Exploring the effect of empathy, attributional complexity and cognitive style on adaptive selling behaviour

ABSTRACT: This pilot study examines the role of empathy, attributional complexity and cognitive style on adaptive selling behavior, which is important in cross-cultural encounters. The findings show that that empathy and attributional complexity are positively related to adaptive selling behavior. Salespeople who prefer an intuiting style of information-intake have higher levels of attributional complexity than those who prefer a sensory style. Salespeople who prefer a feeling style of information-processing have higher levels of empathy than those who prefer a thinking style. Finally, for salespeople who have a low learning orientation (in a selling situation), incremental increases in empathy and attributional complexity have a greater impact on adaptive selling behaviours than incremental increases for those salespeople with higher learning orientation.

Keywords: customer relationship management, sales employee behaviour

PAPER TEXT: Organizations are operating in an increasingly competitive environment, where developing and managing customer relationships is crucial. When customers feel they are getting personalised offering, they are more likely to remain loyal to the organization. Salespeople play a big role in customising or personalising a firm's offering. As stated by Spiro and Weitz (1990), "Personal selling is the only communication vehicle that allows a marketing message to be adapted to the specific needs and beliefs of each customer". Such communication is typically viewed as more credible than messages delivered through other forms of media. The ability of a salesperson to adapt their style and message to suit diverse customers has been found to be positively related to sales outcomes and organisational performance (eg Babakus et al 1996; Boorom et al 1998; Sujan et al 1994).

Because of its importance, there is a stream of research in the selling literature on adaptive selling behaviour, or "the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation" (Weitz et al, 1986). Several studies have examined various factors that influence adaptive selling behavior. Organizational factors have been explored, such as the effect of salesperson-manager relationship quality (DelVecchio 1998);
and supervisor feedback (Sujan et al 1994). Personal factors have also been examined, such as salesperson knowledge structures (Leigh et al 1984; Sujan et al 1988; Szymansky et al 1990); perceptions of control (DelVecchio 1996); cognitive style (McIntyre et al 2000) and self-efficaciousness (Sujan et al 1994). This study furthers this stream of research by examining personal factors of empathy, attributional complexity, and cognitive style on adaptive selling behavior. Figure 1 shows the model to be tested in this study. Each of the constructs and their connections will be explained below.

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**Empathy.** An empathic tendency refers to the capacity to clearly project an interest in others and to obtain and reflect a reasonably complete and accurate sense of another's thoughts, feelings, and experiences (Bush et al, 2001). While textbooks on sales (eg Ingram and LaForge 1992) and service (Zeithaml and Bitner 2000) emphasise the important role that empathy plays in delivering caring, individualised attention to customers, empirical evidence for the relationship between empathy and sales effectiveness is contradictory (Comer and Dubinsky 1985). For instance, in a retail apparel buying context, empathy is related to the likelihood to place an order (Pilling and Eroglu 1994); whereas in a industrial selling context, empathy is not related to adaptive selling behaviour (Bush et al., 2001).

These apparently contradictory results could be due to differences in the selling context. There is a difference between buying and selling in industrial and retail contexts. In an industrial buying context, the buyer has access to other organisational members who provide input into the type of product to purchase (Pilling and Eroglu 1994). For example, a buyer purchasing a computer system for the organisation can often obtain input from computer experts who have the technical knowledge about the product, rendering the buyer less dependent on the salesperson for advice. On the other hand, a retail consumer purchasing a computer system for home use may not have access to independent technical experts, making the consumer more reliant on the salesperson knowledge. To succeed in a retail setting the salesperson may come to learn that empathy is important. There are also differences between retail and industrial selling: one study (Churchill et al 1985) found that type of product sold (eg industrial goods, consumers goods and
services) affected the relationship between personal characteristics of the salesperson and sales performance. Based on this, the following is hypothesised:

Hypothesis 1. In a retail setting, there is a positive relationship between salesperson empathy and adaptive selling behavior.

