

# Effects of Thinking Style on the Job Satisfaction of Retail Store Employees

Dr. William L. King, Management, Fort Hays State University  
Dr. Robert E. Holtfreter, Accounting, Fort Hays State University

## Abstract

*The relationship between thinking style, and job satisfaction was investigated with retail store employees whose jobs involved highly repetitive tasks. Most of the employees had thinking styles characterized by reliability, precision, and conformity. These employees were generally satisfied with their jobs. The least satisfied employees were those who had a thinking style characterized by a low tolerance for detailed, routine work, and little respect for rules. The practical implications of these findings are discussed.*

## Introduction

Low job satisfaction of employees has an adverse impact on organizations in many ways. Among these are poor health, complaining, damaging equipment, high absenteeism (Scott and Taylor, 1985), and high turnover (Lee and Mowday, 1987). The cost of high turnover alone can be substantial. It often costs an employer \$5,000 or more to hire and train a replacement for an hourly worker who has quit, and the cost is much higher for higher level jobs (Dumain, 1987).

Many different factors have been found to affect job satisfaction. Among the factors that have often been studied are working conditions, supervision, and pay. A factor that has not traditionally been considered is the fit between an employee's thinking style and the nature of the tasks performed on a job. Some people have a thinking style that fits well with a clearly defined job that demands precision, reliability, and conformity to rules. Other people have a quite different thinking style--one that is more open, but less precise. Their thinking style fits better with a loosely defined job that requires creativity. When people end up in jobs for which they are ill suited, frustration and low satisfaction are likely results. A framework for understanding individual thinking styles and a way to measure these styles were developed by Michael Kirton. His adaption-innovation theory (Kirton, 1976) postulates two very different thinking styles that anchor the ends of a continuum. He states that some individuals are highly reliable and not easily bored by repetitive tasks. They are comfortable with rules, good at repetitive tasks, and like well-defined job expectations. But they are not good at coming up with new ideas that break with

tradition or at dealing with unstructured situations. Other individuals have a very different thinking style. They are easily bored with repetitive tasks, are broadly imaginative, and function effectively in unstructured situations. Kirton labels individuals who readily accept rules "adaptors" because they adapt well to existing situations. He labels those who are less rule-governed and more open-thinking "innovators" because they are adept at developing new ideas in unstructured situations (Kirton, 1976). Selected characteristics of these two thinking-style types are shown in Table 1.

It seems reasonable to assume that individuals are attracted to jobs that fit their thinking styles, and there is evidence that this in fact happens. Adaptors tend to predominate in highly structured, repetitive jobs concerned with the internal functions of organizations, such as costing, supply, and production (Hayward & Everett, 1983; Keller & Holland, 1978; Kirton, 1980; Kirton, 1985; Kirton and Pender, 1982). Innovators tend to cluster in less routine jobs in areas that are concerned with the organization's external environment, such as sales support, planning, and research and development. Nevertheless, studies in this area suggest that there are still quite large thinking style differences between incumbents in the same job classification. This suggests that some employees are thinking-style misfits because the sorting process is not highly efficient. This imperfect sorting may have dual causes. First, employers do not make any systematic attempts to select employees with thinking styles that are appropriate for the jobs they fill. Second, employees often take jobs because of pay or convenience even if they do not think they are particu-

**Table 1. Behavioral descriptions of adaptors and innovators (abbreviated from Kirton, 1976)**

Adaptor	Innovator
Characterized by precision, reliability, methodicalness, prudence, conformity.	Seen as undisciplined, thinking tangentially, approaching tasks from unsuspected angles.
Seems impervious to boredom, can maintain high accuracy in long spells of detailed work.	Capable of detailed routine for only short bursts. Quick to delegate routine tasks.
Challenges rules rarely, cautiously...	Often challenges rules, has little respect for past custom.
Is an authority within given structures.	Tends to take control in unstructured situations.
Liable to make goals of means.	In pursuit of goals treats accepted means with little regard.

larly well suited to the type of work required.

