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Connecting cognitive-experiential self theory’s information-processing styles with organisational influencing tactics: Rational thinkers are rational persuaders.

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Connecting Cognitive-Experiential Self Theory’s information-processing styles with organisational influencing tactics: Rational thinkers are rational persuaders.

Abstract

Several recent studies have connected information-processing styles, as described by Cognitive-Experiential Self Theory (CEST), with important workplace behaviours including leadership and conflict-handling styles. This paper extended such research by examining the connection between CEST information-processing styles and organisational influencing tactics. In Study 1 ($N=119$), the CEST information-processing styles of behavioural coping and rational thinking were positively correlated with the use of rationality as an influencing tactic, as measured by the Profile of Organizational Influence Strategies. In Study 2 ($N=142$), a broader self-report measure of influencing tactics was used; behavioural coping and rational thinking were positively correlated with effective influencing tactics such as rational persuasion. Together, behavioural coping and rational thinking accounted for more than 31% of the variance in preference for rational persuasion as in influencing tactic. Additionally, the appraising tactic was positively correlated with both behavioural coping and rational thinking. These findings emphasize the importance of examining individual differences in information-processing preferences to understand key elements of organisational behaviour.
Effective interpersonal influence is vital within the workplace, particularly for management (Yukl, Seifert & Chavez, 2008). The use of effective influence tactics, such as persuading people rationally and appealing to people’s higher values, can help to drive much-needed change within organisations, while the use of ineffective influence tactics may promote resistance (Farbe & Yukl, 1992; Yukl, Kim & Farbe, 1996). Influence processes in the workplace have been studied in a range of contexts and have been connected to important aspects of organisational behaviour such as leadership (e.g., Charbonnaeu, 2004). Influence involves behaviours, and the behaviours people engage in are often driven by the ways in which they think (Epstein, 1994). However, no previous research has examined whether there is any connection between people’s thinking styles, or information-processing preferences, and their preference for the use of various organisational influencing tactics.

A framework that is emerging as potentially useful for organisational psychology to understand information-processing styles is that provided by Cognitive-Experiential Self Theory (CEST; Epstein, 1994). CEST describes information-processing as operating using two interacting systems, the rational system and the intuitive-experiential system. The rational system processes information consciously and logically, but relatively slowly (Epstein, 1998a). The intuitive-experiential system processes information rapidly but mostly non-consciously, relying on experience and affect (Epstein, 1998a). People’s preference for using these information-processing systems can be measured, for example, by instruments designed to assess need for cognition and preference for intuitive thinking (Epstein, Pacini, Denes-Raj, & Heier, 1996). Preferences for using these information-processing systems are correlated with behaviour and decision-making (e.g., Denes-Raj & Epstein, 1994; Mahoney, Buboltz, Levin, Doverspike, & Syvantek, 2011). According to CEST all behaviour is underpinned by the operation of the two information-processing systems (Epstein, 1994), and this would, of course, include influencing behaviour in a workplace setting.
An additional element to CEST is a consideration of whether people use their intuitive-experiential information-processing systems constructively (Epstein & Meier, 1989). Epstein (1998b) describes constructive thinking as thinking that allows for adaptively dealing with information-processing demands at a minimum of stress. Embedded within the conceptual framework of constructive thinking are concepts such as behavioural coping, which involves people preferring to take action when confronted with a problem, rather than ruminating on the problem (Epstein, 1998b). In an organisational context, Epstein (1998b) reported that executives who outperformed their peers were significantly higher in their preference for using constructive behavioural-coping responses.

There is one clear logical connection between CEST and the various kinds of organisational influencing tactics that have been described in the literature. Two of the most widely-used measures of organisational influencing tactics describe rational persuasion, i.e., the use of logical and reasoned arguments based on evidence, as among the most effective influencing tactics (Schriesheim & Hinkin, 1990; Yukl et al., 2008). It could be theorised, purely by definition, that people who prefer logical, rational, and analytic information-processing will prefer rational persuasion as in influencing tactic. Rational persuasive arguments must be logically and consciously formed before they can be articulated either verbally or in writing. Thus, people who prefer to think logically, analytically, and consciously should prefer to employ rational arguments in influence attempts. For this reason, we hypothesised that there would be a positive correlation between preference for rational thinking and preference for the use of reason-based organisational influencing tactics such as rationality (Kipnis, Schmidt & Wilkinson, 1980) and rational persuasion (Yukl et al., 2008).

As far as we can find, no research has directly tested the connection between the information-processing systems described by CEST and organisational influencing tactics. However, there are three indirect routes in the literature that show the potential for a
connection between CEST and organisational influencing tactics: leadership, conflict management, and personality.

**Indirect connections between CEST and organisational influencing tactics**

**Leadership**

Transformational leadership is known to be a highly-effective leadership style (Bass, 1997; Judge & Piccolo, 2004) and people who are perceived to be transformational leaders are also perceived to use more effective influencing tactics, such as rational persuasion (Charbonneau, 2004). Transformational leadership is positively correlated with a preference for rational thinking (Cerni, Curtis & Colmar, 2008). Moreover, transformational leadership has been positively correlated in four previous studies to the constructive use of the intuitive-experiential information-processing system, particularly via behavioural coping (Atwater & Yammarino, 1993; Cerni et al., 2008; Dubinsky, Yammarino & Jolson, 1995; Humphreys & Zettel, 2002). Recent evidence indicates that the relationship between constructive thinking and transformational leadership is causal; leaders coached in constructive thinking had increased transformational leadership scores as rated by their followers (Cerni, Curtis & Colmar, 2010a, 2010b).

