Relationship Between Intuition and Emotional Intelligence in Occupational Therapists in Mental Health Practice

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KEY WORDS
- decision making
- emotional intelligence
- intuition
- mental health services
- occupational therapy

OBJECTIVE. Clinical reasoning studies have acknowledged tacit aspects of practice, and recent research suggests that clinical reasoning contains intuition informed by tacit knowledge. Intuition also appears to be influenced by awareness and understanding of emotions. This study investigated the relationship between intuition and emotional intelligence among occupational therapists in mental health practice.

METHOD. We mailed a survey containing measures of cognitive style and of use of emotional competencies at work and demographic questions to 400 members of the national occupational therapy association; 134 occupational therapists responded.

RESULTS. A moderate relationship was found between intuitive cognitive style and emotional intelligence. Experienced therapists scored higher on the use of emotional competencies at work and reported a preference for an intuitive cognitive style to a greater extent than novices.

CONCLUSION. This study represents the first attempt to explore occupational therapists' preferred cognitive style and self-reported emotional intelligence. Findings suggest that exploring emotions through reflective practice could enhance intuitive aspects of clinical reasoning.

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Since Mattingly and Fleming's (1994) inaugural exploration of clinical reasoning, occupational therapy researchers and practitioners have been interested in the cognitive processes of practice. Clinical reasoning studies have identified the use of tacit knowledge as a contributor to practice (Fleming, 1994; Gibson et al., 2000; Hagedorn, 1996; Schell & Schell, 2008; Unsworth, 2001). In a recent grounded theory study of intuition among occupational therapists practicing in mental health, *intuition* was defined as knowledge that was immediate and accessed without a conscious awareness of reasoning (Chaffey, Unsworth, & Fossey, 2010). The study found that intuition was embedded in therapists' clinical reasoning and was informed by tacit knowledge. Moreover, the findings indicated that intuition had an affective component. Emotions were implicated in the use of intuition in the following ways: Therapists needed to be aware of and understand their emotions to access intuition, to trust their emotions to act on them, and to use their emotions in problem solving and decision making; therapists with more years of experience reported feeling more comfortable using intuition in clinical reasoning than those with less experience.

In Chaffey and colleagues' (2010) study, the use of emotions in intuition and clinical reasoning that therapists described resembles the construct of emotional intelligence (EI). *Emotional intelligence* is awareness and understanding of one's own emotions (Howe, 2008), including the propensity to allow emotions to drive cognition and action (Palmer & Stough, 2001). This

of knowing, perceived through emotional and physical awareness or through the making of connections at the physical and/or spiritual level" (p. 615). They asserted that intuitive knowledge emerged from emotional feelings such as feelings of unease or excitement.

The impact of emotional states on decision-making strategies has been explored in the psychology literature, with a positive mood found to be associated with intuitive decision making (Bolte, Goschke, & Kuhl, 2003). Additionally, they found that people value the outcome of a decision more highly if their mood state matches the decision-making strategy. That is, people who make an intuitive decision while in a positive mood are more likely to value the outcome more highly than if they made an intuitive decision while in a negative mood (de Vries, Holland, & Witteman, 2008).

A core feature of intuition is that the process and source of information elude the person who is experiencing it, making it impossible to use self-reported measures about intuitive processes (Glockner, 2010). However, self-reported measures of the behaviors associated with the use of intuition, such as its influence on decision making, may be useful. Nursing researchers have sought to quantify intuition in this manner by developing a number of self-report tools including measures of nurses' self-perception of intuition (Miller, 1993; Smith, 2006; Smith et al., 2004) and an instrument that aims to measure nurses' intuitive and analytical decision making (Lauri et al., 2001). Although all of these tools were found to be valid and reliable, they also all strongly reflect nursing roles and tasks and are not easily transferable to other health professions. The Cognitive Style Index (CSI; Allinson & Hayes, 1996), used in Downey et al.'s (2006) study and in many studies of cognitive styles of managers and teams (e.g., Allinson & Hayes, 2000; Armstrong & Priola, 2001; Corbett, 2007), may be more useful with other professional groups.

