

## Managerial Quality, Administrative Performance and Trust in Governance: Can We Point to Causality?

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*The relationship between managerial quality, administrative performance and citizens' trust in government and in public administration systems is a field of study that so far has not received adequate scholarly attention. This article explores some interrelationships between these variables and empirically tests between causality, if it exists, between performance and trust. Applying a technique of structural equation modelling (SEM) with LISREL 8.3 the study examined a sample of 345 Israeli citizens and compared three alternative models. The second model that showed a quality → performance → trust relationship fitted the data best. However, the third model also had some advantages worthy of elaboration. Thus, we concluded that administrative performance may be treated as a precondition to trust in governance rather than trust serving as the precondition to performance. The article ends with further discussion of the findings and their meaning in light of the democratic, bureaucratic and new public management theory.*

Reforms and improvements in public administration systems are based on a number of core fundamentals. Among these, managerial quality, administrative performance, responsiveness, citizens' satisfaction and democratic values such as trust, faith and confidence in government are the most important principles. To date, many studies have focused on one or more of these themes and have shown how each may strengthen our understanding of administrative and political environments. Nonetheless, few efforts have been made to explore the accurate relationship between these principles that are so essential for both effective bureaucracies and stable democracies.

For example, improving managerial quality has become a prime goal of many state agencies that seek effectiveness, efficiency and the improved performance of their employees (Holzer and Rabin 1987; Kahn 1993; Koch and Cabula 1994; Staats 1988). Similarly, the performance of public sector organisations has come under greater scrutiny in light of the new public management (NPM) doctrine that advocates the acquisition of managerial knowledge from successful private firms worldwide through

a process of benchmarking or policy learning (Ammons 1999; Halachmi 2002). The study of performance in the public sector has further benefitted from interdisciplinary inputs rooted in various other social sciences (ie organisational psychology, politics, sociology and communication). Furthermore, many studies have focused on citizens' perceptions and attitudes towards governments and towards bureaucracies' outcomes (Vigoda 2000, 2002b). This process has resulted in higher demands being placed on governmental agencies, public managers and public administration to improve services for citizens. Hence, overloaded bureaucracies have placed a heavy burden on democracies and the need to balance managerial, administrative and political-democratic pressures has become a major goal for policy-makers and policy implementers (Box *et al.* 2001; Thompson 1983).

Nonetheless, and quite surprisingly, there has been little effort to investigate the more specific relationships between various variables in this context (Bouckaert and Van de Walle 2001; Vigoda 2002; Van de Walle and Bouckaert 2003). For example, what is the impact of

managerial quality on performance and trust in government? What, if any, is the role of administrative performance in determining citizens' trust in government? Is it possible that trust in government influences citizens' assessments of government performance? Finally, why is it so important to study the exact nature of these relationships and what benefit does such research bring to our knowledge of modern bureaucracies and democracies?

This article hopes to advance our understanding of the above questions. It is especially interested in exploring the causal relationships between administrative performance and citizens' trust in government and in public administration. This relationship can take the form of a direct linkage, where managerial quality directly affects citizens' trust in government, which then leads to higher levels of administrative performance. However, it may also support the indirect approach where administrative performance functions as a mediator between managerial quality and citizens' trust. Finally, beyond its theoretical and empirical benefits, this study may have some useful practical implications for policy-makers as well as for public officials and managers in the public sector. If administrative performance leads to a greater degree of trust in government, then our current approach to the study of public administration through the NPM doctrine, which emphasises the role of citizens as clients or customers, will be validated. Alternatively, if the immediate and most powerful impact of managerial quality is on citizens' trust and faith in government, then some major changes need to be made to our current managerial thinking and democratic vision.

### **Managerial Quality and its Meaning in Public Administration**

Studies in business management found managerial quality to be a multifaceted concept. Its complexity derives from two major approaches: (1) the economic-market-derived approach and, (2) the behavioural and human resource management approach. According to the more conventional, market-derived view, managerial quality is defined by financial measures. The quality of a managerial cadre is best expressed by financial values such as pay, salaries and profits. For example, Kahn (1993) defined

organisational quality as predicted pay based on the salary of managers. He found positive relationships between managerial quality and baseball players' performance and concluded that managerial quality is a prime asset for every organisation due to its impact on performance. In addition, Koch and Cabula (1994) examined managerial quality in American firms from 33 industries. They found that highly profitable firms, less risky firms and firms that grow faster as well as better reward their stockholders and are perceived by corporate CEOs as better managed. However, these variables explained only about 30 percent of the variance in management quality and excellence. Thus, Koch and Cabula (1994) suggested that financial and market-derived measures are not sufficient to explain the wider meaning of managerial quality that, according to their view, remains a complex variable.

An alternative human resource approach treats managerial quality quite differently. According to this view, managerial quality denotes the success of managers as people-leaders and the proficiency of their activities as decision-makers. This definition comprises various human skills, chosen organisational strategies, managerial culture, norms and entrepreneurial ventures. It represents accessible human assets and inputs that every effective organisation should have. A review of the relevant literature, as taken from the human resource bridge, reveals several core elements of managerial quality. These are (1) human quality and professionalism, (2) acceptance of transparency and accountability as leading administrative values, (3) commitment by organisational members to morality and ethics as desirable codes of behaviour, and (4) innovation and creativity of public personnel. The actual meaning of these constructs and the way they relate to each other need better explanation and will be elaborated upon.

