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THE IMPACT OF SCHEMAS AND INQUIRY
FRAMES ON CONSULTANTS'
CONSTRUCTIONS OF EXPECTATIONS
ABOUT THE CLIENT SYSTEM

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Eden (1988) proposed that the effectiveness of OD may be strongly influenced by the consultants' expectations regarding the clients' potential to succeed or fail by creating self-fulfilling prophecies. This study investigated and supported the view that the consultants' constructions of positive or negative perceptions and expectations about the client system is an artifact of consultant organizational schemas and inquiry frames.

INTRODUCTION

Eden (1984, 1986, 1988) both through empirical investigations and conceptual arguments has made a strong case for the concept of expectations and resultant self-fulfilling prophecy (SFP) effects in OD. In particular he has emphasized the "notion of consultant as Pygmalion" where he contends that the same kinds of SFP processes that affect client's effectiveness in managing their subordinates can also operate to influence consultants' effectiveness in helping their clients.

While Eden (1984, 1986, 1988) extends a conceptual model of the role of expectations in the OD process and makes a call for OD professionals to engage in expectation raising which includes implanting positive expectations and eradication of negative expectations, he does not throw much light on what contributes to a consultant constructing expectations regarding the client's potential to succeed or fail. In this study we extend and explore the view that the consultants' expectations of a client system is an artifact of his/her schemas and assumptions about organizational life and the corresponding framing of inquiry since schemas and frames guide perceptions and expectations. Accordingly the study was designed to investigate and compare the impact of different theoretical guiding schemas about organizations and frames of inquiry on consultants' positive and negative cognitive constructions of their consulting task and client systems.

Expectation Effects

Expectations can play a significant role in the course and outcomes of an OD effort. King (197l, 1974) was one of the first to explore the concept of expectancy effects in industry. His second series of experiments (King, l974) convincingly demonstrated the impact of expectations on the success of interventions in organizations. He hypothesized that manager's expectations regarding the outcomes of organizational innovations produce effects on those outcomes that are independent of the effects of the innovations themselves.

As indicated in his study of four comparable plants getting different treatments; a high-expectation job enlargement plant, a high expectation job rotation plant, a control-expectation job enlargement plant, and a control-expectation on rotation plant the enrichment had no effect but the expectations did. Over a 12 month follow-up period both high-expectation plants increased their output by similar amounts irrespective of whether they had been treated to enlargement or rotation, while the control-expectation plants remained the same.

Other studies also have documented positive expectancy and SFP effects in both educational settings (Dusek, Hall & Meyer, 1986; Rosenthal & Rubin, 1978; Rosenthal & Jacobson 1968) and work units (Crawford, Thomas & Fink, 1980; Eden & Ravid; 1982; Eden & Shani, 1962). Likewise, Babad, Inbad and Rosenthal (1982) among others have provided evidence for negative SFP, showing a clear relationship between low expectations and poor performance.

Consultant Expectation Effects

Consultants can play a critical role in creating expectations effects in client systems. High expectations on the part of a consultant who has faith in the potential of the client to improve influences the consultant to treat the client as a high performance client thereby triggering a positive SFP. Eden (1988) terms this as a "second-order Pygmalion effect". As Eden (1986) clarifies the process "An OD consultant expecting success can exhibit contagious enthusiasm for the intervention, increase the amount and kind of feedback given to clients, establish warmer and more supportive relationships, instill higher self-expectations in the client, and invest more time and energy in the project. In short, a higher-order SFP hypothesis is that OD consultants consult better to clients of whom they expect more" (1986:11). This reasoning parallels Rosenthal's (1974) four factor model of, how teacher expectation effects manifests itself in terms of teachers giving

special treatment to students of whom they expect more by 1. creating for them a warmer socio-emotional climate, 2. providing them with more feedback, 3. giving them more input and 4. allowing them more output.

Likewise a consultant by attuning the organization to its weaknesses, mistakes, incompetencies can create "organizationally induced helplessness" (Martinko & Gardner, 1982) whereby members begin attributing past failures to certain causes and correspondingly reduce their expectations for future performance, resulting in further failure.

