

## RELATIONSHIP BETWEEN COGNITIVE STYLE AND INDIVIDUAL PSYCHOLOGICAL CLIMATE: REFLECTIONS ON A PREVIOUS STUDY\*

Scott G. ISAKSEN, Kenneth J. LAUER

The Creativity Research Unit, Creative Problem Solving Group - Buffalo\*  
1325 North Forest Road, Williamsville, New York 14221 USA

*Abstract:* Isaksen and Kaufmann (1990) conducted an exploratory study into the relationship between cognitive style and individual perceptions of creative climate. Clapp and Kirton (1994) raised questions regarding the theoretical constructs and methodology used in this study. This article reviews the original research and addresses those questions raised by Clapp and Kirton.

*Key words:* cognitive style, individual psychological climate, creative climate

### INTRODUCTION

Isaksen and Kaufmann (1990) performed an exploratory study that sought to determine if a relationship exists between cognitive style and individual perceptions of climate for creativity and change. They explored this relationship by examining how people of strongly different cognitive styles perceived the climate for creativity and change in their organizations. Clapp and Kirton (1994) responded to this study by challenging the theoretical relationship of the two instruments used in the original study. Their response highlighted key points, both theoretical and methodological, requiring further explanation and investigation.

The purposes of this article are to provide a more complete reporting of the original study conducted by Isaksen and Kaufmann (1990), and to respond to the

points, questions and issues offered by Clapp and Kirton (1994) relating to climate for creativity, change and cognitive style.

The impetus for the original study stemmed from work in the person-environment (P-E) fit domain (Lewin, 1936; Murray, 1938). This domain historically stems from the argument that behavior is attributed either to the characteristics of the person or to elements within the environment. The third position, and the keystone for the P-E fit domain, is that both intra-personal characteristics and the environment influence behavior (Caplan, 1983; Holland, 1966; Pervin, 1987; Schneider, 1987a).

The second major reason for pursuing the inquiry into the relationship between climate for creativity and change and creativity style was the development of an emerging program of creativity research which has been characterized as interactionist and ecological (Isaksen, Puccio, Treffinger, 1993; Puccio, Murdock, 1999; Woodman, Schoenfeldt, 1999). There are important conceptual and practical linkages for creativity research and practice using an ecological framework among the

\* The authors wish to acknowledge the assistance of Michael Kirton, Donald Treffinger, Göran Ekvall and Geir Kaufmann, all Fellows of the Creativity Research Unit, for their input on this article. We would also like to acknowledge the assistance of Chris Grivas while a student at the Center for Studies in Creativity at Buffalo State College.

four main areas of person, process, product and situation.

In order to better understand which creative problem-solving approaches work best for whom, and under what circumstances, we need appropriate measures and clear concepts within and among all four main areas. Researchers and practitioners will need to understand individual differences in cognitive style as well as the situational conditions related to effectively learning and applying creative problem-solving approaches.

Before responding to Clapp and Kirton's (1994) points regarding the methodology used in the Isaksen and Kaufmann study, a review of the original study seems prudent for those just entering this discussion. In order to re-examine this study effectively, original data was re-compiled and re-analyzed.

The original study (Isaksen, Kaufmann, 1990) was designed to investigate the extent to which the concepts of individual psychological climate and cognitive style were related. These two constructs are both intra-personal variables (at the individual level of analysis) and they have been described as conceptually linked in that both may help to predict actual creative behavior.

The study sought to determine if those with strong preferences for adaptive or innovative approaches to creativity style and managing change held different individual perceptions of the climate for creativity and change. Since both climate and cognitive style were thought to be predictive of different types of creative behavior, the original hypothesis was that we should find some relationship between the two measures. Since no earlier empirical investigations of these two variables could be discovered, the study was considered exploratory.

## PROCEDURE

### *Sample*

An aggregated population of 646 subjects from eight different public and private organizations located in the Northeast and Central United States participated in the study. Upon re-compiling the data from the original 1990 study, 12 participants from the original organizations who were not available at the time of the original study were included. The senior author conducted Creative Problem Solving programs with these organizations and the data were obtained from the participants in accordance with the research policy of the Creative Problem Solving Group - Buffalo.