*Human quality* refers to the merit and professionalism of public personnel as seen by objective assessors. Excellent managers in all sectors are expected to provide employees with adequate and supportive work environments. It is the managers' responsibility to provide a vision, but at the same time to suggest tools for translating this vision into actions. As mentioned in various other studies, an efficient, skilful, professional and committed public

service supports governments in their functioning (Hart and Grant 1989; Holzer 1989; Holzer and Rabin 1987; Staats 1988; Vigoda 2000).

In addition, *transparency and accountability* provide an indication as to internal mechanisms of managerial self-criticism and willingness to improve existing processes and procedures. Transparency is usually crucial in financial and budgetary policy, but it is also recommended as a good strategy for building commitment among clients and citizens. Bureaucracy that is willing to work under transparent conditions signals that it has nothing to hide and that it leans on quality foundations strong enough to squelch criticism by the public and constantly seeks self-improvement (Finkelstein 2000). Accountability relies on transparency, and the two terms go hand in hand when seeking to explore new avenues for organisational improvement and development. Accountability refers to the duty of governments and public officials to report their actions to citizens, and the right of the citizens to take steps against those actions if they find them unsatisfactory. As suggested by Halachmi (2002), accountability requires us to discern who is accountable, for what, to whom, in what respect and how to assess it. Undoubtedly, both transparency and accountability are crucial elements of quality management in modern democracies.

Along with the need for professionalism, transparency and accountability, managerial quality also leans on a wider set of values, norms and unwritten rules that build a fair and just administrative culture. Hence, standards of *morality and ethics* may be seen as the hidden underbelly of bureaucracies. While every bureaucracy is characterised by a formal set of regulations and laws, their implementation is weighted by the way in which they are interpreted by managers (DeLeon 1996; Gawthrop 1976; Lui and Cooper 1997; Richardson and Suzuki 1995; Wilenski 1980). All the above studies have agreed that managerial quality also encompasses ethical standards, integrity, fair and equal treatment to citizens as clients, or appropriate criteria for rewards to public servants.

Finally, a prominent component of managerial quality is *innovation and creativity*, which serves as an essential engine for renewal, development and continuous advancement to-

wards the collective organisational vision. Traditionally, public sector organisations are viewed as uncreative and stagnant entities. Still, managerial innovation and creativity are essential for those administrators who and systems which seek to perform better and compete successfully with other organisations from the private sector or from the third sector (Golembiewski and Vigoda 2000; Schall 1997).

### **Administrative Performance and Trust in Government**

#### *Administrative Performance: Measuring for Success*

The search for higher performance in public administration systems draws on a continuous exploration of measurable output and outcome indicators. This doctrine as implemented in the public sector implies that *if you can't measure a public output/outcome, it probably isn't worth consideration*. In line with recent reforms in public administration, especially those stemming from the NPM paradigm, many performance indicators (PIs) have been developed to evaluate administrative performance (Berman 2000; Nyhan 1995). Nonetheless, two of the most commonly used perceptual measures are (1) attitudes towards the general responsiveness of governments and public administration and, (2) detailed evaluations of citizens' satisfaction with governmental services.

Responsiveness to citizens as clients may be regarded as the Holy Grail of modern public administration. A responsive bureaucracy delivers services and goods to its destinations with optimal speed and accuracy (Chi 1999; Vigoda 2000). Thomas and Palfrey (1996) argued that responsiveness attests to the speed and accuracy with which a service provider replies to a request for action or for information. Speed can refer to the waiting time between citizens' request for action and the reply of the public agency. Accuracy means the extent to which the provider's response is appropriate to the needs or wishes of the service user (Rourke 1992; Stewart and Ranson 1994).

Beyond the idea of measuring the general responsiveness of public agencies there is also a need to evaluate in greater detail the satisfaction from services received. That is to say, administrative performance means a comprehensive, distinctive, reliable and continuous

assessment of citizens' satisfaction from governmental operation in various fields. In recent decades satisfaction measures have become prevalent in state and federal agencies. They were largely prompted by the client canon of NPM and by the vision of 'putting citizens first' (Caiden and Caiden 2002). Hence, public administration encourages the use of satisfaction measures as part of performance evaluations both inside public agencies and around them (eg Poister and Henry 1994; Swindell and Kelly 2000). It should also be noted that this strategy has been adopted despite some limitations it has and some criticism it needs to address (Stipak 1979, 1980).

### *Trustworthy Government: The Key for Performance or its Consequence?*

Trust is a psychopolitical concept. To trust a person, a group or an institution is to assume their reliability, to believe that they will act 'as they should' (Barber 1983; Citrin and Muste 1999). Psychologically, trust is an informal contract between at least two parties that brings some certainty into relationships. If you trust someone you expect him or her to fulfil some unwritten agreements, and thus you feel free to plan and predict under the assumption that the agreement will be honoured. Hence, trust has some major political implications that are relevant for national-level and community-level relationships such as those between citizens and central or local government or citizens and public administration (Nye *et al.* 1997).

As suggested by Citrin and Muste (1999), political trust refers to the faith people have in their government and to the level of support that citizens give to leaders, policy-makers and the entire political and executive system. Trust also reflects the citizens' belief that the government operates fairly and is deserving of respect and obedience. Thus, trust is related to the effectiveness of government policies. The level of political trust can affect the stability of the institutions that make or enforce these policies. Such stability is necessary for the creation of growth and progress in governments and in their operative branches (ie public administration) that are obligated to serve the public on the basis of the 'hidden agreement, between rulers and the people'.

