

# Development and Significance of Paternalistic Leadership Behavior Scale

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## Abstract

The purpose of this study is to explore the implications of paternalistic leadership behavior, developing and testing a paternalistic leadership behavior scale as well as confirming construct dimensions and questions that provide a basis for later quantitative studies. Research subjects included 402 current elementary school principals in four cities and counties in Taoyuan, Hsinchu, and Miaoli of Taiwan. The primary instrument was a “paternalistic leadership behavior scale” that was created following a process of observation and interviews. The scale initially included 9 dimensions and 48 questions. Reliability analysis and testing of the seven dimensions and 30 questions in the “paternalistic leadership behavior scale” showed that the Cronbach’s  $\alpha$  coefficients of the sub-scales and total scale ranged from 0.716 to 0.915, indicating good reliability for exploratory research. In addition to discussing the implications of scale-related topics and corrections to the initial scale, this study also introduces relevant suggestions for future research.

**Keywords:** Paternalistic leadership, Principals, Elementary schools

## 1. Introduction

Since Silin (1976) pioneered research on paternalistic leadership behavior, Redding (1990), Westwood (1992), Cheng (Cheng, 1995a, 1995b) as well as Cheng, Chou, and Farh (2000) have continued inquiry into the subject, in turn making paternalistic leadership an important focus in the field of organizational behavior. Hsieh (2000) and Tsai (2004) performed qualitative analysis research for paternalistic leadership, successfully analyzing diverse research locales and subjects, providing a different interpretations and readings on paternalistic leadership, and imbuing paternalistic leadership with contemporary meaning consistent with the organizational environment. However, a review of studies related to paternalistic leadership (Hu & Huang, 2003, October; Huang, Cheng, & Hsu, 2003, October; Jen, Farh, Cheng, & Chou, 2003, October; Jiang, Cheng, Cheng, & Jen, 2003, October) reveals the unfortunate fact that measurement tools developed for paternalistic leadership have suffered from inadequate reliability and validity.

Typically, social and behavioral science research involves the application of research instruments as a basis for collecting research data; tests or scales are used as the primary means of data collection (Tuan, Sun, & Chang, 1988). To methodology scholars, the objectivity and reliability of these instruments are subjects of concern, yet they are also the primary basis for determining the research value.

The initial study of paternalistic leadership behavior involved long-term observations and in-depth interviews, represented by the studies of Silin (1976) and Redding (1990). Redding’s study was initially based on the research results of Silin (1976), Deyo (1978, 1983), and Pye (1985), but spanned a total of 20 years. As a whole, it featured greater depth and external validity. Redding not only confirmed the prevalence of paternalistic

leadership, but placed paternalistic behavior into a broader cultural and historical context to deeply dissect the organizational structure and management styles in Chinese family companies. The study introduced the related concepts of “benevolent leadership,” “hereditary succession,” and “personalism,” providing essential elements for conceptual theories in paternalistic leadership research.

In the 1980s, Westwood et al. combined discussion of cultural foundations with empirical research to construct the “Power/Leadership Model from the Southeast Asian View” This provided paternalistic leadership with a more complete face and thread of thought (Westwood, 1992; Westwood & Chan, 1992; Westwood & Chua, 1992); moreover, their work can be considered the beginning of theoretical models. The first to discard Western models of leadership and research local ethnic Chinese leadership was probably Cheng (1995a, 1995b), who examined relevant series topics. Later, research by Cheng et al. (2000) produced a number of important breakthroughs, including two critical points: first, they applied scientific methods from applied psychology to establish the reliability and validity of research scales; this was performed so that research results could be tested later in different times and places and so that the examination, models, and quantitative research for paternalistic leadership-related topics were possible; second, they connected the leadership behaviors of leaders with the behavioral responses of subordinates, pushing paternalistic leadership research past the level of description and explanation and into prediction and control.

Even so, a good deal of space remains for breakthroughs in related research, particularly in the development of research instruments. As stated by Hsieh (2000) regarding related studies, preliminary models should be suggested through literature review and inference, then analyzed using scales and questionnaires. The tens of studies performed by researchers such as Cheng, Huang, and Chou since 2002 are representative of this approach (Cheng, 2004). However, the potential and validity of quantitative research conclusions are derived from the establishment of quantitative indicator validity. From this perspective, the testing of scales developed in relevant domestic studies can still improve. Accordingly, this study aims to develop an objective scale for measuring paternalistic leadership and performing validity testing to facilitate future research.

