be affected by a variety of factors at either the job or organizational level (e.g., culture, values, and norms; Gellatly, 1995; Sagie, 1998).

#### Research question and methodological approaches

Although the loose—tight model is based on sound foundations from the PDM and leadership literature, its formulation of loose—tight integration is rather new. Thus, the main research question was whether or not leader loose and tight practices can be effectively integrated. Namely, we asked whether the combination contributes to the enhancement of the employees' work-related attitudes through cognitive and motivational paths. As the empirical knowledge of loose—tight behavior is minimal, we adopted two methods for examining the research question. In addition to the traditional confirmatory (hypothesis-driven) quantitative approach, we also used an exploratory qualitative approach. The second author, an organizational anthropologist who was unaware of the loose—tight theory of leadership, measured members' views of PDM, leader directiveness, and their outcomes through an independent analysis of a separate set of interview data. Rather than examining *a priori* hypotheses, the qualitative analysis allowed for arriving at a data-bound answer to the research question.

In the quantitative analysis, we tested hypotheses derived from the loose–tight model of leadership (see Figure 1). Specifically, we predicted:

*Hypothesis 1*: Both PDM and leader directiveness will influence job satisfaction; this influence will be mediated by information sharing and exerting effort.

Hypothesis 2: Both PDM and leader directiveness will influence affective organizational commitment; this influence will be mediated by information sharing and exerting effort.

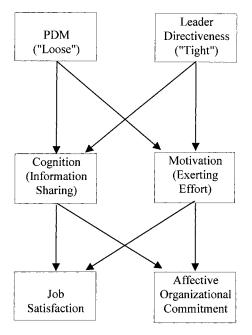


Figure 1. The loose-tight model: PDM and leader directiveness affect employee attitudes through cognitive and motivational mediators

## **Organizational Context**

#### The company

Isdress industries (a pseudonym) is a leading global company in the apparel industry. The compnany designs, develops, manufactures and delivers ladies intimate apparel, men's underwear, socks, baby wear, leisurewear, and fabrics to numerous retailers around the world. The headquarters of Isdress are located in Israel, while several functions including engineering, marketing, and production are globally dispersed. In 2001, Isdress sold apparel products to customers that were scattered all over the world for an annual return of \$600 million. Fifty-six per cent of the sales were in North America, 27 per cent in the UK, 9 per cent in Europe, and the remainder in Israel. One of the factors that helped the company to diffuse its products throughout the globe is Israel's free trade agreements with both the United State and the European Union.

#### The workers

Isdress employs several thousand employees in diverse countries. The current study addressed, however, the 200 unionized employees of the Israeli headquarters' six divisions.

#### The environment

Until recently, the manufacturing function has been done in Israel and in Scotland. In the last five years the company has migrated most of its manufacturing to lower labor cost countries such as

Jordan, Egypt, Turkey, Romania, and Bulgaria. During the last year it started to manufacture in Central America, the Caribbean, and in the Far East. This process is far from being completed; Isdress is continuously shifting labor-intensive functions to various parts of the world. Since the relocating plants typically came from small Israeli towns with limited prospects for alternative employment, the relocations increased the unemployment level in these towns. Yet, in most cases, the company compensated the dismissed employees and managed to avoid strikes. As is occuring in other countries, however, it was demonstrated here as well that globalization does not ensure beneficial consequences for everyone.

#### Communication

The global distribution of the company's activities requires effective communication among the diverse branches and plants. Indeed, Isdress maintains an advanced infrastructure of computerized acquisition, production, inventory control, dispatching, shipping, and billing functions. Using such communication channels as electronic mail and the Internet, the company's managers and workers contact their overseas customers, providers, and contractors, in order to maintain the timely delivery standards.

## **Quantitative Analysis**

#### Site and subjects

Data were collected in the Israeli offices of a multinational textile company. As the demands of overseas customers influence various characteristics (e.g., shape, colours, fabric) of the products, managers and employees need to coordinate, control, and respond to a large amount of information. Indeed, acquisition and diffusion of information are critical to the company's smooth functioning. From the perspective of the national culture, fundamental cultural attributes of Israeli society characterize the current sample as well. These attributes include low power distance, moderate individualism, masculinity, and high emphasis on self-enhancement, independence, self-confidence, independent thinking, and assertiveness (Hofstede, 1991; Katriel, 1995; Pines, 1978).

