# THE ORGANIZATIONAL CLIMATE QUESTIONNAIRE (OCQ)

# Adrian Furnham and Leonard D. Goodstein

Abstract: Although several organizational climate instruments are available, few have the formal psychometric characteristics necessary for practical use and few have been standardized on a broad international population. This 108-item questionnaire, which contains a seven-point Likert-type scale, has been developed on the basis of extensive pilot testing. Fourteen different climate dimensions are tapped by the instrument: role clarity, respect, communication, reward system, career development, planning and decision making, innovation, relationships, teamwork and support, quality of service, conflict management, commitment and morale, training and learning, and direction.

The instrument provides two scores for each of the fourteen dimensions: agreement (employee satisfaction with how things are done) and importance (the degree to which respondents believe that the item is a significant aspect of the way in which work is performed in the organization). These two scores provide a fourfold table of action steps: (1) ignore low agreement and low importance-areas unworthy of further consideration; (2) consider—high agreement and low importance—unimportant things done well (often misguided efforts that could be reduced); (3) celebrate—agreement and importance both high-management should celebrate the fact that these things are being done well; and (4) fix low agreement and high importance—things that need prompt attention.

increasing interest in the managerganizational climate is a topic ment literature. The initial interest in organizational climate usually is attributed to Kurt Lewin (1951) and his field theory of motivation. Managers became more aware of the importance of organizational climate through the work of George Litwin and his colleagues (Litwin & Stringer, 1968; Tagiuri & Litwin, 1968) and of Forehand and Von Gilmer (1964) and James and Jones (1964). The topic remains one of considerable theoretical and practical interest (Jackofsky & Slocum, 1988; Kozlowski & Doherty, 1989; La Follette, 1975; Payne, 1990; Qualls & Puto, 1989; Schneider, Brief, & Guzzo, 1996).

Organizational climate is defined as a psychological state strongly affected by organizational conditions, such as systems, structures, and managerial behavior. Organizational climate is a perception of how things are in the organizational environment, which is composed of a variety of elements or dimensions. As Tagiuri and Litwin point out (1968), there is no universal set of dimensions or properties for organizational climate. Rather, one must describe climate along different dimensions, depending on the kind of organization involved and which particular behaviors are studied. Tagiuri and Litwin consider climate to be a molar, synthetic, and changeable construct. Organizational climate is relatively malleable; changes in systems, structures, and managerial behavior impact the climate, while enduring group values and norms tend to stabilize the climate.

Although organizational climate is shaped by a variety of organizational factors, climate itself impacts both individual and group performance. Litwin and Stringer (1968) empirically demonstrate how different organizational climates impacted both individual and organizational performance in a variety of research settings. Schneider, Brief, and Guzzo (1996) provide similar evidence that organizational climate directly affects organi-

zational change efforts.

Organizational climate can be understood as a moderator variable, serving as an indirect link between job satisfaction and productivity. Caused by organizational structures, systems, and managerial behavior, climate directly affects job satisfaction which, in turn, impacts both individual and

organizational productivity.

Organizational culture refers to the relatively enduring set of values and norms that underlie a social system. An organization's culture provides a "meaning system" that provides members of a culture a way to attribute meaning and value to the endless variety of events that occur, both within and outside the organization. Climate is the more transitory of the two; changes in culture take time and considerable effort and typically must be preceded by systematic and consistent changes in the climate of the organization. Burke and Litwin (1989) provide a useful model of how climate and culture interact both with each other and with a myriad of other organizational variables.

A number of measures of organizational climate exist, including the trail-blazing instrument of Litwin and Stringer (1968), a fifty-item questionnaire that taps nine dimensions: structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity. Other instruments include the Organization Description Questionnaire (House & Rizzo, 1972); the Survey of Organizations (SOO) (Taylor & Bowers, 1972); the Business Organization Climate Index (Payne & Pheysey, 1971), which is based on Stern's (1967) Organizational Climate Index (developed to describe university climates); and many others. Two limitations that all these instruments share are poor internal reliability and weak validation data-inadequate psychometrics. Applied-research needs required the development of a new instrument, presented here, the Organizational Climate Questionnaire (OCQ).