Construction of Expectations An Artifact of Schemas and Inquiry Frames

While Eden (1988) attributes the phenomenal success of some OD consultants to the process of expectation-raising and suggests that some consultants may be fully aware of the power of expectation-raising and use it as a "secret weapon", and for others success may be in part "an unwitting consequence of their ability to inspire high self-expectations and self-confidence in their clients" (1988: 260), he does not provide any clear understanding as to what contributes to the consultant constructing positive or negative perceptions and expectations about a client system. However, he does make a call for a deeper understanding of underlying expectation processes in order to "further demystify SFP and turn it into a practical tool to be used by more managers and OD consultants" (Eden, 1988: pg. 260). At this point we would like to advance the view that the consultants' construction of positive or negative perceptions and expectations about a client system is an artifact of his or her theories/schemas/assumptions about organizational life and the corresponding framing of inquiry as schemas and frames guide perceptions and expectations.

There is a considerable amount of literature to support the social nature of perception and knowledge. A germane stream of thought in this regard pertains to

schematic bases of information processing. Schemas are cognitive structures that consist of memorial representation of some defined stimulus domain. Schematas contain general knowledge about a domain, including a specification of the relationships among principal attributes of that domain (Taylor & Crocker, 1981; Bartlett, 1932). Schematas enable the perceiver to selectively attend to incoming stimuli, encode, store and ultimately retrieve information in a particular domain (Taylor & Crocker, 1981; Markus, 1977). Schemas serve as frames of reference for perception and action (Weick, 1979) and may provide rules for activating anticipated behavioral sequences for how an individual or others should act in various situations (Abelson, 1981).

There is a growing body of research in cognitive psychology clarifying the links between cognitive schemas, perceptions. expectations and actions (Mahoney & Arknoff 1978, Mahoney 1977; Turk & Salovey 1985). Many studies (Cantor Smith, French, & Mezzich, 1980; Horowitz, Post, French & Wallis 1981; Cantor & Mischel 1979; Snyder, 1981; Temerlin; 1968) showed that there was consistent evidence that clinical psychologists theoretical schemas (organized knowledge structures and expectancies) influenced diagnosis prediction and treatment. Temerlin (1968) found that similar behavior of a confederate was evaluated as neurotic or healthy depending on the theoretical orientation of the clinician. A study by Snyder (1981) showed that clinicians sought information from patients that only fitted their theoretical orientation. Thus patients were questioned only about causes believed by the therapist to be related to different presenting symptoms.

Of special relevance are other studies which indicate a relationship between theoretical schemas, perceptions, expectations, and self-fulfilling prophecies. For example, Ullman and Kresner (1976) state, "The therapist who expects a person to be unresponsive to psychotherapy and emits cues to this effect, influences his patient. When the client does indeed respond poorly, at least in part as a result of the therapists actions, the therapists

predictions come true" (1975: 96). Frank (1974) in similar lines notes that the major, factor in therapeutic success is alteration of the client's assumptive world to be consistent with the assumptive world of the therapist. Kadushin (1969) demonstrated the relational effect of schemas, expectations, and self-fulfilling prophecies in his study of four types of clinics in New York, psychoanalytic, psychotherapeutic, religiopsychiatric, and hospital-based. He found that over a period of time the patient's conception of his/her problem matched the model or school of therapy to which the person was referred. As Kadushin (1969) points out, "Indeed a detailed statistical examination of changes in a way a person (patient) first conceived of his problem and the way he finally presented it to the clinic shows that applicants tend to increase their perception of suitable problems" (1969: 106). In summary, evidence from cognitive and clinical psychology suggests that theoretical/cognitive schemas of psychoanalysts can impact their perceptions and the construction of expectations about clients.