Nonetheless, the linkage between political trust and administrative performance is in

dispute. Some studies suggest that building trust in government is possible only when quality managerial foundations promote an administrative system that operates at a higher level of efficiency and effectiveness. According to this view, political trust cannot be created and maintained where governments fail to deliver to the public some satisfactory services and goods (Erber and Lau 1990; Vigoda 2002b). However, another approach treats trust in the government as a key for the emergence of high-performing agencies of public administration. This view suggests that building trust with citizens offers state leaders enough legitimacy to make decisions that are impossible without massive public agreement. Similarly, Citrin and Muste (1999:465) suggest that 'governments enjoying greater public support are able to function more smoothly and effectively than those with less public trust'. Similarly, Ruscio (1997) stated that effective organisations require learning and knowledge, and learning requires trust. Moreover, widespread public trust also infuses the political system with a basic source of power that enables more extensive administrative operation aimed at the interests of the public. Thus, if we want high-performing organisations, we need to find ways to promote trust.

Hence, the paradoxical question remains: Is trust a result of quality management and efficient administrative systems or is it a mediating factor between various constructs of managerial quality and administrative performance?

### **The Paradox of Performance and Trust: Two Alternative Models, and an Extra Midrange One**

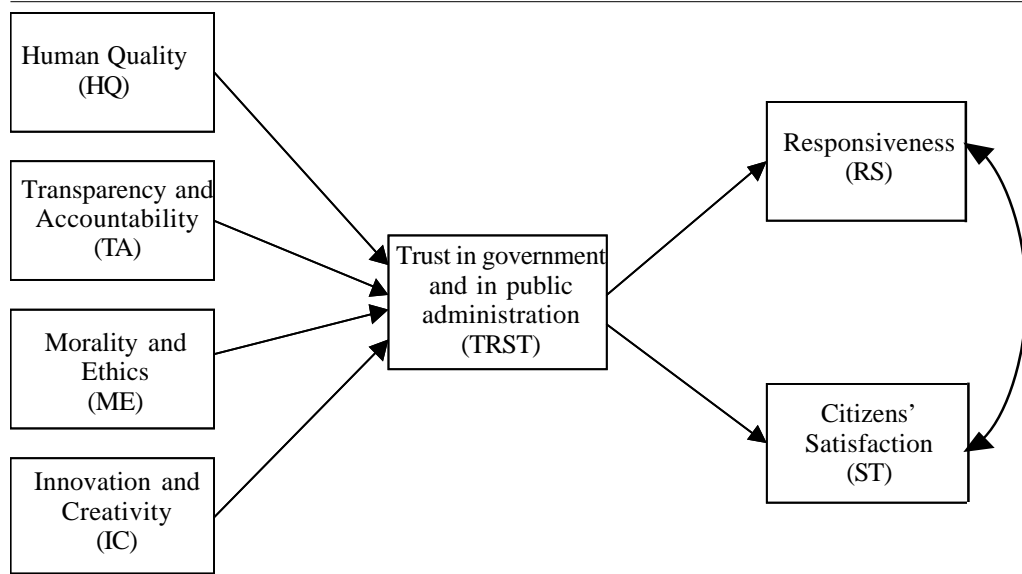
Figure 1 presents the three alternative models for the relationship between managerial quality, administrative performance and trust in government and in public administration. Assuming that managerial quality is an independent variable responsible for variance in both administrative performance and/or trust in government, we first suggest two alternative models: (1) trust in government leads to higher levels of perceived administrative performance, namely to responsiveness and citizens' satisfaction, and (2) perceived administrative performance (responsiveness and citizens' satisfaction) leads to higher levels of trust in government. In addition, a third model is depicted which

hypothesises that: (3) trust in government is affected independently by responsiveness and satisfaction, yet responsiveness also has a clear effect on citizens' satisfaction. Let us explain the three models in more detail.

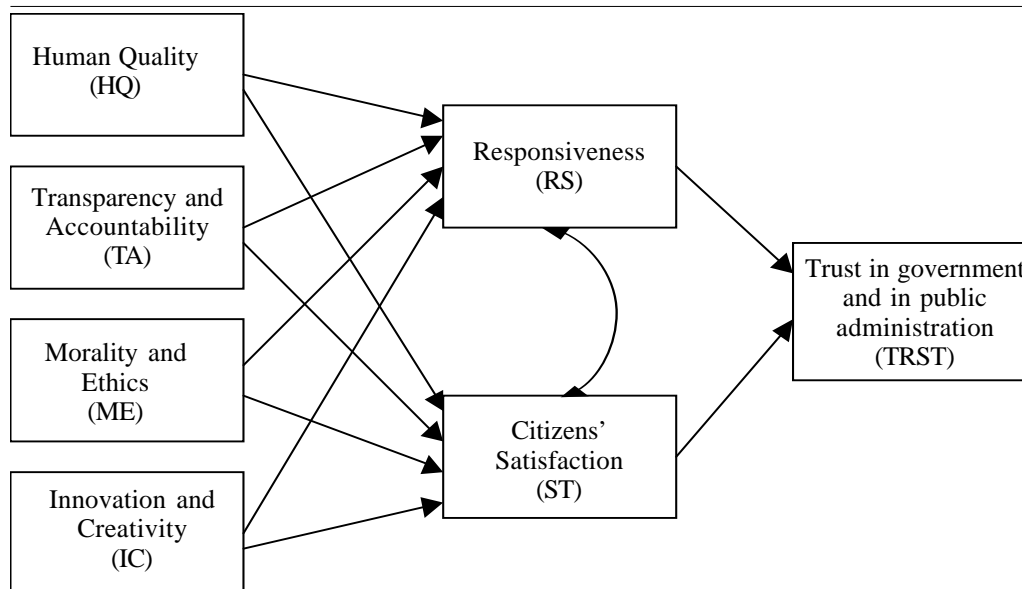
*Model 1: Trust Leads to Performance*

According to model 1, trust in government and in public administration mediates the relationship between a set of variables representing managerial quality and the two components of