The current study was part of a larger research project that included, after the data were analysed, consultation with the company managers on issues like leadership, communication, and organizational knowledge. This required us to study in depth the organization and its processes through both quantitative and qualitative approaches. Questionnaires were administered to all employees who were present in six of the company divisions that are located in Israel (n = 140), 72 per cent of which provided useable data. Ninety-nine of the 101 participants held full-time positions. The average age was 34. Sixty-three per cent of the sample were female, and about two-thirds (65 per cent) were married. All of the respondents were high school graduates, and 43 per cent also had an academic education, either at the undergraduate or graduate level. No identifying information was recorded on the questionnaires and the participants' anonymity was maintained.

#### Measures

In addition to demographic data, the following measures were included in the questionnaires (see an English translation in Table 1):

Table 1. Study scales, items, and results of the factor analysis

	Factor loadings						
Scales and items	1	2	3	4	5	6	
PDM							
To what extent are you involved in:							
1. Determining the goals and tasks	0.31	-0.03	-0.24	0.15	0.80	0.07	
of your subordinates (if any)							
2. Solving problems in your department	0.24	-0.03	0.07	-0.06	0.91	0.07	
3. Initiating changes in your department	0.08	0.08	0.12	0.08	0.91	0.06	
Leader directiveness							
To what extent do you agree with each of the							
following statements concerning your manager:							
1. He/she is an exciting public speaker	0.34	0.70	0.26	0.30	0.09	-0.37	
2. He/she appears to be a skillful performer	-0.07	0.81	0.22	0.25	0.04	-0.02	
when presenting to a group							
3. He/she is inspirational, able to motivate by	0.19	0.74	0.39	0.26	-0.15	-0.15	
articulating effectively the importance of the task							
4. He/she has vision, often brings up ideas	0.09	0.85	0.12	0.31	-0.02	0.12	
about possibilities for the future							
5. He/she provides inspiring strategic and	0.24	0.78	-0.12	0.11	0.6	0.25	
organizational goals							
6. He/she consistently generates new ideas	0.35	0.87	-0.11	0.05	0.06	0.03	
for the future of the organization							
Information sharing							
To what extent do you agree with:							
My boss constantly updates me with	0.31	0.31	0.07	0.85	0.07	-0.11	
relevant organizational information							
2. The information I get from my superior is	0.01	0.21	0.15	0.89	-0.17	-0.05	
sufficient for a most effective functioning							
3. I get all the information required for making	-0.03	0.34	0.23	0.85	0.03	0.03	
conventional as well as unconventional decisions							
4. I know the reasons for the organizational	0.15	0.27	0.18	0.77	0.25	0.15	
policy and higher level decisions							
Exerting effort							
To what extent do you agree with:							
1. When there is a heavy workload, expending effort	0.39	0.16	0.19	-0.08	-0.09	0.67	
at work precedes personal affairs	0.59	0.10	0.19	-0.00	-0.09	0.07	
2. I am not ready to devote myself to work and to	0.02	0.03	0.07	0.00	0.06	0.84	
pay an excessive price (reversed)	0.02	0.03	0.07	0.00	0.00	0.04	
Job satisfaction							
To what extent are you satisfied, on your present job, with:	0.21	0.00	0.50	0.00	0.04	0.05	
1. The chance to work alone on the job	0.21	0.09	0.72	0.00	0.04	0.05	
2. The chance to be 'somebody' in the community	0.24	-0.27	0.59	0.39	0.04	-0.18	
3. Being able to do things that don't go	-0.02	0.42	0.63	0.00	-0.04	0.13	
against my conscience	0.00	0.20	0.63	0.01	0.22	0.02	
4. The way my job provides for steady employment	-0.08	0.29	0.63	0.01	-0.23	-0.03	
5. The chance to do things for others	0.25	-0.04	0.67	0.20	-0.11	0.15	
6. The chance to tell people what to do	0.15	-0.22	0.49	0.39	0.17	0.37	
7. The chance to do something that makes	0.28	0.04	0.67	0.47	-0.03	0.09	
use of my abilities	0.20	0.00	0.53	0.27	0.22	0.20	
8. The freedom to use my own judgment	0.20	0.00	0.52	0.27	0.23	0.28	
9. The chance to try my own methods of doing the job	-0.01	0.29	0.70	0.21	0.33	0.01	