Expertise and Intuition

Although limited research has addressed the relationship between intuition and EI in occupational therapy, a small body of work has examined intuition and expertise. Dreyfus and Dreyfus (1996) asserted that experts use intuition more than novices, with experts appearing to have an intuitive understanding of a situation and the appropriate actions they should take. Explorations of expert occupational therapists' clinical reasoning also indicated that they practice intuitively (Gibson et al., 2000; Unsworth, 2001).

Purpose

The aim of this study was to explore the preference of occupational therapists practicing in mental health for the use of intuition, as measured by the CSI, and EI, as measured by the SUEIT. Specifically, this study aimed to document levels of preference for intuition and levels of EI, compare preference for intuition and EI by gender and level of experience, and explore the relationship between intuition and EI.

Method

Research Design

A survey design was chosen to collect structured, self-reported data from a large sample of occupational therapists (Forsyth & Kviz, 2006). The Faculty of Human Ethics Committee, La Trobe University, approved the study in advance.

Sample

Participants were occupational therapists practicing in mental health who were registered with the national professional association in Australia and had previously agreed to participate in research activities through this association.

Instrument

The authors developed a self-administered questionnaire packet using Dillman's (2000) tailored design method. The packet included demographic questions, a measure of intuition, the CSI, and the SUEIT. The developers of the CSI and the SUEIT granted permission to use their measures. The demographic questions concerned gender, years in occupational therapy practice, and area of mental health practice.

The CSI, designed specifically for professionals, was used to measure respondents' preference for an intuitive versus an analytical cognitive style. The developers defined *intuitive style* as use of immediate judgments based on feelings and a global understanding of a situation and *analytical style* as use of judgments based on reasoning and a focus on detail.

The CSI consists of 38 trichotomously scored items, of which 21 indicate an analytical orientation (e.g., "I avoid taking a course of action if the odds are against its success") and 17 an intuitive orientation (e.g., "I work best with people who are spontaneous"). Possible responses are *true* (score of 2), *uncertain* (score of 1), and *false* (score of 0); these scores were collated to provide an overall score between 0 and 76. Higher scores indicate an

Thirty-five percent of respondents practiced in adult community mental health, 16% in private practice, 12% in child and adolescent mental health, 11% in adult inpatient services, 6% in mental health services for older adults, and 4% in nongovernmental support services. Seven additional areas of mental health practice were represented by up to three respondents each. The mean number of years respondents had practiced as an occupational therapist was 14.89 yr (SD = 10.42), with a range between 3 wk and 43 yr; years of practice was transformed into levels of experience (see Table 1), and all subsequent analyses were undertaken with levels of experience rather than years of practice. Mean scores on the CSI and SUEIT by gender are provided in Table 1.

Table 2 presents the mean scores on the CSI and SUEIT from the study and normative samples. The CSI mean was close to the theoretical mean of 38.00, indicating an absence of response bias. There was a positive skew in the distribution of all SUEIT scores, with the exception of the Emotional Control subscale, which had a negative skew.

No statistically significant difference was found between the scores of male and female respondents, $z = -0.13$, $p = .898$, indicating that preferred cognitive style as measured on the CSI is not dependent on gender. However, few men were among the study sample, which may have influenced this result. The difference between male and female respondents in mean ranking of the total SUEIT score approached significance, $z = -1.83$, $p = .068$, indicating a possible difference in EI between genders; again, this result may have been influenced by the small number of men in our sample. Subsequent data analysis assumed a homogenous sample with no difference by gender.