In sum, transformational leadership is connected with the use of effective influencing tactics such as rational persuasion and transformational leadership is connected with rational and constructive thinking. Therefore, it seems likely that some direct connection would exist between rational and constructive thinking and the use of effective influencing tactics such as rational persuasion (Curtis, 2013).

**Conflict Management**

Several authors have implied that there are connections between effective conflict management and the use of effective organisational influencing tactics (e.g., Behfar, Peterson, Mannix, Trochim, 2008; Furst & Cable, 2008; Tjosvold & Sun, 2001). Recently,
evidence has emerged of a connection between CEST information-processing systems and conflict handling styles (Cerni, Curtis & Colmar, 2012). Specifically, rational thinking and behavioural coping were positively correlated with the use of effective conflict management styles such as integrating ideas from all sides of a conflict to find an effective solution (Cerni et al., 2012). The connection of influencing tactics to conflict management styles, and conflict management styles to CEST, suggests the possibility of a direct connection between influencing tactics and CEST’s information-processing systems.

**Personality**

Studies have connected the five-factor model of personality to both CEST information-processing systems and to the use of organisational influencing tactics. Emotional stability has been found to be positively correlated both to behavioural coping (e.g., Epstein & Meier, 1989) and to the use of rational persuasion (e.g., Cable & Judge, 2003). Conscientiousness is positively correlated both to rational thinking (e.g., Pacini & Epstein, 1999) and the use of rational persuasion (e.g., Cable & Judge, 2003). As with the indirect connections involving leadership and conflict styles, these relationships point to a likely direct connection between CEST information-processing systems and influencing, particularly the theoretical connection we have proposed between rational thinking and rational persuasion.

**The Present Studies**

Taken together, the indirect evidence from studies on leadership, conflict management, and personality, suggests that rational and constructive thinking (particularly behavioural coping), as described by Cognitive-Experiential Self Theory (CEST), will be related to the use of organisational influencing tactics, particularly reason-based tactics. The present studies sought to test the hypothesis that a preference for rational thinking would be positively correlated with a preference for the use of reason-based organisational influencing
tactics: rationality (Study 1) and rational persuasion (Study 2). In addition, as the first studies to examine the relationships between CEST information-processing measures and preferences for other organisational influencing tactics, we pursued the open research question: which information-processing styles are correlated with which organisational influencing tactics, and in what ways?

To add depth to the exploration of connections between CEST and organisational influencing tactics, Studies 1 and 2 used different measures of organisational influencing tactics. In Study 1, participants completed CEST information-processing measures along with the Profile of Organizational Influence Strategies, which assesses six influence tactics (POIS; Kipnis et al., 1980; Schriesheim & Hinkin, 1990). In Study 2, participants completed CEST information-processing measures along with a broader self-report measure of influencing tactics designed to assess the 11 influencing tactics described by Yukl et al. (2008).

Study 1 – Connections between CEST and POIS

Method

Design and Participants.

This study employed a correlational design, with data collected via an online survey. Participants were required to be currently working, or have worked within the last six months. Additionally, participants were required to be 18 years of age or older. One-hundred and fifty-two people completed the online survey, of these, 14 were excluded for not meeting age or employment requirements. A further 19 participants were excluded because their scores were 1.5 standard deviations above the mean for the defensiveness scale or 1.5 standard deviations below the mean for the validity scale of the Constructive Thinking Inventory (CTI; Epstein, 2001). This left a total of 119 participants. Participants ranged in age from 18 to 65 years ($M = 30.73$), and there were 34 males and 84 females. Most
participants were employed full-time (61.3%) with the remainder employed part-time or
casually. Most participants’ (81.5%) nationality was Australian.

**Measures.** Participants completed three measures in an on-line survey, the
Constructive Thinking Inventory (CTI; Epstein, 2001), the Rational-Experiential Inventory –
long form (REI; Pacini & Epstein, 1999), and the Profile of Organizational Influence
Strategies (POIS; Kipnis et al., 1980; Schriesheim & Hinkin, 1990). In addition, the
participants answered questions designed to ascertain their demographic details (e.g., gender)
and suitability to participate in the study (e.g., employment status).

**Constructive Thinking Inventory (CTI).** The CTI is designed to assess the extent to
which people’s intuitive information-processing is likely to lead to adaptive problem-solving
with a minimum of stress (Epstein, 2001). The CTI contains 108 items that participants
respond to using a 5-point Likert scale anchored with 1 “Definitely false” and 5 “Definitely
true”. The CTI assesses two constructive thinking factors and four destructive thinking
factors, most of these factors have minor subscales, which are listed in parentheses. The
constructive thinking factors are: behavioural coping (positive thinking, action orientation,
conscientiousness) and emotional coping (self-acceptance, absence of negative
overgeneralization, nonsensitivity), and the destructive thinking factors are: personal
superstitious thinking, categorical thinking (polarized thinking, distrust of others,
intolerance), esoteric thinking (belief in the unusual, formal superstitious thinking), and naive
optimism (over-optimism, stereotypical thinking, Pollyanna-ish thinking ). The CTI also
produces an overall factor called global constructive thinking, which includes items from
most of the subscales. Additionally, the CTI contains a defensiveness scale that assesses
respondents’ attempts to present themselves positively, and a validity scale that assesses
whether respondents are reading questions carefully (e.g., “Two plus two equals four”;
Epstein, 2001). Reported Cronbach’s alpha reliabilities for the CTI are satisfactory, ranging
from .76 to .92 (Epstein, 2001; Alpha coefficients for the present study can be found in Table 1). However, in the present study alpha coefficients of below .60 were observed for personal superstitious thinking and categorical thinking and these factors were excluded from the analyses. Finally, to minimise familywise error, only the main factors rather than the subscales, of the CTI were included in analyses in both Studies 1 and 2.

