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The effects of tolerance for ambiguity on feedback-seeking behaviour

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In an article that appeared in this *Journal* in 1985, Ashford & Cummings found that tolerance for ambiguity (TA) moderated the relationship between feedback-seeking behaviours (FSB) and ambiguity or uncertainty about one's role or outcome contingencies. The authors concluded that, in uncertain situations, individuals who are low in TA will consider feedback an especially valuable resource, and will engage in higher levels of FSB.

The aim of this article is to expand and reinterpret the Ashford & Cummings' (1985) findings by reanalysing their data with two substantive differences. First, while job-related and problem-solving TA were proposed as conceptually distinct by Norton (1975), and loaded on separate factors in the factor analysis performed by Ashford & Cummings (1985), they were grouped together in their analysis, thus raising the question of how these two aspects of TA might operate differently with respect to FSB.

Second, in investigating the consequences of TA for FSB, Ashford & Cummings used a global measure of FSB which combined feedback specifically sought from boss or co-workers, and feedback inferred from comparisons with others, social cues and other events. This measure also combined feedback sought for a variety of purposes beyond simply assessing performance. Based on earlier work by Ashford & Cummings (1983), Greller & Herold (1975) and others, it is possible that this global measure of FSB is masking important differences due to either the specific seeking strategy, the reason for seeking or even the source from which feedback is sought.

To investigate the above theoretical distinctions between different types of TA and FSB using the Ashford & Cummings' (1985) data, two hypotheses were tested. First, since FSB could be considered an attempt to reduce uncertainty in one's work environment (Ashford, 1986), job-related TA, which involves an individual's concern about his/her standing at work, should be associated with FSB for determining the adequacy of performance or potential for advancement. Problem-solving TA, which reflects a general intolerance for ambiguity in any task, should not be associated with FSB about workplace issues, because the sources of the uncertainty which the person low in problem-solving TA finds aversive are not necessarily at work. Second, when allowing for different types of FSB (monitoring the work environment, solicitations from supervisors and solicitations from co-workers), low job-related TA should be associated with greater soliciting behaviours rather than monitoring behaviours because of the less ambiguous nature of the resulting feedback (Ashford & Cummings, 1983). In other words, feedback which an individual gathers through monitoring the environment may itself be more difficult to interpret than solicited feedback, and thus have less value in reducing ambiguity.

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Method

The questionnaire data used in this analysis were collected from 172 employees at a public utility in the mid-western United States by Ashford & Cummings (1985). The questionnaire included the Rizzo, House & Lirtzman (1970) measure of role ambiguity, an original measure of contextual uncertainty, and selected items from the Norton (1975) tolerance for ambiguity scale. Feedback-seeking behaviour was assessed using 16 items reflecting solicitations from supervisors and co-workers, as well as efforts to monitor the feedback environment, for the purpose of assessing one's performance and potential for advancement. For further details on the sample and questionnaire, the reader is referred to Ashford & Cummings (1985).

Measures

In Ashford & Cummings' (1985) analysis, the Norton TA items loaded on two factors. Scales for the analysis reported here were created based on those loadings. Tolerance for ambiguity in problem solving was computed by summing four items stressing the uncertainty of success in pursuing a task (e.g. 'A problem has very little attraction for me if I don't think it has a solution'). Tolerance for job-related ambiguity was computed by summing three items emphasizing the quality of information concerning the job situation (e.g. 'I function very poorly whenever there is a lack of communication in a job situation'). The items in this scale describe an 'information-poor' environment.

The feedback-seeking items were divided into three groups based on previous research (Greller & Herold, 1975; Herold & Parsons, 1985; Parsons & Herold, 1986): those asking respondents how often they *solicit* feedback information from supervisors (one item) or co-workers (one item) and those asking how often they glean feedback information by *monitoring* the feedback environment (six items). An example of a feedback solicitation item is: 'In order to find out how well you are performing your job, how frequently do you *seek* feedback from your supervisor about your work performance?' An example of a feedback-monitoring item is: 'In order to determine your potential for advancement within [company name], how frequently do you *observe* what behaviours your boss rewards and use this as feedback on your own performance?' Each of these three strategies can be applied for each of the two feedback purposes – performance and advancement potential. Following these theoretical distinctions, six variables were created and served as the dependent variables for the remaining analyses.