Continues

Table 1. Continued

Affective commitment  To what extent do you agree with:						
I would be very happy to spend the rest of my career with this organization	0.72	0.14	0.24	0.44	-0.09	0.11
I enjoy discussing my organization with people outside it	0.70	0.08	0.41	0.26	0.16	0.19
3 I do not feel like 'part of the family' at my organization (reversed)	0.83	0.26	0.23	0.06	0.24	-0.05
4. I do not feel emotionally attached to this organization (reversed)	0.92	0.08	0.03	0.04	0.20	0.23
5. This organization has a great deal of personal meaning to me	0.85	0.13	0.25	0.18	0.16	-0.05
6. I do not feel a strong sense of belonging to my organization (reversed)	0.89	0.16	-0.06	-0.07	0.16	0.09
Eigenvalues % of variance explained	5.1 17	4.8 16	4.4 15	4.3 14	2.9 10	1.9 7

Participative decision-making was measured using a 5-item scale modelled after Sagie and Koslowsky (1994). An ascending response scale ranging from 1 ('not at all') to 6 ('very much'), measured the extent of involvement in various decisions. After conducting an exploratory factor analysis that involved the self-reported data (see details below), we excluded two items with relatively low loading on the same factor. Internal consistency reliability (Cronbach alpha) for the remaining items was 0.91.

Leader directiveness was gauged by the 6-item scale A (vision and articulation) of the Conger–Kanungo charismatic leadership questionnaire (Conger & Kanungo, 1994). A previously used Hebrew version of the questionnaire was applied here. An ascending response scale, ranging from 1 ('strongly disagree') to 6 ('strongly agree'), indicated the agreement with each sentence. Cronbach alpha was 0.92.

The *cognitive* mediator was measured by a newly designed 6-item scale assessing the respondent's perception of the adequacy of information shared at work. Four items remained after the factor analysis. The response scale ranged from 1 ('strongly disagree') to 6 ('strongly agree'); the reliability was 0.86.

The *motivational* mediator was measured by six new items (two following the factor analysis) evaluating perceived effort exerted at work. The response scale ranged from 1 ('strongly disagree') to 6 ('strongly agree'); Cronbach reliability was 0.50.

General job satisfaction was measured by a previously used Hebrew version of the Minnesota Satisfaction Questionnaire's (Weiss, Dawis, England, & Lofquist, 1967) short form (20 items before the factor analysis and 9 after it). A response scale ranging from 1 ('not at all') to 6 ('very much') taped the degree of satisfaction with different job aspects. Coefficient alpha was 0.83.

Finally, *affective organizational commitment* was measured with a previously used Hebrew version of the 8-item (six following the factor analysis) Allen and Meyer's (1990) questionnaire. The response scale ranged from 1 ('strongly disagree') to 6 ('strongly agree'). The reliability coefficient was 0.89.

#### **Results**

In order to support the discrimination among the diverse study constructs we conducted an exploratory factor analysis that included all the self-reported items with six predetermined underlying factors. In

· ·	*			•			
Variable	Mean	SD	1	2	3	4	5
1. PDM	4.14	1.40	_				
2. Leader directiveness	4.12	1.16	0.22*	_			
3. Information	3.58	1.09	0.29*	$0.66^{\dagger}$	_		
4. Effort	4.58	1.01	-0.05	-0.10	-0.14		
5. Satisfaction	4.43	0.78	$0.40^\dagger$	$0.42^{\dagger}$	$0.49^{\dagger}$	0.08	_
6. Affective commitment	3.92	1.06	0.32*	$0.37^{\dagger}$	$0.37^{\dagger}$	0.11	0.31*