**Rational Experiential Inventory (REI).** The REI assesses people’s preferences for using their rational and intuitive-experiential information-processing systems as described by CEST (Pacini & Epstein, 1999). The REI has 40 items; 20 each assessing preferences for rational and intuitive thinking. The REI is respond to using a 5-point Likert scale anchored with 1 “Definitely false” and 5 “Definitely true”. Cronbach’s alpha reliabilities were .91 for the rational thinking scale and .77 for intuitive-experiential thinking scale in this study. Additionally, the rational and intuitive-experiential scales are usually orthogonal, as confirmed in the present study where the scales were uncorrelated ($r = .02, p = .83$; see Table 1)

**Profile of Organizational Influence Strategies (POIS).** The POIS is an 18-item measure of six common upward influencing tactics: rationality, ingratiation, assertiveness, coalition, exchange, and upward appeal (Schriesheim & Hinkin, 1990). This version of the POIS was adapted from the original 58-item version (Kipnis et al., 1980) based on the results of a factor analysis (Schriesheim & Hinkin, 1990). The POIS is responded to using a 5-point Likert scale assessing the frequency with which employees attempt to use various influencing strategies on their supervisors or managers. The response scale is anchored with 1 “never use this tactic to influence him/her” and 5 “usually use this tactic to influence him/her”. In the present study Cronbach’s alpha reliability coefficients were .72 or higher for the six scales.

**Procedure.** Data for the study were collected between May and July 2011 via an online survey hosted through Murdoch University. Participants were recruited via snowball
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sampling, and through the Murdoch University School of Psychology undergraduate participant pool. The survey commenced with information about the study for participants, specifying the requirements of being over 18 years of age and currently or recently employed. Participants indicated their consent to participate in the study by clicking a button in the web form to commence the questionnaires and their participation was anonymous. All participants completed the demographic questions, CTI, REI, and POIS in this order. The questionnaires took approximately 45 minutes per participant to complete.

Results

Assumption Checks. Per-item means, rather than scale totals, were calculated for all test scales to allow easier comparison among the scores. Data were screened for statistical assumptions. For the POIS, the rationality scale was significantly negatively skewed and the upward appeal scale was significantly positively skewed. The rationality scale was reflected and both scales were log transformed to meet the normality assumption for correlational analyses. No other statistical assumption breaches were found. For ease of interpretation, untransformed descriptive statistics are reported and correlations are reported in the direction of the untransformed relationships.

Descriptive Statistics and Correlations. Descriptive statistics for the three scales and correlations among the scales are reported in Table 1. Of most interest in Table 1 are the relationships between the CEST scales (from both the REI and CTI) and the influence tactics measured by the POIS. As hypothesized, rational thinking correlated significantly and positively with the influence tactic rationality. Rationality also had a significant positive correlation, although weak, with behavioural coping. Of the other influencing tactics, ingratiation was significantly negatively correlated with global constructive thinking and its subscale emotional coping, and upward appeal was significantly positively correlated with rational thinking.
Regression Analysis. Because both rational thinking and behavioural coping correlated with the influencing tactic rationality and with each other, rationality was regressed on rational thinking and behavioural coping to examine their ability to predict rationality in combination. The regression indicated that together rational thinking ($\beta = .39$, $p < .001$) and behavioural coping ($\beta = .08$, $p = .40$) accounted for 16.2% of the variance in preference for using the rationality influencing tactic, $F(2,115) = 12.35$, $p < .001$. However, only rational thinking was a significant predictor in this regression.

Discussion. As expected, rational thinking was significantly positively correlated with the use of the rationality influencing tactic as measured by the POIS. However, few other clear, strong, or theoretically-interesting relationships were found in Study 1 between CEST information-processing systems and the influence tactics measured by the POIS.

There were 42 correlations between CEST factors and influence tactics and considering familywise error it would be expected that two of these would be significant by chance at an alpha level of .05. In total six of these correlations were significant, three times the chance result. Importantly, the correlation between rationality and rational thinking was the strongest of those between CEST factors and influencing tactics and was theoretically predicted, therefore it is likely to be robust. However, given that familywise error may account for any of the weaker and unexpected correlations future replication of these results is needed before firm conclusions about their connection can be drawn.

The POIS provides a short and straightforward assessment of organisational influencing tactics, and was suitable for an initial exploratory study of whether any connections existed between CEST information-processing systems and influence tactics.
However, although its brevity is a strength it is also a weakness in that it is not a measure of the wide range of well-documented common workplace influence tactics (Yukl et al., 2008). The extended Influence Behavior Questionnaire covers 11 common influence tactics, as compared with six measured by the POIS. In addition, as noted earlier, transformational leadership has been connected to both CEST and influencing tactics. Specifically, transformational leadership has been linked to the core influence tactics measured by the Influence Behavior Questionnaire (Charbonneau, 2004; Yukl et al., 2008), only one of which is examined by the POIS. The core tactics are those that research indicates to be most effective when used by leaders and managers to influence subordinates (Yukl et al., 2008). In Study 2, we examined connections between CEST information-processing scales the 11 common influence tactics described by Yukl et al. (2008). This study allowed us to increase the breadth of the examination of relationships between CEST and influencing, and to examine whether the correlations, both significant and not, between CEST and influencing would be replicated using a broader measure.