Thinking style differences between individuals who work together can cause problems (Lindsay, 1985). One reason may be the negative images adaptors and innovators have of each other. Kirton (1976) found that adaptors thought of innovators as, among other things, neurotic and insensitive to others. On the other hand, innovators saw adaptors as dogmatic and inflexible, with a marked distaste for venturing into the unknown. These negative images, combined with different ways of approaching tasks (rule-governed versus a more free-wheeling approach), suggest that individuals who have significantly different thinking styles may not work well together. Differences in thinking style could be particularly troublesome for supervisors and subordinates, who are forced to interact frequently by the nature of their relationship.

**The Study**

This research was conducted in two outlets of a midwestern retail chain. All of the jobs in these outlets were concerned with routine, highly structured tasks such as stocking merchandise, serving customers, and supervising these operations. (Operating policies and major sales promotions originated at higher levels in the organization.) Conversations with managers indicated that personal qualities such as precision, reliability, efficiency and methodicalness were highly valued. Note that all of these are characteristics of adaptors (see left column of table 1). Performance appraisal in the organization studied was perfunctory, and supervisors did not have time to make appraisals specifically for the study. Therefore, the study focused only on job satisfaction.

Adaption-innovation theory provides the basis for three hypotheses about the thinking style and job satisfaction of individuals in the routine jobs characteristic of two retail outlets.

*Hypothesis 1:* Employees in the retail outlets studied will tend to be adaptors.

*Hypothesis 2:* There will be an inverse relationship between innovator tendencies and satisfaction with the work itself (here defined as the tasks they perform).

The most innovative employees (those least suited to routine tasks) will tend to be the less satisfied with the work itself than employees who are adaptors. Adaptors, who are better suited to the tasks, will tend to be more dissatisfied.

*Hypothesis 3:* High supervisor-subordinate difference in thinking style differences will be associated with low satisfaction and vice versa.

**Method**

*Sample.*

All 152 workers and first-level supervisors employed in the two retail outlets were given questionnaires and return envelopes addressed to the researchers. Sixty-four questionnaires (42 percent) were returned. From the returned questionnaires it was possible to form 39 supervisor-subordinate pairs consisting of a total of 44 individuals (29 percent of the total sample). In this paired sample the number of subordinates per supervisor ranged from 3 to 14.

### Measures.

**Thinking Style.** Adaptive versus innovative thinking style was measured with the Kirton Adaption-Innovation Inventory (KAI). This instrument asks subjects to report how easy or hard it is to present themselves, consistently over a long period of time, as someone who has each of 32 characteristics. Two such characteristics are "a person who enjoys the detailed work" and "a person who has fresh perspectives on old problems." KAI scores can range from 32 for extreme adaptors to 160 for extreme innovators, with a theoretical mean of 96. Kirton (1976) reported a mean of 95.3 and a standard deviation of 17.5 for a heterogeneous sample of 532 British adults. Reliability of the KAI is high. (In this study Cronbach's alpha was .78, slightly lower than the average Cronbach's alpha of .86 for 12 studies reported by Kirton, 1987).

Kirton (1987, p. 114) presents evidence that the adaptor-innovator style preference is highly resistant to change, and can be considered a persistent personality trait. In addition, Kirton (1987, pp. 90-100) cites evidence that KAI scores have almost no relationship to intelligence, that the KAI is a relatively pure measure of thinking style (as opposed to level of actual innovativeness), and that it measures something related to but distinct from such other instruments as the Myers-Briggs Type Indicator (MBTI) test (Kirton, 1987).

**Job satisfaction.** The Job Descriptive Index (JDI), a measure developed by Smith, Kendall, and Hulin (1969, revised in 1985) was used to measure thinking style. The JDI measures satisfaction with work (tasks performed), people (co-workers), supervision, pay, and promotions.

**Conflict.** A one-item Likert-style scale was used to measure the amount of conflict between supervisors and workers. Only workers were asked to evaluate conflict. This was done for two reasons. First, the non-supervisors' subordinate position was expected to make

them more likely than supervisors to avoid expressing feelings of conflict, so that supervisors might be ignorant of the true extent of feelings of conflict. Secondly, there was concern that the questionnaire return rate for supervisors might be severely reduced if they were asked to undertake the tedious task of rating the amount of conflict with each of their subordinates (who numbered as high as 22 in the stores sampled, and averaged about nine).

