2006

Readiness for Change: Implications on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands

Duane Miller, *Utah Valley University*
Susan R. Madsen, *Utah Valley University*
Cameron John, *Utah Valley University*

JAME

Readiness for Change: Implications on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands

Duane Miller, Utah Valley State College
Susan R. Madsen, Utah Valley State College
Cameron R. John, Utah Valley State College

Executive Summary

This article addresses how employees' readiness/willingness to change is influenced by three workplace factors—management/leader relationship, job knowledge and skills, and job demands. Statistical analyses were completed based on a two-part survey given to 464 employees from four companies. The research findings indicated that all three of these workplace factors had an influence on employees' readiness for change. But employees' relationship with their managers was the strongest predictor of readiness for change. Discussion regarding the implications of these workplace factors and how management's understanding of how these factors impact readiness for change are also presented.

Common sources of change in business include changes in organizational structure, management, products or services, technology, and policies and procedures (McConnell, 2002). Because change occurs more rapidly, in greater volume, and is more complex than ever before (Bennett, 2001); and because being able to adapt to change has such a critical bearing on success (Norton & Fox, 1997), managers need to be able to identify which work factors, if any, best prepare employees for change. If certain work factors can be identified as having a positive effect on employees' readiness for change (RFC), managers should then focus on developing these factors in an effort to better prepare employees for inevitable changes.

RFC means that employees are prepared mentally and/or physically for immediate action that will improve, alter, vary, or modify something (Madsen, 2003). Because of the numerous differences in individual life experiences, motivational levels, sociodemographic characteristics, knowledge, attitudes, support systems, values, and behavioral patterns, just to name a few—it is impossible to know for certain all of the characteristics individuals may need to develop to heighten their overall RFC (Ilgen & Pulakos, 1999)

Although a lot of research has been done regarding readiness for change in the medical field (e.g., Armenakis, 1993; Eby & Dobbins, 1997; Madsen, 2003), little research has been conducted on RFC in other fields, including management. Several research studies in particular (e.g., Backer, 1995; Clark, Cavanaugh, & Brown, 1997; Hanpachern, 1997) have focused on characteristics that might affect employees' readiness for change. Hanpachern (1997), for example, conducted a study assessing an

individual's overall margin in life (the vitality or freedom a person must have to respond to new challenges) and many of its work and nonwork aspects with a person's readiness for change level. Although this study resulted in some significant correlations between work aspects and a person's RFC, it had a number of limitations in the research methodology that prevents it from significant generalizability.

This paper reports the results of a new study that used Hanpachern's framework but made extensive changes in the test instrument, sample size, and other methodology techniques to increase this generalizability. Because the relationship between work and nonwork domains continues to be of great interest to researchers and employers (Kirchmeyer, 1995), the authors felt that continuing the attention given to these domains was important. In addition, the current study sought to extend the interrelationship of three work factors on employees' readiness for change. The three work factors examined in this study are management-leadership relationships, job knowledge and skills, and job demands.

Literature Review

Management-Leadership Relationship

The first work factor variable to be examined regarding its impact on readiness for change was management-leadership relationship. Decker, Wheeler, Johnson, & Parsons (2002) indicated that employees who spent time reporting to a manager eventually developed a relationship with that person. This relationship may be a sound, well-functioning relationship grounded in honesty and mutual trust and respect or a less-than-ideal relationship. Hanpachern, Morgan, & Griego (1998) found that the combination of management-leadership relationship and job knowledge and skills was a very good predictor of readiness for change. Although these studies do show a correlation between readiness for change and a person's relationship with his or her manager or leader, not all of the correlation is positive.

Other researchers (i.e., Eby, Adams, Russell, & Gaby, 2000) concluded that trust in management is not positively related to perceived organizational readiness for change. Livingstone, White, Nelson, & Tabak (2002), in a study regarding attitudes toward change and working with technology, found that faith in management (an employee's perceptions that management is trustworthy and cares about them) was significantly related to attitudes toward change, but that confidence in management (an employee's perceptions of the actual competence of management) was not related to attitude toward change. Based on these research studies, the following hypothesis is presented:

H1: Employees' relationship with their managers is significantly related to their readiness for change.