Several considerations were paramount in developing the OCQ. First, the instrument should be comprehensive—covering all the salient dimensions of climate—but not overlong or redundant. Second, the instrument should be highly reliable, showing strong internal consistency. Third, the instrument should be valid, that is, have clear evidence that it does measure organizational climate. Four, the instrument should travel well, so that it can be used in different organizations and different cultures, permitting comparisons of the same or different companies internationally. Fifth, it should ask respondents to state the degree of importance of each element of the culture. This is not a feature of the preexisting instruments, which only tap the degree to which respondents agree or disagree that specific elements of organizational climate are present in their organization. Having a rating of importance, as well as agreement, is a way of assessing the validity of the questionnaire; items that measure climate should be regarded by respondents as of more than passing interest.

The OCQ is comprehensive and can be used as a before-and-after measure to evaluate the effectiveness of organizational change programs. Although the OCQ collects personal views and beliefs, these inevitably reflect the organizational structures and systems that affect them. As Payne (1990) points out, climate measures inevitably involve tructural issues because "social structures are designed to produce certain patterns of behavior and belief" (p. 79). In recognition of this concern, items on the OCQ are phrased to minimize this problem. Nevertheless, users of the OCO

and other such instruments must keep this important issue in mind.

#### **DEVELOPMENT OF THE QUESTIONNAIRE**

A review of the organizational climate literature in both academic and applied publications led to the identification of a number of dimensions. Items tapping each of these dimensions were written. These items were then reviewed by several directors of human resources in a large number of both large and small organizations as well as by a number of management consultants and teachers of organizational behavior and management. On the basis of this feedback, many changes were made: some dimensions were added, others were removed, and still others were collapsed or subdivided. In the end, fourteen dimensions remained, with a total of 108 questions.

#### Field Testing

The final questionnaire was field tested on two samples, both employees of an American-owned international airline. High levels of reliability (internal consistency) were obtained as was evidence of validity.

The first sample consisted of 204 British subjects, 110 males and 94 females, performing a variety of jobs from secretarial to engineering. They ranged in age from their early twenties to their middle fifties; forty-three held managerial positions, and 161 were nonmanagers. Length of service varied from new hire to over seventeen years, averaging twelve-plus years. These clearly were people who had experienced the organizational climate.

The second sample consisted of 345 employees, 177 males and 168 females, working in seven different European countries where the airline had operations. These employees, all of whom were fully fluent in English, held the same range of positions as those in the first sample, with a similar age range. There were sixty-seven managers and 244 nonmanagers. The length of service of the employees in the second sample did not differ significantly from that of the first.

Copies of the questionnaire, with postage-paid envelopes, were distributed to all employees, with a request that they be returned to the consultants for analysis. Despite the guarantee of anonymity, the response rate varied as a function of organizational segment and country, ranging from 40 percent to 80 percent. All employees were provided with extensive group feedback about two months after the surveys were conducted.

The OCQ asks respondents to read each item carefully and to decide how much they agree with the statement, using a seven-point Likert rating scale ranging from "strongly agree" (7) to "strongly disagree" (1). After rating all 108 items, respondents are asked to reread each and then rate it on its importance to the success of the organization, again using a seven-point Likert scale ranging from "essential" (7) to "quite unimportant" (1). In the

field tests, the instructions generated no questions, suggesting that they are self-explanatory.

#### Reliability

Cronbach Alpha coefficients—a measure of internal consistency—were calculated for each of the fourteen OCQ dimensions, separately for the two samples and for the "agreement" and "importance" ratings. For the British sample, the Alphas for the agreement ratings ranged from .60 to .86, with a mean of .77; for the European sample, the Alphas ranged from .63 to .85, with a mean of .78. For both samples, the lowest Alphas were for dimension I, teamwork and support, suggesting some caution in interpreting this dimension. For the importance ratings, the Alphas ranged from .70 to .88, with a mean of .78 for the British sample, and from .73 to .87, with a mean of .81, for the European sample. These results offer strong support for the internal consistency of both scales, with the possible exception of the agreement with dimension I, teamwork and support. Interestingly, the Alphas for the agreement and importance scales are virtually identical. Overall, these data indicate that the OCQ improves the reliability of climate measures, as the data represent a significant improvement over those reported for the other instruments.

### **Interrelation Among Measures**

Because previous work has indicated that the dimensions of climate are correlated with one another, a number of intercorrelational matrices were calculated. As expected, most of the correlations were low and positive, ranging from .22 to .70, with an average of .51. This suggests that, although organizational climate has a common core, the fourteen dimensions are indeed rather distinct. Some dimensions, e.g., L, commitment and morale, significantly correlated with virtually all other dimensions (.34 to .69); the opposite is true for other dimensions, e.g., H, client relationships (.19 to .50).

