

A GLOSSARY OF TERMS FOR THE SITUATIONAL OUTLOOK QUESTIONNAIRE®

A Technical Resource



**Situational
Outlook
QuestionnaireSM**

**Enhancing Performance of Organizations, Leaders, and
Teams for Over 50 Years**

**Scott G. Isaksen
Göran Ekvall**

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A Technical Resource for the SOQ

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**Scott G. Isaksen
Göran Ekvall**

Published by The Creative Problem Solving Group, Inc.
Post Office Box 648
Orchard Park, New York 14127
USA

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Web site: www.cpsb.com
Phone: (+1) 716.667.1324

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GLOSSARY

The purpose of this technical resource is to provide you with definitions and descriptions of the key vocabulary associated with the Situational Outlook Questionnaire®.

Many people are uncomfortable with "jargon," and its overuse can make a subject seem unnecessarily complex or mysterious. But technical terms and abbreviations are commonplace in every field of study, and their judicious use can be helpful in professional communication. These terms can provide "shorthand" to economize professional reading, writing, and conversations. This glossary will help you become acquainted with some of the words, phrases, and acronyms commonly used in the literature. The words or phrases that appear in italic type within a description or definition will be identified as separate entries in this glossary. At the end of the glossary you will find the references used in the text. This is followed by a list of texts we would suggest if you are interested in further resources and readings.

A

Abstraction. The degree to which the expression of ideas, responses, or descriptions is broad, general, and inclusive. Characteristics include: (a) related to cognitive, rational and semantic perspectives; (b) concerned with things and their qualities; (c) operationalized on a continuum that moves from a high level or large degree (macro) or low level or degree (micro) of specificity in words and meaning; and (d) situational and dynamic. These characteristics can be sorted in two kinds of functions: (a) naming and (b) doing (Murdock, 1993). Abstraction in SOQ is related to narrative analysis and reporting.

Adaptor (or "A"). The general term used to indicate that a person prefers an Adaptive creativity style, as described by Kirton (1976). In discussions of creativity style, this is often further summarized by use of the letter "A" (compared with "I" for a person who prefers an Innovative style). The adaptive style is characterized by precision, reliability, efficiency, prudence, discipline and a concern with resolving problems rather than finding them.

Affective. A way of describing the domain of human behavior that involves feelings or emotional responses, rather than the thinking (cognitive) or physical action (psychomotor) domains.

Affirmative Judgment. A basic principle of CPS, particularly important in the critical or convergent phases of each stage; emphasizes the need to analyze alternatives thoroughly but constructively (Isaksen, Dorval & Treffinger, 1994).

Algorithm. A set of rules or procedures for solving a certain kind or class of problem.

Analysis or Analytic(al) Thinking. Logical, systematic, evaluative thinking, with particular emphasis on examining a whole by breaking it down into its components or parts. Particularly important and useful during convergent phases of thinking.

Analogy. Seeing how seemingly unconnected situations are alike; forming parallel relations in different "worlds of thought" (Samson, 1975).

Analysis of Variance (or ANOVA). A test of the statistical significance of the differences among the mean scores of two or more groups on one or more variables or factors (Vogt, 1993).

Analytic Induction. Analysis technique used to generate theory; begins with a scan of the data to construct categories or relationships that are not pre-determined (Goetz & LeCompte, 1984). Often used with *Constant Comparison* (Glaser & Strauss, 1967).

Applied Intervention. (a) SOQ integrated into a set or tailored program; additional instruments used; (b) SOQ used alone as a diagnostic starting point for tailored follow-up program.

Assisters. In the CPS process stage known as Acceptance-Finding, Assisters refers to possible sources of support in implementing your solutions (including helpful people, places, resources, times, or reasons).

B

Barriers. Obstacles that must be overcome in efforts by an individual or group to express and use creativity; often the same as *blocks*.

Blocks. Personal characteristics, process gaps, inhibiting settings or situations, emotional or social stresses, threats, or hindrances which interfere with the ability or willingness of a person or group to engage in productive thinking and problem solving. Often used as a synonym for *barriers*.

Brainstorming. A group technique for generating many options based on the divergent thinking guidelines of deferring judgment, striving for quantity, freewheeling, and building on other ideas.

Breakthrough. A sudden, important idea or “connection” that offers a novel and appropriate solution to a complex problem, challenge or situation.

Build. Making a deliberate effort to improve an idea by offering other ideas that are modifications of previously presented ideas.

C

Case. A general qualitative research term to describe a phenomenon occurring in a bounded context; a unit under study. Cases may contain data on individuals, roles, or communities (Miles & Huberman, 1993). See also Case Study, Case Example and *Site*.

Case Study. “...an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit” (Merriam, 1988, p. xiv). The output of the deliberate examination of a specific, functioning system or unit of analysis that has integrated, working parts (Stake, 1994).

Case Example. An illustrative description of a particular setting, situation, or outcome used for explanation in training. For example in SOQ narrative training, an illustrative excerpt of responses to all three narrative questions was used for training evaluators.

Categorizing. Combining and organizing coded data according to similarities or relationships.

Challenge. 1) The emotional involvement of members of an organization in its operations and goals. A dimension of the SOQ known as Challenge and Involvement; 2) To look at a difficult situation and describe it with a positive viewpoint.

Change. The act, process or result of transformation. Change implies variation or modification and can include aspects that are outside and inside the object being changed. These have also been called internal and external changes. Change can also be of different degrees and styles. Change can be a slight or minor variation or a major alteration.

Classification. Mentally sorting things into classes, types or families (Samson, 1975).

Climate. The recurring patterns of behaviors, attitudes and feelings that characterize life in the organization. It is a relatively enduring quality of the organization as it is perceived and experienced by the participants within it. Climate influences an individuals' behavior, and can be described in relation to a particular set of environmental characteristics (i.e., SOQ dimensions).

Coding. Tagging or labeling units of meaning to descriptive or inferential information in study (Miles & Huberman, 1993).