## **2. Development of Paternalistic Leadership Scales**

Although a significant body of literature related to paternalistic leadership existed prior to 2000, those articles were limited to discussions of concept and phenomenon theory; empirical research involving quantitative methods did not emerge. Until Cheng et al. (2000) created a Paternalistic Leadership Scale (PLS), the quantitative study of paternalistic leadership achieved few breakthroughs.

Using conceptual analysis, Cheng et al. (2000) constructed a paternalistic leadership scale. They began with two qualitative studies as a basis: one was the result of continued observation of a company leader, while the second was the result of in-depth interviews with leaders of Taiwanese family companies. Cheng et al. first established the two levels of “bestowing favor” and “establishing power” as the primary study framework, then found 152 sentences describing leadership behavior from the interview observations. These sentences were then reduced to 110 initial survey questions. After review by two experts, 15 behavioral dimensions were retained for a total of 88 measurement questions. This two-dimensional leadership survey could be considered the start of paternalistic leadership scales in Taiwan.

After introducing the two-dimensional leadership scale, Cheng et al. (2000) modified the two-dimensional survey questionnaire into a three-dimensional model that included 42 measurement questions. Its framework was based on “benevolent leadership,” “moral leadership,” and “authoritarian leadership,” and included 14 questions on benevolent leadership, 12 on moral leadership, and 16 on authority leadership. Upon scale completion, they selected 200 company employees for pre-testing. In order to test for the construction validity of the survey, exploratory factor analysis was performed for the pretesting results based on the three frameworks.

The primary contribution of Cheng and his colleagues was their application of scientific methods to establish scale reliability. This allowed for their results to be tested by later researchers with different settings and subjects; for subjects related to paternalistic leadership, their approach also made possible examination, model testing, and quantitative research. Unfortunately, scholarly examination of their articles found that the following unresolved issues:

## **3. The Foundation of Argument**

Since Cheng introduced his three-dimensional leadership element framework, later scholars instituted “benevolent leadership,” “moral leadership,” and “authoritarian leadership” as the standards for paternalistic leadership; they have neither doubted nor criticized this framework. However, the original project report issued by Cheng to the National Science Council clearly shows the origin of the three-dimensional leadership element

framework (Cheng, 2001):

“A review of Silin’s (1976) views on the leadership methods of ethnic Chinese enterprises shows that he defined paternalistic leadership as: the disciplined and authoritative leadership methods characterized by father-like benevolence and moral uprightness in contexts with rule-by-man. Under this definition, paternalistic leadership is composed of three important elements: authoritarianism, benevolence, and moral leadership.”

It can be seen that Cheng’s three-dimensional leadership element framework was derived from Silin’s (1976) research, rather than from empirical evidence. A review of Silin’s original article found that his description of Eastern leadership culture included variables such as admonishing leadership, moral leadership, centralized power, maintaining distance, leadership intent, and organizational culture, rather than being limited to variables of “benevolent leadership,” “moral leadership,” and “authoritarian leadership.” Cheng’s formulation of three factors may be invalid. The theoretical basis upon which the three-dimensional leadership element framework rests is fairly weak and lacks quantitative evidence. Future researchers have a great amount of space for review, skepticism, and criticism. Many authors who have applied the Cheng scale have not only failed to examine its basis at depth, but have also neither criticized nor improved it. In stating that “previous empirical research has shown that this scale has fairly good reliability,” they have universally misrepresented it (Cheng, Chou, Huang, Farh, & Peng, 2003; Cheng, Huang, & Chou, 2002; Cheng, Shieh, & Chou, 2002; Hsu, Hu, Ling, Cheng, & Chou, 2004).

#### 4. Research Methodologies

In order to ensure its construct validity, Cheng et al. (2000) applied factor analysis methods toward the establishment of the paternalistic leadership scale. In essence, three methods were utilized for obtaining evidence of construct validity: group differences analysis, internal consistency analysis, and factor analysis; of these, factor analysis was the most persuasive (Kuo, 1985b; Lin, 1985; Yang, Wen, Wu, & Li, 1992). Application required finding the common factor loading following the final hinge. All variables were input in order to describe the covariance between multiple variables using fewer factors (Ma, 1998).