*Model 1: Trust Leads to Performance*



*Model 2: Performance Leads to Trust*



**Figure 1: The Research Models**

Model 3: Midrange Effects

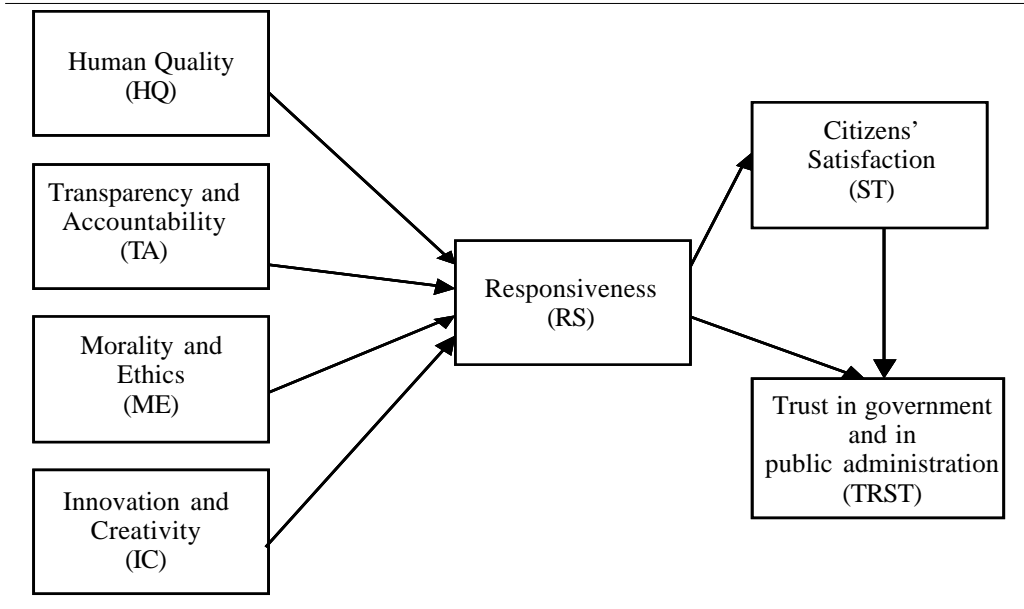


Figure 1: The Research Models (continued)

administrative performance, namely responsiveness and citizens' satisfaction. This model follows the line adopted by Citrin and Muste (1999) and Ruscio (1997). It represents the thesis that trust is a precondition for the emergence of better performance. According to this idea, citizens' perceptions of governmental responsiveness as well as their degree of satisfaction regarding services received are both affected by the level of political faith and trust among the people. Responsiveness and satisfaction are built only when a reasonable level of political trust is maintained, and individuals have good reason to assume that state leaders and public officers are doing their best to promote services for the people.

Model 2: Performance Leads to Trust

Model 2 represents the alternative relationship where various components of managerial quality affect administrative performance, leading to higher levels of citizens' trust in government and in public administration. This model is more in line with the view of Erber and Lau (1990) and Nye *et al.* (1997) who treat political trust among citizens as another consequence of the operation of the state and its administrative

branches. In fact, this is the more prevalent view in political science and has been adopted by Verba *et al.* (1995). To create trust in government and in the public service, state leaders and public officers need to improve outputs and outcomes to a level that builds a positive image of the government and provides satisfaction for its people. Only then can a real level of trust be achieved, a level necessary to support the democratic foundations of the state.

Model 3: Midrange Effects

In addition to models 1 and 2, model 3 offers a more complex pattern of relationships. As with model 1 and 2, this model also assumes that responsiveness and satisfaction are aspects of administrative performance that need to be treated separately. Moreover, as indicated in model 2, trust is again suggested as a dependent variable resulting from administrative performance. However, unlike model 2, this model distinguishes between the two subscales of administrative performance to create an additional midrange effect where responsiveness directly leads to satisfaction. This stands sharply in contrast to model 2, which hypothesises only a general correlation between these facets.

Thus, a clear causal path is delineated where citizens' satisfaction results from governmental responsiveness. It is this satisfaction to responsiveness alone that may lead to changes in the peoples' level of trust.