Attributional complexity refers to an individual's tendency to attribute complex causes to other's behaviors (Fletcher et al 1986). Before salespeople can modify their selling approach, they need to recognise what is different and why. A positive relationship has been found in an industrial selling context between attributional complexity and propensity to display adaptive selling behavior (Porter and Inks 2000). The same might be expected in a retail setting. Therefore, the following hypothesis is offered:

Hypothesis 2: In a retail setting, there is a positive relationship between attributional complexity and adaptive selling behaviour.

Learning orientation refers to an individual's tendency to independently master and understand their work (Meece et al 1988). The term originated in the field of educational psychology, in which students' goal orientations were shown to be important mediators and determinants of behavioral, cognitive, and affective patterns in achievement situations (Meece et al 1988). When students are learning-oriented, they aim for self-improvement or skill development, and they report more active cognitive engagement in learning activities.

The construct has also been applied to salespeople to describe their orientation to mastering sales situations (Sujan et al., 1994). It is expected that learning orientation moderates the relationship between empathy, attributional complexity and adaptive selling behavior. Empathy and attributional complexity are cognitive constructs, while adaptive selling behavior is a behavioural response based on the salesperson's cognition. It is argued here that salespeople with a higher learning orientation will be more motivated to test the accuracy of their cognitive constructs by experimenting with different behaviors. In other words, in the case of a high learning orientation, an increase in empathy and attributional complexity levels will lead to a higher level of adaptive selling behaviour than in the case of a low learning orientation. The following is hypothesised:
Hypothesis 3a: The higher the learning orientation, the stronger the relationship between adaptive selling behaviour and (a) empathy, and (b) attributional complexity.

Cognitive style refers to the way in which individuals obtain and process information (Jung 1971). The information intake dimension of cognitive style refers to how people find out about the world. Sensors (S) emphasise detailed, sensory input such as data and hard facts about a concrete reality; while intuitors (I) rely on imagination and conceptualization to construct holistic realities beyond the abilities of direct sensation. The information-processing dimension of cognitive style refers to how individual evaluate information and make decisions. Thinkers (T) emphasize the role of conventional, deductive logic in decision making, while feelers (F) accentuate values and conflict in decision making. Prior research using real estate agents as participants found that cognitive style is related to adaptive selling behaviour (McIntyre et al 2000). The same is expected in a retail setting, so the following is proposed:

Hypothesis 4: Cognitive style is related to empathy and attributional complexity

It is proposed here, however, that the relationship between cognitive style and adaptive selling behaviour is mediated by attributional complexity. Salespeople develop knowledge structure regarding customer traits and appropriate selling strategies, which have been conceptualised as attributional complexity (Porter and Inks 2000). These knowledge structures affect their ability to gather information from the sales environment, combine the new information with knowledge stored in memory, and then adapt to the selling situation encountered (Weitz et al 1986). In other words, attributional complexity will affect a salesperson's ability to gather and process information. As such,

Hypothesis 5: Attributional complexity mediates cognitive style and adaptive selling behaviour.

It is also proposed here that empathy also mediates the relationship between cognitive style and adaptive selling behaviour. Empathic sales personnel will be able to draw out more useful information from the buyer than will non-empathic salespeople (Brems 1989); and without empathy, neither the sender nor the receiver in a communication dyad can accurately predict how the other will interpret the various
symbols shared (Lewis 1987). In other words, empathy affects a salesperson's ability to gather and use information. Hence,

_Hypothesis 6: Empathy mediates cognitive style and adaptive selling behaviour._

**METHOD**

**Sample**

The target population for this study was salespeople working in retail shopping centres. A snowball sampling technique was used. A convenience sample of 18 participants were initially invited to complete the survey, and then distributed and collected surveys from their friends or family. A total of 64 surveys were returned. 46 people answered the whole survey; while 18 people answered only the questions related to cognitive style, empathy and attributional complexity, and demographic data. These 18 surveys were not discarded but used to test the hypotheses between cognitive style, empathy and attributional complexity. The sample comprised 23 males and 41 females. The length of sales experience averaged 2.2 years, ranging from a few months to 10 years.