Cognition. The process of acquiring, creating and disseminating knowledge.

Cognitive Style. The preferences a person demonstrates over time for solving problems, making decisions and processing cognitive events. Refers to one's preferred patterns of mental activity.

Collinearity. See Multicollinearity.

Communality. The proportion of total variance that is shared by two or more variables. Common factor variance is another term used to describe the concept which is symbolized by the symbol h^2 (Vogt, 1993).

Concurrent Validity. The relationship between scores on a survey, questionnaire or any other type of assessment instrument and that of another that is available at the same time (Ary, Jacobs, & Razavieh, 1972).

Constant Comparison. A qualitative research technique that operationalizes grounded theory. The process of Constant Comparison consists of recursive analysis to provide conceptual density and theory-building. In addition there is on-going data collection, systematic generative questioning, and conceptual organization (Glaser & Strauss, 1967; Strauss and Corbin, 1994). Generally used constructively rather than enumeratively and does not require the use of any particular unit of analysis (Goetz & LeCompte, 1984).

Construct Validity. The extent to which a survey, questionnaire or any other type of assessment instrument reflects the constructs presumed to underlie the instruments' performance and further the extent to which the constructs relate to the theories they are based upon (Ary, Jacobs, & Razavieh, 1972).

Component. A major aspect of CPS that usually includes one or more stages of the six-stage CPS model. CPS includes three major components: Understanding the Problem, Generating Ideas, and Planning for Action.

Conflict. The presence of interpersonal emotional tensions in an organization, expressed among one or more individuals or sub-groups. Conflict is a dimension of the Situational Outlook Questionnaire® (SOQ). High conflict in an organization or group often inhibits creativity and innovation.

Constructive. An assumptive mode in research. It is how units of analysis are formed and described (Goetz & LeCompte, 1984). It discovers analytic constructs or categories from a stream of behavior.

Content. The subject matter contained within a task. It describes what you are talking about or learning.

Content Validity. The degree to which a survey, questionnaire or any other type of assessment instrument samples the content area that is supposed to be measured (Ary, Jacobs, & Razavieh, 1972).

Context. The situation, or area in which some challenges, beliefs and attitudes, traditions, social roles, expectations, rewards, and sanctions are embedded. Context provides the meaning, relevance, and application for activities (Isaksen, Puccio, & Treffinger, 1993).

Convergence. (Also: Converging, Converge or Convergent thinking). Bringing possibilities together, or choosing from among many alternatives, to strengthen, refine, or improve ideas, and to reach a conclusion, synthesis, or correct response. Often used casually as an equivalent to critical thinking.

Correlation coefficient. A linear statistical procedure that tells how closely two variables (predictor and criterion) correspond (Cronbach, 1984). The coefficient is normally reported as a two decimal number that can range from a perfect negative correlation of -1.0 to a perfect positive correlation of 1.0. A coefficient of 0 means there is no relationship between the variables being analyzed. Coefficient scores are often reported with a number that represents the level of significance. The most common form of correlation when the scale of measurement is either of the interval or ratio type is the Pearson Product Moment Correlation Coefficient or Pearson Correlation Coefficient (r).

CPS. See Creative Problem Solving.

CPS model. The principles of Creative Problem Solving arranged, grouped, and presented in such a way as to represent or describe the CPS process.

Creative Analysis. A deliberate classification system for examining and describing the relationship between thought and language that is particularly useful for sorting, categorizing and theory-building in qualitative analysis (Murdock, 1993).

Creative Climate. The conditions and recurring patterns of behavior that interact with other variables (i.e., culture, leadership, resources, structure and others) and have an impact on the creativity of individuals and groups within that particular setting. Creative climate is composed of a number of stimulants and obstacles known as dimensions in the Situational Outlook Questionnaire® (SOQ).

Creative Problem Solving (CPS).

- A process for working on problems in a manner that promotes creativity and new perspectives. CPS contains three components and six stages. It provides an organizing framework for generating and developing new and useful outcomes or actions for a broad range of situations (opportunities, challenges, concerns, or problems). CPS can be used by individuals or groups to recognize and act on opportunities, respond to challenges, and overcome concerns (Isaksen, Dorval & Treffinger, 1994).
- Creative problem solving: Refers to the general efforts made by any individuals or groups to think creatively in order to solve a problem. The lower case letters are used to describe these “generic” efforts, as opposed to CPS (with upper case letters) which describes a specific approach or model described above.

Creative Thinking. The process of generating ideas, which frequently emphasizes fluency, flexibility, originality and elaboration in thinking. Treffinger & Isaksen (1992) defined creative thinking as: “Making and expressing meaningful new connections; it is a process in which we perceive gaps, paradoxes, challenges, concerns, or opportunities; and then—think of many possibilities; think and experience in varied ways, with different viewpoints; think of new and unusual possibilities; and extend and elaborate alternatives.” (See Divergent).

Creativity. A quality of human behavior that has many facets or dimensions and has been defined in a variety of ways. Definitions often emphasize one (or a combination) of factors such as process, personal characteristics or traits, environments or products. In general or conversational use, creativity often refers to novel ideas that are useful.

Creativity Style. A person’s preference for an adaptive or innovative approach to creativity, innovation, and change, based on Kirton’s (1976) theory and related instruments and research.

Critical Thinking. The process of analyzing, refining, developing, or selecting ideas, including categorizing, comparing and contrasting, examining arguments and assumptions, reaching and evaluating inferences and deductions, setting priorities, and making choices or decisions. (See also Analysis and Convergent.)

Cronbach's Alpha. A statistical measure of the internal reliability of question items in a dimension. The alpha score ranges from a low of 0 to a high of 1.0 and indicates how much the items in a dimension are measuring the same thing (Vogt, 1993). The Alpha obtained for a scale when converted to a percentage indicates the % of variance of the total score that is reliable, or systematic, variance (Pedhazur & Schmelkin, 1991). The minimum standard of reliability is debated, but .7 (Nunnally & Bernstein, 1994) is often used for Educational and Psychological measurements. The standard statistical notation for a reliability coefficient is α .