Two-hundred and fifty-six of these adult participants came from an entire rural elementary school district and one suburban elementary school. Six different organizations provided 378 subjects (83 from a technical center within a large manufacturing company; 25 managers of a mid-west information company; 23 branch managers; 211 R&D managers within a large manufacturing company; 40 members of an R&D facility within a beverage manufacturing company; and 8 senior managers of a public service organization). The subjects included about 55% males ( $n = 351$ ) and 45% females ( $n = 291$ ). The gender of 4 subjects' was unknown.

### *Instruments*

The Kirton Adaption-Innovation Inventory (Kirton, 1987) and an earlier version of the Situational Outlook Questionnaire (SOQ), then known as the CCQ, were used in the original study.

The Kirton Adaption-Innovation inventory (KAI) is a 32-item instrument on which respondents are asked to indicate the degree of ease or difficulty they have in maintaining specific adaptive or innovative preferences over a long period of time. The range of scores is theoretically 32-160 on the KAI with a mean of 96. There is a great deal of literature regarding its validity and reliability (Kirton, 1987; 1994). Mudd (1986) has shown an actual mean for the general population to be 95.0, with a standard deviation of 14.9 ( $n = 1719$ ), a reliability of .86 (internal consistency;  $n = 2777$ ) and consistent factorial composition into three subscales. The three subscales include: sufficiency of originality; efficiency; and rule/group conformity.

The Creative Climate Questionnaire (CCQ) was originally conceptualized by Ekvall (1983) and developed further by Ekvall, Arvonen and Waldenstrom-Lindblad (1983) in Sweden. The instrument is a measure of climate which is defined as an attribute of the organization and composed of behaviors, attitudes and feelings which characterize life in the organization. Climate exists independently of the perceptions and understanding of the members of the organization (Ekvall, 1996). The CCQ was translated into English by Ekvall, Isaksen and Isaksen's colleagues at Buffalo State College in the late 1980's. Since that time the questionnaire has been modified and refined in English speaking cultures by the Creative Problem Solving Group - Buffalo (Cabra, 1996; Isaksen, Lauer, Murdock, Dorval, Puccio, 1995; Lauer, 1994). The version of the instrument used in this study, now called the SOQ, has fifty questions. The SOQ consists of five questions for each of the ten dimensions. Each item is scored from zero to three; zero standing for "not

at all applicable" and three for "applicable to a high degree." Results are reported here in a 0 - 3.00 format.

Studies (Cabra, 1996; Isaksen, Lauer, Ekvall, in press; Lauer 1994) of the SOQ's validity and reliability have been conducted. Lauer (1994) performed a literature review and found support for the conceptual validity of the SOQ's 10 dimensions. Lauer (1994) also conducted an exploratory principle component analysis which yielded 10 factors with eigenvalues greater than 1.0 ( $N = 419$ ). Isaksen and Kaufmann, (1990) reported coefficient alphas that ranged from .72 to .87 for the 10 dimensions.

Further studies (Ekvall, 1987, 1996; Ekvall et al., 1983; Nystrom, Edvardsson, 1980) indicate substantial differences in organizations described as "creative" by productivity from those described as "stagnated." Higher scores on the nine positive dimensions with a lower score on the negative dimension (conflict) indicated a climate more conducive to creativity. Scores have consistently discriminated those organizations that are able to successfully develop new products or services from those that are not. The SOQ is, however, not a direct measure of organizational stagnation or progressiveness.

The SOQ is designed to assess situational conditions related to creativity in such a way that it does not prescribe the perfect climate for all situations. Rather than providing a simplistic and ubiquitous normative goal toward which everyone should strive, our approach to measurement of climate provides a profile aimed at gauging the current situation for the purpose of developing and implementing organizational improvement initiatives.

Isaksen, Lauer, Ekvall and Britz (in press) found consistent patterns of re-

sponses across work situations deemed by the respondents as being "best case" they have experienced as well as "worst case." Across these studies, it was found that there was generally no "ideal" score for any of the dimensions of creative climate. These results were consistent with those of Ekvall (1983; 1996). As such, a "perfect" score of a three on the positive dimensions, with a perfect score of a zero on the negative dimension (conflict) did not necessarily indicate a "best case" scenario.