Cheng et al. developed a three-stage graded scale, but did not perform factor analysis for the three-factor framework of the first level. In other words, not all 42 questions were used for analysis, seemingly eschewing the fundamental principles of factor analysis (Lin, 1991; Wang, 1999). Secondly, Cheng’s article only shows the factor loads for individual questions rather than addressing the explanatory variance of the entire scale post-factor analysis. The validity of the research results requires further discussion.

##### 4.1 Scale Creation

Paternalistic leadership scales are a type of personality test. The success or failure of these tests is determined by the following four issues: definition, reliability, response set, and disguised answers (Kuo, 1985a). Based on the problems described above, Cheng’s scale would have difficulties passing any requisite tests. The team members led by Cheng created a number of scales for paternalistic leadership, but each time included three levels of benevolence, morality, and authoritarian leadership; however, between scales, large variances in question content exist. Not only have the three levels of benevolence, morality, and authoritarian leadership never been reevaluated, but questions for each level range from 5 to 15 questions, constituting significant variance and salient evidence of poor external validity. In addition, the wording for many questions is highly negative. Since survey respondents are all the subordinates of research subjects, their responses are characterized by serious psychological defensiveness, making it difficult to achieve genuine answers. Secondly, in the scale created by Cheng, three factors are measured using only two questions, a fact inconsistent with the principles of the attitude scales.

In both the research levels and scale development for paternalistic leadership, there remains room for improvement. Since researchers began topical studies on the theoretical basis of paternalistic leadership, a comparison of research by Silin (1976), Redding (1990), and Westwood (1992) shows that the views and arguments of the three authors are not very contrary. However, the model of paternalistic leadership introduced by Westwood et al. is more complete and includes deeper and more extensive discussion, making it the primary basis for research throughout the following 5 years (King-Ching Hsieh, 2002, 2003a, 2003b, 2004).

Observations and analysis of two elementary school principals began in September 2001; a year later, 25 observation records totaling 33,044 words were completed. Observation scales included 9 aspects of strategy, each of which included 5 to 8 leadership behavioral indicators. In August 2002, a “leadership strategy empirical observation statistical table” was developed based on the observation journal; meanwhile, statistics for

leadership behaviors were compiled. Data was then organized to complete the “leadership strategy interview question outline.” Interviewing began in November 2002, producing interview records for 18 principals and totaling 51,189 words (King-Ching Hsieh, 2002).

Initial results from three years of research revealed that paternalistic leadership styles indeed existed in school leadership culture; leadership behavior showed neutral, esoteric, and refined tendencies. Continued deeper research also confirmed the constructs of paternalistic leadership, finally allowing for the development and completion of a draft of the “Elementary School Paternalistic Leadership Behavior Scale.” This draft scale included a total of 49 questions (1 question was an experimental question) divided between 9 dimensions, constituting a self-reporting inventory that used five-point scales (Table 1).

The scale produced by this study differed from the one by Cheng et al. in a number of respects. First, theoretically, the scale developed by Cheng et al. followed the views of Silin, applying observation methods and in-depth interviews to create levels and measurement questions. This study’s scale was derived from the theoretical model of Westwood and Chan (1992), using similar observational and in-depth interview methods. Secondly, in terms of their research subjects, the scales differ. Cheng et al.’s research focused on managers of Taiwanese family companies, while the subjects of this study were public elementary school principals.

This difference mainly explains the disparities in the development of the two scales. Enterprise organizations are profit-oriented and ownership belongs to the enterprise owner, who solely determines employment and discharge. Therefore, leaders and subordinates are positioned in a completely unequal hierarchical structure. As a result, autocratic leadership styles are commonplace. In contrast, schools are national assets. Education personnel tend to emphasize personal sacrifice, care, and love of the discipline; schools themselves are classic non-profit organizations. Despite hierarchical differences between school principals and teachers, autocratic leadership styles rarely receive approval. The development of an “authoritarian” level of leadership according to Cheng et al.’s scale is unsurprising; there is little space for the development of autocratic leadership in such settings. In terms of form and implications, paternalistic leadership undergoes transformation, exhibiting neutral, esoteric, and refined tendencies. These differences are expressed quite clearly in scale questions. Cheng et al.’s scale includes many negative and extreme adjectives, while this study uses more neutral terminology for educational settings.