Cross-Cultural SOQ Administration. Data from groups of varying national or ethnic backgrounds; may contain intact or cross-functional structure.

Cross-Functional Structure for SOQ Administration. Data from groups across varying formal levels within the same organization, such as departments or divisions.

Cultural Blocks. The application or effects of beliefs, morals, traditions, norms, or expectations within a culture in such a way as to interfere with creative problem solving.

Culture. The context within which individuals hold perceptions of their working climate; usually referring to the deeper values, traditions and artifacts of the organization. Those within the culture do not typically perceive it.

D

Degrees of Freedom (df or DF). Statistical notation used to designate the degrees of freedom used in the calculation of ANOVA, MANOVA or regression equations. The degrees of freedom equal the number of coded vectors that represent the number of categories, or groups minus one.

Data. Data includes information, impressions, observations, feelings and questions that are collected from people or other sources. Generally this data is processed and organized on a computer with other data to create a database. The data is then used in a number of ways including statistical analysis.

Data boundaries. Setting, concepts, sampling, etc. that describe the parameters of design and analysis in a qualitative study (Miles & Huberman, 1993).

Debate. Examining a question, situation, issue, topic, or challenge from many and diverse perspectives or viewpoints, including sharing of differing experiences and knowledge. A dimension of the SOQ. When debates are high in a climate the individuals focus on the issues involved, as opposed to conflict where the focus is on the person holding or presenting the beliefs or issues.

Debrief. Descriptive presentation of SOQ data to clients; includes a formal explanation of psychometric properties, background, history, uses of instrumentation and description of results on dimensions and narratives.

Debriefing. Reflecting on an experience or activity, think about what you observed, felt, or learned; commonly involves exchanging those observations, feelings, and learnings with other participants in a group. The second of three stages in an experiential learning model.

Deductive. An assumptive mode in research. It identifies the place of theory (Goetz & LeCompte, 1984). It begins with a theoretical system. It develops proposition, concepts and matches to data.

Deferred Judgment. A basic principle of CPS, particularly important in the creative or divergent phases of each stage; emphasizes the need to refrain from evaluation (criticism or praise) of ideas during the process of generating options.

Demographic Data. Information about the population sampled in a study. This information can consist of information like gender, age, income, religion, educational status and similar variables.

Dependent Variable. The variable of interest in a explanatory study. The variability of the dependent variable depends, to some degree, on the effect of the independent variable. In statistical procedures the dependent variable is represented by Y (Pedhazur & Schmelkin, 1991).

Descriptive. An approach to applying CPS or any model or theory, that helps match one's needs with an appropriate process pathway; to design, formulate, or invent, and then apply strategies, methods, and techniques in ways that are personally, socially, and situationally relevant and useful.

Descriptive Codes. Labeling whose function is to identify the basis classification of attributes in a segment of text (Miles & Huberman, 1993).

Developer Preference. (Also see VIEW) In ordinary use, a "developer" is an individual who brings tasks to fulfillment, who begins with the basic elements or ingredients and then organizes, synthesizes, refines, and enhances them, forming or shaping them into a more complete, functional, useful condition or outcome. Developers are concerned with practical applications and the reality of the task, and they use their creative and critical thinking in ways that are clearly recognized by others as being helpful and valuable. They prefer problems and solutions that are within the framework of their present experience, seeking change that is incremental, practical, and easily assimilated by the current reality. Developers prefer finding a small number of workable possibilities and guiding them to successful implementation. They tend to focus on bringing one task to closure before taking on a new challenge. Others often see Developers as persistent, careful, practical, methodical, well organized, and as seeking to minimize risk and uncertainty. They are comfortable with plans, details, structure, and the guidance of authority figures. They find structure and the guidance of authority helpful, or even enabling, in moving tasks or projects forward in an efficient, deliberate manner.

Discrepant Case Selection. An instance that modifies, refines, or elaborates a construct; can be used with various units of analysis. Applied in SOQ narrative design, analysis, and training by maintaining a focus on differences as well as similarities. (See Negative Case Selection).

Distribution. A ranking of variables values and the resulting pattern of the scores. The ranking is usually from lowest to highest and are plotted on a graph.

Divergence. (Also: Diverging, Diverge or Divergent thinking). Generating many possible responses, ideas, options, or alternatives in response to an open-ended question, task, or challenge. Often used casually as equivalent to creative thinking.

Dyad. A grouping of two people; a pair of people interacting.

Dynamic Balance. The appropriate use of both Divergent and Convergent thinking in CPS (Isaksen, Dorval & Treffinger, 1994).

Dynamism—Liveliness. The eventfulness of the life in an organization. A dimension that was assessed in the earlier versions of the Situational Outlook Questionnaire® known as CCQ I, CCQ II and CIQ III. The dimension was removed from subsequent versions because it had a tendency to merge with other dimensions when Factor Analysis was used to analyze the structure of the questionnaire.

E

Ecological Approach to Research. A method of research designed to discover more about the nature of interactions among many relevant contingencies and their implications for instruction, training, and future refinements of change methodologies (Isaksen, Puccio, & Treffinger, 1993).

Environment. The setting (physical and psychological) in which human behavior takes place. See Climate or Press.

Enumeration. (Also known as frequency count). In the SOQ narrative data, enumeration is used to cluster "hot spot" (Goetz & LeCompte, 1984) areas of similar responses for debriefing or reporting narrative results.

Enumerative. An assumptive mode in research. It is how units of analysis are formed and described. It counts previously defined or derived units of analysis (Goetz & LeCompte, 1984).

Evaluation. A deliberate and systematic process for analyzing, developing, and refining options, and for making and justifying choices and decisions. In creative environments, evaluation is regarded as a constructive process, not merely as criticizing or judging the inadequacies of an idea.