Job Knowledge and Skills

The second work factor variable examined regarding its impact on employee readiness for change was job knowledge and skills. In a longitudinal study conducted on readiness for organizational change in the workplace, Cunningham, et al. (2002) indicated that jobs which empower employees with skills, attitudes, and opportunities to manage change increase readiness for organizational change. The Cunningham et al. study (2002) also implies that workers who are more confident in their abilities to cope with job change reported a higher readiness for organizational change. Also, as mentioned in the previous section (Hanpachern, 1997), the combination of job knowledge and skills and management-leader relationship was a very good predictor for readiness for change. Hanpachern (1997) also indicated that job knowledge and skills were key factors in indicating readiness for change. Based on these research studies, a second hypothesis is presented:

H2: Employees' job knowledge and skills are significantly related to their readiness for change.

Job Demands

The final work factor variable examined regarding its impact on employee readiness for change was job demands. Karasek (1979) indicated that workers in demanding jobs with an active approach to job problem-solving which afforded higher decision latitude and control over challenging tasks reported a higher readiness for organizational change. Cunningham et al., (2002), also concluded that staff in active jobs (e.g., high decision latitude and/or high job demand) reported a higher readiness for organizational change, participated in a greater number of redesign activities, and made a greater contribution to organizational change than those in passive or less-demanding jobs. Additional research studies (e.g., Greenberger, Strasser, Cummings, & Dunham, 1989; Karasek & Theorell, 1990; Tetrick & LaRocco, 1987) also reported that people with more job demands tend to be more receptive to organizational change than those with less job demands.

The majority of the research studies reviewed show that job demands do have an impact on an employee's readiness for organizational change, although one study (McConnell, 2002) indicated that job classification and or a person's position in the company had no relationship to a person's readiness for change. It could be argued, however, that job classification and job position are not good measures of job demands. Based on these research studies, a final hypothesis is presented:

H3: Employees' job demands are significantly related to their readiness for change.

Research Method

This section addresses the following six topics: research design, participants and sample selection, measures/instrumentation, data collection, data analysis, and limitations.

Research Design

The project included an empirical research study which involved a survey questionnaire being given to employees in corporate settings. The study is classified as a correlation relational study because two or more different kinds of data were gathered from the same group of people to test the relationship between the independent and dependent variables. The study was also concurrent because the independent and dependent variables occur at the same time.

Originally, the researchers planned on doing a complete replication of Hanpachern's (1997) study. However, after getting disconcerting results from a pilot test, the researchers made substantial changes for this study. In the revised study, RFC served as the dependent variable; management-leadership relationships, job knowledge and skills, and job demands served as the independent variables. The demographic variables included gender, age, marital status, educational level, age of children, and length of time with the company.

Participants and sample selection

The population for this study included the employees of four for-profit companies from northern Utah. These four companies had between 200 and 2,000 employees. The four companies were quite different regarding their industry, products, and services. One company distributed surveys to all employees in six predetermined departments. The second company distributed surveys to all employees. The third company conducted a random sample of all supervisors, management, and leadership within the company. The fourth company allowed for a random sample of about two-thirds of its employees. A total of 758 surveys were given to employees, and 464 were returned for a rate of return of over 60 percent.

Measures/instrumentation

A two-part instrument was used for this research project. The first part used Hanpachern's (1997) original 14-item RFC scale with some minor alterations based in part on McNabb and Sepic (1995) and several unpublished studies. This part of the instrument was designed to determine employee willingness or "openness" to do 14 things ranging from 1) my willingness to work more because of change is . . . ; 3) my willingness to be a part of the new project is . . . ; 7) my willingness to change the way I

work because of the change is . . . ; 11) my willingness to change something even if it appears to be working is . . . ; to 14) my willingness to sell ideas about change is. Respondents marked their feelings using a Likert scale with 1 being *very unlikely* and 7 being *very likely*. Hanpachern (1997) and Hanpachern et al. (1998) pilot tested three versions of this scale and Cronbach's alphas were measured at .82, which indicates good internal consistency. With the modified survey instrument, this study found Cronbach's alphas of .81, which is very consistent with Hanpachern's results.

The second part of the survey examined the relationship of readiness for change and the following three work factors: management-leadership relations, job knowledge and skills, and job demands. Participants were asked to read each statement carefully and then circle the number that best represented their feelings and views. Once again the seven-option Likert scale was used to measure responses. Questions asked regarding the employee's management-leadership relationship included the following: my supervisor is supportive, and working with my supervisor is a positive experience. Questions regarding the respondent's job skills and knowledge included the following: my knowledge and skills concerning my present job are strong, and I have the knowledge and skills necessary to move up in my organization. Questions asked regarding job demands for the employee included the following: meeting job/task assignment deadlines is very easy, and I am frustrated with the demands of my job.