## 5. Research Methods

In 2004, a paternalistic leadership scale was created for elementary schools with principals as research subjects. Based on observations and interviews, the entire scale included nine levels. The seven levels of “implementation of central leadership,” “hiding personal intentions,” “distances in personal interactions,” “group and social distance,” “harmony in interpersonal relations,” “protecting leadership authority,” and “rewarding trusted associates” each included five measurement questions. Meanwhile, the level of “active political operations” included six measurement questions, and “crafting personal reputation” included seven measurement questions. As of September 2001, two main differences could be found compared to the level names designed in the theoretical model introduced by Westwood and Chan (1992): First, adjustments for neutrality tended to be clearer; for example, “implementing central leadership” replaced “centralization of power” and “rewarding trusted associates” replaced “care and bias for relatives.” Secondly, level organization differed and additional levels were included, as shown in Figure 1.

Reliability and validity testing was performed upon scale completion. A total of 402 current public elementary school principals were selected from four cities and counties in Taoyuan, Hsinchu, and Miaoli. Surveys were distributed by mail in December 2004. A total of 312 surveys were returned for a retrieval rate of 77.6%. Question testing was used as the basis for discarding surveys; a total of 270 usable scales were retained for a usability rate of 86.54%.

### 5.1 Reliability and validity testing

Reliability and validity testing for the paternalistic leadership scale was divided into three main parts: the first involved descriptive analysis to describe respondent scores; the second used exploratory factor analysis to test for conceptual structures and serve as a basis for orientation and question selection; the third used reliability analysis to test for soundness. Of the entire process, exploratory factor analysis was the most difficult. In the event that designs of the initial questions were less than ideal, later hinge and factor extraction were impeded, thereby lowering explained variance; the primary reason for this was the degree of communality between questions.

The first step of factor analysis calculations was to find the correlation coefficient matrix between all questions

and then estimate the communality of each question based on a correlation matrix; a higher communality indicated greater homogeneity among questions (Wang, 1999). According to the above-described principles, communality was used as the basis for question filtering. Those with low communality were first discarded, then the remaining questions were used to perform factor analysis. By doing so, the explained variance of factor analysis was increased, achieving purpose of describing covariance between multiple variables with fewer factors.

Table 1 shows the results of descriptive analysis for 49 questions; question 16 was used only to discard invalid surveys and hence was not included. In addition, Table 1 shows a comparison of factor analysis results. It shows that factor analysis was performed four times. The first run involved discarding questions with communality lower than 0.6, which led to the discarding of 11 questions; the second run then discarded questions with communality lower than 0.5, removing four questions; the third run then discarded questions with communality lower than 0.5, discarding one question. After 16 total questions were discarded, 32 questions were used in the final run.

The results of this final round are shown in Table 2; a total of eight factors were calculated for an explained variance of 66.907%. However, only two questions remained for “implementing centralized leadership,” a violation of survey creation that led to discarding the aspect. A total of 30 questions ultimately remained across seven factors, for an explained variance of 61.213%. Lastly, the question with the lowest factor load of the 30 remaining questions had a factor load of 0.566.

Once factor analysis was completed, reliability analysis was performed. Cronbach’s  $\alpha$  coefficient, introduced in 1951, has been termed the minimum for estimating reliability and is also the most rigorous method for estimating reliability (Kuo, 1985a). Consequently, if the Cronbach’s  $\alpha$  coefficient is satisfactory, estimations of re-test reliability, alternate form reliability, split-half reliability, and inter-rater reliability are all unnecessary. This study therefore chose the Cronbach’s  $\alpha$  as the basis for reliability.

Table 3 shows that, following reliability analysis for 30 questions in seven dimensions of the “Paternalistic Leadership Behavior Scale,” the Cronbach’s  $\alpha$  coefficients for sub-scales and the total scale fell from .7160 to .9158, meeting the reliability standards of exploratory research.