Explorer Preference. (Also see VIEW) In ordinary use, an "explorer" is an individual who thrives on venturing in uncharted directions, seeks to break new ground, and follow adventurous or promising new possibilities wherever they may lead. Those with an Explorer style enjoy initiating a broad range of tasks, and thrive on new, ill-defined, and ambiguous situations and challenges. Explorers seek to create many unusual and original options that, if developed and refined, might provide the foundation for productive new directions. They enjoy seeing unusual possibilities, patterns, and relationships. Other people may find their highly novel ideas difficult to understand or initially to "buy into." Explorers tend to embrace new experiences and to "plunge" right into novel situations. They do not fear (and may seem to thrive upon) risk and uncertainty, and often improvise their planning as the situation unfolds, becoming so involved in the excitement of new, leading edge ideas that concerns about efficiency and practicality are, at times, forgotten. Explorers may continue to consider new ideas about a project, even after closure has been reached, or they may abandon a project before reaching any closure, so they can pursue new challenges. They often find plans, procedures, and structures that are imposed on them to be confining and limiting.

External Preference. (Also see VIEW) Individuals who exhibit a well developed preference for this style draw their energy from interaction with others, discussing possibilities, and building from the ideas of others. They prefer physical engagement with the environment. When learning new and difficult material those with an External style preference clarify their ideas and understandings through discussion. They find the input of authorities helpful as part of their active discussion. They are not bothered by noise in the study area, approach learning in several ways, and often find that physical mobility enhances their learning, thinking, and problem solving. When solving problems, they seek a great deal of input from others before reaching closure. "Externals" tend to be seen by others as good team members and often appear full of energy. Preferring action to reflection, they may appear to rush into things before others are ready to proceed.

F

Facilitation. The process through which a group carries out and monitors its progress in applying CPS methods and techniques during a group meeting or working session.

Facilitator. The person charged with the major responsibility of providing the process expertise for a group session; usually someone with some special knowledge, ability, and skill dealing with methods and techniques of the particular process being used.

Factor Analysis. Any of several methods of analysis that allow researchers to decrease a large number of variables to a smaller number of variables, or factors (Vogt, 1993). Principle Component and Maximum Likelihood are variations of Factor Analysis.

Flexibility. The divergent thinking ability (or option-generating quality) associated with producing varied ideas; emphasizes examining a situation from different or varied perspectives or viewpoints (Guilford, 1977).

Fluency. The divergent thinking ability (or option-generating quality) associated with producing many ideas (Guilford, 1977).

Formal or Middle-Range Theory. "Interrelated propositions designed to explain some abstract class of human behavior" (Goetz & LeCompte, 1984, p. 35); conceptualizes human experience as explicit empirical data (Glaser & Strauss, 1967; Denzin, 1978).

Freedom. The independence in behavior exercised by the people in an organization. A dimension of the Situational Outlook Questionnaire® (SOQ).

G

Generative. An assumptive mode in research. It is the extent of generalizability. Discovers constructs or propositions developed elsewhere (Goetz & LeCompte, 1984).

Generating Ideas. One of three major components of the CPS model in which ideas are produced to respond to a specific concern or problem (Isaksen, Dorval & Treffinger, 1994). It includes the Idea-Finding stage of the CPS process.

Grounded Theory. A research methodology that considers "generating theory and doing social research [as] two parts of the same process" (Glaser & Straus, 2012, p. 2). Theory may be generated either from the original data itself or may be elaborated and modified from existing appropriate theory (Strauss & Corbin, 1994). (See Constant Comparison).

H

HM (How might...). An invitational stem or open-ended phrase at the beginning of a problem statement used to invite ideas.

H2 (How to...). An invitational stem at the beginning of a problem statement used to invite ideas.

Homogeneity. The concept of similarity in structure because of common descent. The term is often applied to items of an instrument, questionnaire, or survey that measure the same concept or theory, or when a sample of a population is selected for their similarity on a particular demographic feature (i.e., age, gender, or income). When samples are homogeneous the results obtained for that study may not be transferable to other samples or the population in general. A common test of homogeneity in sampling is the chi-square test.

Heterogeneity. A term used to generally describe variables that have a dissimilarity in structure because they do not have a common descent from a concept or theory. In respect to samples of individuals for data analysis when it is desired to transfer the results to the general population or are intended to be used as norms it is necessary to obtain a heterogeneous sample (i.e., the sample is normally distributed on age, gender, intelligence, educational status, etc.).

I

Idea. In general use, a thought or a specific result of cognitive activity. More specifically, options, directions, or possibilities generated during the Idea-Finding stage in CPS (Isaksen, Dorval & Treffinger, 1994).

Idea-Support. The degree to which new ideas are treated in a positive and encouraging manner. A dimension of the Situational Outlook Questionnaire® (SOQ).

Idea-Time. The amount of time people can use (and do use) for generating, developing, or elaborating new ideas. A dimension of the Situational Outlook Questionnaire® (SOQ).

Ill-Defined Challenge. A challenge that is not yet formulated or developed to the extent or degree of specifying actions and responsibilities to be taken by an individual or group (Getzels & Csikszentmihalyi, 1976).

Imagination. The ability of the mind to develop and use images. In CPS, the degree to which novelty is needed for a particular outcome or obstacle. One of the three criteria for ownership in CPS (Isaksen, Dorval & Treffinger, 1994).

Implementation. The point at which one or more promising or possible solutions or ideas are ready to be carried out. In CPS, the intended outcome(s) for the Plan of Action (Isaksen, Dorval & Treffinger, 1994).

Incremental Improvement. A process of change that relies upon making a series of small or detailed refinements within the given problem definition or accepted system. Indicative of the style preference of Adaptors (Kirton, 1976).

Incubation. A general phenomenon in the creative process, during which one's mind may continue to explore ideas even when one is not consciously thinking about the challenge or concern (Wallas, 1926).

Independent Variable. The variable used in an explanatory study that has been predetermined from theoretical formulations to be the cause of variations in the dependent variable. In statistical procedures the independent variable is represented by X (Pedhazur & Schmelkin, 1991).