### Study 2 – Connections between CEST and EIBQ

#### Method

**Design and Participants**

This study employed a correlational design, with data collected via an online survey. One-hundred and ninety-two participants completed the online questionnaires. Thirty participants were excluded for not meeting the age or employment requirements. A further 20 participants were excluded for having scores outside the acceptable range for defensiveness or validity as measured by the CTI, using the same criteria as in Study 1. This left a total of 142 participants. Participants ranged in age from 18 to 68 years ($M = 30.90$), and there were 59 males and 83 females. Half of the participants were employed full-time (50%) with the
remainder employed part-time or casually. The sample contained significant sub-groups of participants whose nationality was Asian ($N = 80$, mostly Singaporean $76.3\%$) or non-Asian ($N = 62$, mostly Australian $82.3\%$).

**Measures.** This study used the REI and CTI, which are described in Study 1, to assess information-processing styles as described by CEST. As in Study 1, the scales had satisfactory Cronbach’s alpha reliability coefficients in excess of .80 (see Table 2) except for the personal superstitious thinking and categorical thinking scale is of the CTI, which had reliabilities of below .60 and were thus excluded from further analyses. In this study, organisational influencing tactics were assessed using a broad-based self-report measure of influencing designed for this study. Again, questions were included to assess demographics and whether the participants met the eligibility criteria for the study.

**Influencing Measure.** The extended Influence Behavior Questionnaire (eIBQ) assesses 11 common influencing tactics used by managers in organisations. The eIBQ is an other-report measure, where people rate the frequency of various behaviours as performed by their managers/supervisors. However, there is no self-report version of the eIBQ available for research. Because of this, we created our own self-report measure of the 11 influencing tactics for this study.

The broad-based self-report influencing tactics measure used in the current study was modeled off the format of the eIBQ. Four items were written to assess each tactic, making 44 items in total to assess 11 organisational influencing tactics. Each item reflected a behaviour that exemplified the relevant tactics. The items were assessed by the researchers and feedback was obtained from colleagues and from business managers who participated in training through Murdoch Executive Education to ensure that the items reflected the relevant tactics. Participants rated how frequently they use the tactics described by each item in the questionnaire using a 5-point scale anchored with 1 “I don't remember ever using this tactic”
and 5 “I use this tactic very often”. Reliability of the scales was confirmed with Cronbach’s alpha reliabilities above 0.83 for all the influencing tactics (see Table 2). The 11 tactics include four core tactics: rational persuasion, consultation, inspirational appeals, collaboration; and seven non-core tactics: apprising, ingratiation, personal appeals, exchange, legitimating tactics, pressure, and coalition tactics.

**Procedure**

Data for the study were collected between September and December 2011 via an online survey hosted through Murdoch University. Participants were recruited via snowball sampling, and through the Murdoch University School of Psychology undergraduate participant pool. As in Study 1, participants were first provided with information about the study and consent was implied from the completion of the anonymous questionnaires. All participants completed the demographic questions, CTI, REI, and broad-based influencing measure in this order. The questionnaires took approximately 50 minutes per participant to complete.

**Results**

**Assumption Checks.** Per-item means, rather than totals, were calculated for all test scales to allow easier comparison among the scales. Data were screened for statistical assumptions. For the broad-based influencing measure the rational persuasion and consultation scales were significantly negatively skewed and the pressure scale was significantly positively skewed. The rational persuasion and consultation scales were reflected and all significantly skewed scales were square-root transformed to meet the normality assumption for correlational analyses. No other statistical assumption breaches were found. For ease of interpretation, untransformed descriptive statistics are reported and correlations are reported in the direction of the untransformed relationship.
Descriptive Statistics and Correlations. Descriptive statistics for the scales in Study 2 are presented in Table 2. Of more interest, however, are the relationships between the CEST information-processing scales and the organisational influencing tactics, presented in Tables 3 and 4. Note, for convenience, that in Tables 3 and 4, the four core influencing tactics are listed as the top four rows in each table.

As hypothesized, rational thinking correlated significantly and positively with the influence tactic rational persuasion, above .5. Additionally, rational thinking correlated significantly and positively with two other core influencing tactics, inspirational appeals and collaboration, as well as with apprising, ingratiation, and legitimating. Experiential thinking correlated positively and significantly with consultation, inspirational appeals and apprising.

Looking at the constructive thinking factors (see Table 3), the clearest results were for behavioural coping, which had significant positive correlations, above .3, with all four core influencing tactics and with apprising. Some other significant correlations between constructive thinking scales and influencing were found, but none of these exceeded .3

Regression Analysis. Each of the four core influencing strategies was significantly correlated with more than one CEST information-processing scale. Because the core
influencing tactics are those that are most strongly related to effective influencing in an organisational context (Yukl et al., 2008), we conducted standard multiple regression on these tactics to examine the extent to which they were predicted by the CEST scales to which they were significantly correlated. Behavioural coping, which was included in all regressions, correlated strongly with global constructive thinking ($r = .658, p < .001$), principally because items from several CTI scales including behavioural coping are included in the global constructive thinking scale. Therefore, to avoid breaching the multicollinearity assumption of regression, no regressions were conducted entering the global constructive thinking and the other CTI sub-scales together.