## 6. Conclusions and Suggestions

Paternalistic leadership originated from traditional Chinese culture and exists in Eastern social organizations. It is an absolutely important subject warranting the deep understanding of domestic social science researchers. In recent years, reports on Chinese-style leadership have gained attention, and research on paternalistic leadership in areas with large ethnic Chinese populations has produced significant results. This research has not only confirmed the diversity of leadership concepts in different cultural backgrounds, but also effectively interpreted leadership phenomena particular to Eastern social organizations. Regardless of existing literature, strengthening the reliability and validity of measurement instruments is an important factor in achieving future breakthroughs. Accordingly, this study aimed to develop and test an objectively effective scale based on deep interviews and observations in school environments.

Following multiple factor analysis and filtering tests for the “paternalistic leadership behavior scale,” this study found seven factors explained 61.213% of variance. Factors concerning “implementing centralized leadership” and “group and social distance” were removed following factor analysis; meanwhile, the names and constructs of the other seven factors remained identical to those of initial drafts, consistent with the needs of validity tests.

Secondly, in terms of the basic principles of scale construction, 48 questions were used in the original draft; following factor analysis, 30 remained. Each dimension had three to five questions, and the factor load for each question reached .566 or above, meeting the needs of scale construction.

Thirdly, through reliability analysis, seven aspects and 30 questions of the “paternalistic leadership behavior scale” had Cronbach’s  $\alpha$  coefficients between .7160 and .9158 for the sub-scales and total scale, indicating good reliability for exploratory research.

In conclusion, establishing a paternalistic leadership behavior scale appropriate for use in school contexts was mainly achieved. Nonetheless, problems with construct orientations and indicators remained and merit discussed. For the former, the results of both surface validity analysis and quantitative analysis support the removal of group social distance.

However, the removal of implementing centralized leadership should be discussed, since paternalistic leaders must express clear and strong authority, like that of a father’s. These characteristics are consistent with the construct implications. Secondly, the results of reliability analysis indicate that, although only two questions

remained concerning centralized leadership, the Cronbach's  $\alpha$  coefficient reached .7157. We suggest that future researchers retain the implementing centralized leadership aspect in order to perform exploratory analysis after supplementing it with additional questions. In doing so, they can further develop and test a paternalistic leadership behavior scale.

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Table 1. Summary of Paternalistic Leadership Behavior Description Analysis and Factor Analysis Result Comparison

| Dimension                              | Test Questions   | Single Question Score | Factor 1                             | Factor 2                             | Factor 3                             | Factor 4           |
|--|--|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------|
|  |  |                       | Communalities Extraction <.6 removal | Communalities Extraction <.5 removal | Communalities Extraction <.5 removal | Factor Positioning |
| 1. Implementing Centralized Leadership | 1. Important policies or action plans are ultimately decided by myself   | 3.83                  |                                      |                                      |                                      | 1                  |
|  | 2. I obtain the opinions of trusted associates before making important decisions                                       | 4.03                  |                                      |                                      |                                      | 1                  |
|  | 3. If school decision-making is predicted to be disturbed, I will choose beneficial information for public explanation | 4.18                  |                                      | .498(removed)                        |                                      | (removed)          |
|  | 4. I will not change established policies because of the recommendations of subordinates                               | 3.17                  | .492 (removed)                       |                                      |                                      | (removed)          |