Table 2. Means, standard deviations, and intercorrelations of the study variables

accordance with the hypotheses, each factor fitted one of the theoretical constructs. Items that did not load strongly on the intended factors (the minimum loading was 0.49) or that cross-loaded on another factor (either above 0.39 or less than 0.20 difference between the primary and cross-loadings) were excluded from the analysis. Table 1 presents the remaining items and reports the results of the factor analysis. The factors were ordered as follows: affective commitment (eigenvalue = 5.1; 17 per cent of the variance explained), leader directiveness (4.8; 16 per cent), job satisfaction (4.4; 15 per cent), information sharing (4.3; 14 per cent), PDM (2.9; 10 per cent), and exerting effort (1.9; 7 per cent). Means, standard deviations, and intercorrelations among the study variables are shown in Table 2.

Our next step was the assessment of the mediating roles of the cognitive variable—information sharing, and the motivational variable—exerting effort, in the relation between the antecedents: PDM and leader directiveness, and both attitudes: job satisfaction and affective organizational commitment. To do this we conducted a mediated regression analysis using the procedure outlined by James and Brett (1984) and recently employed by Earley and Mosakowski (2000). Table 3 presents the results of the mediated regression using job satisfaction as a criterion, and Table 4 displays the results using affective commitment as a criterion. Each table compares the results of two tests, differing in the entry order of the predictors to the regression equation. In the first test, the criterion was regressed on the

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Table 3	Mediated	regression	analysis	usino	10h	satistaction	as a criterion

Test	Predictors	$\Delta R^2$	b	SE	t
1	1. Demographics	0.17*			
	Sex		0.42	0.20	2.10*
	Age		-0.02	0.01	-1.86
	Education		-0.22	0.09	-2.35*
	Marital status		-0.18	0.22	-0.81
	2. Antecedent variables	0.19*			
	PDM		0.15	0.06	2.42*
	Leader directiveness		0.23	0.08	3.03*
	3. Mediators	0.13*			
	Information		0.28	0.09	3.22*
	Effort		0.16	0.07	2.23*
2	1. Demographics	0.17*			
	2. Mediators	$0.24^{\dagger}$			
	Information		0.36	0.08	$4.46^{\dagger}$
	Effort		0.17	0.08	2.16*
	3. Antecedent variables	0.08*			
	PDM		0.14	0.06	2.49*
	Leader directiveness		0.11	0.08	1.41

<sup>\*</sup>p < 0.05; †p < 0.001.

<sup>\*</sup>p < 0.05; †p < 0.001.

Table 4. Mediated regression analysis using affective commitment as a criterion

Test	Predictors	$\Delta R^2$	b	SE	t
1	1. Demographics	0.13			
	Sex		0.03	0.29	0.11
	Age		0.03	0.02	1.39
	Education		-0.31	0.13	-2.29*
	Marital status		-0.30	0.31	-0.96
	2. Antecedent variables	$0.21^{\dagger}$			
	PDM		0.27	0.09	3.06*
	Leader directiveness		0.28	0.11	2.60*
	3. Mediators	0.14*			
	Information		0.44	0.12	3.51*
	Effort		0.18	0.10	1.76
2	1. Demographics	0.13			
	2. Mediators	$0.24^{\dagger}$			
	Information		0.52	0.12	$4.47^{\dagger}$
	Effort		0.18	0.11	1.65
	3. Antecedent variables	0.11*			
	PDM		0.26	0.08	3.17*
	Leader directiveness		0.10	0.11	0.86

<sup>\*</sup>p < 0.05; †p < 0.001.

demographical variables: sex, age, education, and marital status; then, on the antecedent variables: PDM and leader directiveness; finally, we added the hypothesized mediators: information sharing and exerting effort. In the second test, the entry order was: demographics, mediators, and antecedents that closed the list. The second test introduced, therefore, a case in which information sharing and exerting effort mediated the antecedents—attitudes relationship, whereas the first test demonstrated an unmediated case (the mediators were added at the final phase). The justification for entering the demographic variables first in each test was that they are more stable than the attitudinal variables. In addition, considering the study's aim, these variables were only nuisance variables that needed to be controlled (Sagie, 1998).