It is important to note that the correlations between ratings of agreement and importance for the fourteen dimensions are quite low, ranging from -.08 to .24, with an average of .06. These results strongly suggest that respondents are quite able to understand the distinction between agreement and importance and to make independent ratings of the these two critical aspects of organizational climate.

#### **Demographic Differences**

Both the agreement and importance scores for each of the fourteen dimensions were compared with a variety of demographic variables, including gender, age, seniority, country, department, and job function. An inspection of the data led to three conclusions. First, there were no differences in importance ratings as a function of sex, age, or seniority, which indicates strong consensus about the relative importance of climate dimensions. Second, there were some statistically significant differences in agreement ratings as a function of gender, and there were some for age; however, they were few in number, and no clear patterns were discernable. (For gender, there were four differences found in the British sample and four in the European sample, but none of them were the same; for age, there were five differences for the British and two for the Europeans, with no overlap.) Third, the differences with seniority were systematic, substantial, and very similar for the two samples. The more senior the employee, the higher the rating they gave all fourteen of the climate dimensions. Clearly, the more senior the employee, the better the climate appears. The data do not allow an answer to the question of whether the more satisfied employees tend to stay or whether remaining on the job leads to greater satisfaction with the climate. Longitudinal research on this issue is necessary.

#### Validity

The validity of the OCQ was dealt with in two ways. First, the introduction of the importance ratings meant that it was possible to examine the average importance rating on the fourteen dimensions for the two samples. The mean on each of these dimensions exceeded 5.0 (on a seven-point scale) for both samples, indicating that, overall, the respondents believed the dimenons to be important. Since the correlations between the importance and agreement dimensions were negligible, importance was independent of how the respondents perceived the climate of the company.

Second, a set of statistical analyses (ANOVA) were computed between the various scores on the OCQ and the obtained demographic data. These analyses revealed negligible differences as a function of gender, age, job site, job function, and nationality, but striking differences as a function of seniority. These data strongly suggest that the employees had a shared perception of the organizational climate of the company, regardless of where they worked, both within and between countries, or what they did on the job. The one difference that was found, that seniority led to more positive ratings, was both predictable and expected (Jackofsky & Slocum, 1988). These two sets of findings provide strong preliminary evidence for the validity of the OCQ.

#### USING THE OCQ

The OCQ should be duplicated and distributed to participants with cover letter explaining how and why the instrument will be used. Anonymity should be assured, and the completed questionnaires should be returned to a neutral, external party.

The completed questionnaires should be tabulated so that mean scores are developed for agreement and importance on each of the 108 items. Results with the two samples described above suggest that average agreement scores of 4.0 or above can be considered high, and scores of 2.5 and below can be considered low. Average scores of 5.0 or above on importance can be considered high, and importance scores of 2.0 and below can be considered low. Users, however, should inspect their own array of scores to determine what are the appropriate cutting scores that differentiate the upper and lower quartile of each distribution of scores.

Once the items that yield high and low scores have been determined, the actual item numbers should be entered into the matrix that appears below:

#### **IMPORTANCE**

#### **PERFORMANCE**

Ratings	Low	High
High	Consider	Celebrate
Low	Ignore	Fix

The process identifies four different courses of action for the identified items, depending on where they fall in the matrix:

Fix: These are the items that are high in importance but for which performance is low. It is these items that warrant the most prompt attention, particularly those that have very low performance coupled with very high importance ratings.

Ignore: These are the items that involve behaviors that are neither very present nor very important. These items are of little importance to the organization. Efforts to change them are unlikely to pay off and are not worthy of attention.

Consider: These are items for which performance is high (i.e., positive) but of low importance. Employees see that certain things are being done well but are not very important. These behaviors need to be considered, as they may represent misguided efforts. Reducing attention to these

may give management the time and resources to concentrate on those items that need to be fixed.

*Celebrate:* Where both performance and importance are high, management can celebrate that important issues are receiving the attention they deserve. It is important that these behaviors be maintained while the organization attempts to fix the problem areas.

It is also possible to use this process to subdivide the data for the total organization and to study the climate in different functions, locations, and departments. Further, summary scores can be developed for each of the fourteen dimensions. These scores can provide an overall picture of the organizational climate. The OCQ provides a valuable diagnostic tool for organizations to study how organizational climate is experienced and to develop action plans to fix what needs to be fixed.