## Method

The study was based on a survey of 345 Israeli citizens who were asked to provide their perceptions and attitudes towards public services and public officials on the national and local levels. Data were collected during May–July 2001 by a random sampling method. Interviewers asked participants to provide information about their attitudes to managerial quality, responsiveness of public sector agencies, satisfaction with services and trust in various governmental institutions. Of the total sample, 59.8 percent were men and 40.2 percent women, 54.3 percent were married, and 18.6 percent were new immigrants. Average age was 33.2 years (s.d. = 10.35); 33.5 percent defined themselves as 'Ashkenazim', 21.7 percent as 'Sefaradim', and 44.8 percent as 'native Israelis'. With regard to schooling, 41.1 percent had an elementary or high school education and 58.9 percent had attended a university or completed studies in higher education. With regard to political orientation, 37.2 percent of the participants defined themselves as supporters of the political right in Israel, 23.8 percent supported the central parties, and 39.3 percent supported left-wing parties. With regard to socioeconomic level, 70 percent were Jews, and a breakdown by income showed that 40.2 percent had a low monthly net income (up to NIS 4,000/\$900), 37.3 percent had an average income (NIS 4,000–7,000/\$900–1,600), and 22.5 percent had a high income (above NIS 7,000/\$1,600). Note that the research sample was highly representative of the overall Israeli population. The demographic characteristics of the sample were quite similar to those of the total population in Israel as reported in the Statistical Yearbook for 2000. However, the sample group was slightly younger and better educated than the average Israeli population.

## Measures

**Human quality (HQ):** This variable refers to the professionalism and quality of public personnel (Vigoda 2002a). It was examined using two subscales: (1) quality of administrative leadership

and (2) quality of employees. The first subscale reflected citizens' views as to the quality and professionalism of the leading administrative group, managers and senior bureaucrats. Three items were used to test this subscale: (1) 'public leadership and senior management in the Israeli public service are well qualified and with high professional standards'; (2) 'the Israeli public service is managed appropriately and it is in good order'; and (3) 'the leaders of the Israeli public service have a clear vision and long range view as to where we are going'. The second subscale reflected citizens' views as to the quality and professionalism of street-level employees in the public service. This subscale was also measured by three items: (1) 'employees of the Israeli public service are professionals and highly qualified'; (2) 'employees of the Israeli public service show understanding, care, and willingness to serve the citizens'; and (3) 'the Israeli public service employs only high quality individuals'. Respondents were asked to provide their attitudes on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Internal reliability of the overall six-item scale was 0.87.

**Transparency and accountability (TA):** This variable represents the acceptance of criticism, a sincere desire to improve poorly functioning programs or performance in state services, and a willingness to be exposed to outside evaluators in order to improve future results (Finkelstein 2000; Halachmi 2002). It was measured by five items: (1) 'Israeli public administration takes public criticism and suggestions for improvement seriously'; (2) 'today, more than ever before, the public system is willing to be exposed to the public and to the media'; (3) 'public administration treats defects found by the state comptroller seriously'; (4) 'public administration sees criticism as an important tool for future service improvement'; and (5) 'Israeli public administration encourages public employees to accept criticism and use it to improve services for citizens'. Respondents were asked to provide their attitudes on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Internal reliability of the overall scale was 0.84.

**Morality and ethics (ME):** This variable describes general attitudes towards ethics, morality and the fairness of civic servants. It consists of three items: (1) 'in Israeli public

administration, most civic servants are disinterested and honest'; (2) 'citizens of this country receive equal and fair treatment from public officials'; and (3) 'in Israeli public administration, exceptions from good moral norms are rare'. Respondents were asked to report the degree to which they agreed with these items. The scale ranged from 1 (strongly disagree) to 5 (strongly agree) with higher scores representing a more positive (moral and ethical) view of the public service in the city. Internal reliability of this variable was 0.77.

**Innovation and creativity (IC):** This variable reflects entrepreneurial actions, flexibility, the willingness to adopt new ideas and the initiation of original enterprises by public servants in order to improve services to the people. It was measured by a three-item scale: (1) 'Israeli public administration formulates promising new ideas which improve citizens' quality of life'; (2) 'compared with other countries, Israel occupies a leading position in developing useful projects for the public'; and (3) 'advanced technology is involved in improving quality of service in this country'. Respondents were asked to report the degree to which they agreed with the items on a scale from 1 (strongly disagree) to 5 (strongly agree). Internal reliability of this variable was 0.77.

**Trust in government and in public administration (TRST):** Trust in government and in public administration refers to the level of confidence citizens have in state authorities and in administrative branches of various kinds (Citrin and Muste 1999). It was measured using an 18-item scale. Respondents were provided with a list of various state agencies and public organisations (eg Ministry of Health, public hospitals, judiciary system, police and prisons, public broadcasting system, Ministry of Transportation, state comptroller's office, the central bank). They were asked to indicate how much trust they had in each of these on a five-point scale from 1 (very low trust) to 5 (very high trust). Internal reliability of this scale was 0.85.

**Responsiveness (RS):** Responsiveness refers directly to the accuracy and speed of public sector reaction to citizens' demands. Relying on the theoretical conception of Thomas and Palfrey (1996), this variable was measured by four items aimed at evaluating the speed and accuracy of public services provided to the residents by the city authorities. The items

were: (1) 'Israeli public administration responds to public requests quickly'; (2) 'Israeli public administration is efficient and provides quality solutions for public needs'; (3) 'Israeli public administration is sensitive to public opinions and makes a sincere effort to support those citizens who need help'; and (4) 'citizens' appeals to public agencies are treated properly, concisely, and within a reasonable period of time'. Respondents were asked to report the degree to which they agreed with the items. The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). Internal reliability of the scale was 0.88.

**Citizens' satisfaction (ST):** This variable assembled detailed information regarding citizens' satisfaction from various public services on the national and communal level. Respondents were given a list of public institutions and organisations that deliver different services. They were asked to report how satisfied they were with the treatment they received either when they personally arrived at the city departments or contacted them by phone. The services that were studied were: (1) hospitals and public clinics, (2) public schools, (3) courts, (4) Ministry of Interior, (5) labor ministry and employment services, (6) police, (7) transportation ministry, (8) public transport/ buses, (9) public transport/rails, (10) public transport/EI-AI (Israeli Airlines), (11) public transport/airport authority, (12) public postal system, (13) local municipality, (14) electricity company, (15) Ministry of Religious Affairs, (16) welfare system and national security, (17) telecommunication services, and (18) tax system. Internal reliability of the scale was 0.81.