According to James and Brett's (1984) procedure, the two tests are compared with regard to the variance in the criteria accounted for by the antecedent and mediating variables. The variance in the criteria explained by the antecedents should decrease from the first, unmediated test, to the second, mediated test; in fact, it is desired that they will account for insignificant variance in the second test. The hypothesized mediators should account for significant variance in the criteria in both tests; nevertheless, the variance explained by them should be larger in the second than in the first test (James & Brett, 1984). Alternatively, mediating could be described as a significant antecedents—criterion relationship in the first test (as revealed, for example, by *b* coefficient) followed by an insignificant relationship in the second test.

Table 3 shows that the mediator variables: information and effort, accounted in the first, unmediated test for 13 per cent (p < 0.05) of the variance in job satisfaction; in the second, mediated test the satisfaction variance accounted for by mediators increased to 24 per cent (p < 0.001). The influence of information sharing on job satisfaction increased considerably from the first to the second test; b grew from 0.28 (t = 3.22, p < 0.05) to 0.36 (t = 4.46, p < 0.001). Conversely, only a negligible change in the influence of exerting effort on satisfaction was observed between the two tests (b coefficients were 0.16 [t = 2.23, p < 0.05] and 0.17 [t = 2.16, p < 0.05], respectively). Hence, only information sharing contributed to the change in the variance in job satisfaction.

The variance accounted for by the antecedents dropped from 19 per cent (p < 0.05) in the unmediated test, to 8 per cent in the mediated test. Yet, the latter relationship was still significant (p < 0.05); as it is apparent in the table, this was because of the still significant PDM influence (b = 0.14; t = 2.49, p < 0.05) on job satisfaction. Thus, in accordance with the first hypothesis, the results indicate that both PDM and leader directiveness affected job satisfaction; nevertheless, information sharing rather than exerting effort mediated the effect of leader directiveness only on the dependent variable.

Table 4 shows that in the second test, the affective organizational commitment variance accounted for by the mediators (0.24; p < 0.001) was larger by 10 per cent than the variance accounted for in the first test (0.14; p < 0.05). As the impact of effort on commitment was non-significant in the first test as well as the second test (in both cases b = 0.18), it could be said that primarily, the commitment variance was accounted for by the cognitive mediator, information sharing. The affective commitment variance explained by the antecedents decreased from 21 per cent (p < 0.001) in the first test to 11 per cent (p < 0.05) in the second test. As in the case of job satisfaction, PDM was still significantly related to affective commitment (b = 0.26; t = 3.17, p < 0.05). Hence, only the affective commitment relationship with leader directiveness but not with PDM was mediated; information sharing rather than exerting effort was found to be an effective mediator here. These findings provide partial support to the second hypothesis.

## **Qualitative Analysis**

The second author conducted in-depth, semi-structured interviews with all 20 employees of one of the company divisions (hereafter: Division A). These included the division manager, department managers (reporting to her), and their subordinates. After considering other divisions, we decided to focus on Division A. This division was well established (i.e., not a new division), the manager and the majority of the employees were several years in their roles, and performance was relatively stable. Interviewing members of one division produced a sufficient variety of participants as they held diverse positions and roles within the division hierarchy. Moreover, the focus on one division allowed us to analyse its entire network of relationships, work context, and unit sub-culture.

Each interview lasted approximately one hour; it covered a standard set of questions (see Appendix 1), but the participants were encouraged to raise and discuss related topics as well. All interviews were conducted in Hebrew and written verbatim. The interviewer employed no audio recording; she used shorthand, however, for technical terms. The participants were assured that their responses would remain anonymous. The interviews and the qualitative analysis were conducted in accordance with Spradley's (1979) approach, which focuses on studying how the world is organized from the participants' point of view. The interview questions addressed the research question by grasping the interviewees' evaluations of directive leadership, PDM methods, information sharing, effort exerted in the workplace, and work-related outcomes. Participants were not given key definitions; rather, they were provided with the opportunity to use their own definitions of the key constructs and to describe their perception of and experience with the interconnections among these constructs.