Therefore, results of the SOQ are not designed to indicate a theoretical or cross-situational ideal. Rather, they act as a barometer gauging the general perception of how these dimensions are perceived within a given climate. Nor are they to be treated as though the dimensions all fall on a larger single continuum. Factor anal-

ysis has repeatedly shown multiple dimensions associated with the climate conducive to change and creativity (Ekvall, Arvonen, Waldenström-Lindblad, 1983; Cabra, 1996). The scores on the SOQ are best used as a profile and can help to identify strengths and potential weaknesses within any specific working situation.

#### RESULTS AND DISCUSSION

The means and standard deviations for the entire population and for male and female groupings for each instrument are provided in Table 1. The data reported in Table 1 are similar to those reported in the original study. The additional 12 subjects beyond those reported in Isaksen and Kaufmann (1990) provided only minor variations. Gender differences are observed for both the SOQ and the KAI.

Table 1. SOQ & KAI Means and Standard Deviations - Males/Females

Variable	Entire Group (N = 646)		Males (n = 351)		Females (n = 291)	
	AM	SD	AM	SD	AM	SD
Challenge	2.33	.48	2.28	.49	2.37	.47
Freedom	1.87	.52	1.85	.52	1.90	.51
Idea Support	1.82	.61	1.83	.60	1.82	.61
Dynamism	2.12	.53	2.07	.55	2.19	.51
Play/Humor	1.82	.59	1.75	.58	1.90	.59
Debate	1.88	.53	1.84	.52	1.92	.54
Trust	1.63	.58	1.64	.58	1.61	.57
Conflict	.81	.63	.91	.64	.69	.60
Risk-taking	1.46	.53	1.43	.54	1.49	.52
Idea Time	1.45	.57	1.46	.57	1.43	.57
KAI	100.03	17.2	103.32	16.67	96.04	17.05
KAI - O	44.52	8.33	45.55	7.93	43.2	8.60
KAI - E	19.10	5.37	19.89	5.45	18.18	5.13
KAI - R	36.39	7.68	37.88	7.56	34.61	7.46

Correlational results, which were not included in Isaksen and Kaufmann (1990), are presented here in Table 2. None of the correlations show a strong relationship between the KAI and the SOQ. Thirteen out of 40 correlations between the total groups' KAI and SOQ scores were statistically significant. Eighteen out of 40 correlations between KAI and SOQ were significant for the 291 females. Only one of the 40 correlations was significant for the 351 males.

Given that the overall correlational results did not show any clear relationships between psychological climate and cognitive style, we sorted the subjects into two groups which should show very different cognitive orientations. Even though the KAI is a continuum, and not a dichotomy, it is possible to examine any specific distribution and identify a subset that is more adaptive or more innovative. The subjects in this study were sorted by identifying two groups, each one-half standard deviation above or below the observed mean on the KAI. This resulted in one group (n = 212) having a stronger innovative orientation and another group (n = 204) having a stronger adaptive orientation. Means and standard deviations for the two groups on the KAI and SOQ are shown in Table 3. The means for the more adaptive and innovative groups are nearly 39 points apart.

The sorting of subjects in this study in this manner is in accordance with the notion of cognitive gap, as reported in the literature (Clapp, deCiantis, 1987; Kirton, McCarthy, 1988; Kirton, deCiantis, 1994). According to this notion this one standard deviation difference should result in two groups with distinctly different preferred approaches to problem solving, decision making and creativity. This type of separ-

ation is commonly used in KAI research focused on individual differences (Clapp, 1991; Hammerschmidt, 1996; Puccio, Joniak, Talbot, 1995). Kirton and deCiantis (1994) noted, "...more than one standard deviation causes difficulties in integration and begins to raise noticeable problems of communication and strains in goodwill." (p. 86). When we conducted this study we believed that it was likely that these two styles may also differ in how they view aspects of their climate for creativity and change.

Since we had clearly different groups according to KAI theory, we submitted these two groups to discriminant analysis (Hair, Anderson, Tatham, 1987) to determine if they would show any statistically significant and meaningful differences in their orientation to individual psychological climate. The discriminant function allows for analysis of both groups across all climate variables. If there is a difference in how the two groups view climate, the two groups should remain distinctly separate with regard to any particular climate dimension.