Another related line of thinking which has examined selective perceptions, expectations and actions can be classified under the rubric of "framing effects". Though primarily in the context of bargaining and negotiation Bazerman (1990) offers an extensive review of how two different frames of a similar situation evoke different responses from individuals. In the context of negotiations, research on framing bias has shown that, often whether the decision maker is evaluating the prospect of gains or losses is simply a matter of the way a question is presented or phrased (e.g., "Is the glass half full," or "Is the glass, half empty?"). Thus the way a decision is framed, that is positively in terms of gains or negatively in terms of losses, can influence a decision

makers risk propensity and thereby his/her decisions. The impact of framing on

perceptions, expectations and actions have been evidenced in many studies Neale &

Bazerrnan, 1985, Neale, Huber & Northhcraft, 1987). For example, Neale and Bazerman

(l985) found that negatively framed negotiators were less concessionary, resolved fewer

contracts, and had less successful contracts than positively framed negotiators. Thus

frames much as schemas direct attention, expectations, and determine, influence, or

moderate behavior.

RESEARCH QUESTION

Drawing on the above framework that schemas and frames direct perceptions,

expectations and actions, the current study was exploratory in nature with a broad research

focus. The primary interest was in comparing whether consultants employing two different

schemas and frames towards organizational inquiry, one which assumes organizations as

solutions to be enhanced and focuses on organizational strengths which facilitate

organizational effectiveness, and the other which assumes organizations as problems to be

fixed and focuses on organizational weaknesses which inhibit organizational effectiveness,

will influence consultants perceptions and expectations of the consulting task and the client

systems more positively or more negatively. The schema and inquiry frame focusing on

organizational strengths was represented by the Appreciative Inquiry paradigm

(Cooperrider & Srivastava, 1987) and the schema and inquiry frame focusing on

organizational weaknesses was represented by the traditional Action research paradigm

(French & Bell, 1978). For an examination of perceptions and expectations of consultants

the method of reporting cognitive constructions was utilized (Halpert & Sanderst 1988).

Two exploratory hypothesis in this regard were;

H1. Consultants using an Appreciative Inquiry paradigm will report more positive cognitions than the consultants using an action research paradigm with respect to the consulting task and client systems.

H2. Consultants using an Appreciative Inquiry paradigm will report less negative cognitions than the consultants using an action research paradigm with respect to the consulting task and the client systems.

Action Research and Appreciative Inquiry Paradigms

The traditional action research paradigm approaches "organizing as a problem to be solved and metaphorically views the glass (organization) as half empty" (Cooperrider & Srivasha, 1987). Most definitions of action research equate it with problem identification and problem solving. As French and Bell (1978) define it, "Action research is both an approach to problem solving - a model or paradigm, and a problem-solving process" (1978: 88). Likewise Levinson (1972) emphasizes that the major focus of action research should be on discovering problems in organizations. As he states ...(The researcher) "should look for experiences which appear stressful to people. What kinds of occurrences disrupt or disorganize people" (1972: 37). As an approach action research develops applicable knowledge in the problematic social situation by emphasizing a self-critical approach to social problems and practices (Peters and Robinson, 1984). Other definitions of action research also support this contention (Blake & Mouton, 1976). The typical action research process follows a sequence of 1. identification of problem, 2. analysis of causes, 3. analysis of possible solutions, and 4. action planning (treatment).

The Appreciative Inquiry paradigm approaches "organizing as a miracle of cooperative human interaction which needs to be affirmed and metaphorically views the glass (organization) as half-full" (Cooperrider & Srivastva, 1987). As a methodology, Appreciative Inquiry seeks to locate and highlight the "life giving properties" of

organizations. Life giving forces refer to the unique structure and processes of the organization that makes its very existence possible. An affirmation of these unique structures and processes are most likely to help realize what makes organizing possible and further throw open possibilities of newer and more effective forms of organizing. Appreciative Inquiry, thus, seeks out the very best of "what is" to provide an impetus for imagining "what might be." Appreciative Inquiry follows a process of: 1. Appreciating and valuing the best of "what is," 2. Envisioning "what might be," 3. Dialoguing "what should be," and 4. Innovating "what will be."

