Development - Orientedness, Ethics, and Work Problems of New Faculty[1]

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Abstract

The works of the International Studies of Values in Politics, Straussman (1985), Williams (1979) and Muthayya and Gananakanna (1973) serve as a basis for the research hypotheses of this study that socioeconomic characteristics and perceived personnel practices are related to development-orientedness, ethics, problems and causes of problems faced by new faculty. Upon testing of the hypotheses, it was found that some socioeconomic characteristics and perceived personnel practices are related to some dimensions of development-orientedness, ethics, and some problems and causes of problems. Also found are some problem resolutions resulting from open-ended questionnaire items. These research findings together with those from the 2004 project, titled Analysis of New Faculty Socialization in Thai Public Universities, are beneficial for both academic and practical undertakings.

Key terms: development-orientedness, ethics, personnel practices, work problems, and new faculty

1. Introduction

Over the last decade, extensive studies on new faculty have been done in North America in preparation for the encroaching retirement of a large cohort of the baby-boomer senior faculty, such as the works of Fink (1984), Whitt (1991), Sorcinelli and Austin (1992), Boice (1992), Dunn, *et al.* (1994), and Austin and Wulff (2004). Most of those studies focus on new faculty socialization. At present, Thai higher education is facing a closely similar challenge as being with their American counterpart. However, few studies have been done on new faculty in Thai higher education, some of them are Laubunjong (1995) and Prachyapruit (2001). In response to such unmet needs, Prachyapruit (2004; 2006) conducted a study, titled Analysis of New Faculty Socialization in Thai Public Universities. According to the findings of this study, the level of new faculty socialization in Thai universities is high in teaching and research, while moderate in community service, and arts and cultural preservation. Besides, when comparing among different sources of new faculty socialization including experiences, socializers, and staff development programs, it was found that experiences as a teaching/ research assistant (TA/RA) are most important for new faculty socialization into the teaching and research functions, while mentors are their most important socializers into the community

service, and arts and cultural preservation functions. To a certain extent, the aforementioned study together with other studies on new faculty can be a beneficial for faculty developers and administrators in facilitating new faculty's socialization into their academic roles. However, in the current knowledge-driven society, faculty, particularly the novice, need to be competent not only in fulfilling their academic roles but should also possess other essential qualities including ethical and development-orientedness. Studies were done on development-orientedness and ethics in the civil service context including the works : Thailand's elite civil servant and their development-orientedness (Prachyapruit,1987); Chairpersons: Relationship between their socioeconomic characteristics, perceived personnel practices and job satisfaction and result orientation: a case study of Chulalongkorn University (Prachyapruit, 1984), and Public service professionalism during the reign of King Rama V: Evolution and its ramifications upon Thai society (Prachyapruit, 1993). Rarely any study focuses on new faculty's ethics and development-orientedness, the gap in body of knowledge that this study attempts to fill. At the same time, to retain and develop new faculty, higher education institutions need to understand problems faced by new faculty, another area under investigation in this study.

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2. Conceptual Framework and Literature Review

The conceptual framework of this study is based on 6 areas of literature including the works of the International Studies of Values in Politics (1971) and Tin Prachyapruit (1987) on development-orientedness, Straussman (1985) on ethics, and Williams (1979) on problems faced by university personnel, and Muthayya and Gnanakannan (1973) on causes of problems and problem resolution serve as a basis for this study. These works have been reviewed below.

The International Studies of Values in Politics defines development-orientedness as value commitments to national development which comprises the following 10 measures: change, participation, tolerance, equality, economic development, concern for nation, selflessness, action propensity (risk-taking), commitment to work, and result-orientation. In this study development-orientedness has been touched upon both at a micro and macro (aggregate) levels.

Straussman (1985) has developed a survey package to evaluate and rank individuals' standing on ethics. In this study, ethics levels have been considered at an aggregate/macro level, based on 10 questionnaire items set forth by Straussman himself.

Williams (1979) tried to develop a survey package to investigate the problems mostly faced by university personnel. These problems include 11 dimensions: (1) initiative problem, (2) training problem, (3) motivation problem, (4) control problem, (5) teamwork problem, (6) personnel selection problem, (7) structure problem, (8) succession problem, (9) organization goal problem, (10) reward problem, and (11) leadership problem.

The work of Muthhayya and Gnanakannan (1973) touches upon the causes of problems faced by civil servants. Viewed from this standpoint, this work seems to correspond to the work of Williams above. However, while Williams stresses the types of problems, Muthayya and Gananakannan emphasize the causes of those problems: problems caused by job, problems caused by interpersonal relationship, and problems caused by self. Therefore, these works are symbiotic, useful for analyzing the problems of new faculty.

The aforementioned works will serve as dependent variables, while socio-economic characteristics and perceived personnel practices will serve as independent variables in this project. So, it will be more appropriate to clarify what we mean by socioeconomic characteristics and perceived personnel practices.

In this study, socioeconomic characteristics include university affiliation, sex, age, education, father's occupation, and fields of study and perceived personnel practices are defined as the way in which civil service laws, rules and regulations are actually implemented and such an implementation impinges upon new faculty 's behavior. Perceived personnel practices herein include an opportunity for two-step salary increases, factors resulting in two-step salary increases (including, quantity of works performed, quality of work performed, initiative, knowledgeability, and overall factors), an opportunity for training in Thailand and an opportunity for training abroad.