Data were analysed in three steps. First, we listed the participants' responses, ordered by interviewee within question. For example, all the interviewees' responses to the first question were reviewed together. The second step involved an assessment of the diverse responses to each question. The analyser asked: Did the participants express similar opinions? Were there dominant themes in their answers? Finally, if recurrence of opinion was found for several participants, a quotation that vividly illustrated their point of view was selected from the interviews.

Starting with leader directiveness, the interviewees were asked to describe their experiences with, and expectations from, their leaders (primarily the division and/or department managers). Twelve out of the 20 respondents said that their leaders were directive, and viewed directive leadership rather positively. For example, the following reference to the manager's directive practice was made by one of the interviewees:

'All the people approach our manager when they need help. She is aware of everything. I think she directs us. If she were not here, a very important link would be missing. When I have a problem, I always approach her for advice' (translated from Hebrew).

Although not requested to compare the two leader practices, PDM and directiveness, three interviewees explicitly expressed their complementary roles. For example, one employee said that the leader's directiveness encourages her initiative. The desired weight of each practice varied somewhat between employees with and without managerial authority. Whereas the former (n = 4) emphasized more leader directiveness, the latter (n = 16) put more emphasis on PDM. Stating it slightly differently, whereas the subordinates preferred an *active* employee role: a case where one actually has an impact over the firm's decisions, managers had in mind a more *passive* role for their employees. According to this view, the leader most often should make the decisions by him/herself, and the employees' role is typically limited to receiving information, listening to the rationale, understanding the decisions, supporting them, and, at most, consulting the 'boss' in the process of making the decisions. For example, one of the managers reflected the second, more passive, employee role, while describing his combined loose–tight approach to knowledge diffusion:

'People do not always understand the whole picture. I try to explain very carefully and to expose people to more information so that they will understand why it is important. I invite more people to meetings, including people who do not have a direct interest in the topic. I would like them to know the process.'

Eleven participants out of 19 agreed that leader directiveness and PDM affect the quantity and quality of the intra-departmental information sharing. When requested to describe the nature of the latter process, the views of superiors and subordinates differed, however, once again. The subordinates (n = 16) considered information sharing as an egalitarian, two-way process of exchanging data; superiors (n = 4), on the other hand, described information sharing as a way of informing subordinates. However, both parties believed that the leader should be well informed to enable the team to achieve its goals. The following interviewee echoed Fiedler's (1989, 1995) concerns with regard to the aversive influence of a directive but uninformed leader on group performance:

'Knowledge transfer by managers is very important. Information should be clear...From my experience here, a lot of information is transferred vaguely. Sometimes the manager himself does not know all the details and that causes confusion in the system...There are times when the information given is full of mistakes. These mistakes are exposed by workers and clients, and that is not healthy.'

With the exception of two, all the interviewees shared the belief that leader directiveness is important for the distribution of information; ten out of 17 interviewees who addressed this issue said that PDM helps to diffuse information. Indeed, two interviewees distinguished between decision performance and task performance that requires neither decision-making nor problem solving (Wagner & Gooding, 1987). Whereas full and reliable information is essential for the former category and for those employees who are frequently required to make decisions, it is less important, according to this view, to those employees who are primarily concerned with the latter category. One of the interviewees

held a R&D role in two divisions, A and B; he used the variables of leader directiveness and information sharing for comparing the levels of performance in both divisions:

'These two divisions are entirely different. Division A is really led [by its manager]; there is 80 per cent rate of strategic planning and knowledge diffusion. Performance here is very high. Conversely, Division B is not led [by its manager]; knowledge diffusion is very limited. Performance here is very low.'

There was disagreement among the interviewees as to whether directive leadership and PDM lead to an increase in their level of effort. Six participants argued that these effects exist, whereas seven others claimed that they need no triggers, as their motivation is constantly high. They agreed, however, that high motivation and a broad sharing of information are beneficial with regard to their outputs and attitudes. One interviewee used the following example to describe how more information and technical knowledge can lead her to achieve better results:

'I like my job... When do I enjoy it more? When I know the system; when I know whom I should approach instead of interrupting other people and wasting time. For example, there is a storeroom about 200 metres from here. The person working there does not answer the phone. People need to go there to see samples of fabrics or buttons. If I knew how to find the fabric myself, I would save a lot of time. At present, I have to go back and forth, back and forth, until I find him.'