Cognitive Constructions

Cognitive constructions is a broad based concept and includes under its rubric an individual's s thoughts. perceptions, expectations, beliefs, and attributions as related to self or others including objects (Halpert & Sanders, l 988). Cognitive constructions are typically classified as being of a positive, negative, or neutral nature, and have been used extensively in studying differences between maritally distressed and non-distressed couples (Halford & Sanders, 1988; Jacobson & Moore, l 981; Carnper et al., 1988), in the areas of assertiveness (Schwartz & Gottman, l 976). Social anxiety (Glass et al., l982), and Coping patterns (Kendall et al., l979). For example, the study by Halford and Sanders (l988) indicated that maritally distressed couples had significantly higher proportions of negative partner-referent cognitions and lower proportion of positive-partner referent cognitions, than non-distressed couples while problem solving.

METHODS

Subjects

The subjects for this study were 30 students pursuing their Master's degree in Organization Development who had not been previously exposed to the appreciative inquiry or action research paradigms. As part of a course requirement in organizational analysis these students were required to undertake a consulting project with an organization. The convention was to combine four to five students to form a consulting team which would work with a particular organization. The proiects were for a duration of four to five months.

Procedure

The subiects were randomly assigned to either the Action Research group or to the Appreciative Inquiry group resulting in 15 students in each group. Then, the two groups were separated and taken to different classrooms. Two instructors each were assigned to the two groups as resource persons. Once in their separate class rooms, the concerned instructors spent approximately six hours educating their group on the concepts of Action Research or Appreciative Inquiry. Each group was asked to break up into teams of five mernbers each, and from the three organizations presented to each group, to choose an organization they would like to work with on the consulting project. Once the choices were made, a system of meetings was set up whereby each team was required to meet independently without any instructors present at least once a week for the complete duration of the project for planning and strategizing activities with respect to their client organizations. These meetings were essentially set up as de-brieflng and planning meetings where team members shared their observations and interpretations about the organization, engaged in collective sense-making, planned for and worked on next steps with respect to

their client organization. Each member was also asked to maintain a detailed diary listing their thoughts, feelings, and observations about these meetings. This technique referred to as "thought listing" is an extensively used method for reporting cognitions (Camper et al., 1988; Halford & Sanders, 1988).

Thought listing is a generative strategy as opposed to endorsement strategies (self-statement checklists) and requires subjects to report their own cognitive constructions of an experience or interaction which are later content-analyzed by trained judges. Given the exploratory nature of this study a generative strategy seemed appropriate. Further, this method has been shown to produce high inter-rater reliability and adequate disciminant validity (Cacioppo & Petty, 1981).

The consulting teams were given the option to schedule their meetings at their own time and the only requirement placed on them was that each person submit each week a copy of their diary recordings of the preceding meeting to their respective instructors. Details of the study were not disclosed and the subjects assumed that maintaining the diary was a normal course requirement.

Development of the Code

From the diary recordings a sample was randomly drawn which was content analyzed by five researchers and a coding system was devised. This method of devising a coding system follows the guidelines of a "classical coding strategy" (Russell & Stiles, 1979). Nine categories were developed for positive cognition and thirteen categories for negative cognition and one category for neutral cognition. This was consistent with suggestions in the literature (Clark, 1988; Schwartz & Garomani, 1986) that content and predictive validity of cognitive measures can be improved by making them bi-dimensional. A neutral cognition was one which did not fall into either the positive or negative category. Further, the content analysis also suggested contexts for the cognitions. We found four

predominant contextual patterns in terms ot statements referring to task, clients, self, and group members. The coding scheme is described more thoroughly in Tables 1 and 2.