Inductive. An assumptive mode in research. It identifies the place of theory. Begins with collection of data; builds from discovered relationships (Goetz & LeCompte, 1984).

Influence. The degree to which you have the ability to make decisions and to take action to create change. One of the three criteria for ownership in CPS (Isaksen, Dorval & Treffinger, 1994).

Innovation. The result of creativity which emphasizes the product or outcome.

Innovator (or "I"). Represents the Innovative style of creativity described by Kirton (1976). In discussions of creativity style, this is often summarized by the use of a letter "I". The innovative style is characterized by a tendency to challenge rules and paradigms. Individuals who have an "I" preference may appear undisciplined, impractical or unstructured because of their tendency to discover new problems or to manipulate an existing problem in different or new ways.

Intact SOQ Working Group. A group that works together directly on tasks. Intact group task functions for SOQ purposes focus on project groups or teams whose tasks have a distinct beginning and end in a product.

Intact Structure for SOQ Administration. Data from groups who operate within a single, formally identified organizational structure such as a department, a division, or a company.

Interest. The degree to which you have a desire or motivation to work on a particular challenge. One of the three criteria for ownership in CPS (Isaksen, Dorval & Treffinger, 1994).

Internal Preference. (Also see VIEW) Those with a well-developed Internal style look first reflectively to their own inner resources and draw energy from their reflection. They prefer to consider ideas on their own before sharing them with others. They embark on action only after giving it careful consideration. People with an Internal preference emphasize quiet reflection and processing information at their own pace. They tend to become engrossed in inner events, ideas, and concepts. They prefer learning privately, working at least initially without the help of peers or authority figures. They may seem quiet and might be perceived by others as pensive or withdrawn.

Interpretative Codes. Labeling to include inferences and directions suggested by the data (Miles & Huberman, 1993).

Intervening Variable. A variable that occurs or lies between other variables. An intervening variable is effected by one set of variables and then has an effect on another set. Once these effects begin to operate the intervening variable has a moderating effect in both directions and the relationship becomes cyclical.

An intervening variable can be inferred and interpreted on the basis of an observers' perceptions (Reber, 1985). In respect to the concept of Climate as an intervening variable in organizations the dimensions of climate are factors that occur between particular stimulants (independent variables, i.e., people, concepts, funds, etc.) and particular behaviors (dependent variable, i.e., job satisfaction, productivity, innovation, etc.)

Intervention. The deliberate use of the SOQ to diagnose climate strengths, areas of improvement, and unique aspects to guide the planning and implementation of change in an organizational climate or workplace. Any degree of action or use of SOQ that deliberately attempts to influence the direction of a situation may be regarded as an intervention; the greater the deliberate application of the data, the stronger its intervention function. (See proactive and reactive intervention).

Intrinsic Motivation. Pursuing a task for the interest or enjoyment afforded by the task or the effort itself, rather than for the potential promise of some external reward (Amabile, 1983).

Invitational Stem. One of the four elements of a problem statement which is designed to encourage the flow of ideas; initial phrases in a problem statement such as, "In What Ways Might..." (IWWM), "How might..." (HM), or "How to...." H2 (Isaksen, Dorval & Treffinger, 1994).

Isolated Intervention. Climate focus; only SOQ data and instrumentation used; no initial plan for follow-up requested. (See Debrief).

Iteration. A recurring round of data analysis that returns to a prior set or subset of data in light of an emergent idea, theme, or direction in the current set. (See recursive analysis).

IWWM. Short-hand for "In What Ways Might..." Constructive ways to word the invitational stem or format of a problem statement.

K

KAI. Kirton Adaption-Innovation Inventory: A psychological instrument designed by Kirton (1976) to measure an individual's style of creativity and Problem solving; (See Adaptor, and Innovator.)

Kuder-Richardson (KR20 or KR21). Measures of the internal consistency or reliability of measurement in instruments, surveys, or questionnaires that have only two possible answers, such as agree/disagree or yes/no (Vogt, 1993).

L

Leadership.

- The exercise of authority and influence within a social group (Reber, 1985).
- A process through which a person guides a group in practicing or applying CPS methods, taking into account the nature of the task, the socio-emotional relationships, needs of group members, and the developmental level of the participants for their task (Isaksen, Dorval & Treffinger, 1994).

Learning Style. A person's consistent or stable preferences for dealing with a variety of different tasks or situations. There are many theoretical models and instruments for assessing various aspects of learning style. These can be used for self-understanding, for improving teamwork and effective group participation, and for understanding the working dynamics of CPS within a group.

Level I Analysis. Open coding of SOQ narrative data to identify similarities and differences in participant responses; output is reported in categories or themes that reflect participants' views and perceptions of identified climate.

Level II Analysis. Selective coding, organizing, and reporting of similarities and differences in SOQ narrative data using the definitions of the nine dimensions as deliberate categories.

Level III Analysis. Theoretical development of grounded theory from case results across sites. Used for multi-method validation of similarities and generative directions for differences or unique relationships.

Level of Creativity. A person's capacity or ability to produce many, varied, or unusual ideas that are useful or to elaborate on possibilities already generated; responds to the question, "How creative are you?" Contrasted with Style of Creativity or Creativity Style.

Level of Significance. An estimation of the probability that the results of a statistical procedure are the function of chance alone. If the level of significance is reported at .01 it means the probability of the observed result occurring by chance would be one in a hundred.

Likert Scale. A questionnaire format developed by Rensis Likert. In this format the respondent evaluates a statement and responds by saying whether they 'strongly agree,' 'agree,' 'disagree,' or 'strongly disagree' (Vogt, 1993). The Situational Outlook Questionnaire® (SOQ) uses this format.

Limitation. A concern, shortcoming or problem associated with a particular option. In CPS interventions limitation is usually worded as a problem statement beginning with a How to... or How might....

Linearity. A description of the relationship between two or more variables, that when plotted on a graph, forms a straight line (Vogt, 1993).

M

Manner of Processing. (Also see VIEW) This dimension describes the person's preference for working externally (i.e., with other people throughout the process) or internally (i.e., thinking and working alone before sharing ideas with others) when managing change and solving problems.