The results of the discriminant analysis are shown in Table 4. This table includes the percentage of classification for the overall analysis by each dimension of the SOQ. Both challenge and conflict were found to be optimal predictor variables which was consistent with the original study. The re-analysis showed that there were also statistically significant differences for both the dynamism and risk-taking dimensions of the SOQ. These results indicate that adaptors view more challenge, dynamism and risk-taking within their individual psychological climates than innovators. Innovators view more conflict within their climates than adaptors.

Table 2. KAI/SQ Correlations

	Challenge	Freedom	Idea Support	Dynamism	Play/Humor	Debate	Trust	Conflict	Risk-Taking	Idea Time
<i>Entire Group</i>										
KAI total	-.121**	-.065	-.006	-.074	-.063	-.066	-.050	.145***	-.067	.021
KAI - O	-.056	-.015	.036	.009	-.039	.020	-.008	.116**	.008	.066
KAI - E	-.110**	-.050	.017	-.085*	-.007	-.082*	-.051	.049	-.068	.024
KAI - R	-.138***	-.097*	-.068	-.119**	-.103**	-.117**	-.070	.167***	-.115**	-.044
<i>Females</i>										
KAI total	-.196***	-.080	-.086	-.090	-.082	-.122*	-.084	.140*	-.132*	-.062
KAI - O	-.082	-.009	.001	.0005	-.054	-.011	-.007	.108	.001	.061
KAI - E	-.225***	-.135***	-.084	-.142**	-.022	-.142*	-.135*	.077	-.170**	-.084
KAI - R	-.207***	-.084	-.142**	-.115*	-.121*	-.173**	-.099	.147*	-.193***	-.162***
<i>Males</i>										
KAI total	-.026	-.036	.062	.017	.007	.008	-.036	.092	.011	.083
KAI - O	-.006	-.006	.074	.048	.013	.067	-.019	.079	.038	.064
KAI - E	-.004	.025	.091	-.016	.052	-.013	-.002	-.010	.022	.103
KAI - R	-.049	-.090	-.006	-.077	-.035	-.041	-.058	.126*	-.031	.041

\* = p < .05; \*\* = p < .01; \*\*\* = p < .001

Table 3. SOQ & KAI Means and Standard Deviations - Adaptors/Innovators

Variable	More Innovative n = 212		More Adaptive n = 204	
	AM	SD	AM	SD
Challenge	2.24	.50	2.38	.47
Freedom	1.81	.55	1.89	.50
Idea Support	1.80	.66	1.83	.55
Dynamism	2.06	.56	2.17	.51
Play/Humor	1.79	.59	1.87	.56
Debate	1.83	.60	1.91	.49
Trust	1.58	.62	1.65	.55
Conflict	.91	.70	.70	.56
Risk-taking	1.40	.57	1.50	.46
Idea Time	1.44	.62	1.41	.53
KAI	119.31	8.37	80.44	8.4
KAI - O	51.96	5.58	36.77	6.46
KAI - E	23.59	4.59	15.1	3.8
KAI - R	43.74	5.14	28.57	4.53

Table 4. Discriminant Function Analysis and Percentage of Classification SOQ & KAI Wilks' Lamda (U-Statistic) and Univariate F-Ratio (n = 416)

Variable	Wilks' Lamda	F	Significance	% of Classification (total group 58.8)
Challenge	0.9804	8.26	0.004 **	54.1
Freedom	0.9946	2.26	0.134	51.0
Idea Support	0.9994	0.21	0.647	51.9
Dynamism	0.9894	4.41	0.036 *	53.9
Play/Humor	0.9954	1.92	0.167	54.6
Debate	0.9956	1.84	0.176	54.6
Trust	0.9965	1.46	0.228	50.0
Conflict	0.9739	11.05	0.001 ***	53.3
Risk-taking	0.9906	3.91	0.049 *	56.5
Idea Time	0.9995	0.20	0.656	52.4

\* = p < .05; \*\* = p < .01; \*\*\* = p < .001

There are a number of possible explanations for these findings. Since we deliberately chose individuals with different cognitive styles we should expect to see differences in individual perceptions and interpretations of behavior which characterizes life in organizations. In short, their point of view would be different, even in similar contexts. Adaptors may see certain behavior which is outside the norm more frequently as risk-taking while innovators may wonder what the norms are in the first place. The same may be true for dynamism or pace of life in the organization. Given the same observed behavior, adaptors would see things moving faster than innovators.