### *Data Analysis*

A structural equation modelling (SEM) with LISREL 8.3 was applied for the assessment of the three competitive models. A covariance matrix served as an input for the path analysis. It was built upon seven factors that were also included in our models, namely: HQ (human quality), TA (transparency and accountability), EM (ethics and morality), IC (innovation and creativity), RS (responsiveness), ST (citizens' satisfaction), and TRST (trust in government and in public administration). Note that while the usual approach is to estimate structural relationships between variables that are free of



measurement errors, we employed another technique that was more appropriate for our case. Bollen (1989) showed that the ratio of the number of observed variables to the sample size should be at least 1:5 in order to allow the common estimation approach. This criterion holds in our case (58:345 or 1:5.9). However, he also argued that when the ratio between latent and observed variables is higher than 1:5 (7:58 or 1:8.3 in our case), the common approach of examination is not a recommended measure. A better alternative is to treat the multi-item scales as single indicators of each construct. Accordingly, we also corrected for measurement errors in the models by the following procedure. The random error variance associated with each construct was equated to the value of its variance multiplied by the quantity one minus its estimated reliability (Bollen 1989). Results of this procedure, however, diverged substantially from the uncorrected single-indicator analysis.

In addition we have used seven indices to assess the fit of the models. The first was the chi-square test, which is the most basic and essential for the nested-model comparison. A low and non-significant value of chi-square represents a good fit to the data. The chi-square test is sensitive to sample size, so the ratio of the model chi-square to degrees of freedom was used as another fit index. In this study a ratio up to 2 was considered a satisfactory value. In addition, some other fit indices are also reported as less sensitive to sample-size differences and to the number of indicators per latent variable increase (Medsker *et al.* 1994). Four of these indices were used in our study: the Relative Fit Index (RFI), the Comparative Fit Index (CFI), the Normed Fit Index (NFI) and the Goodness-of-Fit Index (GFI). The RFI and the CFI were developed to facilitate the choice of the best fit among competing models that may differ in degree of parameterisation and specification of relations between latent variables (Bentler 1990; Bollen 1989). They are recommended as being the best approximation of the population value for a single model. The closer their value to 1, the better the fit. The NFI was proposed in earlier studies and is additive for the nested-model comparison (Bentler and Bonett 1980). Its value should be close to 1 to indicate a good fit. The last indicator, the GFI, does not depend on sample size explicitly and measures how much *better* the model fits than no model at all.

Both these measures should be between 0 and 1, and a value higher than 0.90 is considered very good.

Moreover, to determine the superiority of one model over another, one must consider path coefficients that indicate the quality of the chosen alternative as a 'correct causal model'. Joreskog and Sorbom (1994) defined this as the 'plausibility criterion'. This criterion means that the path coefficients in the plausible better-fit model adhere well to the general theoretical conception and to the hypotheses. This adherence should hold in terms of magnitude as well as in the expected directions. Accordingly, a model that fits the data well, but many of whose theoretical paths do not support the theoretical arguments, cannot be defined as correct. Some balance must be made between the fit indices and the theoretical predictions or hypotheses regarding the relationships between research variables. Hence, the accuracy of the theoretical predictions can be tested by the path coefficients in each of the models, as was done in this study.

Finally, we have calculated the percentage of explained variance for each dependent variable in all three models. Low percentage of explained variance in a certain model indicates that this model is not correct (Saris and Stronkhorst 1984). Various reasons are mentioned for a low level of explained variance. Among them, measurement errors, omission of important variables from the model or inaccurate definitions of the interrelationships of the variables in the model are the most prevalent ones. Thus, the explained variable is another useful piece of information for the assessment of the correctness of a model.

## Results

### *Descriptive Statistics and Intercorrelations*

Table 1 presents descriptive statistics as well as intercorrelations between the variables. Means, standard deviations and Cronbach alpha levels were within reasonable limits. Cronbach alphas ranged between 0.77 for responsiveness and equity and morality, and 0.87 for human quality. The correlations between the variables were relatively high, but did not exceed the level of 0.70 that in other cases indicates a problem of multicollinearity.

*Models' Assessment*

Evaluation of the research models relied on several parameters: (1) a goodness-of-fit summary for each model which is presented in Table 2; (2) path coefficients which are presented in Table 3; and (3) the explained variance parameters, also displayed in Table 3. Together they enabled a reasonable evaluation of the correctness and theoretical adaptability of the models.

Table 2 presents seven major fit indicators that testify to the quality of the models. While many other indicators are available through the LISREL program we have decided, for reasons of brevity, to include in our detailed analysis only a limited number of fit indicators. However, we confirmed that these measures were in line with other indicators that are not presented here. As clearly shown in Table 2, model 2 (performance leads to trust) best fits the data. Its chi-square value was not significant, and the chi-square to df ratio was lower than 2. The RFI, NFI, NNFI, CFI and GFI were relatively high and ranged between 0.97 and 1.00. All these values indicate that the model fits the data better than models 1 and 3. Both models 1 and 3 had a significantly lower fit with the data and had to be rejected. Their chi-square test produced significant values, indicating that the models did not cohere with the data; chi-square to df

ratio ( $\chi^2/df$ ) was close to 5 and 8 (respectively), which exceeds the recommended value of 2. The RFI, NFI, NNFI, CFI and GFI were all lower than in model 2.