|                                      |  |      |                    |               |  |           |
|--------------------------------------|--|------|--------------------|---------------|--|-----------|
|                                      | 5. To implement the execution of major policies, I will personally conduct hands-on supervision                | 3.98 | .564 (removed)     |               |  | (removed) |
| 2.Hiding Personal Intentions         | 6. I do not easily express my personal feelings, emotions, or thoughts in public                               | 3.67 |                    |               |  | 2         |
|                                      | 7. I do not easily reveal my personal intentions and action policy as to maintain decision-making space        | 3.60 |                    |               |  | 2         |
|                                      | 8. I will suitably maintain space for suggestions or flexibility to protect mutual dignity and save face       | 4.14 | .514(removed)      |               |  | 5         |
|                                      | 9. I decide the degree of open sharing based on knowledge and information needs and effects                    | 3.97 |                    |               |  | (removed) |
|                                      | 10. If there is a need, I will avoid using formal and explicit methods to maintain flexibility                 | 3.91 |                    |               |  | 5         |
| 3.Personal Interaction Distance      | 11. I maintain different, friendly, but suitable distances in my personal contacts with different subordinates | 4.04 |                    |               |  | 3         |
|                                      | 12. I maintain a distant but friendly relationship with non-trusted subordinates                               | 3.40 |                    |               |  | 3         |
|                                      | 13. I suitably maintain personal private space and mystery   | 3.40 | .585(removed)      |               |  | 3         |
|                                      | 14. I gauge the situation and cautiously act and speak in my personal contacts with subordinates               | 4.13 |                    |               |  | (removed) |
|                                      | 15. I talk little and do not easily express my emotions during my personal contacts with subordinates          | 3.15 | test item(removed) |               |  | 2         |
|                                      | 16. I cannot accept public challenges to my authority by subordinates  | 2.77 |                    |               |  | (removed) |
| 4.Group Social Distance              | 17. During group interactions, I attempt to build a friendly organizational atmosphere with suitable distance  | 4.27 |                    |               |  | 3         |
|                                      | 18. I do not easily speak in public and limit myself to remarks required by the occasion                       | 2.86 |                    |               |  | 6         |
|                                      | 19. I trust my subordinates, but do not reveal my bottom line, to build the space for dialogue                 | 3.70 | .598(removed)      |               |  | 3         |
|                                      | 20. I avoid discussing personal feelings, emotions, or values in public or formal situations                   | 3.36 |                    |               |  | 2         |
|                                      | 21. I skillfully participate in the private social activities of non-trusted associates                        | 3.22 |                    |               |  | (removed) |
| 5.Harmony in Interpersonal Relations | 22. I attempt to create a harmonious surface atmosphere in the organization to avoid public conflict           | 3.71 | .559(removed)      |               |  | (removed) |
|                                      | 23. To strengthen interpersonal relations, I perform timely private concern and courtesy visits                | 3.98 |                    | .472(removed) |  | (removed) |
|                                      | 24. Before obtaining public consensus, I attempt private communication and coordination as much as possible    | 4.16 |                    |               |  | 5         |

|                                   |   |      |  |               |               |           |
|-----------------------------------|---|------|--|---------------|---------------|-----------|
|                                   | 25. When necessary, I allow exceptions to regulations to obtain compromise  | 3.58 |  |               |               | 5         |
|                                   | 26. In interpersonal interactions, I take into consideration mutual dignity and face  | 4.37 |  |               |               | 5         |
| 6.Protecting Leadership Authority | 27. I avoid giving my subordinates opportunities to publically challenge my leadership authority                              | 3.36 |  |               | .496(removed) | (removed) |
|                                   | 28. I strongly believe in my own decisions and assessments on outcomes or subordinate performance                             | 3.68 |  |               | .482(removed) | (removed) |
|                                   | 29. I stop other subordinates from criticizing the policies of my associates in meetings                                      | 3.31 |  |               | .487(removed) | (removed) |
|                                   | 30. To implement my philosophy, I prioritize the appointment of obedient subordinates   | 3.47 |  |               |               | 6         |
|                                   | 31. For organizational harmony, I prioritize the appointment of deferential subordinates                                      | 3.32 |  |               |               | 6         |
| 7.Rewarding Trusted Associates    | 32. I hire and promote reliable subordinates that have close relationships with me  | 3.29 |  | .594(removed) |               | (removed) |
|                                   | 33. When giving rewards, I attempt to inconspicuously take care of trusted associates   | 3.06 |  |               |               | 7         |
|                                   | 34. I am aware of the different demands of trusted associates and suitably use resources to accommodate and take care of them | 3.07 |  |               |               | 7         |
|                                   | 35. I often participate in social meals with trusted associates to enhance emotional exchanges                                | 3.01 |  |               |               | 7         |
|                                   | 36. My social meals with subordinates differ based on the degree of closeness   | 2.57 |  |               |               | 7         |
| 8.Active Political Operation      | 37. I mobilize trusted associates to effectively exert support  | 3.48 |  |               |               | 7         |
|                                   | 38. I privately use strategies to defuse opposition   | 3.75 |  |               |               | 8         |
|                                   | 39. I strengthen interpersonal relationship networks through multiple channels  | 4.17 |  |               |               | 8         |
|                                   | 40. I maintain harmonious interpersonal relationships with different subgroups  | 4.13 |  |               |               | 8         |
|                                   | 41. I carefully consider the distribution of benefits in the organization before making decisions                             | 4.19 |  | .585(removed) |               | (removed) |
|                                   | 42. I seek to gain the support of more members through methods such as courteous treatment and sharing benefits               | 3.82 |  | .530(removed) |               | (removed) |
| 9.Shaping Personal Reputation     | 43. I usually maintain appropriate clothing and a clean appearance  | 4.40 |  | .555(removed) |               | (removed) |
|                                   | 44. My behavior is strictly within proper rules and legal boundaries  | 4.42 |  |               |               | 9         |

