

The development of a leadership orientation scale

Tin Tin Htun and Mariko Yamamoto (*Institute of Psychology, University of Tsukuba, Tsukuba 305, Japan*)

The present study involves the construction of a leadership orientation scale to measure the inclination of an individual towards leadership positions or leader-like positions. The construction of the leadership orientation scale was based on findings from the literature and the results of interviews with female students regarding a familiar woman leader and their own leadership experiences. Factor analysis of the leadership orientation scale yielded one factor which indicates preference for a leadership position or a leader-like position. To measure the validity of leadership orientation (i. e., whether leadership-oriented individuals take leadership roles in reality), the relationship between the leadership orientation scale and a leadership experience scale that measures actual experience of taking leadership roles was examined. It was found that leadership orientation and leadership experience correlate significantly. Moreover, high leadership-oriented women had more leadership experience than low leadership-oriented women. To investigate what kind of leadership behaviour or style leadership-oriented individuals adopt, the leadership styles of leadership-oriented individuals were measured. It was found that high leadership-oriented women tend to adopt an autocratic task-orientation style, whereas no difference was observed between high and low leadership-oriented women.

Key words: leadership orientation, leadership experience, autocratic task-orientation style, relation-oriented style.

The present study involves the construction of a leadership orientation scale to measure the inclination of individuals toward leadership positions or leader-like positions. In other words, such a leadership orientation scale is for individuals who have not yet achieved leadership positions, and it measures to what extent individuals desire to achieve a leadership position or a leader-like position.

Contemporary leadership theories tend to focus indiscriminately on an actual leader population and individuals who have not yet achieved leadership positions (e.g. students). Whether these theories apply to different populations has yet to be established. From this, it is important to develop different measures for leader populations and potential leader populations or individuals who want to become leaders, because different personal and situational factors may be involved in being a leader and wanting to become a leader. Moreover, it is unclear whether these contemporary theories apply similarly to men and women. This is an important issue because, with

the growing number of woman leaders, questions arise about why and how women can become leaders.

The present study has two major aims in developing the Leadership Orientation Scale (LOS): (1) to construct a different measure for individuals who have not yet become leaders and who want to become leaders; (2) to explore the leadership orientation of women. The development of the LOS forms the basic step in exploring the factors associated with leadership orientation. It could also be worthwhile studying individuals who want to become leaders in order to understand better factors involved in becoming leaders. It is also important to utilize this information in educating and training potential leaders.

The construction of a leadership orientation scale is especially beneficial for woman leadership research. Previous studies on woman leadership have focused primarily on the comparison of man and woman leaders (e.g., Chapman, 1975; Day &

Stogdill, 1972; Wexley & Hunt, 1974) and the evaluation of woman leaders (Bartol & Butterfield, 1976; Butterfield & Powell, 1981; Welsh, 1979). However, a less explored issue concerns the attributes of women who became leaders. A number of studies on women's career and career orientation as regards psychological, behavioural, and sociocultural factors have been conducted (e. g., Almquist, 1974; Almquist & Angrist, 1970; Giankos, 1995; Goodale & Hall, 1976; Tangri, 1972; Turner, 1964). Notwithstanding this, studies on women's leadership orientation and other related variables are still needed.

Thus, exploring the motivation of women to take leadership positions, together with further exploration of situational and personal factors associated with leadership orientation, can help us predict whether these women will become leaders.

Method

Participants: Eighty-eight Japanese undergraduate students (Male=40, Female=48) from Tsukuba University participated on a voluntary basis.

Measures: Leadership Orientation Scale (LOS): The construction of the LOS was based on the Directiveness Factor Scale (Lorr & More, 1980) and findings from the literature. The scale consists of nine items which measure an individual's desire to become a leader or preference for leadership behaviour and leader-like positions. Each item has to be rated on a 5-point scale (1=not at all characteristic of me to 5=very much characteristic of me). The maximum score of the LOS is 45, and the minimum score is 9.