Table 3 presents path coefficients and explained variance for the models. As can be seen, all path coefficients were in the expected positive direction. Human quality was positively related to responsiveness in models 2 and 3 (0.30 and 0.33 respectively) and to satisfaction and trust (0.25 and 0.21 respectively in model 2 and in model 1). Transparency and accountability were positively related to responsiveness in models 2 and 3 (0.28 and 0.23 respectively). Morality and ethics were positively related to responsiveness, satisfaction and trust in models 3, 2 and 1 (0.13, 0.13 and 0.14 respectively). Innovation and creativity were positively related to responsiveness in models 2 and 3 (0.34 and 0.35 respectively). Furthermore, trust was positively related to responsiveness and satisfaction in model 1 (0.96 and 0.73 respectively), as well as in model 2 (0.17 and 0.68 respectively) and in model 3 (0.15 and 0.68 respectively). Finally, responsiveness and satisfaction were also positively related in model 3 (0.37).

However, an analysis of the explained variance raises some questions as to the superiority of model 2. As is evident, it was model 3

**Table 1: Descriptive Statistics and Intercorrelations for the Study Variables (reliabilities in parentheses)**

Variable	Mean	S.D.	1	2	3	4	5	6	7
1. Human Quality (HQ)	2.71	0.73	(0.87)						
2. Transparency and Accountability (TA)	2.72	0.78	0.60*	(0.84)					
3. Morality and Ethics (ME)	2.64	0.85	0.57*	0.47*	(0.77)				
4. Innovation and Creativity (IC)	2.70	0.83	0.58*	0.61*	0.53*	(0.77)			
5. Responsiveness (RS)	2.40	0.81	0.68*	0.67*	0.58*	0.68*	(0.88)		
6. Citizens' Satisfaction (ST)	3.11	0.51	0.47*	0.33*	0.40*	0.38*	0.48*	(0.85)	
7. Trust in government and in public administration (TRST)	3.02	0.55	0.47*	0.43*	0.40*	0.38*	0.48*	0.63*	(0.81)

N = 345, \*P < 0.001

**Table 2: Goodness-of-Fit Summary for the Research Models**

Model/Description	df	$\chi^2$	P	$\chi^2/df$	RFI	NFI	NNFI	CFI	GFI
1. Trust leads to performance	8	216.34	0.0000	27.04	0.45	0.79	0.46	0.79	0.85
2. Performance leads to trust	4	6.47	0.17	1.62	0.97	0.99	0.99	1.00	0.99
3. Midrange effects	7	23.15	0.0016	3.31	0.94	0.98	0.96	0.00	0.98

N = 345, P = Significance

**Table 3: Path Coefficients and Explained Variance (R<sup>2</sup>) for the Models**

Model/Description	Model 1: Trust leads to Performance	Model 2: Performance leads to Trust	Model 3: Midrange Effects
HQ→RS	–	0.30*	0.33*
HQ→ST	–	0.25*	–
HQ→TRST	0.21*	–	–
TA→RS	–	0.28*	0.23*
TA→ST	–	–0.04	–
TA→TRST	0.14	–	–
ME→RS	–	0.12	0.13*
ME→ST	–	0.13*	–
ME→TRST	0.14*	–	–
IC→RS	–	0.34*	0.35*
IC→TRST	0.04	–	–
TRST→RS	0.96*	–	–
TRST→ST	0.73*	–	–
RS→TRST	–	0.17*	0.15*
ST→TRST	–	0.68*	0.68*
RS→ST	–	–	0.37*
R <sup>2</sup> #			
RS	0.43	0.80	<i>0.81</i>
ST	0.60	<i>0.62</i>	0.35
TRST	0.44	0.34	<i>0.60</i>

\*P ≤ 0.05

#Highest value of explained variance in rows is in italics.

that exhibited the highest explained variance for the variable trust in government and in public administration (R<sup>2</sup> = 0.60) and for the variable responsiveness (R<sup>2</sup> = 0.81). These values were higher than the levels achieved by model 2 (R<sup>2</sup> = 0.80 and R<sup>2</sup> = 0.34 respectively). Model 2 showed a higher level of explained variance for the variable satisfaction (R<sup>2</sup> = 0.62) only, and model 1 displayed a higher level of explained variance than model 2 for the variable trust. Consequently, while model 2 fit the data best, it is still not a perfect model in terms of explained variance. Indeed, model 3 shows its advantages in this regard.

Despite some weaknesses in model 2, especially its limited level of explained variance in the variable trust, we concluded that this was the best model of those examined here. This model, which demonstrates the effect of managerial quality on administrative performance and only then on trust in government and in public administration, was better than the other

two models. It proved a very good fit with the data, a good magnitude of path coefficients in the expected directions, a reasonable level of explained variance and sound theoretical adaptability to our conceptual framework. Nonetheless, model 3, which depicts a set of relationships similar to those of model 2, also had its advantages. It indicates that our hypothesis that administrative performance leads to trust is more conceivable than the alternative pattern where trust is assumed to have an influence on performance. Moreover, it re-emphasises that our decision to demonstrate a clear causal link where responsiveness leads to satisfaction (rather than a general bi-directional linkage between these facets) has some merit.