Maximum Likelihood Estimation. Statistical methods for estimating the population parameters most likely to have resulted in observed sample data (Vogt, 1993).

Mean. The statistical average of a group of scores (Vogt, 1993).

Median. The middle score in a set of ranked scores (Vogt, 1993).

Memoing. Recording of ideas, reflections, and relationships by the analyst during coding and analysis; theory-oriented and conceptual in intent (Glaser & Strauss, 2012; Goetz & LeCompte, 1984).

Mode. The most common or frequent score in a set of scores (Vogt, 1993).

Multicollinearity. A term used to describe the situation that exists when two or more independent variables are highly correlated. Thus, it makes it challenging, if not impossible, to ascertain their separate effects and predictive contribution in respect to the dependent variable (Vogt, 1993). Multicollinearity also has an effect on other statistical procedures, including Factor Analysis.

Myths. Widely held opinions or beliefs that are based on false premises or are the result of flawed or illogical reasoning. Three principal myths historically associated with creativity have been "mystery, magic, and madness" (Isaksen, Dorval & Treffinger, 1994).

N

Narratives. Verbatim responses to three open-ended questions on the SOQ designed to identify participants' perceptions of what helps and hinders their creative climate and to elicit ideas about productive actions.

Negative Case Selection. A case that refutes or disconfirms a construct; similar to null hypothesis and helps establish boundaries and distribution of a construct. (Goetz & LeCompte, 1984, p. 175). See also Discriminant Case Analysis.

Norms.

- In measurement, the distribution of scores on a particular variable or instrument within a sample with which the scores of other individuals or groups can be compared.
- In relation to group development and group process, the term is also used to describe an expectation, standard, or principle for establishing and guiding appropriate action.

Novelty. Newness, unusualness, or originality; the statistical infrequency of an idea or option.

O

Objective. An assumptive mode in research. It is an external/external view of reality. It is observer reality. Removed from context. The situation is described with minimal observer interaction and involvement (Goetz & LeCompte, 1984).

Oblique. Used in factor analysis and other research designs involving variables that are correlated or not independent of one another (Vogt, 1993). In SPSS the term for an oblique rotation in the factor analysis procedure is Oblimin. See orthogonal.

Obstacles. Situations which represent areas of concern, discomfort, or dissatisfaction for an individual; may serve as starting points for CPS (Isaksen, Dorval & Treffinger, 1994).

Open Coding. Developing emergent categories during initial data analysis to fracture or run the data open for construction; not pre-set according to any theory or typology.

Operation Analysis. Noticing how things happen and in what successive stages (Samson, 1975).

Options. A broad term which refers to available choices or possibilities for an individual or group.

Organizational Climate. The set of characteristics that describe an organization and a) distinguish it from other organizations, b) are enduring over time, and c) influence the behaviors of people in the organization (Forehand & Gilmer, 1964). Organizational climate is an attribute of the organization. (See Climate and Psychological climate).

Orientation to Change. (Also see VIEW) This dimension describes the person's perceived preferences in two general styles for managing change and solving problems creatively: the Explorer and the Developer.

Originality. The divergent thinking variable or dimension (or idea-generating quality) associated with producing unique, novel, or unusual responses (options or ideas) that are statistically infrequent in relation to an appropriate comparison sample or group (Isaksen, Dorval & Treffinger, 1994).

Orthogonal. A term used to describe the orientation of uncorrelated variables to each other. When plotted on a graph they form right angles. In factor analysis an orthogonal rotation is used when it is assumed that the factors extracted are not correlated (Vogt, 1993). In SPSS the term for a orthogonal rotation is varimax. (See oblique.)

Outcomes. Positive opportunities or challenges upon which individuals work; also used to describe the desired results or intended action steps which emerge from a CPS session (Isaksen, Dorval & Treffinger, 1994).

Output. The term used to describe the results of activity from any of the three CPS components. These outputs are process related such as locating yourself elsewhere on the CPS framework; a need to recycle; or exit CPS.

P

P (or p). The symbol for probability value or p value. When used in the expression ' $p < .05$ ' it signifies the probability that this result could have been produced by chance (random error) is less than 5%. In other words ' $p < .05$ ' means that the odds are a hundred to five against the result being an error (Vogt, 1993).

Paradigm. A set of rules, guidelines, or beliefs adhered to consistently to guide or direct one's behavior or thinking; a stable pattern of operating or thinking.

Pattern Codes. Inferential or explanatory interpretation of a segment of text that identifies emergent motifs or relationships in qualitative data analysis; typically used later in data collection as patterns are clarified (Miles & Huberman, 1994).

Pearson Correlation. See Correlation.

People Preference. (Also see VIEW) People oriented persons tend to focus on the People style as their primary emphasis when deciding. They consider first the impact of choices and decisions on people's feelings and support, and on the need for harmony and positive relationships. They prefer to be emotionally involved when setting priorities. They are often seen as warm, friendly and caring. They are often quick to become aware of, and to respond to, the needs of others. They seek solutions or decisions that all concerned can "buy into."

Perceptual Barriers. A set of obstacles or factors that inhibit creative thinking based on how information is gathered, organized, and processed; obstacles that arise from failure to observe carefully or challenge assumptions.

Planning for Action. One of three major components of the CPS model in which the major focus involves examining, analyzing, and developing potential solutions, as well as formulating a specific plan to gain acceptance and support implementation (Isaksen, Dorval & Treffinger, 1994).

Playfulness and Humor. The extent to which spontaneity and ease are displayed in an organization, and individuals feel free to generate and share unusual or unlikely possibilities. A dimension of the Situational Outlook Questionnaire[®] (SOQ).

Predictive Validity. The extent to which a survey, questionnaire, or test can predict the future performance of individuals or the concept assessed.

Prescriptive. A rigid approach to problem solving in which individuals or groups follow a fixed or pre-determined set of steps or apply specific strategies regardless of the specific demands or requirements of the task, the group, or the setting.

