

行政院國家科學委員會專題研究計劃成果報告

360度績效評估之影響:影響過程之模式建構與實證研究

The Impacts of 360 Degree Performance Evaluation: Construction and An Empirical Study of a Process Model

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I. 中文摘要:

本計劃研究多源績效回饋對於受評者管理才能之影響，並探討認知因素成為其影響過程中間因素之可能性。本研究採縱頗面設計，分別於三不同時段向140位受試者蒐集資料。資料來源為受評者之直屬主管、部屬、同儕及個人自評。結果顯示受試者多半傾向於比他評高估自己的管理才能，此趨勢於第三階段時則顯現減緩現象。一般而言，受評者對多源績效回饋制度之態度並不受他評-自評差異之影響。自評愈優者，對本制度態度愈負向。第一季上司評論及自評與一三季間管理技能改善程度呈現顯著負相關。此研究結果可能是因為上司與受評者受到第一階段績效評估回饋之影響而修正其第三季之評估。本研究之主要限制是多源績效回饋在台灣企業間仍未被接受，不容易找到足夠受評者樣本。

關鍵字: 多源績效回饋; 360度績效回饋; 管理技能; 績效評估; 縱頗面研究

Abstract

Multi-source performance feedback has been suggested to be powerful for individual development application. This longitudinal study examined a model explaining the impacts of multi-source evaluation program on

management development. One hundred and forty employees of two Taiwan companies participated this study, and 22 of them were the ratees. Data were collected at three different timing, from the participants' supervisors, peers, the subordinates, and the ratees themselves. The results indicated that most ratees overestimated their performance as a manager, but this trend declined at time 3. In general, the favorability of self-evaluation were associated with more negative attitude toward the evaluation program, which may result from increase of self-other discrepancies. However, the direction and degree of self-other agreement did not lead to any different attitude and beliefs toward the feedback and the program. The results in general suggested that favorability of feedback from one's supervisors and oneself led to a worse evaluation from the supervisors and oneself at time 3. Future research may need to include a larger sample size and other potential mediators.

Key words: multi-source performance evaluation; 360 degree performance evaluation; management competency; performance evaluation; longitudinal study

II. Introduction:

The literature suggested that multi-source evaluation not only provides an integrated assessment of individual performance that maximizes the strength and minimizes the weakness of individual ratings [11] but also represents an increased application of evaluation for individual improvement and development [6]. Moreover, it also improves legal defensibility over single-source rating [4], and a more complete conceptualization and measurement of job performance [9]. In addition, ratees tend to perceive multi-rater evaluation as a fairer, more accurate, and more acceptable appraisal than traditional single-source evaluation [11].

Despite of the advantages and the increasing prevalence of this practice in the top 500 companies in the States, there are limited empirical studies focusing on its applications and impacts. Also, the application of this multi-source evaluations remains unusual in Taiwan. Therefore, it is very important to investigate the applicability of such a performance evaluation program in a non-western country like Taiwan. The current study reviews literature relevant to multi-source performance evaluation and reports the preliminary findings of an ongoing study that has been conducted to examine various issues of multi-rater evaluation.

III. Literature Review

The literature in general confirms the function of feedback on improving the recipients' performance. In the multi-source evaluation program, the recipients have the chance to compare their self-evaluation with other ratings. The consequence of providing feedback from multiple sources were reviewed in the next

section.

The impacts of multi-source evaluation

Although one major concern of multi-source performance appraisal is to enhance management and leader competencies, its impact on improving managers' skill remained rarely answered [8]. In a longitudinal study, Hazucha et al [8] found that the managers who received multi-source feedback had greater improvement on their management skills at time 2 than those did not receive feedback. The ratees also had greater self-other agreement on their management skills at time 2 than at time 1. The findings suggested a positive influence of receiving multi-source feedback on management skills improvement. The improvement, however, may also result from other factors, such as the self-other agreement on the evaluation.

The feedback process involved in a multi-source performance evaluation allows a comparison of self and others' ratings. Self-rating can be either higher, lower, or in-agreement with others' ratings. Some studies suggested that self-other agreement was related to one's subsequent performance [7], while others have suggested no relationship between self-other agreement and performance effectiveness [3].

Recent studies suggested that the degree and direction of self-other agreement are relevant to various outcome measures [2][1][12]. For example, Atwater and Yammarion [2] found that a positive relationship between performance evaluation and leadership rating was only revealed for in-agreement raters, but not for over or under-estimators. They also found that recommendations for promotion were negatively related to leadership for over-estimators, positively related for those in-agreement, and no

significant relationship was found for under-estimators.

Atwater and Yammarino [3] suggested that both degree and type of agreement between self and other rating were relevant to outcomes (e.g., performance, effectiveness). They argued that ratees who over-estimated their performance would be expected to perform more poorly and less effectively, compared with the under-estimators or in-agreement. On the other hand, the performance of underestimators was expected to be mixed, because they will always work harder to improve but suffer from inadequate self-confidence at the same time. In-agreement/good estimators would be the most effective group because they would be the good performers holding a view of their own competencies and performance similar to those hold by others.