Together, rational thinking ($\beta = .43, p < .001$) and behavioural coping ($\beta = .23, p = .003$) accounted for 31.1% of the variance in preference for using the rational persuasion influencing tactic, $F(2,139) = 32.76, p < .001$, with both predictors adding significantly to the regression. Preference for the use of the inspirational appeals tactic was regressed on rational thinking ($\beta = .19, p = .03$), experiential thinking ($\beta = .05, p = .56$), behavioural coping ($\beta = .33, p = .001$), and naive optimism ($\beta = .14, p = .093$). Together, these variables accounted for 22.8% of the variance in inspirational appeals [$F(2,139) = 11.41, p < .001$], however only rational thinking and behavioural coping were unique significant predictors. Collaboration was regressed on rational thinking ($\beta = .12, p = .16$), and behavioural coping ($\beta = .29, p = .001$) which together accounted for 11.4% of the variance in this influencing tactic, $F(2,139) = 10.08, p < .001$. Consultation was regressed on experiential thinking ($\beta = .16, p = .057$), and behavioural coping ($\beta = .31, p < .001$) which together accounted for 13.2% of the variance in this influencing tactic, $F(2,139) = 11.70, p < .001$. For both consultation and collaboration only behavioural coping was a significant predictor.
**Demographic Differences.** Because we had adequately-sized groups for sub-group analysis (Barcikowski, 1981) and to allow comparison with previous research, we compared preferences for the various influencing tactics between gender (male vs. female) and between cultures (Asian vs non-Asian). Independent-samples *t*-tests were used with alpha set at .01 to allow for multiple comparisons (see Table 5). Male participants reported significantly higher use of five of the influencing tactics in the broad-based influencing measure than females: rational persuasion, inspirational appeals, ingratiation, legitimating, and coalition tactics. Interestingly, no significant differences were observed between the Asian and non-Asian participants in their preferences for the use of the various influencing tactics.

General Discussion

As hypothesized, rational thinking was positively correlated with reason-based organisational influencing tactics: rationality as measured by the POIS in Study 1 and rational persuasion as measured by the broad-based influencing measure in Study 2. Additionally, in both studies, the constructive thinking factor of behavioural coping was positively correlated with these reason-based organisational influencing tactics.

Five influence tactics were common to the measures used in both Studies 1 and 2 by definition, if not by name – rationality/rational persuasion, ingratiation, coalition, assertiveness/pressure, and exchange/exchange of benefits (Yukl et al., 2008). As discussed, in both studies rationality/rational persuasion was positively correlated with rational thinking and behavioural coping. Ingratiation was significantly, but weakly, negatively correlated with global constructive thinking and emotional coping in Study 1 but not in Study 2. Furthermore, ingratiation was significantly, but weakly, positively correlated with rational
thinking in Study 2 but not in Study 1. Coalition and pressure/assertiveness had some
significant, albeit weak, correlations with constructive thinking factors in Study 2 but not in
Study 1. These results suggest that there is no clear or strong connection between
information-processing styles and the use of ingratiation, coalition or assertiveness/pressure
as tactics in the workplace.

Exchange of benefits (Study 1) and exchange (Study 2) are tactics that are closely
theoretically aligned with transactional leadership. Interestingly, these showed no significant
relationship with CEST factors in either study. These results are consistent with the lack of
any significant relationship between transactional leadership and CEST information-
processing factors found in other research (Cerni et al., 2008).

In Study 2 we explored differences in preferences for influencing tactics among
gender and cultural subgroups. There were no significant differences found between Asian
and non-Asian nationality groups, which is inconsistent with some previous research (e.g. Fu
& Yukl, 2000; Rao, Hashimoto & Rao, 1997). However, previous studies of cultural
differences in influencing have typically compared traditional Asian cultures such as China
with Western cultures (e.g. Fu & Yukl, 2000). Asian participants in the present study were
mostly Singaporean, where there is a more Westernized culture and more Westernized
business practices than may exist in mainland China. The Westernization of Singaporean
participants may account for the lack of Asian vs. non-Asian differences in our study.

For gender, we found that men reported using 5 of the 11 influence tactics in the
broad-based influencing measure more than did women. Previous research on gender
differences in influence tactics has produced mixed results as far as the tactics used and the
effectiveness of them (Barbuto, Fritz, Matkin, & Marx, 2007). Often, previous studies have
examined perceptions of influence tactics, and it has been suggested that similar tactics may
be perceived differently when used by men and women (Barbuto et al., 2007), leading to
differences being perceived where they do not exist or real differences not interpreted as such by raters. Given that our study used a self-rating where influence tactics were assessed in terms of frequency of use, results of our study suggest that males may perceive themselves as making more frequent influence attempts across a range of tactics. Further research is needed to examine gender differences in influence tactic use more closely.

**Theoretical Implications**

CEST proposes that all behaviour is directed by the rational and intuitive-experiential information-processing systems (Epstein, 1994). This would, of course, include influencing behaviour in the workplace. Studies 1 and 2 confirmed that significant correlations exist between CEST’s information-processing systems and preferences for the use of various organisational influencing tactics. Importantly, our proposed theoretical connection between a preference for rational thinking and the use of influence involving rational argument and persuasion was borne out by the results of both studies. Such a relationship can be expected because people must consciously and logically form rational and persuasive arguments in their mind before they deploy such arguments, and people who prefer to think consciously and logically clearly prefer the thinking that is needed to form rational persuasive arguments.

These results are consistent with the indirect connections between organisational influencing tactics and CEST information-processing systems, as outlined in the introduction to this paper. Both CEST and influencing tactics have been associated with transformational leadership (e.g., Charbonnaeu, 2004; Dubinsky, 1995), conflict-handling styles (Cerni et al., 2012; Tjosvold & Sun, 2001), and personality (e.g., Cable & Judge, 2003; Pacini & Epstein, 1999). Transformational leadership is associated with conflict-handling styles (Hendel, Fish & Galon, 2005) and conflict handling styles are associated with personality (Antonioni, 1998). However, no previous study had directly examined connections between CEST and influencing tactics. Thus, the present studies confirm the relationship between CEST’s
information-processing systems and individuals’ preferences for organisational influencing tactics that could have been implied from the connections among a constellation of organisational behaviour and psychological factors that have been found to be interrelated in previous studies. Although this result is consistent with intuition about how preferences for rational thinking and rational persuasion should be connected, they are significant in that they are the first empirical evidence to confirm this intuitive connection.