The findings relating to conflict and challenge do appear consistent with Kirton and deCiantis (1994) and Kirton and McCarthy (1988) and are described in more detail in Isaksen and Kaufmann (1990).

This presentation of the re-analysis of the original study provides more evidence and detail to support the findings that correlational analysis shows relatively little quantitative relationship between psychological climate and KAI. We continue to find that discriminant function analysis does show that more adaptive and innovative individuals have statistically significantly different SOQ scores on some of the SOQ dimensions. It is important to note that the results of the earlier analysis showed two dimensions were statistically significant while the revised data set showed differences on four dimensions.

Clapp and Kirton (1994) provided commentary on the 1990 study and laid out a number of broad issues requiring further explanation and investigation. Clapp and Kirton (1994) placed the investigation of preferred cognitive style and individual

psychological climate within the level-style debate; interpreted the SOQ as designed to measure a single continuum of level of stagnation or progressiveness; and were unaware of the observed factor structure of the SOQ which lead them to make some incorrect assumptions. We will take each one of these issues in turn and provide more explanation and response.

*The Level-Style Issue.* Kirton (1976; 1987; 1994) has asserted the need to separate the variables of level or capacity from style or mode, just as we would the 'power of the engine' from the 'manner in which it is drawn.' Although there is tremendous potential for clarifying creativity research and practice by separating level and style, most of the inquiry and support for this distinction resides within the general area of person, with little work done in the areas of product, process and situation (Isaksen, 1995; Isaksen, Dorval, 1993).

Although there is clear support for distinguishing KAI from IQ, we have found clear relationships between the KAI and preferences for learning, and levels of applying, specific kinds of creative problem-solving tools (Hurley, 1993; Schoonover, 1996; Wheeler, 1995) as well as graphical approaches to describing natural creative process (Persbyn, 1992). Certain of these preferences may provide for greater degrees of success or level of productivity depending on their fit to the task at hand or other situational factors.

In other words, some of the key variables outlined above may very well be conceptually and empirically distinct. Others may be inter-related, especially when considering the actual behavior of the individual in a particular context. This was the major challenge facing the aptitude-treatment line of research that attempted to understand the relationships between

individual difference variables and student performance (Snow, 1992). Measures of psychological or organizational climate may not necessarily represent their domain "...from the viewpoint of either level (what or how well it is done) or style (how things are done)." (Clapp, Kirton, 1994, p. 130) The degree to which the level-style argument applies to crossing over from among the four main areas of people, processes, products and situations remains to be settled through future inquiry.

As it relates to the Isaksen and Kaufmann study, the results with this sample support a clear distinction between the two concepts of preferred cognitive style and observed psychological climate. The low number of correlations, and the small degree of variance accounted for by those that are significant, supports the empirical and conceptual distinction. Since no correlation accounts for as much as 3% overlap, any relationship between preferred cognitive style and psychological climate may be viewed as trivial. This finding provides preliminary evidence which rejects our initial (and exploratory) hypothesis that these two measures would correlate due to their combined predictive power on creative behavior. The findings tend to support a quantitative distinction between cognitive style and psychological climate. It should be noted that this was not a random sample and that further studies need to be done to generalize the results.

*Conceptual Levels of Analysis.* One of the major points of potential confusion when pursuing this line of inquiry is the need for similar levels of analysis. Individual psychological climate is the primary unit of analysis in order to enable the organizational measure of climate (Ekvall, 1996). It is the measure of individual psy-

chological climate which is aggregated to obtain the organizational measure of the climate for creativity and change (James, James, Ashe, 1990). When analyzing the SOQ from an individual level of analysis, we are examining the concept of individual psychological climate.