Measures of Validity for the LOS:

In order to measure the validity of the LOS and whether the LOS can differentiate between high and low leadership-oriented individuals, we developed three measures: a leadership experience scale, a leadership skill measure, and a leadership style questionnaire.

Leadership Experience Scale: This scale intends to measure the extent to which leadership-oriented individuals have taken a leadership role in real life. The scale contains two parts. The first part is concerned with measuring both the individual's experi-

ence in taking formal and/or legitimate leadership positions i. e. holding office at school and university, and the frequency of holding office. The second part consists of six items which measure the extent to which an individual leads and directs friends and peers (taking informal leadership) on a 4-point scale (1=Never, 2=Rarely, 3=Sometimes, 4=Always). **Leadership Skill Measure:** This measure was developed to examine the relationship between leadership orientation and leadership skill i.e. to examine whether high leadership-oriented individuals and low leadership-oriented individuals differ in leadership skill.

Development of the measure was based on three skills indicated by Katz (1955): *Technical skill* consists of the ability to establish goals and plans to attain them, and the ability to guide others; *conceptual skill* consists of the ability to guide and command others, the ability to grasp the core of a given situation or problem, the ability to make effective decision, and the level of creativeness; *human skill* consists of the ability to communicate and express oneself to others, and persuasiveness. Fifteen items that measure these skills were rated along a 6-point scale (1=Don't have such skill entirely to 6=Having such skill to a remarkable degree).

Leadership Style Measure: In order to investigate the leadership behaviour or style of leadership-oriented individuals, the Leadership Style Measure was constructed. To include items on woman leaders' behaviour, 7 undergraduate students were interviewed about a familiar woman leader or a woman who has a leader-like personality. Characteristics and typical behaviours of the woman leader, her way of treating subordinates and decision making were asked about during the interview. In addition, in order to cover behaviour which was not displayed by the familiar woman leader, characteristics and behaviour of an ideal leader and an unpopular leader were investigated. Furthermore, the respondents were asked to describe how they would act if they took the role of a leader.

From this, the leadership style measure was constructed by using the results of the interview, some items from the translated version of the Leadership Behaviour Description Questionnaire (LBDQ) and the Description of Supervisory Behaviour (Fleishman, 1953). Here, respondents have

to rate (68) items on a 5-point scale (1=Never do it to 5=Always do it).

Procedure: A questionnaire that consists of the LOS, the Leadership Skill Measure, and Leadership Style Measure were given to 78 undergraduate students (male=31, female=47) majoring in Psychology during the class. Another 10 male students of Bio-Resources were given the questionnaire on an individual basis. It took them about 15 minutes to complete the questionnaire.

Results

Leadership Orientation Scale

The Leadership Orientation consists of nine items where the highest score was 45 and the lowest was 9. The highest score indicates a greater inclination to become a leader and the lowest score indicates a low inclination to become a leader. The mean score of the leadership orientation scale for men was 26.29 (SD=5.42). The minimum score for male was 14; the maximum was 41. The mean score of leadership orientation for women was 23.63 (SD=6.3). The minimum score was 13, and the maximum was 42. The leadership orientation of men was significantly higher than that of women ($t(86) = 2.12, p < .04$).

Factorial Validity of the LOS

Factor analysis of the LOS yielded only one factor that shows an inclination toward leadership positions, indicating that the LOS is one-dimensional in nature. Table 1 shows the factor loadings of the LOS. The alpha coefficient of the LOS was .89.

Conceptual Validity of the LOS

To measure the conceptual validity of LOS, correlations between leadership orientation, having experience of holding offices at school and university, frequency of holding office, and taking leadership role in interpersonal relationships were computed. Pearson correlation coefficients showed leadership orientation significantly correlated with these measures. Table 2 presents correlations between leadership orientation and having experience of holding office, frequency of holding office, and taking leadership role in interpersonal relationships.