|  |      |               |  |           |
|--|------|---------------|--|-----------|
| 45. I treat people courteously, act and respond with restraint, and present a high moral attitude        | 4.42 |               |  | 9         |
| 46. I present modest, compassionate, kind, and courteous behavior in public situations                   | 4.42 |               |  | 9         |
| 47. I fairly arbitrate in disputes between members of the organization and play the role of the mediator | 4.33 |               |  | 9         |
| 48. Whether in public or private affairs, I avoid embarrassing myself and other people                   | 4.28 | .517(removed) |  | 9         |
| 49. I do not accumulate personal wealth and benefits through my position                                 | 4.78 |               |  | (removed) |

Table 2. "Paternalistic Leadership Behavior Scale" Question Classification Positioning Table

| Initial Orientation Dimension         | Question Positioning  | Question Number                  |
|---------------------------------------|---|----------------------------------|
| 1.Implementing Centralized Leadership | 1. I ultimately decide important policies or action plans   | Fewer than 3 questions - Removed |
|                                       | 2. I obtain the opinions of trusted associates before making important decisions  |                                  |
| 2.Hiding Personal Intentions          | 6. I do not easily express my personal feelings, emotions, or thoughts in public  | 1                                |
|                                       | 7. I do not easily reveal my personal intentions and action policy so as to maintain decision-making space                    | 2                                |
|                                       | 15. I talk infrequently and do not easily express my emotions during my personal contacts with subordinates                   | 3                                |
|                                       | 20. I avoid discussing personal feelings, emotions, or values in public or formal situations                                  | 4                                |
| 3.Personal Interaction Distance       | 11. I maintain different, friendly, but suitable distances in my personal contacts with different subordinates                | 5                                |
|                                       | 12. I maintain a distant but friendly relationship with non-trusted subordinates  | 6                                |
|                                       | 13. I suitably maintain personal private space and mystery  | 7                                |
|                                       | 17. During group interactions, I attempt to build a friendly organizational atmosphere with suitable distance                 | 8                                |
| 4.Group Social Distance               | 19. I trust my subordinates but do not reveal my bottom line to create space for dialogue                                     | 9                                |
|                                       |   | (Removed this dimension)         |
| 5.Harmony in Interpersonal Relations  | 24. Before obtaining public consensus, I attempt private communication and coordination as much as possible                   | 10                               |
|                                       | 25. When necessary, I allow exceptions to regulations to obtain compromise  | 11                               |
|                                       | 26. In interpersonal interactions, I take into consideration mutual dignity and face  | 12                               |
|                                       | 8. I suitably maintain space for suggestions or flexibility to protect mutual dignity and to save face                        | 13                               |
| 6.Protecting Leadership Authority     | 10. If there is a need, I avoid using formal and explicit methods to maintain flexibility                                     | 14                               |
|                                       | 18. I do not easily speak in public and limit myself to remarks required by the occasion                                      | 15                               |
|                                       | 30. To implement my philosophy, I prioritize the appointment of obedient subordinates   | 16                               |
| 7.Rewarding Trusted Associates        | 31. For organizational harmony, I prioritize the appointment of deferential subordinates                                      | 17                               |
|                                       | 33. When giving rewards, I attempt to inconspicuously take care of trusted associates   | 18                               |
|                                       | 34. I am aware of the different demands of trusted associates and suitably use resources to accommodate and take care of them | 19                               |
|                                       | 35. I often participate in social meals with trusted associates to enhance emotional exchanges                                | 20                               |
|                                       | 36. My social meals with subordinates differ based on the degree of closeness   | 21                               |
|                                       | 37. I mobilize trusted associates to effectively exert support  | 22                               |