The Isaksen and Kaufmann (1990) study attempted to keep the levels of analysis parallel by using individual psychological climate and individual preferred cognitive style. It was the relationship between these two concepts that was investigated. As the argument shifts to include organizational level of stagnation or progressiveness or cognitive climate, it has moved to the group/organizational level of analysis.

Attempting to do this in the context of this study would amount to taking a social-psychological variable (the organizational attribute of climate) and treating it as though it was an intra-personal variable. It can have the same confusing effect as taking an intra-personal (trait) variable like cognitive style and muddling it with another construct called cognitive climate which is asserted to be a social-psychological construct (Kirton, deCiantis, 1994). Keeping these levels of analysis clear will undoubtedly help us as the level-style line of inquiry continues.

*Climate As an Intervening Variable.* The Clapp and Kirton (1994) commentary includes an assertion that "...psychological climate can be used to describe organizations along a continuum concerned with an increasing level of innovation" (p. 130). Again, psychological climate is the individual's perception of the pattern of behaviors that characterize life in the workplace, not the level of creativity of an organization. Similar to cognitive style, psychological climate is a variable that is at the individual level of analysis. The

individual perceptions are aggregated to obtain a measure of organizational climate (James, 1982). Organizational climate is defined as an attribute of the organization, composed of patterns of behaviors that characterize life in the specific context of the workplace.

The SOQ is a measure composed of dimensions which describe the organization's climate for creativity and change. The measure has been shown to effectively discriminate between organizations which can be characterized as creatively productive and those described as stagnated (Ekvall, 1987, 1996; Ekvall et al., 1983). The SOQ does not purport to be a direct measure of the level of creativity or success of the organization, but a recent study (Ekvall, Ryhammar, 1998) does suggest a statistically significant relationship does exist between most climate dimensions and creative achievements.

Organizational climate plays the role of an intervening variable which stems from resources of different kinds (people, buildings, know-how, products, concepts, funds, etc.) and has an effect on productivity, well-being, job satisfaction, and quality. As Ekvall (1996) indicated "The climate has this moderating power because it influences organizational processes such as problem solving, decision making, communications, coordination, controlling, and psychological processes of learning, creating, motivation, and commitment" (p. 106).

From the perspective of the original study, climate is viewed as an intervening variable which effects the behavior of those within an organization. Based on work by Ekvall (1991), the complex and interactional role climate plays in influencing behavior is depicted in Figure 1.

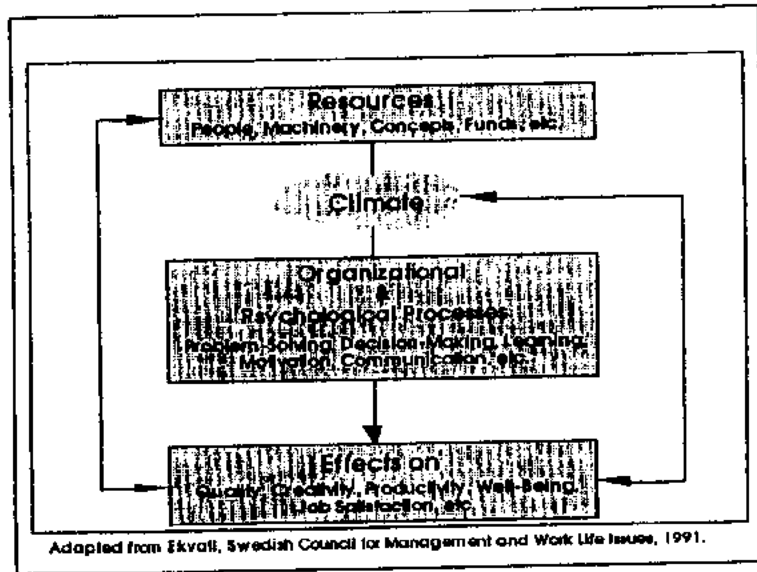


Figure 1. A model of climate as an intervening variable

Clapp and Kirton also suggest that the SOQ is a measure of general level of organizational success. We make no claims regarding the SOQ's ability to directly measure general organizational success. In fact, Ekvall and others are clear that many factors have an influence on the construct of climate for creativity (see Figure 2). Rather than being seen as a measure of a construct falling on a single continuum, the SOQ actually measures a family of independent dimensions aimed at understanding the patterns of behaviors within a particular work group that support creativity and change.