Given that CEST assumes all behaviour is underpinned by the use of information-processing systems (Epstein, 1994), it is important to consider why preferences for some influencing tactics were uncorrelated with CEST information-processing preferences. We believe one explanation for the relationships we found, and for those we did not, is work environment context. According to CEST the combination of rational and constructive thinking promotes the ability to adaptively function within the environment (Epstein, 1998b). There are some influencing tactics that are likely to be effective across a range of workplace environment contexts. For example, the four core influencing tactics are effective across a range of contexts (Yukl et al., 2008) and are related to transformational leadership (Charbonneau, 2004), which is also effective across a range of contexts (Bass, 1997). Both the core influencing tactics (in Study 2) and transformational leadership (Cerni et al., 2008) are positively correlated with rational and constructive thinking. By contrast, other influence tactics, such as ingratiation and coalition tactics, may be better suited to politicized work environments than to transformational work environments (Cheng, 1983). Thus, it may be adaptive to use such influence tactics in some contexts but not others. If rational and constructive thinking predict environmentally-adaptive behaviour they should predict the use of ingratiation and coalition tactics in politicized environments. However, in the present study, we did not control for or measure the degree of politicization of participants’ work environments. Thus, the relationship between CEST information-processing systems and
influence tactics within a range of work-environment contexts remains an open question for future research.

Limitations and Future Research Directions.

Four weak significant correlations were found between preferences for intuitive-experiential processing, as measured by the REI, and organisational influencing tactics in Study 2, and no such relationships were found in Study 1. One reason for the lack of significant or strong relationships between intuitive-experiential processing and organisational influencing tactics may be that the REI does not measure all the theoretically-proposed aspects of the experiential system. According to Epstein (1998b) experiential thinking includes intuition, emotion, and imagination, but the REI simply operationalizes experiential thinking as a preference for intuitive thinking. It is likely that approaches to interpersonal relationships, seen in influencing tactics such as ingratiating and personal appeals, may be more related to the affective or emotional component of the experiential system than to a preference for relying on intuition (Cerni et al., 2008). Shortly after data collection for Study 2 commenced, a new measure of the CEST information-processing systems was published (Norris & Epstein, 2011). This new measure, the Rational-Experiential-multimodal Inventory (REIm), separates experiential thinking into three scales: intuition, emotionality, and imagination. Future research should aim to explore connections among organisational influencing tactics and the sub-facets of experiential thinking using the REIm, where, for example, correlations may be anticipated between emotionality and relationship-focused influencing tactics.

Both studies reported in this paper used self-report measures, one newly-developed for this study. We were mindful of the advice of Conway and Lance (2010) for minimizing common-methods bias in self-report studies. Four elements of the method strengthen the conclusions that can be drawn from this paper; including adequate sample sizes, the use of
working populations, replication of results using different influencing tactics measures, and confirmed reliability of those measures assessed with Cronbach’s alpha. Moreover, the validity of the results was also enhanced by excluding participants who showed self-presentation biases, and those who did not carefully read questions, based on their responses to the defensiveness and validity scales of the CTI. Additionally, although rational thinking and rationality/rational persuasion are conceptually related, items in the scales did not overlap in that they measure information-processing, i.e., thinking, in the REI and behaviour in the influencing measures. Although self-reports are the only option for examining information-processing preferences, it is possible for others to report on influencing tactics. However, it was considered to be appropriate for preliminary exploratory studies to use exclusively self-report measures. Nevertheless, future research should investigate whether people’s information-processing styles, as reported by themselves, are related to their use of influencing tactics as reported by their work colleagues, such as managers, subordinates, and peers.

Another interesting potential avenue of research is to examine the influence of information-processing preference on real-time selection of influencing tactics. In the present study, we examined the connections between relatively-stable preferences for the use of information-processing styles and preferences for the use of various influencing tactics. However, on a real-time basis the influencing tactic someone uses may be best predicted by whether they are primarily thinking consciously or unconsciously. Unconscious thinking theory (Dijksterhuis & Nordgren, 2006) may provide a useful framework for analyzing the interactive and dynamic relationship between information-processing styles and the use of influencing tactics in a real-time context.

There is some chance that some of the observed significant relationships between CEST information-processing measures and the measures of influencing tactics in the present
studies are statistical Type I errors. Given the number of correlations and the reasonable sample size some significant false-positive relationships are to be expected with an alpha level of .05. However, as principally exploratory studies, and the first we are aware of investigating connections between information-processing styles and influencing tactics, we believed it was important not to adjust the alpha level so that future researchers can more readily compare whether results have or have not replicated. With this caveat in mind, however, we believe it is necessary to emphasize that the most important findings in the present paper are those that replicate across both studies and those that are theoretically consistent with other studies; especially the rational thinking – rational influencing connection.