Press. The climate, environment, culture or situation in which creativity takes place—or is inhibited.

Principal Components Analysis. A method for transforming a large set of correlated variables into smaller groups of uncorrelated variables (Vogt, 1993). It is a statistical procedure associated to Factor Analysis.

Proactive Intervention. Using the SOQ to identify or guide the development of a future vision of change in an organization. Characteristics of a proactive intervention include a desire to discover organizational potential or to identify a challenge.

Probability of Success. A global or overall criterion used to help converge on promising options. It asks you to take all things into consideration when you rate the likelihood of successfully accomplishing what you set out to do.

Problem. Any situation for which we need new ideas or a plan for using or implementing new solutions successfully; the gap between where you are and where you want to be. For CPS, a problem can be viewed as an opportunity for change (Isaksen, Dorval & Treffinger, 1994).

Problem Statement. A question that can be used to generate many, varied, and novel ideas; expressed in a concise form that includes an invitational stem, a statement of ownership, a constructive action verb and a goal or objective (Isaksen, Dorval & Treffinger, 1994).

Process. A bounded group of interrelated work activities providing output of greater value than the inputs by means of one or more transformations.

Process Diagnosis. Deliberately selecting an appropriate CPS component, stage, or tool to use for a certain task, within a specific group, under particular circumstances (Isaksen, Dorval & Treffinger, 1994). (See Task Appraisal.)

Process Language. The terminology known and used by the members of a group to communicate effectively and efficiently about their task and their approach to Creative Problem Solving.

Profiling. A vehicle to help identify peoples' strengths and talents for a particular goal or task, in a particular context and circumstances, for specific outcomes (Isaksen, Puccio, & Treffinger, 1993, p. 157).

Psychological Climate. An "... individuals' cognitive representations of relatively proximal situational events, expressed in terms that reflect the psychological meaning and significance of the situation to the individual. ...psychological climate is regarded as an attribute of the individual" (James & Sells, 1981, p.275). (See Climate and Organizational climate.)

Purposive Sampling. A qualitative approach to sampling where selection is related to the organic nature of the study. Used when the purpose of the study is to learn about or understand a phenomenon rather than to generalize to all cases (Patton, 1980). (See Kuzel, 1992; Miles & Huberman, 1993; Patton, 1980 for typologies of sampling strategies).

Q

Qualification. Noticing the qualities of things; how things are alike and how they differ (Samson, 1975).

Qualitative Research/Analysis. An umbrella term encompassing a variety of research approaches that are used to examine processes that may or may not be measured in traditional ways; that study social relationships or experiences; that reflect the relationship of the researcher to what is being studied; and that consider values as a part of the design and analysis of the study. Its assumptive modes tend to focus on (a) inductive; (b) subjective; (c) generative; and (d) constructive approaches (Goetz & LeCompte, 1984). Used specifically in SOQ to describe the handling of the narrative data in Part II of the instrument.

R

r. Statistical notation commonly used to designate the Pearson Product Moment Correlation Coefficient or Pearson Correlation Coefficient. Also see z.

r². Statistical notation commonly used to refer to the percentage of predictable variance. The magnitude of r² is often interpreted (sometimes incorrectly) and reported as the effect of the independent variable on the dependent variable or the variance explained (Pedhazur & Schmelkin, 1991). In regression analysis 1-r² is the proportion of variance attributed to error.

Reactive Intervention. Using the SOQ to examine or describe the handling of existing problems that need correction in the current reality of an organization.

Recursive Analysis. A generic term that describes the back and forth movement between and among rounds of data analysis; typically associated with the technique of Constant Comparison.

Regression Analysis. Methods of explaining or predicting the variability of a dependent variable using data about one or more independent variables. Regression analysis answers the question, "What values in the dependent variable can we expect given certain values in the independent variables?" (Vogt, 1993).

Reliability. The degree of consistency with which an instrument, survey or questionnaire measures what it is suppose to be measuring (Ary, Jacobs, & Razavieh, 1972, p. 200). A common measure of reliability is the Cronbach's Alpha. The standard statistical notation for a reliability coefficient is α .

Resister. In Acceptance-Finding, resisters are possible sources of difficulty or obstacles which might inhibit or prevent implementation of a solution (including people, places, resources, times, and reasons).

Risk-Taking. The tolerance of uncertainty permitted in an organization. A dimension of the Situational Outlook Questionnaire[®] (SOQ).

S

SPSS (Statistical Package for Social Sciences). One of the more popular computer software packages for Main Frames, PC's and Macintosh computers. The software has an array of statistical procedures commonly used by social scientists.

Sampling. The process of selecting subjects who represent the larger group or population in question. If the sampling is done randomly and is representative of the larger group the results from the sample can be transferred to the larger group with a fair degree of certainty.

Self-Image Barriers. A set of blocks to creative thinking emphasizing a low confidence in one's own ability to think creatively and solve problems, and the inability to identify and use resources effectively.

SEM. See "Standard Error of Measurement"

Sensory Search for Relationships. A category of tools that uses the five senses to identify observations, impressions, reactions and memories to stimulate novel connections.

Set Training Program. Use of a developed and tested program design that can be imported to meet the needs of a variety of clients; may or may not include SOQ administration as a part of the design, but is likely to include climate dimensions and implications to clarify situational outlook.

Site. The physical location of SOQ administration (specific location and local, state, regional, national, and international contexts. Includes traditional demographics and other data boundaries. (See also Case and Case Study.)

Situational Outlook for Creativity. The concern for, or consideration of, a complex set of factors within one person's situation that has a powerful impact on creativity (Isaksen, Dorval & Treffinger, 1994).

Situational Outlook Questionnaire® (SOQ). A questionnaire developed in the USA by Isaksen in collaboration with Ekvall. The instrument is designed to assess dimensions of creative climate through the use of Likert scale items and open-ended response questions.

Spearman-Brown. A statistical formula used to determine the gain in reliability of an instrument if the size of the sample used were increased.