Organizational climate describes the atmosphere of the interpersonal functioning of the people within a given working environment. The composition of the dynamics of the individuals within an environment creates a climate in which they interact (Schneider, 1987b). Clapp (1991) described organizational climate as "...organizational attributes and behavior that are outside of any individual in the organization." (p. 101). Psychological climate is composed of the perceptions the individual makes of their climate and may dictate appropriate behaviors for that individual within the environment

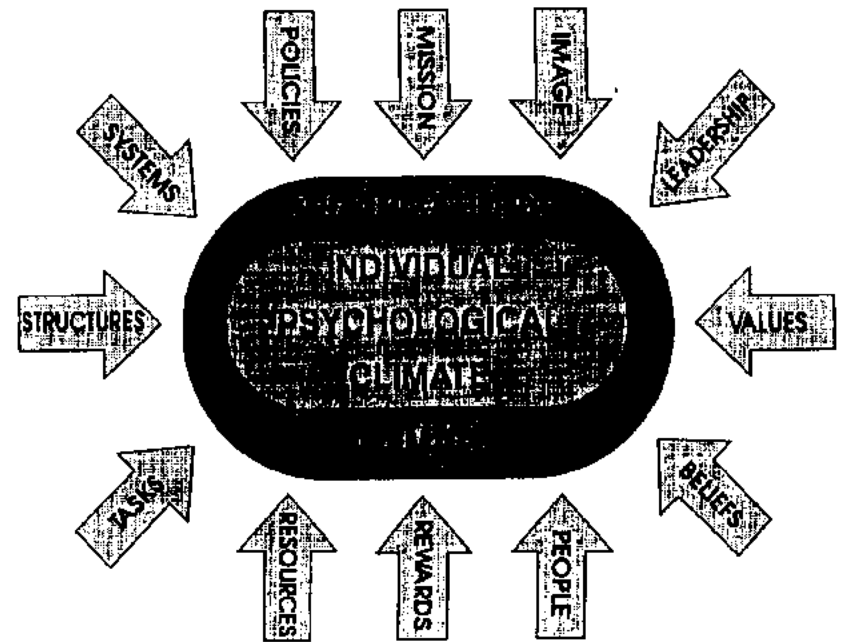


Figure 2. Factors effecting climate

(Schneider, Reichers, 1983; Koys, Decotius, 1991). Therefore, factors contributing to the way individuals perceive their environments, such as their psychological characteristics, help to create the climate in which the individuals' perceptions occur. One such psychological characteristic may be the individual's cognitive style.

*Challenge and Conflict as Independent Dimensions.* Finally, Clapp and Kirton indicated that "...challenge and conflict appear to be semantic opposites..." (p. 133) They recommended combining them into a single bipolar measure because they appeared to be opposites and because these were the two dimensions which were the optimal predictor variables reported in the first study. Their suggestion would be a convenient way to handle the fact that some dimensions were significantly discriminated and others (pure from style relationship) were not.

It is not that simple. The observed factor structure of the SOQ clearly indicates that the challenge and conflict dimensions are independent of one another (Cabra, 1996; Isaksen et al., 1995; Isaksen, Lauer, Ekvall, in press; Lauer, 1994). Instead, items on the trust dimension sometimes load negatively with the conflict dimension (occasionally, items on the conflict dimension will load negatively on the trust dimension) depending on the size and nature of the sample.

Since the dimensions of challenge and conflict are factorially independent and since they are not a direct measure of organizational productivity, it would not be appropriate to place them on a single continuum. Rather, they should be seen as two dimensions (among others) that characterize the climate for creativity and change in the organization.

Although these comments are in direct response to Clapp and Kirton (1994), their general interpretation and questions provided an opportunity to explore other areas for future research and inquiry.