**Use of Difference Scores.** In this study it was necessary to use difference scores (on the KAI), a practice that has been criticized (Johns, 1981) because of the problem of interdependent measures. However, in this study that problem was avoided. Scores from which differences were calculated were independent because they were made by different individuals.

### Results

Hypothesis 1 was confirmed. The average KAI score of 87.1 (SD=9.6) for employees in the two retail outlets was significantly lower (more adaptive) than the average KAI score of 95.3 (SD=17.5) obtained by Kirton (1976) for a heterogeneous sample of 532 individuals ( $t=5.9$ ,  $p<.001$ ). The average KAI score of 79.6 for supervisors (excluding workers) was even lower ( $t=2.6$ ,  $p<.01$ ), and the average KAI score of 88.1 for workers only, while higher than that for supervisors, was still lower than the average for Kirton's sample ( $t=4.3$ ,  $p<.001$ ).

Hypothesis 2 was confirmed. There was a modest but significant negative relationship between KAI scores and JDI work scale scores ( $r=-.29$ ,  $p<.01$ , one tailed), indicating that the most innovative employees tended to be the least satisfied. The relationship was even stronger when only the more innovative employees were considered ( $r=-.50$ ,  $p<.01$ , one tailed).

The tendency for the more innovative employees to be less satisfied than their adaptive co-workers does not appear to be due to a general tendency for innovators to

**Table 2. Relationships between supervisor-subordinate KAI score differences, and JDI measures of job satisfaction.**

	Correlations with JDI measures of Job Satisfaction				
	Super- vision	Work	People	Pay	Promo- tions
KAI Difference scores for Supervisor- Subordinate Pairs	-.33*	-.32*	-.25	-.20	-.21

\*  $P<.05$ . one tailed.

have lower job satisfaction than adaptors. Business school alumni (King and Masters, 1990) and lawyers (King and McClure, 1990) have both shown small positive correlations ( $r = .08$  and  $r = .14$  respectively, both non significant) between KAI scores and general measures of job satisfaction, suggesting that if anything innovators are in general a little more satisfied with their jobs than adaptors.

Hypothesis 3 was also confirmed. Differences in thinking style as measured by KAI score differences were associated with low subordinate JDI satisfaction-with-supervision scores (see Table 2). In addition to the hypothesized relationship between thinking style differences and satisfaction with supervision, a negative relationship was found for satisfaction with work.

The two retail outlets did not differ significantly from each other on any of the measures of job satisfaction, on KAI scores, or on any of the demographic factors included in the questionnaire.

## Discussion

Most of the workers in this study had adaptor thinking styles that were suited to operating-level retail store tasks such as restocking merchandise and customer check-out. For these tasks, precision, reliability, and resistance to boredom--all adaptor traits--are highly valued in employees. The adaptor orientation of supervisors was even stronger than for subordinates, which is consistent with the existence a sorting-out process that favors the survival of adaptors in this work environment. It appears that supervisors are strong adaptors because only those employees who were well suited to the job (i.e. had the adaptive traits listed in the left column of Table ) stayed on the job long enough, and were successful enough, to be promoted to supervisory positions.

Higher than average attrition for those who did not have the prevalent, and appropriate, adaptor thinking style may have occurred because these individuals had low job satisfaction, and individuals with low job satisfaction are more likely to quit than their more satisfied co-workers (Steers and Rhodes, 1978). Attrition of thinking-style misfits may also have been due to low job performance of individuals who were not by nature as methodical as their supervisors demanded, had little respect for rules, and were bored with their jobs. Nevertheless, sorting by thinking style was evidently not rapid or complete since some thinking-style misfits remained. Ten of the 64 employees who responded to the survey had KAI scores above the average (on the innovator side) of Kirton's large heterogeneous sample, and therefore could be considered thinking-style misfits in the adaptor-dominated organization studied. Compared to the other employees these ten employees were

considerably less satisfied than other workers with their jobs.