Results

Table 1 presents the correlations and internal consistencies for all measures used in the study. The factor-analytic distinction between the two TA scales and their moderate correlation (.38) suggest that the separate use of the two measures is warranted. The correlation matrix also indicates that problem-solving TA is significantly, but weakly, correlated only with monitored feedback for determining performance and solicited feedback from supervisor for assessing advancement potential. The positive sign of the latter correlation is opposite to that predicted. The correlations between job-related TA and all of the feedback-seeking behaviours are significant, generally stronger than those for problem-solving TA and in the predicted direction. These patterns suggest that combining the two measures, as Ashford & Cummings (1985) did, may have created an averaging effect which underestimated the tolerance for ambiguity–feedback-seeking behaviour link.

The next analysis consisted of a series of OLS multiple regressions using the measures of feedback-seeking behaviour as dependent variables. Independent variables were entered together into the equation. They included the two TA scales developed above, the Rizzo *et al.* (1970) measure of role ambiguity and the measure of contingency uncertainty developed by Ashford & Cummings.

The regression analysis results are presented in Table 2. As predicted, the two tolerance for ambiguity measures differentially affect the dependent variables. Specifically, problem-solving TA does not significantly predict FSB to assess performance. Job-related TA, on the other hand, predicts both feedback solicitation from supervisors and monitoring behaviours to assess performance *and* promotion potential. Contrary to prediction, problem-solving TA positively predicts feedback solicitation from supervisors concerning advancement potential. As expected, individuals high in job-related TA engage in less feedback solicitation from supervisors and less monitoring regarding both performance and advancement potential.

A further significant point is that when feedback-seeking behaviours are segmented into the three strategies, and the two TA components are separated, role ambiguity and contingency uncertainty do not

Table 1. Correlations, means and standard deviations for all variables ($N = 172$)

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Tolerance for ambiguity–problem solving (alpha = .70)	12.11	3.13	1.00									
2. Tolerance for ambiguity–job-related (alpha = .66)	7.78	2.24	.38***	1.00								
3. Solicited feedback performance–supervisor	3.03	1.06	−.11	−.43***	1.00							
4. Solicited feedback performance–co-workers	2.49	1.17	−.05	−.16*	.22**	1.00						
5. Gleaned feedback performance (alpha = .87)	21.49	4.97	−.15*	−.26***	.36***	−.03	1.00					
6. Solicited feedback potential–supervisor	2.77	1.03	.16*	−.20**	.44***	.16*	.21**	1.00				
7. Solicited feedback potential–co-workers	2.28	1.03	−.00	−.16*	.18*	.52***	.00	.31***	1.00			
8. Gleaned feedback potential (alpha = .84)	21.87	4.28	.05	−.27***	.32***	.02	.44***	.46***	.27	1.00		
9. Role ambiguity (alpha = .79)	15.94	4.07	−.21***	−.27***	.15*	.13*	.11	.08	.12	.03	1.00	
10. Contingency uncertainty (alpha = .61)	18.02	3.16	−.15*	−.16*	.09	.01	.17*	.12	.15*	.12*	.36***	1.00

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

Table 2. Betas from multiple regression analysis ($N = 172$)

Independent variables	Dependent variables: Feedback seeking behaviour concerning: Performance — Solicit supervisor	Performance — Solicit co-workers	Performance — Gleaned	Potential — Solicit supervisor	Potential — Solicit co-workers	Potential — Gleaned
Role ambiguity	.03	.13	−.06	.03	.06	−.04
Contingency uncertainty	.02	−.07	.16	.11	.12	.10
Tolerance for ambiguity Problem solving	.04	.00	−.05	.27**	.07	.15
Tolerance for ambiguity Job related	−.43***	−.16	−.24**	−.26**	−.16	−.35***
Adjusted R^2	.17	.02	.07	.08	.03	.09

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

significantly predict FSB, whereas they did in Ashford & Cummings' (1985) analysis. This finding, that job-related TA is of more help in explaining variance in FSB than are two contextual variables, is of considerable interest, considering the short shrift typically given to individual difference variables in organizational behaviour models (e.g. Weiss & Adler, 1984).