Conclusion

This paper reported two studies that are the first to examine relationships between information-processing styles as described by CEST and organisational influencing tactics. The key finding in this paper was that people who prefer rational thinking and constructive thinking (particularly behavioural coping) tend to prefer to use more effective organisational influencing tactics, particularly rational persuasion. People select organisational influencing tactics that they think will work (Yukl & Tracey, 1992). The results of the present studies indicate that people who think better, i.e., more rationally and constructively, are more likely to select the influencing tactics that work better. These results add to the growing body of evidence that individual differences in the information-processing systems described by CEST provide a useful level of analysis for a range of important organisational behaviour variables (Cerni et al., 2008, 2012).
References


Information processing and influencing


Author Note

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Endnotes

1. Ingratiation also correlated with two CEST variables, global constructive thinking and emotional coping. However, regression was not performed because emotional coping is a sub-scale of, and highly correlated with, global constructive thinking, which breaches multicollinearity assumptions for regression.
Table 1

Scale item means, standard deviations, reliabilities and correlations among REI, CTI, and POIS scales.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
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</thead>
<tbody>
<tr>
<td>1. Rational Thinking</td>
<td>3.81 (.61)</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Experiential Thinking</td>
<td>3.34 (.42)</td>
<td>.02</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Global Constructive Thinking</td>
<td>3.29 (.54)</td>
<td>.37**</td>
<td>.06</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioural Coping</td>
<td>3.84 (.41)</td>
<td>.35**</td>
<td>.33**</td>
<td>.63**</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Emotional Coping</td>
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<td>.25**</td>
<td>-.03</td>
<td>.93**</td>
<td>.46**</td>
<td>.94</td>
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<td></td>
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<tr>
<td>6. Esoteric Thinking</td>
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<td>-.24**</td>
<td>.38**</td>
<td>-.27**</td>
<td>-.04</td>
<td>-.27**</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Naive Optimism</td>
<td>3.26 (.41)</td>
<td>-.06</td>
<td>.37**</td>
<td>.18</td>
<td>.29**</td>
<td>.11</td>
<td>.28**</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>8. Rationality</td>
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<td>.10</td>
<td>.00</td>
<td>.21*</td>
<td>-.08</td>
<td>.00</td>
<td>.03</td>
<td>.78</td>
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<td>9. Ingratiation</td>
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<td>.18</td>
<td>-.25**</td>
<td>-.03</td>
<td>-.24**</td>
<td>.10</td>
<td>.12</td>
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<td>.85</td>
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<td></td>
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<tr>
<td>10. Exchange of Benefits</td>
<td>2.19 (1.01)</td>
<td>.08</td>
<td>.03</td>
<td>-.08</td>
<td>-.05</td>
<td>-.05</td>
<td>.16</td>
<td>.04</td>
<td>.14</td>
<td>.39**</td>
<td>.76</td>
<td></td>
<td></td>
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<td>11. Assertiveness</td>
<td>1.89 (.78)</td>
<td>.15</td>
<td>-.04</td>
<td>.00</td>
<td>-.04</td>
<td>.06</td>
<td>.04</td>
<td>-.09</td>
<td>-.08</td>
<td>.09</td>
<td>.23*</td>
<td>.72</td>
<td></td>
<td></td>
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<td>12. Upward Appeal</td>
<td>1.83 (.91)</td>
<td>.24**</td>
<td>-.01</td>
<td>.12</td>
<td>.11</td>
<td>.14</td>
<td>.07</td>
<td>-.11</td>
<td>-.06</td>
<td>.16</td>
<td>.31**</td>
<td>.41**</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>13. Coalitions</td>
<td>2.45 (1.04)</td>
<td>.17</td>
<td>.12</td>
<td>.00</td>
<td>.12</td>
<td>-.03</td>
<td>-.04</td>
<td>-.06</td>
<td>.18</td>
<td>.21*</td>
<td>.25**</td>
<td>.42**</td>
<td>.47**</td>
<td>.84</td>
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</table>

N = 119, *p < .05, **p < .01 (2-tailed). Cronbach’s alpha internal consistency reliabilities are on the diagonal.
Table 2

*Scale item means, standard deviations, and Cronbach’s alpha reliabilities for REI, CTI and the broad-based self-report influence measure scales.*

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>$\alpha$</th>
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<tbody>
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<td>3.62</td>
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<td>.89</td>
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<td>.86</td>
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<td>.52</td>
<td>.89</td>
</tr>
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<td>3.90</td>
<td>.51</td>
<td>.84</td>
</tr>
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<td>Emotional Coping</td>
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<td>.63</td>
<td>.94</td>
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<td>.75</td>
<td>.84</td>
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<td>.52</td>
<td>.81</td>
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<td>.82</td>
<td>.90</td>
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<td>3.62</td>
<td>.91</td>
<td>.91</td>
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<tr>
<td>Inspirational Appeals</td>
<td>3.55</td>
<td>1.04</td>
<td>.90</td>
</tr>
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<td>.81</td>
<td>.89</td>
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<td>.99</td>
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<td>.87</td>
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<td>.86</td>
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<td>1.01</td>
<td>.93</td>
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<td>1.07</td>
<td>.93</td>
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<tr>
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<td>.79</td>
<td>.84</td>
</tr>
<tr>
<td>Coalition</td>
<td>2.69</td>
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<td>.88</td>
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</table>

$N = 142.$
### Table 3

*Correlations between REI and broad-based self-report influence measure scales.*

<table>
<thead>
<tr>
<th></th>
<th>Rational Thinking</th>
<th>Experiential Thinking</th>
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<tr>
<td>Rational Persuasion</td>
<td>.53**</td>
<td>.03</td>
</tr>
<tr>
<td>Consultation</td>
<td>.13</td>
<td>.24**</td>
</tr>
<tr>
<td>Inspirational Appeals</td>
<td>.30**</td>
<td>.17*</td>
</tr>
<tr>
<td>Collaboration</td>
<td>.24**</td>
<td>.13</td>
</tr>
<tr>
<td>Apprising</td>
<td>.25**</td>
<td>.19*</td>
</tr>
<tr>
<td>Ingratiation</td>
<td>.20*</td>
<td>.08</td>
</tr>
<tr>
<td>Personal Appeals</td>
<td>-.09</td>
<td>.21*</td>
</tr>
<tr>
<td>Exchange</td>
<td>.12</td>
<td>.05</td>
</tr>
<tr>
<td>Legitimating</td>
<td>.26**</td>
<td>.00</td>
</tr>
<tr>
<td>Pressure</td>
<td>-.07</td>
<td>.10</td>
</tr>
<tr>
<td>Coalition</td>
<td>.05</td>
<td>.08</td>
</tr>
</tbody>
</table>