To examine whether leadership-oriented men and women differ from low leadership-oriented men and women, high and low leadership orientation groups were formed separately for men and women by using mean scores. T-tests were computed to examine differences between high and low leadership orientation groups. For women, the high leadership orientation group had more experience in holding office ($t(45) = 4.19, p < .001$), reported greater frequency of holding office ($t(45) = 4.14, p < .001$), and took more interpersonal leadership ($t(45) = 2.51, p < .02$). However, for men, no significant differences was observed between the high and low leadership orientation groups. Similar results were noted with regard to the Leadership Skill Measure. High leadership-oriented women reported a higher leadership skill than low leadership-oriented women ($t(45) = 2.61, p < .01$).

Leadership Orientation and Leadership Styles

Factor analysis was conducted to examine the underlying structure of leadership styles. Two fac-

Table 1 Factor Loadings of the Leadership Orientation Scale (LOS)

Items	Factor Loadings
Prefer positions that allow decision making in a group	.83
Prefer an influential position	.80
Like directing people	.80
Wish to become a leader	.79
Usually lead peers and friends	.79
Want to be a manager rather than subordinate	.67
Want to attain a prestigious position	.62
Don't want to give orders	.54
Want to give one's opinion first in conversation or discussion	.53
Variance explained	4.56

Table 2 Correlations between Validity Measures and Leadership Orientation

Validity Measures	Leadership Orientation
Having experience of holding office	.35*
Frequency of holding office	.37*
Taking leadership in interpersonal relationship	.42*

* $p < .001$

tors, relation-oriented style and autocratic style were observed. Tables 3.1 and 3.2 show the factor loadings of relation-oriented style and autocratic styles respectively.

T-tests were performed to detect whether high and low leadership orientation groups differ in leadership styles. For women, no statistical significant difference was found between high and low leadership orientation groups with respect to relation-oriented style. Regarding autocratic style, high leadership-oriented women adopted this more than low leadership-oriented women ($t(36) = 2.4, p < .05$). For men, no statistical significant difference was found between high and low groups regarding both styles.

Additional Findings

Overall Gender Differences: T-tests were computed to examine gender differences between men and women. Gender differences were observed in leadership orientation, having experience of holding office, and frequency of holding office. Men were more leadership oriented ($t(86) = 2.12, p < .03$), had more experience of holding office ($t(86) = 2.5, p < .01$), and had higher frequency of holding office ($t(86) = 1.94, p < .05$).

Leadership Styles and Related Variables: Pearson correlation coefficients were computed between leadership styles, leadership orientation, leadership skill, taking interpersonal leadership, having experience of holding office, and frequency of holding office. For women, relation-oriented style correlated with leadership skill, taking interpersonal leadership, and experience of holding office. Autocratic style correlated with leadership orientation, leadership skill, taking interpersonal leadership, experience of holding office, and frequency of holding office (see Table 4).

For men, relation-oriented style correlated with

leadership orientation, leadership skill, and taking interpersonal leadership. On the one hand, autocratic style correlated with leadership skill and taking interpersonal leadership (Table 4).

Discussion

Leadership Orientation Scale (LOS). The Leadership Orientation Scale (LOS) is one-dimensional in nature and proved to measure an inclination toward leadership positions. Compared to McClelland's "leadership motive pattern" (McClelland & Boyatzis, 1982) which contains high power motive, low need for affiliation, and high self-control, leadership orientation has a simple structure. This might be due to the fact that McClelland's leadership motive pattern was observed in a managerial population, whereas the leadership orientation scale was specially constructed to study the tendency to take leadership roles in a student population. In addition, McClelland used TAT to identify the leadership motive pattern, whereas LOS was developed as a rating scale. It is possible to assume that leadership orientation is a rudimentary structure, from which a complex structure such as leadership motive pattern can be developed.