Split-Half Reliability. A way to investigate the reliability of an index by seeing how well the scores on one half of the question items correlate with those on the other half (Vogt, 1993).

Standard Error of Measurement (SEM). The standard error of measurement (SEM) estimates how repeated measures of a person on the same instrument tend to be distributed around his or her "true" score. The true score is always an unknown because no measure can be constructed that provides a perfect reflection of the true score. SEM is directly related to the reliability of a test; that is, the larger the SEM, the lower the reliability of the test and the less precision there is in the measures taken and scores obtained. Since all measurement contains some error, it is highly unlikely that any test will yield the same scores for a given person each time they are retested.

Stem. A specialized word, sentence, or phrase used to guide or focus your thinking in a particular way during different CPS activities.

Strategic Barriers. Blocks to creative thinking emphasizing limited flexibility in the use of problem-solving strategies.

Structural Analysis. Observing how things are made; breaking structural wholes into parts (Samson, 1975).

Style of Creativity. An individual's preferences or predispositions to deal with people or situations in consistent ways, and to use particular methods for gathering data, making decisions, and interacting with the environment. Deals with how individuals express and best use their creativity ("How are you creative?"), not with how creative they are. (Contrast with Level of Creativity.)

Subjective. An assumptive mode in research. It is a world view of reality. It is participant reality. The context is integral. Perspectives and input from participants used to form and describe a situation (Goetz & LeCompte, 1984).

Substantive Theory. "Interrelated propositions or concepts lodged in particular aspects of populations, settings, and times that can be identified concretely" (Goetz & LeCompte, 1984, p. 38).

T

Tailored Training Program. Use of a modified or new program design that meets the specific needs of a particular client; may or may not include SOQ administration as a part of the design, but is likely to include climate dimensions and implications to clarify situational outlook.

Task. A particular job, piece of work, assignment or effort that needs attention and energy.

Task Appraisal. Identifying the important and relevant dimensions of a task to determine your approach and appropriateness for using CPS.

Task Preference. (Also see VIEW) Those with this focus tend to look first at choices and decisions that are logical, sensible and can be justified objectively. They prefer making judgments that are impersonal, based on well-reasoned conclusions. Individuals with a Task style of decision making seek mastery of content or information to help them arrive at the "best solution" or response, or at a solution they can readily defend or justify. They may stress the need for staying cool and free from emotion, while seeking clarity, precision, and logical order.

Technique(s). A specific algorithm, procedure, or strategy for generating options or ideas, or for analyzing them; often used as a synonym for tools.

Test-Retest Reliability. A correlation between scores on two administrations of a measurement instrument given to the same subjects. A high correlation indicates high reliability (Vogt, 1993).

Themes. Coding and category output in SOQ narrative reports that describes a recurring pattern or interpretation of verbatims; primarily identified by key descriptive phrases or single sentences.

Theoretical sampling. The search for theory that best matches existing data. In qualitative research traditions, this can and usually does occur during data collection (Goetz & LeCompte, 1984).

Theorizing. “The cognitive process of discovering or manipulating abstract categories and relationships among those categories....the fundamental tool of researchers to confirm or develop explanations for how and why things happen as they do” (Goetz & LeCompte, 1984, p. 167).

Thing-making. Making mental pictures of things when we interpret sensations (Samson, 1975).

Tool(s). Specific techniques that can be named, learned, practiced, and applied to increase the ease, efficiency, and effectiveness with which we generate or analyze options (Isaksen, Dorval & Treffinger, 1994).

Toolbox. A collection of techniques used for divergent and convergent thinking in the CPS process (Isaksen, Dorval & Treffinger, 1994).

Training Case. A case example created or selected from actual data to illustrate key concepts or principles in a learning situation.

Transcriptions. Verbatim responses from participants written up from field notes, audio or video tapes; can include verbal and non-verbal responses as available.

Triangulation. Use of multiple data sources and multiple ways to collect and analyze information (Denzin, 1978).

Trust and Openness. The emotional safety in relationships displayed in an organization. A dimension of the Situational Outlook Questionnaire® (SOQ).

V

Validity. The degree to which a test or instrument measures what it purports to measure. The common forms of validity are internal, external, construct, content, concurrent, and face validity. Newer lines of evidence include evidence based on: test content, internal structure, response processes, and relations to other variables.

Value Barriers. The blocks to creative thinking in which values, beliefs, ethics, or principles of conduct are held or applied so rigidly as to unduly influence problem-solving behavior.

Variable. An attribute or characteristic that can change, that can vary.

Varimax Rotation. "A method of orthogonal rotation of the axes in a factor analysis" (Vogt, 1993, p. 242).

Verbatims. Exact words of participants transcribed for analysis; in the SOQ, the exact responses of participants to the three narrative questions in Part II. (see Narrative Responses.)

Verificative. An assumptive mode in research. A position of evidence (Goetz & LeCompte, 1984).

Vision. The image of a desired future state; answers the question, "What are the results you wish to create?" Visions are compelling or inspiring, and, although they refer to the future, are usually stated in the present tense.

VIEW; VIEW: An Assessment of Problem Solving Style (Treffinger, Selby, & Isaksen, 2008) is an instrument for assessing problem-solving style, for use with individuals from ages 12 through adult. It measures three dimensions of style relating to creative problem solving and change management (Also See Orientation to Change, Manner of Processing and Ways of Deciding).

W

Ways of Deciding. (Also see VIEW) This dimension describes the major emphasis the person gives to people (i.e., maintaining harmony and interpersonal relationships) or to tasks (i.e., emphasizing logical, rational, and appropriate decisions) when making decisions during problem solving or when managing change.

WIBAI... (Wouldn't it be awful if...). One form of an invitational stem used to explore or generate possible mess statements.

WIBNI... (Wouldn't it be nice if...). Another form of an invitational stem used to explore or generate possible mess statements.

Z

z. The statistical notation commonly used to designate the standard score. The covariance of two variables expressed in z scores is the same as the Pearson correlation coefficient.

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