Data Collection

A contact person from each company was asked to distribute the surveys. This person had a list of the employees to be given the surveys and the survey number each employee received. A list of the survey numbers was maintained, and the surveys were recorded as they were returned. To help maintain confidentiality, the researchers did not have a list of the employees' names. Numbers were also used to identify the different companies. About 10 days after the surveys were distributed, the company' contact person was asked to provide a general reminder to all participants to return their surveys. Additional copies of the surveys were given to the contact person in case employees lost the original survey.

Three of the companies provided a pre-addressed, stamped envelope for their employees to mail the completed survey directly to us. The other company asked the respondents to seal their surveys in an envelope and place them in a "drop envelope" in each department. The following week a researcher picked up the sealed envelopes. After the data collection phase was completed, the results were entered into SPSS for analysis.

Data Analysis

Pearson correlations were used to determine the relationship between RFC and management-leadership relationship, job knowledge and skills, and job demands. The Pearson correlation coefficient was used to test magnitude and direction of the

relationship. A MANOVA was used to determine the difference between the criterion variable and a combination of demographics (Gall, Borg, & Gall, 1996). Some of the differences were then examined further using an ANOVA comparison.

Limitations

The research design had three main limitations. The first limitation was that a person's RFC can be influenced by variables not measured in the study. A questionnaire survey cannot accurately control the many variables within a company's culture or for each person's situation. Also, a questionnaire cannot probe deeply into people's opinions and feelings which would be helpful in taking a more comprehensive look at RFC and relationship to management-leadership relationships, job knowledge and skills, and job demands. The second limitation was that only 758 employees in four companies were given the questionnaire. A larger, fully randomized sample would have improved the study. The final limitation was the slightly different populations surveyed at each company.

Results and Discussion

Table 1 summarizes the demographics of the sample population.

Table 1. Demographics of Sample Population

Demographics	Category Frequency
Sample Size	N = 464
Gender	Male (n=222); Female (n=229); No gender indicated (n=13)
Age Range	Younger than 21 (n=10); 21 – 30 (n=230); 31 – 40 (n=97); 41 – 54 (n=92); 55+ (n=22)
Marital Status	Single (n=96); Separated/Divorced (n=33); Widowed (n=3); Married (n=316)
Education Level	High School (n=135); Associate Degree (n=141); Bachelor Degree (n=152) Master's Degree (n=21); Doctorate Degree (n=2)
Age of Children	None (n=180); 0-5 (n=144); 6-11 (n=98); 12-18 (n=87); Over 19 (n=51)

Length of Time With Company	0-6 months (n=53); 7-11 months (n=63); 1-2 years (n=95); 3-5 years (n=145); 6 or more years (n=95)
Number of Surveys Returned	Company 1 (n=128); Company 2 (n=145); Company 3 (n=127); Company 4 (n=54)

The three work factor scales—management-leader relationship (MLR), job knowledge and skills (JKS), and job demands (JD)—were tested using reliability analysis. Reliability coefficients for the three variables were MLR .87; JKS .62; and JD .61, all of which have internal consistency, although the latter two are somewhat weak. Correlations for the variables used in the study are shown in Table 2. These correlations, which indicate a relationship between the variables, show that of the work factors being studied--the strongest predictor of readiness for change was an employee's relationship with his or her manager/leader, $r = .308$; $p < .01$. Therefore, hypothesis one (H1), which stated that employees' relationship with their managers is somewhat related to their readiness for change, is supported. The results are very consistent with Hanpachern's (1997) study.

The second work factor, job knowledge and skills, $r = .213$; $p < .01$, also proved to have a correlation to employees' readiness for change. Consequently, hypothesis two (H2), which stated employees' job knowledge and skills are significantly related to their readiness for change, was also supported. This finding was consistent with Hanpachern (1997) and Cunningham et al (2002) studies.

The final work factor --the employee's job demands--showed less correlation, $r = .018$; $p > .01$, with readiness for change. Thus, hypothesis three (H3), which stated that employees' job demands are significantly related to their readiness for change, was not supported as predicted. This finding seemed to contradict the Hanpachern (1997) and Cumminghan et al. (2002).