|                               |  |    |
|-------------------------------|--|----|
| 8.Active Political Operation  | 38. I privately use strategies to defuse opposition  | 23 |
|                               | 39. I strengthen interpersonal relationship networks through multiple channels                           | 24 |
|                               | 40. I maintain harmonious interpersonal relationships with different subgroups                           | 25 |
| 9.Shaping Personal Reputation | 44. My behavior is strictly within proper rules and legal boundaries                                     | 26 |
|                               | 45. I treat people courteously, act and respond with restraint, and present a high moral attitude        | 27 |
|                               | 46. I present modest, compassionate, kind, and courteous behavior in public situations                   | 28 |
|                               | 47. I fairly arbitrate in disputes between members of the organization and play the role of the mediator | 29 |
|                               | 48. Whether in public or private affairs, I avoid embarrassing myself and other people                   | 30 |

Note: 1. When keeping 8 factors and 32 questions, the variance is 66.907; when keeping 7 factors and 30 questions, the variance is 61.213%.

2. The minimum factor loading when keeping 30 questions is .566.

Table 3. “Paternalistic Leadership Behavior Scale” Reliability Analysis Summary

| Dimension                     | 1.Hiding Personal Intentions | 3.Personal Interaction Distance | 5.Harmony in Interpersonal Relations | 6.Protecting Leadership Authority | 7.Rewarding Trusted Associates | 8.Active Political Operation | 9.Shaping Personal Reputation | Total Scale |
|-------------------------------|------------------------------|---------------------------------|--------------------------------------|-----------------------------------|--------------------------------|------------------------------|-------------------------------|-------------|
| <b>Cronbach α coefficient</b> | .7160                        | .7445                           | .7449                                | .7751                             | .7688                          | .8349                        | .8733                         | .9158       |

Note: The Cronbach α coefficient of the removed “Implementing Centralized Leadership” dimension is .7157.

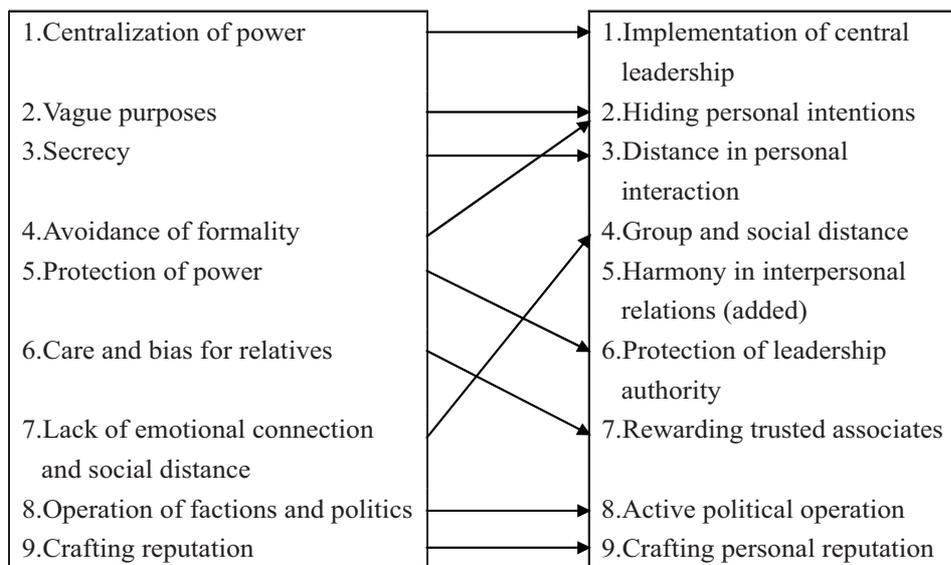


Figure 1. Comparison of development of paternalistic leadership frameworks