The advantage of LOS is its appropriateness for explaining the leadership tendency of potential leaders or individuals who have not yet achieved leadership position. Because McClelland's leadership motive pattern is mainly observed in the managerial population, whether it is applicable to a general population is not clear. In other words, measures like the LOS are more suitable for predicting the leadership tendency of a general population.

Significant correlation between LOS and measures of actual leadership experience (having experience of holding office, frequency of holding office, taking leadership role in interpersonal

Table 3. 1 Varimax-Rotated Factor Loadings of Relation-Oriented Style

Items	Factor 1 (Relation-Oriented Style)
Build up a good relationship with subordinates	.74
Discuss and solve problems together with subordinates	.72
Create a friendly and intimate atmosphere	.72
Make subordinates feel they belong to the group	.71
Take care of subordinates	.68
Allow subordinates to solve problem by themselves	.68
Help wholeheartedly when someone is in trouble	.67
When my leadership is needed, assume the role readily	.64
Available to give advice or discuss	.63
Consider subordinates' happiness	.62
Give priority to subordinates' satisfaction	.59
Grant personal favour to subordinates	.59
Criticize a specific act rather than a particular person	.59
Take responsibility when something is wrong	.58
Have concern for subordinates	.56
Work together with subordinates	.56
Help subordinates without avoiding	.56
Consult subordinates for decision making	.55
Use subordinates' ideas	.54
Listen to others' opinions first	.52
Always quick and decisive	.52
Variance explained	14.61

Table 3. 2 Varimax-Rotated Factor Loadings of Autocratic Style

Items	Factor 2 (Autocratic Style)
Extremely self-assertive	.71
Insist others accept my decision	.70
Give own opinion	.63
Ask subordinates to take responsibility when something is wrong	.61
Persuade others to accept my idea	.57
Direct what and how work should be done	.57
Insist on my opinion	.56
Help subordinates with personal problem	.56
Decide without consulting subordinates	.55
Don't care about results	.54
Criticize a subordinate's mistake	.53
Give direction clearly	.52
Variance explained	6.14

Note. Loadings below .52 are omitted from both tables.

relationships) supports the conceptual validity of the LOS. In addition, gender difference was observed in leadership experience and leadership skills. High leadership-oriented women had more actual leadership experience and leadership skill than low

leadership-oriented women, whereas no such difference was observed between high and low groups in men. This implies that leadership-oriented women seek more leadership positions and take more leadership roles than low leadership-oriented

Table 4 Correlations between Leadership Styles and Related Variables

	Relation-Oriented Style		Autocratic Style	
	Male (N=41)	Female (N=47)	Male (N=41)	Female (N=47)
Leadership skill	.48***	.65***	.43**	.38**
Taking interpersonal leadership	.35*	.29*	.33*	.57***
Experience of holding office	.21	.33*	-.23	.32*
Frequency of holding office	.28	.20	.28	.44**
Leadership orientation	.33*	.09	.18	.64***

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

women. This result also indicates a possible interaction between attempting leadership positions and gaining leadership experience and leadership skill. That is, by attempting leadership positions, leadership-oriented women will gain leadership experience and leadership skills. In turn, the newly gained leadership experience and leadership skills will also lead leadership-oriented women to take more leadership roles. On the other hand, in men, the finding that there were no differences between high and low leadership-oriented groups implies that men are more or less expected to take leadership roles owing to their gender: taking leadership roles seems to be quite common among men. This highlights the different paths men and women have to take to become leaders.

Leadership Orientation and Leadership Styles.

The present study also found two factors, autocratic style and relation-oriented style, that had been also observed in other leadership style studies. For women, high leadership-oriented women adopted a greater autocratic style than low leadership-oriented women, whereas there was no difference between high and low groups regarding relation-oriented style. This implies that high leadership-oriented women seem to perceive masculine or autocratic type behaviour as more leader-like or as the way to attain leadership positions.

Overall Gender Differences: Men were more leadership oriented and had more experience of holding office than women. This is not surprising, because they have natural access to leadership positions as men, and they are brought up to take leadership roles in family, groups, and work.