**Instrument**

To test the hypotheses, existing scales or slightly modified versions of these measured were obtained from the marketing literature. This was to maintain scale integrity and enhance comparison with previous studies. _Empathy_ was measured using a 5-item scale adapted from that used by Bush et al (2001). The scale consists of such statements as "Before criticising somebody, I try to imagine how I would feel if I were in their place". Previous studies using this scale in a selling context have reported reliabilities ranging from 0.71 (Bush et al 2001) to 0.78 (Spiro et al 1990). Only five of the original seven items were used to reduce the survey length. A six-point scale was used ranging from 1 (does not describe me at all) to 5 (describes me perfectly).

_Attributional complexity_ was measured using a 4-item scale adapted from Fletcher et al 1986. The scale consists of statements such as "I enjoy analysing the reasons or causes of people's behaviour". A
recent study using this scale in a selling context reported a reliability of 0.78 (Bush et al 2001). Only four of the original items were used to reduce the survey length. A 6-point scale was used ranging from 1 (does not describe me at all) to 5 (describes me perfectly).

Adaptive selling behaviour was measured on a 6-item scale adapted from Spiro et al (1990), and consists of such statements as "I am very flexible in the selling approach I use". This scale has been used in several studies with reported reliabilities ranging from 0.85 (Spiro et al 1990) to 0.88 (Sujan et al. 1994). Only six of the original items were used to reduce survey length. The original items encompassed items about selling beliefs and behaviours. Since our study focused on selling behaviour, only the behaviour-related items were used. All items were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Cognitive style was measured using the intuiting/sensing and thinking/feeling scales from the Myers-Briggs Type Indicator (Myers and McCaulley 1985). The intuiting/sensing comprised 7-items and the thinking/feeling scales comprised 5-item scales respectively. These scales provide continuous measurements. A recent study using these scales in a selling context reported reliabilities of 0.72 and 0.65 respectively.

Learning orientation was measured using a 6-item scale adapted from Ames and Archer (1988). The scale consists of statements such as "It is important for me to learn from each selling experience I have". A recent study using this scale in a selling context reported a reliability of 0.81 (Sujan et al 1994). Only six of the original items were used to reduce survey length. All items were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The following variables were also included as control variables: gender, formal training in sales, length of time in a sales role. The correlation matrix for the resulting measures is shown in Table 1.
Hypothesis testing

The analysis of the data for hypothesis testing proceeded in several stages. Four sets of regression were conducted testing for: (i) the effect of empathy and attributional complexity on adaptive selling behavior; (ii) the moderating effect of learning orientation; (iii) the effect of cognitive style on empathy and attributional complexity; and (iv) the mediating role of empathy and attributional complexity.

The first simple regression analysis examined the effect of empathy and attributional complexity on adaptive selling behavior. Empathy and attributional complexity explain 22% of the variance in adaptive selling behavior. The F-statistic was 7.46 (p<0.01). Hence, Hypotheses 1 and Hypothesis 2 are supported.

Second, the mediating effect of learning orientation was investigated. Ideally, this would be determined by calculating main and interaction effects simultaneously. However, there was strong multicollinearity between the interaction terms and the constituent terms (e.g., the variance inflation factor for attributional-complexity*learning 112). Hence, the sample of was split into two: the first subset had a 'low' learning orientation, denoted by values of learning orientation less than 3.76 (3.75 was the median value for learning orientation); the second subset had a 'high' learning orientation, denoted by values of learning orientation greater than 3.76. A regression for main effects was conducted on both subsets. The coefficients for empathy and attributional complexity were significant at the 0.1 level at low learning orientation. However, the coefficients are not significant at high learning orientation. In fact, at high learning orientation, the variance in adaptive selling behavior is explained entirely by other factors. Hence, learning orientation did moderate the relationship between empathy, attributional complexity and adaptive selling behavior, but not in the direction expected. Thus, Hypotheses 3a and Hypothesis 3b were only partially supported.