## Discussion

This paper tried to deal with the puzzling question of causality among managerial quality, administrative performance and citizens' trust

in governments and in public administration. While there is almost no doubt that managerial quality is a necessary precondition for the enhancement of performance, as well as for trust in government, the exact relationship between these variables is far from clear. The paper asked whether administrative performance leads to a higher degree of trust in the government and in public administration or, alternatively, does the reverse line of causality better represent reality.

The answer to this question is complex. This complexity is rooted in the oft commented upon inherent tension between democracy and bureaucracy. For example, Thompson (1983: 235) suggested that 'democracy does not suffer bureaucracy gladly. Many of the values we associate with democracy — quality, participation, and individuality — stand sharply opposed to hierarchy, specialisation and impersonality we ascribe to modern bureaucracy'. In addition, Gawthrop (1996:205) argued that there is much confusion and hypocrisy between the concepts of democracy and bureaucracy. Citing the view of Dwight Waldo, he argues that hypocrisy emerges because 'the "dialectic" between democracy and bureaucracy offers extraordinary opportunities for confusion and self-delusion and invites self-serving opinions'. Moreover, 'both democracy and bureaucracy are multifaceted and controversial. When both are studied together, the opportunities for confusion and delusion are multiplied, given the human capacity for irrationality and ego-serving views of the world'.

However, despite this complexity we argue that a focused examination of causality among our research variables will help clarify the picture. We suggest that one set of relationships is, after all, more dominant than the other. According to our findings, managerial quality leads to administrative performance, while trust should be treated as a subsequent reaction by citizens to the services and goods received from governments and from public administration agencies. Putting it other way, our relatively strong support for model 2 and the higher explained variance of model 3 lead us to conclude that trust is built by the performance of governments and public administration rather than its being a driver of these outputs.

What are the implications of these results? First it should be noted that our study examined

one sample of Israeli citizens, and thus all theoretical and practical implications should be treated with caution. However, in the first part of this paper we noted that if administrative performance leads to higher and better trust in government, then our theoretical focus in the study of public administration should follow the NPM doctrine, which emphasises the role of citizens as clients or customers. In this paper we have actually rejected the alternative option where managerial quality has an immediate and powerful impact on citizens' trust and faith in government and ultimately on administrative performance. Thus, the paper provides support for advocates of the NPM paradigm who seek to improve the performance of governmental and administrative bodies and by so doing to strengthen the foundations of our democracy.

It is important to note that this support should be weighted against criticisms about the NPM approach that have surfaced in recent years (Box *et al.* 2001; Vigoda 2002c). For example, Box *et al.* (2001:608) argued that 'today's market model of government in the form of New Public Management goes beyond earlier "reforms", threatening to eliminate democracy as a guiding principle in public-sector management'. Similarly, Vigoda (2002) warned against the tyranny of NPM that downplays the willingness of citizens to engage in active political participation and seek control over administrative elites. Nonetheless, the fact that NPM directs public managers and political decision-makers to utilise business measures in order to reduce financial/budgetary waste as well as increase managerial quality and performance eventually leads to more public trust. This in itself is an important contribution to our democratic values. It is possible, however, that the NPM approach does introduce some shortcomings into the public system, but these should not prevent us from using the NPM vision in an appropriate manner. After all, the goal of NPM, as of other past and future influential administrative reforms, is to find the 'golden path' of balance between the economical/financial needs of the state on the one hand, and the social/ethical necessities of citizens as individuals on the other hand. Thus, it seems that NPM still has much to offer to our public administration and governmental institutions.

Finally, as with other studies of this kind, this research also has its limitations. First,

despite the unique power of the SEM technique in testing and evaluating causality, our data were not collected over time and thus limit the strength of the findings. We agree that much more could be said about causality among the examined variables in this study if, for example, managerial quality could be tested at time 1, administrative performance at time 2 (and/or 3), and citizens' trust in government and in public administration at time 3 (and/or 2). Therefore, our design was definitely not longitudinal, but tested causality using the unique characteristics of SEM and LISREL. Still, the fact that models 2 and 3 were clearly superior to model 1 allows us to conclude that the more accurate flow of causality is managerial quality → performance → trust, rather than managerial quality → trust → performance. Second, the findings were based on cross-sectional and self-report data, incurring the possibility of source bias (eg social desirability effect) or common method error. Nevertheless, the study reported sound psychometric properties in terms of reliabilities and variances of all research variables, which firmly supports the validity of the data and the findings. Finally, the data were collected in Israel and may reflect the managerial quality–performance–trust relationship in one culture only. We agree that further studies are needed to support these findings and yield a higher level of external validity.

However, beyond its limitations we believe that the current study has merit in that it examines an underdeveloped field of knowledge and attempts to provide an empirical answer to an interesting theoretical question. The findings of this study indicate that satisfied citizens (may) potentially be the great builders of modern democracy. It is more likely that they develop trust in government and in its executive branches when most of their essential needs and demands are fulfilled to a desirable level. However, this does not mean that they are also willing to become engaged in active political participation (Vigoda 2002b). Most of them still prefer to be bystanders and passive supporters of reforms in the public realm. Nevertheless, they have more confidence and faith in the government than they would have if the government performs poorly or public administration fails to deliver substantial public goods. The alternative possibility (Citrin and Muste 1999; Ruscio 1997) that trust in government and in public administration may also contribute to

the performance of bureaucracies was not supported in this study and still needs to be examined in future cross-cultural works and with other samples, methods and research designs.

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