#### References

- Burke, W.W., & Litwin, G.L. (1989). A causal model of organizational performance. In J.W. Pfeiffer (Ed.), *The 1989 annual: Developing human resources*. San Francisco, CA: Pfeiffer, an imprint of Jossey-Bass.
- Forehand, G., & Von Gilmer, B. (1964). Environmental variations in studies of organizational behavior. *Psychological Bulletin*, 62, 362-381.
- House, R., & Rizzo, J. (1972). Toward a measure of organizational practices: Scale development and validation. *Journal of Applied Psychology*, *56*, 388-396.
- Jackofsky, E., & Slocum, J. (1988). A longitudinal study of climate. *Journal of Organizational Behavior*, 9, 319-334.
- James, L., & Jones, A. (1974). Organizational climate: A review of theory and research. Psychological Bulletin, 72, 1096-1112.
- Kozlowski, S., & Doherty, M. (1989). Integration of climate and leadership: Examination of a neglected topic. *Journal of Applied Psychology*, 74, 546-553.
- La Follette, W. (1975). How is the climate in your organization? *Personnel Journal*, 6, 376-379.
- Lewin, K. (1951). Field theory in the social sciences. New York: Harper.
- Litwin, G.L., & Stringer, R. (1968). *Motivation and organizational climate*. Cambridge, MA: Harvard University Press.
- Payne, R. (1990). Madness in our method: A comment on Jackofsky and Slocum's "A longitudinal study of climate." *Journal of Organizational Behavior*, 11, 77-80.

- Payne, R., & Pheysey, D. (1971). C.G. Stern's organizational climate index. Organizational Behavior and Human Performance, 18, 45-62.
- Qualls, W., & Puto, C. (1989). Organizational climate and decision framing. *Journal of Marketing Research*, 26, 179-192.
- Schneider, B., Brief, A., & Guzzo, R. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, 24(4), 7-19.
- Stern, C.G. (1967). People in context. Syracuse, NY: Syracuse University Press.
- Tagiuri, R., & Litwin, G.L. (Eds.). (1968). Organizational climate: Explorations of a concept. Cambridge, MA: Harvard University Press.
- Taylor, J., & Bowers, D. (1972). Survey of organizations: A machine-scored standardized questionnaire instrument. Ann Arbor, MI: University of Michigan.

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Instructions: Read each item carefully. Then rate how much you agree with each item, using the seven-point scale immediately below, recording your rating in the space provided to the left of the item.

- 7. Strongly agree
- 6. Agree
- 5. Slightly agree
- 4. Neither agree or disagree3. Slightly disagree
- 2. Disagree
- 1. Strongly disagree

After you have rated your agreement with each of the 108 items, then rate each item on how important you think it is to your organization's success, using the seven-point scale immediately below, using the space provided to the right of each item.

- 7. Essential
- 6. Important
- 5. Somewhat important
- 4. Neither important or unimportant
- 3. Somewhat unimportant
- 2. Unimportant
- 1. Quite unimportant

Ratin		Rating
A	. Role Clarity	
	1. I have clear goals and objectives for my job.	
	2. I am clear about my priorities at work.	
	3. I know what my responsibilities are.	
	4. I know exactly what is expected of me.	
	5. I know what most people in the company do.	

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Rating	Importance Rating
6. Work in the company makes the best use of people's experience.	
7. I know what most people around me do.	
8. I know what most departments do.	
9. The company has good quality workers.	
B. Respect	
10. I feel valued by my colleagues in the department.	
11. I value my colleagues in the department.	
12. I feel valued by my colleagues in the company as a whole.	
13. I value my colleagues in the company as a whole.	
14. My department respects other departments.	
15. My department is respected by other departments	
C. Communication	
16. I receive all the information I need to carry out my work.	
17. People in this company do not spend too much time on unessentials.	
18. I am kept adequately informed about significant issues in the company as a whole.	
19. I am kept appropriately informed by the grapevine and other informal means.	
20. My department works well with other departments	
21. My department receives all the information it needs to carry out its function well.	
22. My department is kept adequately informed about significant issues in the company as a whole.	

23.	I understand clearly how I can contribute to the general goals of the company.	
24.	I have adequate opportunities to express my views in my department.	
25.	My colleagues are generally eager to discuss work matters with me.	
26.	In general, communication is effective in this company.	
27.	I work effectively because other employees communicate regularly with me.	
D. F	Reward System	
28.	Good work is recognized appropriately.	
29.	I think my boss is too tolerant of poor performers.	
30.	Work that is not of the highest importance is dealt with appropriately.	
31.	In general, people are adequately rewarded in this company.	
32.	In my opinion, the company's pay scale is competitive with similar companies.	
33.	I receive an appropriate salary.	
34.	I receive appropriate benefits.	
35.	There is an appropriate difference between the pay awarded to good and bad performers.	
36.	. I feel a strong sense of job satisfaction.	
37.	. Virtually everyone in the company receives an appropriate salary.	
E. C	Career Development	
38.	. My work is regularly reviewed with my development in mind.	