Thirdly, two simple regressions were performed to examine the effect of cognitive style on empathy and attributional complexity. The feeling/thinking dimension was related only to empathy at the 0.05 level (Adj R² 0.067; F=3.12 sig 0.05); and the sensing/intuiting dimension was related only to attributional complexity at the 0.05 level (Adj R² 0.054, F=2.69 sig 0.076). Hence, Hypothesis 4 is supported.
The final set of regressions involved assessing the mediating role of empathy and attributional complexity. A similar procedure to that used by Sethi (2000) to test for a mediating effects. First, variables that were significantly related to empathy and attributional complexity were selected. Second, adaptive selling behavior was regressed on these variables. Both sensing/intuiting and feeling/thinking had a positive relationship with adaptive selling behavior (p<0.05).

Then, adaptive selling behavior was regressed on sensing/intuiting, feeling/thinking, empathy and attributional complexity. If empathy and attributional complexity are mediators, then coefficients for sensing/intuiting and feeling/thinking should not be significant in this step. It emerged that sensing/intuiting was not significant and attributional complexity was slightly significant (p<0.1), which suggests that sensing/intuiting influences adaptive selling behaviour only through attributional complexity (ie attributional complexity is a mediator). Hence, Hypothesis 5 is supported. Feeling/thinking and empathy were both significant (p<0.05), which suggests that feeling/thinking influences adaptive directly and indirectly through empathy (ie not full mediation). Hence, Hypothesis 6 is only partially supported.

**DISCUSSION**

The results suggest that (in this sample at least) empathy and attributional complexity are positively related to adaptive selling behaviour. Salespeople whose preferred information-intake style is intuiting have higher levels of attributional complexity than those who have a sensory preferred style. Salespeople whose preferred information-processing style is through feeling are more likely to have high levels of empathy than those who have a thinking style. For salespeople with low levels of learning orientation, incremental increases in empathy and attributional complexity have a greater impact on adaptive selling behaviours than for those salespeople with higher learning orientation.

These results have several practical implications for salespeople and sales managers, who want to enhance adaptive selling behaviours. Adaptive selling behavior can be improved by enhancing empathy and attributional complexity. Role playing, debating on both sides of a topic, and group discussion about problematic selling situations can help individuals take the perspective of another person, and to recognise
more complex causes of behaviour. However, these exercises would be especially worthwhile for salespeople with low learning orientation. The results suggest that sales managers could also enhance the adaptiveness of their sales force by recruiting staff with an intuiting style of information-intake and a thinking style of information-processing.

The result that empathy impacts adaptive selling behavior differs from the finding of Bush et al (2001), but is similar to the finding of Pilling and Eroglu 1994. This could be due to differences in the target sample. Bush's sample was drawn from professional industrial salespeople in industries such as manufacturing and health care, in which the choice of product (ie whether a sale is made) is often governed by technical and regulatory requirements, and customer-salesperson interaction is less important. In a retail setting, such as a shoe shop, there is more of a one-to-one relationship between customer and salesperson; customers may be more responsive to an empathic salesperson; and an empathic salesperson would be more successful in the long run. Pilling and Eroglu (1994) make a similar argument in their study.

The manner in which learning orientation acted on empathy and attributional complexity was unexpected. It was thought that high learning orientation would strengthen the link between empathy and adaptive selling behaviour, and attributional complexity and adaptive selling behaviour. The reverse was found: stronger relationships were found at low learning orientations; at high learning orientation, it seems that factors other than empathy and attributional complexity contribute towards adaptive selling behaviour. Another way of looking at this result is that incremental increases in empathy and attributional complexity contribute significantly and positively to adaptive selling behaviour; but the effects level off at high learning orientation, as other factors 'kick-in' to affect adaptive selling behavior. Further research is required to determine what the other factors are.

Results also show that sensing/intuiting dimension of cognitive style is related to attributional complexity. More specifically, Intuitives are more likely to be attributionally complex. This is expected since the construct of attributional complexity is partially derived from the construct of cognitive complexity. Cognitive complexity refers to the number of characteristics involved when a person
perceives or evaluates social stimuli; and the organizational complexity of the connections among the differentiated characteristics (Fletcher et al 1986). Intuitives are more likely to have complex, holistic relationships between characteristics.