Discussion

This research offers two extensions to Ashford & Cummings' (1985) previous empirical work on feedback seeking. First, it examined the role of tolerance for ambiguity in the feedback-seeking process in a manner consistent with theoretical discussions of the tolerance for ambiguity construct. Second, it differentiated among three feedback-seeking strategies resulting in a better specification of individuals' feedback-seeking behaviours. Each of these extensions will be discussed in turn.

Tolerance for ambiguity is an important variable for three reasons. First, TA clearly plays a role in an individual's decisions to seek feedback. Those who could tolerate ambiguity sought feedback less frequently than those who could not. This research, however, highlights that the specific referent of the tolerance makes a difference. Future feedback research should focus primarily on job-related TA in examining the role of TA in the feedback process. Apparently, a general intolerance of ambiguity does not motivate the seeking of job-specific feedback. Second, uncertainty has become an increasingly frequent organizational reality. Even in situations where individuals' roles are relatively fixed, the contexts surrounding those roles are often highly ambiguous as organizations restructure, merge, divest and so forth (Kimberly & Quinn, 1984). Differences in tolerance for ambiguity should affect people's reactions to these situations.

Third, given the reality of greater uncertainty in organizations, it would also seem to be important to identify those individuals who are likely to react to uncertainty with stress and anxiety. An intolerance for ambiguity is one important predictor of such reactions (Schweiger & Ivancevich, 1985). Determining how these individuals will respond is also of practical utility. For example, if we know that those low in TA are particularly likely to react to the uncertainty surrounding organizational transitions by seeking feedback, then we can explicitly train upper level managers either to provide more feedback during these periods or to be more ready for and accepting of individuals' seeking attempts.

A further practical implication has to do with the findings regarding those with high TA. Such individuals did not respond to uncertainty by seeking out feedback. It is important to remember that, while these individuals may seek less because they do not find the uncertainty aversive, feedback also serves other

important functions besides reducing uncertainty. In particular, Ashford & Cummings (1985) argue that feedback seeking is instrumental in that it allows individuals to correct errors in their performance. If high TAs are seeking less because they find the uncertainty less aversive, they may be missing out on error-corrective information that they may actually need to perform their tasks. In an analogous finding, individuals with low self-esteem tended to seek out more information about how a task should be structured than did individuals with high self-esteem (Weiss, 1977). As a result, low self-esteem individuals had important task-relevant information at their disposal. Similarly, low TAs may end up with more feedback, an equally important type of task-relevant information, while their counterparts with high tolerance for ambiguity may not.

One finding contrary to prediction was that high TAs sought more, not less, feedback about their advancement potential from their supervisors than did low TAs. It may be that, given the inherent ambiguities and political realities involved in the promotion process in organizations, individuals have learned over time that feedback from their supervisors regarding advancement potential is of little utility as an uncertainty reduction mechanism and may, in fact, increase uncertainty rather than reduce it. This being the case, it may be that only those who can tolerate ambiguity can afford to seek feedback.

This article also extends previous empirical efforts in the feedback area by more precisely delineating the several possible feedback-seeking strategies and using a measure that allowed for possible differences among the strategies to emerge. This measurement approach is consistent with Ashford & Cummings' (1983) arguments that there are different costs and benefits involved in the different strategies. While in this study tolerance for ambiguity affected each of the strategies similarly, future studies may find differences. Research on feedback should continue specifically to delineate the various feedback strategies discussed here and to assess their individual relationships with various predictors.

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