Table 1. Positive Cognition Categories

	Cognitive Type	Description	Example
1.	Positive valence	Any mention of positive valence past or present	"I like the meeting."
2.	Hope towards future	Any mention of hope, optimism, positive anticipation towards future.	"We were looking forward to a good meeting."
3.	Skill or competency	Any mention of a skill, competency, action, positive quality about self or others.	"The group worked very well together, task-oriented and highly pragmatic."
4.	Openness, receptivity learning	Any mention of receptivity in self or others accompanied by a positive valence or outcome. Also any noticing of self or other's learning, or interests.	"By listening to her explanations, we came closer to a group understanding."
5.	Active connection, effort to include or cooperate	Any noticing of efforts to include, cooperate, connect, or relate to others, that may be accompanied by at least inferred positive valence or outcome.	"Hal and Joe began to seek consensus for their proposal."
6.	Mention of positive surprise, curiosity, or excitement	Any mention of curiosity, positive surprise, excitement in self or others.	"We were excited about the presentation and anticipating the unknown."
7.	Notice of facilitating action or movement towards a positive outcome	Any mention of a facilitating action or movement towards a real or imagined positive outcome, or any mention of a facilitating object or circumstance. Also noticing of any event that enhances another event, effective state, or a person. Noticing facilitating or positive cause and effect.	"Having a computer for us to type the questions we formulated was very helpful." "There was a lot of energy that helped us get the session completed in good time."
8.	Effort to reframe in positive terms	Any mention of a negative emotion or action accompanied by the possibility of a positive desired outcome. Also, any mention of a change in mood from negative to positive, including any mention of an obstacle that is temporary, getting over a negative static state, or reframing of a negative situation in more positive terms.	"We experienced a lot of conflict, but I realized that this was an appropriate time for us to learn how to constructively manage conflict."
9.	Prediction, image of a positive future	Any explicit description of a vision, or valued end state, articulation of a positive outcome envisioned for the future which is either spculative (i.e. what might be) or normative (i.e. what should be).	"My hope for the group's development was that we would operate openly with one another as partners under egalitarian norms."

Table 2. Negative Cognition Categories

	Cognitive Type	Description	Example
1.	Negative valence	Any mention of negative valence, such as fatalism, apathy, or dislike. Any mention or identification or person, groups, circumstance or event as a problem or obstacle.	"We hoped that it would not be a problem that they wanted two groups."
2.	Concern, worry, preoccupation, doubt	Any mention of concern, worry, preoccupation without mention of possibility of a facilitating model to alleviate concern or to enhance understanding. Any mention of doubt, suspicion, lack of confidence in future outcome.	"I'm concerned whether the new appointee will work out."
3.	Unfulfilled expectation	Any mention of an event, action, state or person that does not match intention, wish, desire, goal or other unfulfilled expectation.	"My first preference was the Art Museum, but the group filled up so quickly."
4.	Lack of receptivity, absence of connection	Any mention of a lack of receptivity in self or others, including a lack of collaboration, lack of understanding, failure to listen, or failure to agree, noticing of inequality, or otherwise any explicit mention of an absence of connection, interest or collaboration.	"There was no commonality between the members."
5.	Deficiency in self or others	Any mention of a sense that something is missing, such as, deficiency in self or others, lack of motivation, appropriate effort, skill, competence, or absence of resources such as time and money.	"Thus, from a scouting standpoint, initially little though was given to the saspect of how the potential client's influence within an organization might affect the acceptance of an OD intervention."
6.	Negative affect	Any mention of feelings of dissatisfaction, selfishness, sadness, defensiveness, irritation, anger without mentioning a possible antidote, relief or effort to understand.	"I was irritated by her lack of concern."

Table 2. Negative Cognition Categories (cont.)

7.	Withdrawal or suppression	Any mention of avoiding, ignoring, withdrawing energy, surrendering, suppressing self or others.	"I retreated from the discussion."
8.	Control or domination	Any noticing of effort or action to disrupt, dominate, wield control, impact mood or activity, in self or others.	"Tony controlled consensus by belaboring each item."
9.	Wasted effort	Any mention of excessive investment of time, resources, or energy without mention of reward or positive outcome.	"The vast majority of the five hour meeting was spent on a few trivial issues, what a waste of time."
10.	Prediction, image of a negative future	Any explicit prediction or description of a vision, image or expectation of a negative future which is either speculative (i.e., what might be) or normative (i.e., what should be).	"The way this meeting is going on right now in another ten minutes we will be at each other's throats."
11.	Attribution of control in other(s) in combination with self-deprecation	Any notice of effort or action in other(s) to disrupt dominate, or wield control in combination with attribution of helplessness to self, self-pity or self-depreciation.	"Every one else knew more than I did and were dominating the discussion and I could contribute nothing."
12.	Negative cause and effect relation	Any explicit notice of cause and effect relationship leading to a negative valence or outcome.	"The tension and the rivalry in the group arose because of all the undisclosed problems."
13.	Reframing a situation in negative terms	Any mention of a positive emotion accompanied by the possibility of a negative outcome. Also, any mention of a change in mood from positive to negative, or getting into a negative state, focusing on possible obstacles, or reframing a positive situation in more negative terms.	"The team member's were so participative, but underneath there was a tendency to outsmart one another."