Table 2. Correlation of Social Interaction Variables and Readiness for Change

	Readiness	MLR	JKS	JD
Readiness	___	.308**	.213**	.018
MLR		___	.081	-.220**
JKS			___	.018
JD				___

**p<.01

A MANOVA test was run to see if any differences existed among the three work factors, readiness for change, and the selected demographic categories; it was determined that there was significance in three areas--surprisingly all were regarding job demands.

Table 3. MANOVA for Demographics

Demographics	RFC[a]		MLR[b]		JKS[c]		JD[d]	
	F	*p*	F	*p*	F	*p*	F	*p*
Gender	1.095	.296	.884	.384	1.188	.276	23.826	.000***
Age	.713	.399	1.735	.189	3.088	.080	.659	.471
Marital Status	.268	.605	2.536	.112	.554	.457	.336	.563
Education Level	.091	.763	1.704	.193	.002	.968	9.581	.002**
# of Children	.599	.440	.524	.614	1.950	.163	.021	.886
Time at Company	1.637	.020	3.086	.080	1.957	.207	5.012	.026*

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

Note: RFC = readiness for change; MLR = management/leader relationship; JKS = job knowledge and skills; JD = job demand.

[a]R^2 = .029, ΔR^2 = .009; [b]R^2 = .041, ΔR^2 = .022; [c]R^2 = .056, ΔR^2 = .037; [d]R^2 = .109, ΔR^2 = .091.

The three demographic areas showing significance were gender ($p < .001$), level of education ($p < .01$), and time with the company ($p < .05$). To get a better look at the areas of significance, an ANOVA test was run on each of the three significant demographic areas. The results of the ANOVA test are shown in Tables 4 – 6. When comparing gender and its relationship to job demands, it was found that men with high job demands seem to be more ready for change than women with high job demands. The significance level between the men with high job demands and women with high job demands was .001.

Table 4. ANOVA of Male vs. Female and Job Demands

Gender	Mean	Std. Dev.
Male	19.57	5.04
Female	17.30	5.31

F (1, 447) = 21.40; p = .0001Level of education and its relationship to job demands was found to be highly significant at the .002 level (see Table 5). The data show that, when comparing job demands relationship to readiness for change, the higher the education level the more ready for change the person seems to be. This was true for all education levels except the doctorate level and the readiness level dropped slightly in this category. It should be noted that only two people had doctorate degrees, and this may have been a factor in this group not showing a significant difference when compared to the other levels of education. This seems to show that there is a highly significant difference at the .0001 level between levels of education and readiness for change—the more education the person has the more ready he or she is for change.

Table 5. ANOVA of Education Levels and Job Demands

Level of Education	Number	Mean	Std. Dev.
High School	133	16.83	4.76
Associate Degree	141	18.24	5.22
Bachelor Degree	152	19.53	5.32
Master's Degree	21	21.33	6.15
Doctorate Degree	2	21.00	4.24

F (4, 444) = 6.70; p = .0001

A follow-up Post Hoc Test with a Tukey HSD was run to look at the differences between the various levels of education. The test revealed a mean difference of -2.69 and a p value of .0001 when comparing those with high school degrees and those with bachelor degrees. The mean difference between those with high school degrees and those with master's degrees was -4.50 with a p value of .002. However, people with associate degrees and doctorate degrees showed no significant difference. An ANOVA test was then done to see if tenure with the company had significance regarding readiness for change. It was found that, for the most part, those who had been with the company longer were more ready for change than those who had been there less time, but it was not a significant difference. Although the ANOVA for length of time with a company did not show a significant difference with readiness for change (see Table 6), the mean scores for this category did show an interesting trend. The mean scores moved from 17.60 for *0 to 6 months* with the company to a peak of 19.23 at *3 to 5 years* with the company; but the mean score then dropped to 18.87 for the *6 years or more* category reversing the upward trend of the mean scores related to tenure with the company. This finding that those who had being with the company longer, other than the more than six years category, were more ready for change is in stark contrast to the Hanpachern (1997) and Hogarty (1996) studies which found that newer employees were more ready for change.

This result seems to show that, although there is significance between time with the company and readiness for change as the employee's tenure increases, readiness for change may peak out after 6 years. It would have helped to have had additional categories of numbers of years beyond six years to see if the slight downward trend continued.