On the contrary, Fleenor et al. [7] in their study found that the degree and type of agreement was less important, and other ratings was the major variable accounting for the variance in effectiveness. A similar conclusion was drawn by Brutus, Fleenor, and Taylor [5].

The literature revealed inconsistent findings regarding the feedback process involving in multi-source evaluation. The inconsistencies may be accounted for by the cognitive process occurred to the recipients after receiving feedback. Therefore, this paper examines the influences of feedback and self-other ratings agreement on the recipients' attitude and beliefs regarding the feedback and this evaluation program. This investigation may contribute to the current knowledge of feedback process because these cognitive variables could subsequently impact the recipients' efforts and outcome of self-improvement. The feedback

and self-other ratings agreement may also affect the feedback recipients' job satisfaction which could have further influences on the willingness to improve and develop one's competencies.

IV. Research Methods:

Design: Data were collected at three different timing. At time 1, all participants filled up a questionnaire assessing evaluations of the ratees' performance (or self-evaluation). The ratees received feedback two weeks after completing the first survey, and were then asked to fill out a measure that assessed their attitude and belief toward the feedback and the multi-source evaluation. A similar procedure for time 1 was repeated at time 3.

Participants: A total of 140 subjects participated this study, including 22 managers, their supervisors, peers, and their subordinates. The participants were employed in two high technology companies located at the northern Taiwan.

Measures: The following measures are applied in this study.

Time 1: A measure of management competencies developed by Jones and Bearley [10] was applied at time 1 with minor modification to fit the culture in Taiwan. The scale contains the following components : (1) Administration skills; (2) Communication; (3) Cognitive competencies; (4) Interpersonal skills; (5) Leadership; (6) Other; (7) Conclusion. The items were categorized based on a theoretical framework developed by Van Velsor and Leslie [12]. All items were assessed with a five-point Likert scale. This measure were conducted at time 1 & 3.

Time 2: The measures employed at time 2 was

developed for the current study to assess the ratees' attitude and beliefs toward the evaluation program. The package included various components: (1) Perceived accuracy and importance of the appraisals; (2) Perceived adequacy of the performance measures/perceived competence of the raters; (3) Understanding of targets for improvement/perceived feasibility of self-improvement; (4) Attribution (of responsibility) for the evaluation; (5) Perceived support from supervisor and the organization for improvement; (6) Attitude for the multi-source evaluation program; (7) Job satisfaction.

Time 3: The management competencies scale was conducted at time 3 again. In addition, all participants filled out questions regarding ratees' efforts on improvement between time 1 and time 3.

V. Results:

Reliability and Primary Results The internal consistency for the measures ranging from .61 to .93, indicated the adequacy for subsequent analyses. The descriptive analyses revealed that upward feedback from the subordinates were the most unfavorable ones among different sources. The results also showed a general tendency to overestimate one's performance. However, the number of over-estimators decrease at time 3.

Self-Other Ratings Agreement The managers who received feedback for their leadership and management skills were categorized into groups based on Atwater and Yammarino's [3] framework. The results showed that the participants fell into two groups only at time 1, the over-estimators and under-estimators. Specifically, there are 4 out of 22 managers underestimate their own performance than their

peers and subordinates. Compared with their supervisors' evaluations, 7 out of 22 managers were under-estimators. However, there were 2 ratees fell into the in-agreement group at time 3, and the number of under-estimators increased suggested that some ratees did refer to the feedback for their self-evaluation. In general, this study suggested that most people don't reach self-other ratings agreement, and most people tend to overestimate their own performance.

Performance Rating and Attitude/Beliefs To the Feedback

No statistically significant correlation was found between peer/subordinate rating and recipients' attitude/beliefs toward the feedback and the evaluation program. On the other hand, self-evaluation significantly and negatively correlated with attitude toward the multi-source evaluation they participated ($r=-.64$, $p\leq.01$). Negative correlation coefficients were also found between supervisor-rating and attitude toward this multi-source evaluation program, perceived adequacies of the evaluation content, and perceived competencies of the raters (all r 's $\geq-.47$, all $p\leq .05$). No significant correlation was found between performance rating and job satisfaction.

The findings were surprising but interpretable. More favorable self-evaluation may increase the discrepancies between self-other ratings given that most participants were over-estimators. The enlarged discrepancies may then lead to a negative attitude toward the program. However, the findings regarding supervisor ratings and subsequently negative attitude were unexpected and need further investigations.