When employees are not well suited to their jobs both employee and employer suffer. Employees are dissatisfied and probably frustrated, and the employer must deal with the effects of dissatisfaction that may include high absenteeism, high turnover, and low morale.

Thinking style may even be more important than the results of this study suggest. It is easy to imagine that thinking style might affect not only job satisfaction but also job performance. Employees who have a thinking style that is ill suited to performing their jobs are likely to be poor performers.

If thinking style affects job satisfaction and/or performance, there are important implications for organizations. They need employees with thinking styles that are appropriate for their jobs. Selecting the right employee for a job could be accomplished by using the KAI as part of a test battery for personnel selection. Indeed, the KAI might well be the best predictor of job satisfaction and success for many lower-level jobs. Success in such jobs is usually not determined by ability since ability requirements are low, and the great majority of workers have the mental and physical abilities required to do these jobs well. In this case, thinking style rather than ability might be what makes some employees more successful than others. Another approach might be to use realistic job previews; detailed explanations of what a job entails that include aspects that some people might not like, as well as the more pleasant side of the job. This would enable applicants to decide for themselves whether job requirements match their abilities and thinking styles well enough to provide good prospects for a happy, successful work experience.

## Suggestions for Further Research

Although considerably more research will be required to define the role of thinking style in job success, the findings of this study suggest that its role is substantial enough to warrant such an effort. Placing employees in jobs that complement their thinking styles holds the potential for significantly benefiting both employees and employers.

## \*\*\*References\*\*\*

1. Dumaine, B. (1987, August 17). The new art of hiring smart. *Fortune*, pp. 17-23.
2. Hayward, G., & Everett, C. (1983). Adaptors and innovators: Data from the Kirton Adaptor-Innovator Inventory in a local authority. *Journal of Occupational Psychology*, *56*, 339-342.
3. Jenkins, J.J., & Patterson, D.G, (Eds), (1961). *Studies in Individual Differences: The Search for*

- Intelligence*. New York: Appleton-Century-Crofts.
4. Johns, G. (1981). Difference score measures of organizational behavior variables: A critique. *Organizational Behavior and Human Performance*, 27, 443-463.
  5. Keller, R. T., & Holland, W. E. (1978). A cross-validations study of the Kirton Adaption-Innovation Inventory in three research and development organizations. *Applied Psychological Measurement*, 2(4), 563-570.
  6. King, W. L., & Masters, R. J. (1990). The relationship of thinking style to success and job satisfaction. *Unpublished manuscript*.
  7. King, W. L., & McClure, A. L. (1991). Female attorneys/male attorneys: The blurred image. *Unpublished manuscript*.
  8. Kirton, M. (1976). Adaptors and innovators: A description and measure. *Journal of Applied Psychology*, 61(5), 622-629.
  9. Kirton, M. (1980). Adaptors and Innovators: The way people approach problems. *Planned Innovation*, 3, 51-54.
  10. Kirton, M. (1985). Adaptors, innovators, and paradigm consistency. *Psychological Reports*, 57, 487-490.
  11. Kirton, M. (1987). *Kirton Adaption-Innovation Inventory Manual*. Hatfield, England: Occupational Research Centre.
  12. Kirton, M. J., & Pender, S. (1986). The adaption-innovation continuum, occupational type, and course selection. *Psychological Reports*, 51, 883-886.
  13. Lee, T. W & Mowday, R. T. (1987, December). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's Model of Turnover. *Academy of Management Journal*, 30, 4 721-743.
  14. Lindsay, P. R. (1985). Counseling to resolve a clash of cognitive styles. *Technovation*, 3, 57-67.
  15. Scott, K. D., & Taylor, S. G. (1985, September). An examination of conflicting findings on the relationship between job satisfaction and absenteeism: A meta-analysis. *Academy of Management Journal*, 599-612.
  16. Smith, P.C., Kendall, L.M., and Hulim, C.L. (1969). *The Measurement of Satisfaction in Work and Retirement*. Rand McNally & Company, Chicago, Ill.
  17. Steers, R.M, & Rhodes, S.R. (1978, August). Major influences on employee attendance: A process model. *Journal of Applied Psychology*, 63 391-407.