Sixteen out of 17 interviewees felt that information sharing helps one to clarify his or her domain of responsibilities, understand the superiors' expectations, and increase performance. Ten interviewees said that better knowledge positively influences job satisfaction and commitment to the organization. Five other participants, however, argued that work attitudes are independent of knowledge level. The following report by one of the interviewees represents the first opinion:

'My entrance to wide areas [of technical knowledge] and the strengthening of the connection with the organization and its aims lead to a strong relationship and very strong identification with the organization. If my job were limited to one area only, it would not have been difficult to leave.'

#### **Discussion**

In his book on leadership, Yukl (1998) argued that the field 'has been in a state of ferment and confusion for decades... The confused state of the field can be attributed in large to the sheer volume of publications, the disparity of approaches, the proliferation of confusing terms, [and] the narrow focus of most researchers... As the old adage goes, it is difficult to see the forest for the trees' (pp. 493–494). An integration of the diverse leadership approaches is, therefore, warranted. In the present work, we attempted to combine the PDM and leader directiveness schools as well as the respective participation and leader directiveness practices. The resultant loose–tight approach has borrowed concepts and variables from a range of widespread theories in the field, including Vroom and Yetton's (1973) contingency approach and the theory of transformational leadership. Further, we tried to synthesize two methodological approaches, quantitative and qualitative, in order to better analyse the data. By highlighting diverse pieces of a complex puzzle, the different sources and methods may contribute to our understanding of the leadership phenomenon.

Both the quantitative and qualitative analyses indicated that the integration of PDM and directive leadership into a consistent loose-tight behavior is feasible and pays dividends, at least in terms of

employee attitudes. Nonetheless, the two analysis types provided only partial support to the hypothesized relationships. Starting with the quantitative analysis, the results show that PDM and leader directiveness affected the employees' attitudes; however, PDM's influence was unmediated by any of the study's mediators, whereas the influence of leader directiveness was mediated by information sharing rather than by exerting effort. Interestingly, a similar view stemmed from the interviews. Our interviewees mentioned directive leadership rather than PDM or any other factor as the main determinant of efficient data exchange. In accordance with Fiedler (1989, 1995), it appears that information sharing was the main process used by directive leaders in the researched company to enhance worker attitudes. Conversely, it is possible that PDM transmits its effect to work attitudes through other processes. Probably, beyond the study mediating variables, PDM uses further mediators, either cognitive (e.g., synthesis of viewpoints) or motivational (e.g., self-efficacy).

The quantitative analysis shows that information sharing transmits the impact of leader directiveness to both work attitudes: job satisfaction and affective organizational commitment. Conversely, without real connection to either of the study antecedents, exerting effort is related to job satisfaction but not to organizational commitment. Similarly, the current interviewees agreed that information sharing positively affects their performance and work-related attitudes. There was disagreement, however, as to whether effort increases through the two practices. In the eyes of some interviewees, their motivation was so high that no external factor might raise it. Hence, both analyses imply that the cognitive variable is the primary mediator, at least for the present sample. Indeed, unexpected results of one methodological approach could be explained by bias; the accord of both methods validates the inference, although further evidence is required for generalization beyond the current organizational and national environment.

In a sense, however, the qualitative analysis revealed a deeper insight into the nature of the loose and tight practices than the quantitative analysis. Only the former reflected the dynamic relationship between both components of the integrative leader approach, the loose and tight. PDM was more central for employees without supervisory positions than for their counterparts with such positions. The reverse trend characterized the attitudes of both parties to leader directiveness. It appears that subordinates perceived the influence upon decisions stemming from both the upper as well as the lower organizational levels. Conversely, the managers believed that it goes primarily from top down. Moreover, many subordinates required full and reliable information sharing for all employees. Conversely, most of the managers thought that information is essential for employees who are frequently required to make decisions but not to those employees who are not. Whether the members' role in decision-making is central or marginal, it is legitimate, according to both interpretations. Further, the two interpretations share the notion that as the leader—member cooperation increases the aggregated influence of both parties on the decisions may grow (Kouzes & Posner, 1988; Likert, 1961; Sagie & Koslowsky, 1994, 1996; Tannenbaum, 1968). In a sense, this shared view is the essence of the loose—tight notion.