Self-Other Agreement and Attitude/Beliefs Toward the Feedback

Two sets of analyses were performed to examine the relationship between self-other ratings agreement and attitude/beliefs toward the feedback and the multi-source evaluation program. No significant correlation was revealed from the analyses. The results suggested that managers' attitude and beliefs about the feedback after receiving the feedback was not impacted by either the direction or the degree of self-other rating agreement. Self-other agreement did not associate with job satisfaction either.

The influences of feedback on competencies improvement

A series of correlation analyses were performed to examine the relationship between the favorability and the changes on evaluations of management competencies between time 1 and time 3. The results in general revealed that supervisors' rating were negatively correlated with time1-time3 changes. That is, more positive supervisors' ratings resulted in a deteriorated supervisors' ratings at time 3. And this tendency appeared in almost every aspect of management competencies. A similar pattern was discovered on the ratees' self evaluations and their self-report time 1-time 3 ratings changes.

The results were interesting and could be induced by different causes. First, the findings that more favorable supervisors led to a worsen evaluations of management competencies in the eyes of the supervisors could be induced by the supervisors' rising expectations for the ratees between time 1 and time 3. Second, that more favorable ratees' self-evaluations resulted in a deteriorated self-evaluations at time 3 could be caused by the feedback delivered to the ratees at time 2. In addition, the deteriorated

self-evaluations could be self-crippling strategy adopted by the ratees to avoid further embarrassment for over-estimation.

Another set of analyses examined the impacts of attitude and beliefs about the evaluation system on management improvement. The results showed that greater level of perceived accuracy of the feedback and knowledge about the improvement targets led to a decreased self-evaluation of management competencies from time 1 to time 3. However, ratees reported a better knowledge of self-improvement targets and attitude toward the feedback program respectively associated with competencies improvement in the eyes of the supervisors and the subordinates (all r 's $>.49$, all p 's $<.05$).

VI. Conclusions and Self-Evaluation:

This paper examined the impacts and the influences process of a multi-source evaluation program. The analyses did not suggest cognitive variables as potential mediators of the the multi-source feedback process. The results in general suggested that favorability of feedback from one's supervisors and oneself led to a worse evaluation from the supervisors and oneself at time 3. The deterioration can be a consequences of modification based on the feedback information.

In sum, this study has a few contributions. First, the feedback participants can benefit from receiving multiple source information, which can be a very valuable experience for them. Second, this study representing one of the first empirical studies about multi-source evaluation in Taiwan provided information and experiences for future research. In addition to the quantitative data collected with questionnaires, the process of applying multiple rating in the participating

company can be studied with a qualitative approach (e.g., case study) as well to provide more in-depth information for business practices. One major limitation of this study was the small size of rates, and future study is suggested to expand the sample size for more generalizable findings. Two conference paper based on partial findings of this study has been published, and further analyses will be conducted for developing journal paper.

VI. References:

- [1] Atwater, L, Roush, P., & Fischthal, A. "The Influence of Upward Feedback on Self- and Follower Ratings of Leadership," *Personnel Psychology*, 1995,48,35-59.
- [2] Atwater, L, & Yammarino, F. "Does Self-Other Agreement on Leadership Perceptions Moderate the Validity of Leadership and Performance Predictions?" *Personnel Psychology*,1992,45,141-164.
- [3] Atwater, L, & Yammarino, F. "Self-other rating agreement: A review and model," *Research in Personnel and Human Resource Management*, 1997,15, 121-174.
- [4] Bernardin, J.H. & Beatty, R.W. "Can subordinate appraisals enhance managerial productivity?" *Sloan Management Review*, 1987,28(4), 63-73.
- [5] Brutus, S. ,Fleenor, J., & Taylor, S. *Methodological issues in 360-degree feedback research*, Paper presented at the Annual Conference of Society for Industrial and Organizational Psychology, Inc. San Diego, 1996.
- [6] Cardy, R.L., & Dobbins, G.H. *Performance appraisal: Alternative perspectives*, South-Western, Cincinnati, OH.,1994.
- [7] Fleenor, J. MaCauley, C, Brutus S. "Self-other rating agreement and leader effectiveness," *Leadership Quarterly*, 1996,7-487-506.
- [8] Hazucha, J.F., Hezlett, S.A., & Schneider, R.J. "The impact of 360-degree feedback on Management Skills Development," *Human Resource Management*, 1993,32(2&3), 325-351.
- [9] Henderson, R.I. *Performance appraisals*, Reston Publishing, Reston, VA.1984.
- [10] Jones, J.E., & Bearley, W.L. *360° feedback: Strategies, Tactics, and Techniques for Development Leaders*, MA: HRD Press.1996.
- [11] Latham, G.P. and Wexley, K.N. *Increasing productivity through performance appraisal*, Addison-Wesley, Reading, MA,1982.
- [12] Van Velsor, Taylor, & Leslie. "An Examination of the Relationships among Self-Perception Accuracy, Self-Awareness, Leader Effectiveness," *Human Resource Management*, 1993, 32(2&3), 249-263.