Table 6. ANOVA of Time with the Company

Amount of Time	Number	Mean	Std. Dev.
0 – 6 months	53	17.60	5.49
7 – 11 months	63	17.44	6.00
1 – 2 years	95	17.83	4.96
3 – 5 years	144	19.23	5.05
6 years or more	94	18.87	5.26

F (4, 444) = 2.175; p = .071Based on the findings of the study, it was clear that two of the work factors examined—management/leadership relations and job skills and knowledge had a significant relationship with readiness for change. The most significant work factor in the study regarding readiness for change was the employees' relation with their managers. The study showed significance at the $p < .01$ level for a positive relationship between the employee's relationship with his or her manager and readiness for change. The Hanpachern (1997) study also showed management-leadership relations to have a positive significance relationship to readiness for change, but it was only significant at the level of $p < .05$.

The job knowledge and skills work factor was also shown to be related to readiness for change at the $p < .01$ level. In the Hanpachern (1997) study, the job knowledge and skills factor was found to be significant at the $p < .05$ level. According to the study, job demands was not significantly related to readiness for change, but it was related to management/leader relations at the $p < .01$ level, which was contradictory to most of the other research that was studied. Hanpachern (1997) showed job demands to be significant with RFC at the $p < .01$ level. When job demands was broken down in the study and comparisons were made regarding the demographic factors, it was found that there was statistical significance regarding readiness for change in the areas of gender, level of education, and amount of time with the company. This seems to indicate that some additional research should be done particularly in the area of job demands.

Implications for Managers

These results suggest that managers' relationship with subordinates is critical to the subordinates' readiness for change. Anything managers can do to develop a good rapport with their workers may be helpful. Workers need to feel valued and appreciated. They need to be recognized and rewarded for their efforts. Good managers should communicate openly, clearly, and consistently. Good communication helps to build faith and trust which makes change easier to accept. A good manager should encourage feedback and then listen to that feedback. Managers should be open to workers'

suggestions. Managers should be honest in their dealings with those under their supervision.

Regarding work knowledge and skill, there is very strong evidence that people who are in challenging jobs are more ready for change than those who are in passive jobs. Good managers will stretch their people by giving them problem-solving situations and by allowing workers to spread their wings and try new things. Managers should encourage workers to get all the training and schooling possible. Job-enrichment should be used to expand the employee's responsibilities. Management should provide jobs that empower employees with skills, attitudes, and opportunities to manage change. Workers should be evaluated regularly; and if they are lacking in skill areas, opportunities should be provided for them to improve in the weak areas. When workers have a good working relationship with their managers, and they are knowledgeable about their duties, and are active in doing their jobs—they will be much more ready for change when change occurs.

Although job demands was not significantly related to readiness for change, there is strong evidence that job demands has a relationship with readiness for change as far as several demographics are concerned. Men as a group tend to be more ready for change than women; however, not much can be done to change this. The other two demographic factors that showed significance in the area of job demands might be something managers could work with. Educational level seems to have a relationship to readiness for change. Managers should encourage their people to continue their education, which could help in the development of new skills and knowledge.

Length of time with the company also had a relationship with readiness for change. The data seemed to show that people with more tenure were more ready for change than those with less tenure. Managers should try to identify things that could be done to make newer employees be more receptive to change. New employees should not have mindless jobs—they should be challenged, they should be involved early, they should be given responsibility, and they should be held accountable for their assignments. They should be trained appropriately, and they should have regular evaluations to check their progress. Managers should start early to develop and maintain strong relationship with these new employees.

Additional research regarding employees' readiness for change and theses three workplace factors should probably be done with companies whose employees are not as homogenous as those from companies in northern Utah. Also, a larger fully randomized survey should be used. Additional research should be done regarding job demands and readiness for change.

References

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations, 46* 6, 681-703.

Backer, T. E. (1995). Assessing and enhancing readiness for change: Implications for technology transfer. In T. E. Backer, S. L. David, & G. Soucy (Eds.), *Reviewing the behavioral science knowledge base on technology transfer* (pp. 21-41). Rockville, MD: National Institute on Drug Abuse.

Bennett, J. L. (2001). Change hygiene. *HRMagazine, 46* 9, 149.

Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research, 42*, 36-41.

Clark, C. E., Cavanaugh, N. C. & Brown, C. V. (1997). Building change-readiness capabilities in the IS organization: Insights from Bell Atlantic experience. *MIS Quarterly, 21* 4, 425-455.

Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., Rosenbloom, & D. Brown, J. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational & Organizational Psychology, 75* 4, 377.

Decker, D., Wheeler, G. E. Johnson, J. & Parsons R. J. (2002). Effect of organizational change on the individual. The Health Care Manager, *19* 4, 1-12.

Eby, L. T., Adams, D. M., Russell, J. E. A., & Gaby, S. H. (2000). Perceptions of organizational readiness for change: Factor related to reactions changes' reactions to the implementation of team-based selling. *Human Relations, 53* 3, 419-442.

Eby, L. T., & Dobbins, G. H. (1997). Collectivistic orientation in teams: An individual and group level analysis. *Journal of Organizational Behavior, 18*, 275-295.

Gall, M. D., Borg, W. R. & Gall J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, NY: Longman Publishers.

Greenberger, D. B., Strasser, S., Cummings, L. S. & Dunham, R. (1989). The impact of personal control on performance and satisfaction. Organizational Behavior and Human Decision Processes, *4* 3, 29-51.

Hanpachern, C., Morgan, G. A. & Griego, O. V. (1998). An extension of the theory of margin: A framework for assessing readiness for change. *Human Resource Development Quarterly, 9* 4, 339-350.

Hanpachern, C. (1997). The extension of the theory of margin: A framework for assessing readiness for change. Unpublished Doctoral Dissertation, Colorado State University, Fort Collins.

Hogarty, D. B. (1996). The young and restless. *Working Woman, 21* 7-8, 27-28.

Ilgen, D.R. & Pulakos, E. D. (1999). Employee performance in today's organizations. In D. R. Ilgen, & E. D. Pulakos (Eds.) *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 1-18). San Francisco: Jossey-Bass.

Karasek, R. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign, *Administrative Science Quarterly, 24*, 285-307.

Karasek, R. A. & Theorell, T. (1990). *Healthy work—Stress, productivity, and the reconstruction of working life*. New York: Basic Books.

Kirchmeyer, C. (1995). Managing the work-nonwork boundary: An assessment of organizational responses. Human Relations, *48* 5, 515-536.

Livingstone, L. P., White, M. A., Nelson, D. L. & Tabak, F. (2002). Change in attitudes toward an information systems innovation: Reaction to implementation delays. *American Business Review, 20* 2, 80-88.

Madsen, S. R., (2003). Wellness in the workplace: Preparing employees for change. *Organization Development Journal, 21,* 69.

McConnell, C. R. (2002). Making change work for you—or at least not against you. The Health Care Manager, *20* 4 pp. 66-77.

McNabb, D. E. & Sepic, F. T. (1995). Culture, climate, and total quality management: Measuring readiness for change. Public Productivity & Management Review, *18* 4, 369-383.

Norton, J. R. & Fox, R. E. (1997). *The change equation: Capitalizing on diversity for effective organizational change*. Washington DC: American Psychological Association.

Tetrick, L. E. & LaRocco, J. M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological well-being. *Journal of Applied Psychology, 72*, 538-543.

About the Authors

Duane Miller is a Professor of Business Management at Utah Valley State College. He completed a master's degree in business education and administrative management at Brigham Young University. He has taught marketing, business

management, business communication, and human resource management classes for the last 23 years. He has managed several businesses and done extensive writing of textbook chapters and case studies. His research interests include pedagogy and change in the work place. Duane, his wife, and seven children live in Provo, Utah.

Dr. Susan R. Madsen is an Associate Professor of Business Management at Utah Valley State College. She completed her doctorial work at the University of Minnesota in Work, Community, and Family Education (specializing in Human Resource Development). She also has degrees from Portland State University and Brigham Young University. She has worked for many years as an independent performance improvement consultant and has taught college and university courses for the past 14 years. Her areas of research include leadership development, change, work-life issues, and academic service-learning. Susan, her husband, and their four children currently live in Highland, Utah.

Cameron R. John is an Associate Professor in the Behavioral Science department at Utah Valley State College. He is also a mental health counselor working for UVSC Student Health Services. Cameron earned his Ph.D. from the University of Arizona in Educational Psychology with an emphasis in measurement and methodology. He also has a degree from Weber State University. He has worked in the areas of program evaluation, grant writing, and counseling. His research interests include assessment practices, counseling related issues and program evaluation. Cameron, his wife, and two children live in Springville, Utah.