The basic unit of measurement was a complete sentence and each sentence was coded only for a single cognition. In cases where a single sentence suggested two different cognitive types. The more dominant cognitive type was coded for. Two raters naive to the experimental questions or treatment conditions were trained for 25 hours in the use of the code. The content for these practice sessions was drawn randomly from the diary recordings. Training was completed when the coders estabished an interrater reliability of 85% in the practice sessions. Following this, a representative sample of 20% was randomly drawn from each diary and coded individually by both coders. The total number of complete sentences coded were 2806. In order to balance for possible differences in the number of sentences sampled for each group it was decided that instead of comparing the actual frequency of cognitions between the groups, the ratio of a partlcular type of cognition to the total number of cognitions for each group would be used as dependent measures.

Overall Interrater reliabilities for coding of cognitions was 85.52% and subsequent discussions on disagreement between the raters estblished the reliability at 100%. The total number of sentences coded for the Appreciative Inquiry group was 1212 and the number of sentences coded for the Action Research group was 1594.

RESULTS

Analysis of Differences between Appreciative Inquiry and Action Research groups on Demographic and related variables

In light of the fact that the sample size was very restricted in number (30 subjects) and the probability for a randomization process to achieve equivalence is lower with a sample. We compared the two groups on some demographic life style, interpersonal, and learning style measures the subjects had responded to as part of another study conducted six months prior to the current study conducted six months prior to the current study

(N=26). Specifically the demographic measures were: Age, Sex, Occupation, Population of city of residence, Number of siblings, Birth order, Religion born into, and current religion. The life style variables were measured using the Life Style Questionnaire (Friedlander, 1975) which includes three life style dimensions of Formalistic, Sociocentric, and Personalistic. The Interpersonal variables were measured through the FIRO-B Questionnaire (Schutz, 1958) which measures Expressed and Wanted Inclusion, Expressed and Wanted Control, and Expressed and Wanted Affection. The Learning style variables were measured by the Learning Style Inventory (Kolb, 1984) which assesses an individual's scores on learning dimensions of Concrete Experiences, Reflective Observation, Abstract Conceptualization, and Active Experimentation. A Bartlett's test of sphericity was applied to test whether the control variables were intercorrelated or not. The determinant value was .0000, the Bartlett test of sphericity value was 494.63 with 210 d.f., and a significance of .000 suggesting that the variables were significantly intercorrelated. The results of a Multivariate analysis of variance (MANOVA) procedure showed no significant differences between the two groups (F= .836, df= 21, 4, p <.658) indicating that the groups were equivalent before the study.

In order to discriminate statistically significant differences in cognition ratios between the two groups, it was decided to conduct two more MANOVAs, one for the positive cognitions and another for the negative cognitions. A Bartlett's test of sphericity for the positive cognition variables showed a determinant value of .654, a Bartlett's test of sphericity statistic of 46.8 with 36 d.f., and a significance of .07. The negative cognition variables showed a determinant value of .23, a Bartlett's test of sphericity statistic of 160.85 with 78 d.f, and a significance of .000. While the intercorrelations for the negative cognition variables was strongly significant, the intercorrelations for the positive cognition variables though statistically not significant within the conventionally accepted level of

.05, was close to statistical significance at .07. Thus it was decided to proceed with the MANOVAs.