Mean ranks of CSI scores differed significantly by level of experience, $H(2) = 12.12$, $p = .002$. Post hoc analysis indicated the following differences: novice and intermediate, $z = -1.5$, $p = .135$; novice and experienced, $z = -2.59$, $p = .01$; and intermediate and experienced, $z = -1.36$, $p = .175$. The only significant difference in CSI scores was between novice and experienced therapists. Similarly, mean ranks of SUEIT scores by level of experience showed significant differences, $H(2) = 7.50$, $p = .023$. Post hoc analysis indicated the following differences: novice and intermediate, $z = -1.84$, $p = .066$; novice and experienced, $z = -2.6$, $p = .008$; and intermediate and experienced, $z = -0.13$, $p = .90$. The only significant difference was between novice and experienced therapists.

Lower CSI scores were associated with higher overall SUEIT scores, $r = -.56$, $p = .000$, indicating that higher EI is associated with an intuitive cognitive style. Table 3 presents the correlations of CSI scores and SUEIT subscale scores for respondents. The weakest association between CSI and the SUEIT subscales was for Emotional Control, $r = -.24$, $p = .005$, and the strongest was for Emotions Direct Cognition, $r = -.56$, $p = .000$.

Discussion

With the exception of the subscale Emotions Direct Cognition, SUEIT scores in our sample were higher than the developers' normative data (Palmer & Stough, 2001). This finding suggests that occupational therapists may exhibit higher levels of emotional competency and management in the workplace than workers in general. The mean score on the CSI was close to the theoretical mean, indicating a lack of bias in responses.

Comparisons of Intuition and EI by Gender and Experience

Our study found no statistically significant difference in CSI scores between male and female respondents, a finding that should be interpreted with caution because of the small number of male respondents. Research by the tool developers has produced inconsistent results for gender

Table 1. CSI and SUEIT Scores, by Gender and Level of Experience (N = 134)

			CSI Scores			SUEIT Scores		
Variable	*n*	%	Mean	*SD*	Median	Mean	*SD*	Median
Gender								
Male	6	4.5	37.33	12.16	37.00	213.00	18.01	211.50
Female	124	92.5	37.16	15.03	37.50	229.65	30.93	228.50
Missing	4	3.0						
Level of experience								
Novice	26	19.4	45.71	12.63	43.50	219.85	16.01	217.50
Intermediate	24	17.9	38.79	15.48	41.00	231.51	22.73	229.50
Experienced	83	61.9	34.07	14.34	32.00	231.98	21.51	230.00

Note. CSI = Cognitive Style Index; *SD* = standard deviation; SUEIT = Swinburne University Emotional Intelligence Test.

levels were only fair. This fair relationship suggests that Smith and colleagues' (2004) assertion that emotional awareness is one of the core aspects of intuition may not provide a complete picture of the role of EI in intuition, at least for occupational therapists in mental health practice.

Recognizing emotions appears to be the first step in the use of intuition, with the next step being interpretation of these feelings, which Mayer and colleagues (2000) referred to as the ability to *integrate emotion in thought.* This ability is represented in the SUEIT subscale Emotions Direct Cognition. This subscale had a moderate negative correlation with the CSI ($r = -.56$), with high scores on this subscale linked to an intuitive thinking style. This finding is not surprising, given the nature of the measures used. Emotions Direct Cognition assesses a person's ability to use emotions in reasoning, and a high score indicates an intuitive, emotion-based decision-making style. The CSI assesses a person's propensity to use either an intuitive or an analytical cognitive style; a low score indicates an intuitive thinker. Downey and colleagues (2006) also found a correlation between this SUEIT subscale and the CSI in their study of senior managers. Our finding supports Akerjordet and Severinsson's (2004) assertion that EI is important in interpreting and acting on intuitive feelings. These authors found that their participants experienced intuitive feelings but also needed an awareness of emotions to interpret and act on these feelings. Moreover, this result supports Smith and colleagues' (2004) other component of intuition: knowledge arising from emotional feelings. Our findings suggest that merely recognizing emotions in oneself and others does not necessarily result in the use of intuition, but using these emotions to drive cognition is important in the use of intuition.