Another issue examined only through interviews was the effect of the loose-tight practice on performance. Although keeping the anonymity of the respondents did not allow us to pair their self-reports with hard data or performance appraisals, the loose-tight model indicates that leader directiveness and PDM also affect behavioral outcomes, including task- and contextual performance, teamwork, withdrawal, and misbehavior (Borman & Motowidlo, 1993; Sagie & Koslowsky, 2000). Indeed, our interviewees addressed performance (Appendix 1, question 8) and their responses supported the proposed causal link. As in the case of attitudinal outcomes, information sharing and exerting effort are supposed to mediate this effect. We encourage future researchers using the loose-tight model to tap behavioral data.

Limitations of the current study should not be overlooked. Although the qualitative analysis helped to confirm the findings of the quantitative analysis, its exploratory nature caused the interviewer to ignore specific propositions of the loose–tight theory. For example, no questions were posed

concerning the distinction between substance (requiring a loose approach) and framework (requiring a tight approach) that is at the theory core. Future research should verify this issue. Also, our reliance on new scales (e.g., information sharing and exerting efforts) without prior validation limits the generalizability of the study conclusions. Moreover, generalizing from the responses of a single sample in a specific society to the behaviors of employees throughout the world is not so simple. One may claim that the results fit better individuals who are characterized, like the current sample, by low power distance and moderate individualism and masculinity. However, the aggregated findings gathered in various countries including the USA (Adler, 1993), Japan (Hull *et al.*, 1988), and Malta (Cassar, 1999), and in the context of different theoretical frameworks (e.g., Vroom–Yetton theory, transformational leadership), may provide support to the idea that leaders who are loose but tight are not as rare throughout the globe.

Another limitation is the possible single source/single method bias effect on the quantitative results; we cannot rule out the possibility that one variable (for example, the respondents' job satisfaction) influenced the perception of other variables (such as the interpretation of their leader's directiveness). Also, the conclusions achieved through the qualitative data analysis rely on a single researcher. However, the combination of both analysis types and of different hierarchical levels in our interviews partially compensates for this bias.

The loose–tight approach may have implications for both future research and practice. If supported by continued research, the notion of blending leader practices to produce the necessary resources for effective performance and satisfaction has implications for managers' training and development. The interviews showed that such a combination, if used effectively, is certainly welcome by employees. Future applied research is needed to determine whether the leader can learn to use both the loose and tight practices, even though one may come more naturally. One implication of the present study that requires further support is that leaders need to master both practices and to know how to combine them in applied settings. In sum, the message of the present findings is that managers can improve workers' attitudes by providing them with a clear sense of direction (or vision) and by encouraging more opportunities for employee initiatives, autonomy, and participation. Further broadening of the theoretical loose–tight perspective may help in unravelling the mysteries of organizational leadership.

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## **Appendix: Questions Used in the Interviews**

- 1. Please describe a good manager.
- 2. Describe your experiences with, and expectations from, your department manager; how does he/ she lead the department?
- 3. To what extent are managers in your department directive and/or participative? Please give an example.
- 4. To what extent do you have a say in your department? Please give an example.
- 5. To what extent do managers transfer information and knowledge in your department? Please give an example.
- 6. What in the work setting (if at all) affects your work knowledge and information?
- 7. What in the work setting (if at all) affects your motivation?
- 8. What in the work setting (if at all) affects your performance at work?
- 9. What in the work setting (if at all) affects your job satisfaction?
- 10. What in the work setting (if at all) affects your organizational commitment?

*Note*. Department was substituted by division, and department manager by division manager, in some of the interviews.