Analysis of differences on the Positive Cognition Variables

The MANOVA on the positive cognition ratios indicated significant differences between the groups (F=2.91, df=9, 20, p < .004). Univariate analysis of variance (ANOVA) were conducted to establish on which particular positive cognition ratios the two groups differed. The Appreciative Inquiry group showed with respect to task, client, self, and other group members significantly higher ratios of: notice of a skill, competency, action or positive quality (F=6.86, p <.01), notice of positive surprise, curiosity or excitement (F=6.23, p <.014), and mention of facilitating action or movement towards a real or imagined positive outcome (F=4.94, p .028). No significant differences were found between the groups with regard to the other six positive cognition classifications. A confirmatory discriminant analysis confirmed the same three positive cognition categories as accounting for significant differences between the two groups. Table 3 presents the means, standard deviations, results of the ANOVA and the discriminant analysis.

Table 3. Means, Standards Deviations, Analysis of Variance [a] and Discriminant Analysis for Positive Cognition Variables

	Variables	Appreciative Inquiry Means	s.d.	Action Research Means	s.d.	Anova F	Standarized Discriminant Function Coefficients
1.	Positive valence	3.19	3.97	2.23	3.55	1.89	.41
2.	Hope towards future	3.14	4.55	1.83	4.14	2.69	.35
3.	Skill or competency	12.53	9.61	8.58	6.53	6.86**	.55
4.	Openness, receptivity or learning in self or learning	7.48	9.37	4.94	7.01	2.79	.21
5.	Active connections, effort to include or cooperate	5.06	7.44	4.54	4.96	.20	.08
6.	Mention of notice of positive surprise, curiosity or excitement	2.60	4.50	.97	2.29	6.23**	.50
7.	Mention of facilitating action or movement towards a positive outcome	7.86	8.81	4.64	6.84	4.94*	.42
8.	Effort to reframe in positive terms	6.28	6.94	6.27	6.50	.001	-.03
9.	Prediction, image of a positive future	.18	.63	.18	1.29	.281	-.30

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[a] F - statistics with df = 1,116 are reported in the table

* $p < .05$
** $p < .01$
*** $p < .001$

n = 30

Analysis of differences on the Negative Cognition Variables

The MANOVA on the negative cognition ratios also showed significant differences between the groups (F=5.24, df=13, 16, p < .001). ANOVAs indicated that the Appreciative Inquiry group showed with regard to task, client, self, and group members lower negative cognition ratios of: Notice of lack of receptivity, including lack of collaboration and absence of connection (F=14.46 p < .001), Notice of effort or action to disrupt, dominate, or wield control (F= 17.57, p < .001), and Mention of wasted resources such as excessive investment of time, resources or energy without mention of positive reward or outcome (F=4.24, p < .042). Subsequent discriminant analyses confirmed the ANOVA results. Table 4 presents the mean percentages of the thirteen negative cognition ratios, standard deviations, and results of the ANOVA and discriminant analysis.

Table 4. Standards Deviations, Analysis of Variance [a] and Discriminant Analysis of Negative Cognition Variables

	Variables	Appreciative Inquiry Means	s.d.	Action Research Means	s.d.	Anova F	Standarized Discriminant Function Coefficients
1.	Negative valence	1.23	2.72	.90	2.26	.53	.06
2.	Concern, worry, pre-occupation	5.03	9.29	5.87	6.59	.32	-.37
3.	Unfulfilled expectation	1.65	3.41	.68	1.74	3.89	.47
4.	Lack of receptivity, absence of connection	2.38	4.07	6.51	7.22	14.45***	-.59
5.	Deficiency in self or others	3.50	5.39	5.48	5.98	3.55	-.41
6.	Negative affect	3.08	5.38	2.33	3.78	.80	.35
7.	Withdrawal or suppression	.84	2.57	1.19	2.64	.52	.11
8.	Control or domination	1.65	3.34	7.59	10.27	17.57***	-.65
9.	Wasted effort	.17	.94	.92	2.60	4.23*	-.55
10.	Prediction, image of a negative future	.05	.38	.21	.91	7.40	.03
11.	Attribution of control in others combined with self-deprecation	.05	.38	.13	.61	2.39	-.20
12.	Negative cause and effect relation	2.46	3.85	3.19	5.00	.77	-.13
13.	Reframing in negative terms	3.06	5.71	2.66	4.57	.18	-.01