*N = 142. *p < .05. **p < .01 (2-tailed).*
Table 4

_Correlations between CTI and broad-based self-report influence measure scales._

<table>
<thead>
<tr>
<th></th>
<th>Constructive Thinking</th>
<th>Emotional Coping</th>
<th>Behavioural Coping</th>
<th>Esoteric Thinking</th>
<th>Naïve Optimism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational Persuasion</td>
<td>.17*</td>
<td>.08</td>
<td>.39**</td>
<td>-.11</td>
<td>.05</td>
</tr>
<tr>
<td>Consultation</td>
<td>.21**</td>
<td>.12</td>
<td>.31**</td>
<td>.11</td>
<td>.12</td>
</tr>
<tr>
<td>Inspirational Appeals</td>
<td>.05</td>
<td>-.04</td>
<td>.42**</td>
<td>.07</td>
<td>.28**</td>
</tr>
<tr>
<td>Collaboration</td>
<td>.16*</td>
<td>.02</td>
<td>.31**</td>
<td>.04</td>
<td>.12</td>
</tr>
<tr>
<td>Apprising</td>
<td>.15</td>
<td>.07</td>
<td>.32**</td>
<td>.13</td>
<td>.29**</td>
</tr>
<tr>
<td>Ingratiation</td>
<td>.03</td>
<td>-.03</td>
<td>.15</td>
<td>.02</td>
<td>.03</td>
</tr>
<tr>
<td>Personal Appeals</td>
<td>-.15</td>
<td>-.20**</td>
<td>.00</td>
<td>.14</td>
<td>.20**</td>
</tr>
<tr>
<td>Exchange</td>
<td>-.04</td>
<td>-.08</td>
<td>.07</td>
<td>-.04</td>
<td>-.02</td>
</tr>
<tr>
<td>Legitimating</td>
<td>-.06</td>
<td>-.16*</td>
<td>.24**</td>
<td>.09</td>
<td>.21**</td>
</tr>
<tr>
<td>Pressure</td>
<td>.23**</td>
<td>.22**</td>
<td>.17*</td>
<td>-.08</td>
<td>-.13</td>
</tr>
<tr>
<td>Coalition</td>
<td>-.19*</td>
<td>-.21**</td>
<td>-.05</td>
<td>.17*</td>
<td>.24**</td>
</tr>
</tbody>
</table>

*N = 142. *p < .05. **p < .01 (2-tailed).*
Table 5

*Means preference for influencing tactics by gender and nationality*

<table>
<thead>
<tr>
<th>Tactics</th>
<th>Male (N = 59)</th>
<th>Female (N = 83)</th>
<th>Asian (N = 80)</th>
<th>Non-Asian (N = 62)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Rational Persuasion</td>
<td>4.32 (.71)*</td>
<td>3.89 (.85)*</td>
<td>4.12 (.77)</td>
<td>4.00 (.89)</td>
</tr>
<tr>
<td>Consultation</td>
<td>3.78 (.81)</td>
<td>3.51 (.97)</td>
<td>3.71 (.87)</td>
<td>3.50 (.95)</td>
</tr>
<tr>
<td>Inspirational Appeals</td>
<td>3.85 (.96)*</td>
<td>3.33 (1.05)*</td>
<td>3.72 (.95)</td>
<td>3.32 (1.11)</td>
</tr>
<tr>
<td>Collaboration</td>
<td>3.83 (.70)</td>
<td>3.69 (.88)</td>
<td>3.70 (.81)</td>
<td>3.82 (.82)</td>
</tr>
<tr>
<td>Apprising</td>
<td>3.69 (.87)</td>
<td>3.27 (1.02)</td>
<td>3.62 (.88)</td>
<td>3.22 (1.07)</td>
</tr>
<tr>
<td>Ingratiation</td>
<td>3.55 (.76)*</td>
<td>3.09 (.89)*</td>
<td>3.28 (.82)</td>
<td>3.28 (.93)</td>
</tr>
<tr>
<td>Personal Appeals</td>
<td>2.91 (1.01)</td>
<td>2.88 (.99)</td>
<td>3.02 (.94)</td>
<td>2.73 (1.05)</td>
</tr>
<tr>
<td>Exchange</td>
<td>3.11 (1.04)</td>
<td>3.08 (1.00)</td>
<td>2.99 (.98)</td>
<td>3.24 (1.05)</td>
</tr>
<tr>
<td>Legitimating</td>
<td>3.50 (.89)*</td>
<td>2.98 (1.14)*</td>
<td>3.31 (.98)</td>
<td>3.05 (1.18)</td>
</tr>
<tr>
<td>Pressure</td>
<td>2.22 (.74)</td>
<td>2.01 (.81)</td>
<td>2.15 (.74)</td>
<td>2.03 (.84)</td>
</tr>
<tr>
<td>Coalition</td>
<td>3.01 (1.00)*</td>
<td>2.47 (.88)*</td>
<td>2.82 (.97)</td>
<td>2.52 (.94)</td>
</tr>
</tbody>
</table>

N = 142. Note. Significance is indicated for paired comparisons, i.e., male-female and Asian-non-Asian. *p < .01 (2-tailed).