Leadership Styles and Related Variables. Taking

interpersonal leadership and having leadership skill correlated with both relation-oriented style and autocratic style for men and women. This indicates that leadership skill and taking interpersonal leadership seem to be essential in the leadership styles of both sexes. It is possible to assume that leadership skill may be gained through taking interpersonal leadership. For women, in addition to leadership skill and taking interpersonal leadership, experience of holding office correlated with both styles. This implies that the experience of taking leadership roles (both formal and informal) can lead to a particular leadership style in combination with leadership skill. In men, experience of holding office is not related with either style. Therefore, it can be clearly seen that women need experience and opportunity in taking leadership roles.

For women, autocratic style correlated with leadership orientation, leadership skill, taking interpersonal leadership, experience of holding office, and frequency of holding office. On the other hand, for men, relation-oriented style correlated with leadership orientation, leadership skill, and taking interpersonal leadership. This results indicates gender differences in leadership styles in relation to leadership orientation. That is to say, leadership-oriented men seem to adopt or be oriented toward a relation-oriented style, whereas leadership-oriented women seem to adopt or be oriented toward autocratic style.

The present study serves as a foundation for future studies related to the leadership orientation of women by means of developing the LOS, and establishing conceptual and factorial validity. In addition, this study indicates that variables such as

leadership experience, taking leadership in interpersonal relationships, and leadership skills are essential for adopting particular leadership styles.

References

- Almquist, E. M. (1974). Sex stereotypes in occupational choice: The case for college women. *Journal of Vocational Behaviour*, **5**, 13-21.
- Almquist, E. M., & Angrist, S. S. (1970). Career salience and atypicality of occupational choice among college women. *Journal of Marriage and the Family*, May, 242-249.
- Bartol, K. M., & Butterfield, D. A. (1986). Sex effects in evaluating leaders. *Journal of Applied Psychology*, **61** (4), 446-454.
- Butterfield, D. A., & Powell, G. N. (1981). Effect of group performance, leader sex, and rater sex on ratings of leader behaviour. *Organizational Behaviour and Human Performance*, **28**, 129-141.
- Chapman, J. B. (1975). Comparison of male and female supervisors: A comparative study. *Personnel Psychology*, **25**, 353-360.
- Day, D. R., & Stogdill, R. M. (1972). Leader behaviour of male and female supervisors: A comparative study. *Personnel Psychology*, **25**, 353-360.
- Gianakos, I. (1995). The relation of sex-role identity to career decision-making self-efficacy. *Journal of Vocational Behaviour*, **46**, 131-143.
- Goodale, J. G., & Hall, D. T. (1976). Inheriting a career: The influence of sex, values, and parents. *Journal of Vocational Behaviour*, **8**, 19-30.
- Katz, R. L. (1955). Skills of an effective administrator. *Harvard Business Review*, January-February, 33-42.
- Lorr, M., & More, W. W. (1980). Four dimensions of assertiveness. *Multivariate Behavioural Research*, **15**, 127-138.
- McClelland, D. C., & Boyatzis, R. E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology*, **6**, 737-743.
- Tangri, S. S. (1972). Determinants of occupational role innovation among college women. *Journal of Social Issues*, **28** (2), 177-199.
- Turner, R. H. (1964). Some aspects of women's ambition. *The American Journal of Sociology*, **LXX** (3), 271-285.
- Welsh, M. C. (1979). Attitudinal measures and evaluation of males and females in leadership roles. *Psychological Reports*, **45**, 19-22.
- Wexley, K. N., & Hunt, P. J. (1974). Male and female leaders: Comparison of performance and behaviour pattern. *Psychological Reports*, **35**, 867-872.

Author Note

We would like to thank Andrew Barfield (Foreign Language Centre, Tsukuba University) for editing the English of this paper.

— Received Sept. 30, 1996 —