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[a] F - statistics with $df = 1,116$ are reported in the table

* $p < .05$

** $p < .01$

*** $p < .001$

22

n = 30

DISCUSSION

The results support both of our exploratory hypotheses as evidenced by the consultants using an appreciative inquiry paradigm reporting higher positive cognitions and lower negative cognitions with respect to the task and client system and also self and other group members than consultants using an action research paradigm. However the multivariate difference effect for positive cognitions have to be interpreted with caution since the Bartlett's test was only close to significance ($p < .07$).

An interesting question for future investigation here relates to the high frequency of cognitions referring to self and other group members. While one can expect cognitions referring to the task and client system given the nature of the job, the references to self and group members suggests that possibly the Inquiry paradigms and the act of inquiry also impacted the consultants' in a personal context. This phenomena is discussed by Morgan (1983) as "Research as an Engagement process" wherein as researchers we not only create and discover the world we create through our inquiry assumptions but also make and remake ourselves in the process. Another question worthy of investigation is that whether there is any relationship between consultants perceptions/expectations of self and perceptions/expectations of client systems.

From a theoretical perspective the study has extended evidence that consultant perceptions and expectations of the client system and tasks are impacted by consultant schemas and inquiry frames. There was more notice of skill, competency, positive action and qualities; notice of positive surprise, curiosity and excitement, and mention of facilitating action and movement towards positive outcomes with respect to the client system and tasks when the schema and frames viewed organizations as solutions to be enhanced and focused on organizational strengths. Likewise there was more notice of lack of receptivity, collaboration and connection; notice of effort or action to disrupt, dominate, or wield control, and mention of wasted resources such as excessive investment of time, resources or energy without mention of positive reward or outcome towards the client

system and task when the schema and frames assumed organizations as problems to be fixed and focused on organizational weaknesses.

At this point we cannot discourse around why some specific cognitions were significant versus others as the research was exploratory in nature and an unstated purpose of the study was to also understand what type of cognitions do consultants construct in relation to client systems. This definitely needs elaboration in the future. However based on our findings we can suggest that framing organizations and inquiry from the "glass is half full) perspective does direct consultants perceptions and expectations of clients in positive terms and may very well create a positive self-
fulfilling prophecy, as much as framing organization and inquiry from the "glass is half-empty" perspective can create negative self-fulfilling prophecies.

One definite implication of this study is that consultants should make a conscious attempt to understand their schemas and frames of inquiry particularly in light of the fact that through schema driven perceptions and expectations we may be unwittingly engaged in creating negative self-fulfilling prophecies. Likewise consultants who want to create positive self-fulfilling prophecies may want to spend more time examining their implicit assumptions and frames. A definable way of understanding this assumptive ground is to examine the frame in which a particular paradigm, intervention, or technique is developed and what implicit assumptions does it hold. For example Schein (1985) argues the need for consultants to develop power based and politically oriented strategies to achieve organizational change objectives. Her assumptions behind these strategies are that organizations are political environments and change programs threaten current power distribution. Therefore organizational members who seek to maintain their own power will tend to thwart or eliminate the power of the consultant and therefore counterstrategies by the consultant are a natural component of any change program. Going by our evidence on the relational nature of schemas, perceptions, and expectations this Machiavellian assumption of organizational life will direct us to perceive and expect Machiavellian

moves and counter-moves from organizational members and may create a Machiavellian self-fulfilling prophecy. Metacognition, the awareness and monitoring of one's own cognitive processing including memory, comprehension, knowledge, goals, and in general cognitive resources (Flavell, 1979; Merluzzi et.al., 1981) may be another way for consultant's to raise awareness around their schemas assumptions and frames. They can acquire and develop metacognitive inquiry skills.

There are two weaknesses of the study which have to be corrected in future investigations. One was the limited sample size of subjects and the other non-matched organizational or client-system samples.

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