The study of both cognitive style and organizational climate has recently captured the international attention of organizations striving to create more productive and competitive working environments (Brown, Leigh, 1996; Ford, Gioia, 1995; Jurčová, Zelina, 1995; McNabb, Sepic, 1995; Pasmore, 1994). By understanding the elements that effect the people within these organizations, actions may be taken in which to improve the work environment in light of both environmental (social and climatic) and psychological (intra-individual) factors. The suggestions and comments offered by Clapp and Kirton on our previous inquiry have stimulated this particular response and we hope to continue this line of research to offer improved responses to the issues they raise. Improving our understanding of the relationship between cognitive style and psychological climate will assist the future work of both scholars and practitioners.

Received September 29, 1998

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optimálnymi predikčnými premennými sú výzva a konflikt, čo je v súlade s pôvodnou štúdiou. Opätovná analýza ukázala hoci malé, ale štatisticky významné rozdiely v dimenziách dynamizmu a riskovania v SOQ.

Výsledky podporujú všeobecný a jasný rozdiel medzi koncepciou preferovaného kognitívneho štýlu a sledovanou psychologickou klímou. Malý počet korelácií a malá variácia podporuje empirický a koncepčný rozdiel a vedie k rozlíšeniu úrovne a štýlu.

Clapp a Kirton (1994) hovoria, že "...psychologickú klímu možno použiť na popis organizácií, v ktorých sledujeme kontinuálne sa zvyšujúcu úroveň inovácie" (s. 130). My naproti tomu tvrdíme, že psychologická klíma je jednotlivcom vnímaný vzor správania, ktorý charakterizuje život na pracovisku a nie úroveň tvorivosti v organizácii. SOQ je miera pozostávajúca z nezávislých dimenzií, ktoré opisujú klímu organizácie pre tvorivosť a zmenu, ale nie je priamou mierou úrovne tvorivosti v organizácii alebo jej úspechu. Ukázalo sa, že miera efektívne dokáže odlišiť organizácie, ktoré možno považovať za tvorivo produktívne od stagnujúcich organizácií (Ekvall, 1987, 1996; Ekvall et al., 1983).

Napokon Clapp a Kirton odporúčali spojiť dimenzie výzvy a konfliktu do jednej bipolárnej miery, pretože sa zdá, že sú to protiklady a pretože to boli tie dve dimenzie, ktoré boli optimálnymi predikčnými premennými aj v prvej štúdií. Faktorová štruktúra SOQ jasne naznačuje, že dimenzia výzvy a dimenzia konfliktu sú vzájomne nezávislé (Cabra, 1996; Isaksen, et al., 1995; Lauer, 1994), a preto by nebolo vhodné zaradiť ich na jedno kontinuum.

## VZŤAH MEDZI KOGNITÍVNYM ŠTÝLOM A INDIVIDUÁLNOU PSYCHOLOGICKOU KLÍMOU: ÚVAHA O PREDCHÁDZAJÚCOM VÝSKUME

S. G. Isaksen, K. J. Lauer

**Súhrn:** Tento článok je už v poradí tretí, ktorý sa zaoberá vzťahom medzi kognitívnym štýlom a psychologickou klímou. V tejto štúdií sa vrátíme k pôvodným zisteniam, urobíme dodatočnú analýzu pôvodných údajov a budeme reagovať na názory Clappa a Kirtona (1994), ktorí kritizovali pôvodnú štúdiu Isaksena a Kaufmanu (1990).

Výskum sa uskutočnil na súbore 646 probandov z ôsmich rôznych verejných a súkromných organizácií v USA. Probandi vyplnili Kirtonov dotazník Adaptivnosť-Inovativnosť (KAI, Kirton, 1987) a staršiu verziu Dotazníka vnímania situácie (SOQ) neskôr známou ako Dotazník tvorivej klímy (CCQ). Opätovná analýza priniesla ďalšie dôkazy podporujúce korelačné zistenia, že vzťah medzi SOQ a KAI je len mierne štatisticky významný.

Údaje sme rozdelili do dvoch skupín na základe kritéria  $\pm 1/2$  SD v KAI. Tieto dve skupiny sme podrobili diskriminačnej analýze (Hair, Anderson, Tatham, 1987), aby sme zistili, či medzi nimi budú nejaké štatisticky významné rozdiely v ich orientácii na psychologickú klímu. Zistili sme, že