Other researchers have found a link between Jungian cognitive style and sales performance (eg Lewis 1995), but the results have been inconsistent (Lewis 1995). This inconsistency may be due to the effect of unmeasured factors. This study shows that salespeople's level of empathy, attributational complexity and adaptive selling behavior could be some of the factors that impact the relationship between cognitive style and performance.

The results relating cognitive style directly to adaptive selling behavior (in testing Hypothesis 5 and 6) are in line with previous research, which found that salespeople who preferred information intake via intuiting, and information processing via thinking, were more likely to practice adaptive selling behavior (McIntyre et al 2000). However, the results suggests one mechanism through which cognitive style acts on adaptive selling behavior: the sensing/intuiting component influences adaptive selling behaviour indirectly, through attributional complexity; while the feeling/thinking dimension influences adaptive selling behavior both directly and indirectly via empathy. Further research on larger samples of different types of salespeople is needed to show whether this mechanism actually exists.

The reliability and factor structure of most of the scales in this study differed to those reported in prior studies. For instance, the reliability of the sensing/intuiting scale and thinking/feeling scale in this study were 0.60 and 0.57 (before item deletion) which are lower than 0.72 and 0.65 reported by McIntyre et al 2000. Similarly, differences in factor structure were observed. For example, one item from the empathy scale also loaded significantly onto the attributional complexity scale ("When I'm upset at someone, I usually try to "put myself" in their shoes for a while"). When Bush et al (2001) tested these scales in their study, they reported unidimensionality of both of these constructs. Other researchers using the adaptive selling behavior and learning orientation scale in non-US setting (the Netherlands) also reported lower reliabilities (eg Vink and Verbeke 1993), which was attributed to possible differences in
the way salespeople in the different countries operate. Further research is needed to test the applicability of scales developed overseas to Australian setting. This is important for theory testing and development.

This study has potential limitations which should be kept in mind when interpreting the results. First, the relatively sample size and the use of snowball sampling limits the generalisability of the results. The use of snowball sampling, while reducing sampling costs, may also have reduced sample variance, as the personal characteristics of the participants are more likely to be similar to the person referring them than would occur by chance. Secondly, the reliabilities of the scales were lower than that recommended by Nunnally et al (1994), which may have attenuated some of the relationships reported. Thirdly, the results were based on self-report data, and social desirability bias may have influenced responses, especially in constructs such as empathy. Fourth, the findings of this study could vary with factors such as salesperson motivation (eg whether a salesperson was doing the job full-time as opposed to "getting out of the house"). Future research could address these issues.
REFERENCES


Figure 1: Theoretical model

Cognitive style

Information intake: sensing/intuiting

Information processing: thinking/feeling

Empathy

Attributional complexity

Adaptive selling behaviour

Learning orientation
Table 1: Correlations, reliability, means and standard deviations of measures.

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<td>1. Adaptive selling behaviour</td>
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<td>2. Empathy</td>
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<td>3. Attributional complexity</td>
<td>0.44***</td>
<td>0.22</td>
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<td>4. Learning orientation</td>
<td>0.15</td>
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<td>5. Sensing/intuiting</td>
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<td>6. Feeling/thinking</td>
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<td>0.02</td>
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<td>7. Gender</td>
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<td>-0.06</td>
<td>-0.13</td>
<td>0.08</td>
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<td>8. Formal sales training</td>
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<td>-0.14</td>
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<td>9. Years in sales role</td>
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<td>-0.03</td>
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<td>-0.38***</td>
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Mean                      | 3.77 | 3.13 | 3.73 | 3.83 | 6.67 | 5.33 |      |      | 2.20 |
Standard deviation         | 0.82 | 0.80 | 0.78 | 0.70 | 1.39 | 1.16 |      |      | 2.20 |
Alpha                      | 0.84 | 0.59 | 0.61 | 0.54 | 0.66 | 0.57 |      |      |      |

* Correlation is significant at the .05 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).
*** Correlation is significant at the 0.001 level (2-tailed)
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