Importance Rating

Agreement Rating

Agreement Rating	Importance Rating
39. I understand how the appraisal system wo	rks.
40. There is an adequate means of appraising my performance.	
41. I can develop my career within the compa	ny.
42. I have an opportunity to see my appraisal and discuss it with my supervisor.	report
43. In general, there is an adequate system for career development in the company.	r
44. There is the opportunity to work for this cuntil I retire.	company
45. People are promoted fairly in this compar	ıy
46. My current job makes full use of my talent	.s
47. Career development is taken seriously in t company.	he
F. Planning and Decision Making	
48. The work of departments is well-coordinate	ted
49. People here rarely start new projects without deciding in advance how they will proceed	
50. In general, planning is carried out approp in the company.	riately
51. I am allowed to participate sufficiently in s decisions that affect my work.	ignificant
52. I am delegated work and authority approp to my expertise.	priate
53. I am made responsible only for those thing influence.	gs I can
54. My supervisor likes me to consult him/her take action.	before I
55. I have confidence in the process by which important decisions are made in the comp	any.

Agreement Rating	Importance Rating
56. I'm kept well enough informed for me to make decisions well.	
57. I feel that I have the right amount of authority over my subordinates.	
58. In general, delegation, responsibility, and decision making are all handled well in this company.	on
G. Innovation	
59. I am encouraged to be innovative in my work.	
60. My department is encouraged to innovate.	
61. The company plans adequately for the future.	
62. The company responds promptly to new commercial and technical innovations.	
63. Work methods here are quickly changed to meet new conditions.	
H. Relationships	
64. Worker's needs are well met by this company.	
65. The needs of women and minority employees are greatly respected here.	
66. Virtually everybody in the company is aware of people's special needs.	
67. This company is flexible in order to meet people needs.	's
68. The ways in which women and minority employe are treated in this company is likely to attract oth women and minority workers.	
I. Teamwork and Support	
69. My department collaborates well with other departments.	
70. By and large, people in my group pull their weig	ht

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Rating	Rating
71. I am rarely put under undue work pressure by my colleagues.	
72. People here generally support each other well.	
73. I usually do not have to put in long hours to complete my work.	
74. I do not feel that the pressure of work is excessive.	
75. Work rarely piles up faster than I can complete it.	
76. There is rarely too much work and too little time.	
77. In general, this is a caring and cooperative organization.	
J. Quality of Service	
78. When it comes to the provision of our services, we do the best.	
79. We are proud of the quality of service our company provides.	у
80. We are proud of the quality of service in our department.	
2. 81. This company has quality standards that are higher than those of its competitors.	
K. Conflict Management	
82. Conflicts are constructively/positively resolved in this company.	
83. We are generally encouraged to resolve our conflicts quickly rather than let them simmer.	
84. There are helpful ways of preventing conflicts from getting out of hand in the company.	
85. There is little conflict between departments.	
86. In general, conflict is managed well here.	

Agreement	
Rating	

## Importance Rating

L	. Commitment and Morale
ik 	87. Motivation is kept at high levels in the company.
	88. Morale is high in most departments.
	89. Morale is high in my department.
	90. My personal morale is high.
	91. The commitment of the staff is high in this company.
	92. The company solves the vast majority of its important problems.
	93. I am proud to be part of this company.
	94. I feel that I am a valued member of the company.
	95. In general, people are strongly committed to the company.
M	I. Training and Learning
(	96. Most departments review their work on a regular basis
9	97. There are appropriate orientation procedures in this company.
9	98. I have received the training I need to do a good job.
9	99. Most of us in this company are committed to helping one another learn from our work.
10	00. In general, this company learns as much as is practically possible from its activities.
1	01. The training I receive is of high quality.
10	02. I get the training I need to further develop my skills.
N	. Direction
10	03. The future of this company has been well communicated to all employees.
10	04. We all feel part of the company.

Rating	Importance
105. I am clear about the part I can play in helping this company achieve its goals.	
106. The future objectives of the company are cons with my personal objectives.	istent
107. The future of this company is bright.	
108. The vast majority of the employees share a clear understanding of where the company is going and what it is trying to achieve.	ur

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