The SUEIT subscale Emotional Management also had a statistically significant but fair relationship with the CSI, $r = -.49$. This subscale measures a person's ability to maintain a positive mood. Bolte and colleagues (2003) found that a person is better able to make intuitive decisions when in a positive mood. De Vries and colleagues (2008) elaborated on Bolte et al.'s idea, suggesting that a person values the decision outcome more if the decision strategy was congruent with mood. Our finding that the ability to manage emotions to maintain positive moods is associated with the propensity to use intuition supports this literature regarding mood and decision style.

The SUEIT subscale Emotional Control had no or little relationship with the CSI, $r = -.24$. Unlike the Emotional Management subscale, which assesses the ability to regulate and manage moods in oneself and others on a daily basis, the Emotional Control subscale assesses the impact of strong emotional reactions to events on a person's ability to work effectively. Our results indicate that this aspect of EI is not related to a preference for a particular cognitive style.

Our findings thus indicate that the key EI factors influencing the use of intuition are the ability to recognize and interpret emotions in oneself and others and the ability to use these emotions in driving action and decisions. This interpretation is in keeping with Mayer and colleagues' (2000) view of EI as being a set of abilities that are amenable to improvement over time. It also suggests that enhancing EI may help occupational therapists use intuition in practice more effectively over time.

Limitations of the Study

A potential limitation of this study is the imbalance in gender distribution in the sample; 92% of respondents were women. We do not believe this imbalance to be a substantial threat to the validity of the data. The fact that 93% of the occupational therapy workforce in Australia consists of women (Australian Institute of Health and Welfare, 2006) indicates that our sample was representative of the population in question, ruling out a coverage error (Dillman, 2000). The return rate of 35% could also be considered a limitation, and further investigations with larger and international samples are warranted.

Implications for Occupational Therapy Practice

Our findings have the following implications for occupational therapy practice:

- This study found that experienced therapists had a greater preference for an intuitive cognitive style than did novice therapists. Understanding the need for time to develop a pattern library and adequate tacit knowledge may assist occupational therapy supervisors with tempering the use of intuition by novice therapists.
- Developing abilities associated with EI, either individually or in supervision, could enhance practice by encouraging occupational therapists to make effective use of intuition within clinical reasoning. It may also contribute to the therapeutic use of self.
- Supervision for occupational therapists could be enhanced if it focused not only on practice issues but also on understanding and using emotions within practice.
- Including education on EI in occupational therapy course curricula could be beneficial because novice therapists could develop improved skills more quickly by analyzing and articulating their intuitions.

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	Comments
STUDY PURPOSE: Was the purpose stated clearly? O Yes O No	Outline the purpose of the study. How does the study apply to occupational therapy and/or your research question? main point
LITERATURE: Was relevant background literature reviewed? O Yes O No	Describe the justification of the need for this study. why we need to study
DESIGN: O randomized (RCT) O cohort O single case design O before and after O case-control O cross-sectional O case study	Describe the study design. Was the design appropriate for the study question? (e.g., for knowledge level about this issue, outcomes, ethical issues, etc.) Specify any biases that may have been operating and the direction of their influence on the results.

	Comments
RESULTS: Results were reported in terms of statistical significance? O Yes O No O N/A O Not addressed Were the analysis method(s) appropriate? O Yes O No O Not addressed Clinical importance was reported? O Yes O No O Not addressed	What were the results? Were they statistically significant (i.e., $p < 0.05$)? If not statistically significant, was study big enough to show an important difference if it should occur? If there were multiple outcomes, was that taken into account for the statistical analysis? What was the clinical importance of the results? Were differences between groups clinically meaningful? (if applicable)
Drop-outs were reported? O Yes O No	Did any participants drop out from the study? Why? (Were reasons given and were drop-outs handled appropriately?)
CONCLUSIONS AND CLINICAL IMPLICATIONS: Conclusions were appropriate given study methods and results O Yes O No	What did the study conclude? What are the implications of these results for occupational therapy practice? What were the main limitations or biases in the study? Baucec