3. Research Objectives

Research Objectives are as follows:

3.1 To describe new faculty's level of development-orientedness, ethics, and related problems faced and their causes.

3.2 To identify the relationships between socioeconomic characteristics and perceived personnel practices (the independent variables) and development-orientedness (the dependent variables).

3.3 To identify the relationships between socioeconomic characteristics and perceived personnel practices (the independent variables) and ethics (the dependent variable)

3.4 To identify the relationships between socioeconomic characteristics and perceived personnel practices (the independent variables) and problems faced by new faculty (the dependent variables).

3.5 To identify the relationships between socioeconomic characteristics and perceived personnel practices (the independent variables) and causes of problems faced by new faculty (the dependent variables).

4. Research Hypotheses

Research Hypotheses are as follows:

4.1 Socioeconomic characteristics and perceived personnel practices are related to development-orientedness, both at individual and aggregate dimensions;

4.2 Socioeconomic characteristics and perceived personnel practices are related to ethics levels.

4.3 Socioeconomic characteristics and perceived personnel practices are related to problems faced by new faculty.
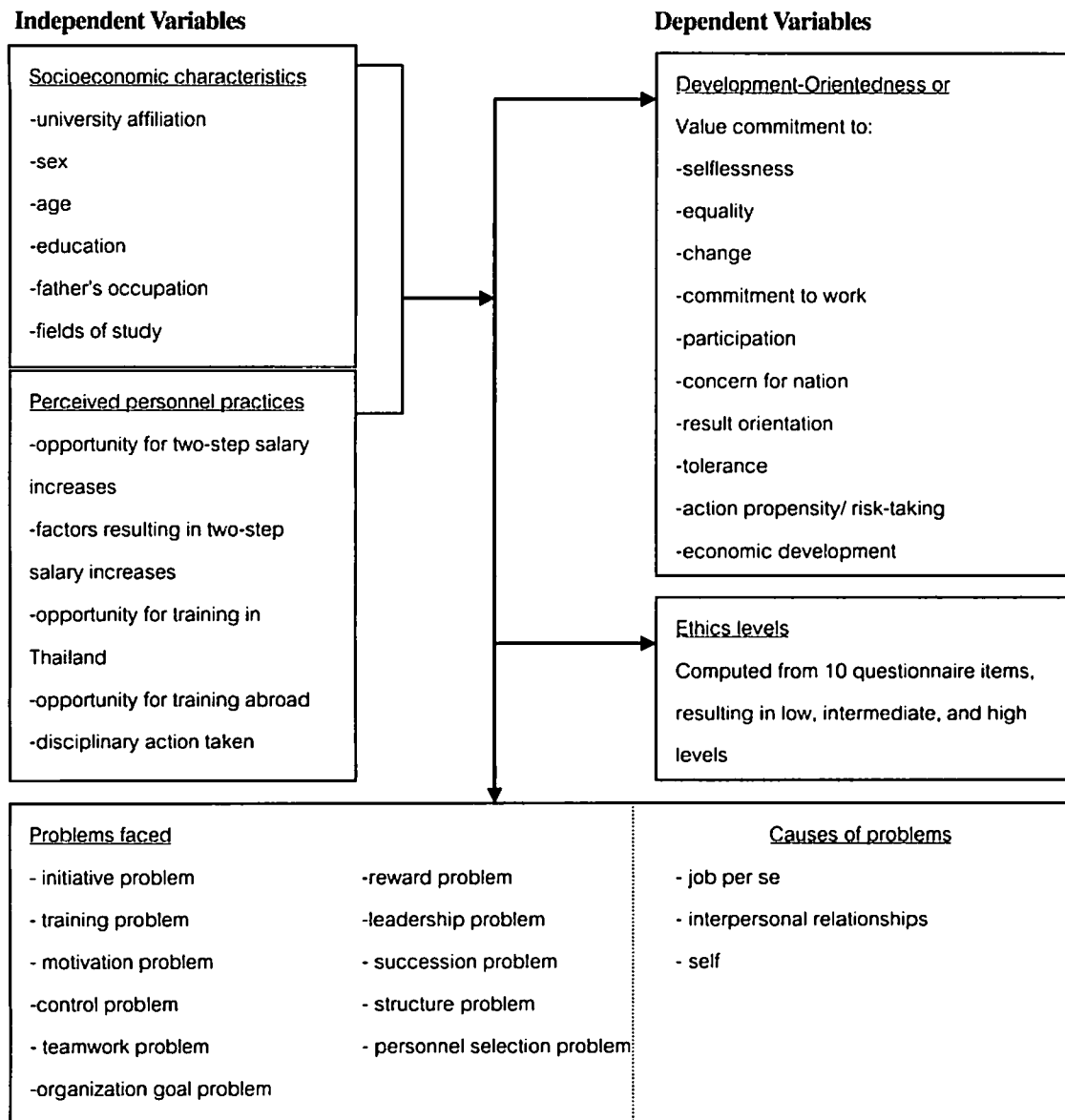
Independent Variables

Socioeconomic characteristics

-university affiliation

-sex

-age

-education

-father's occupation

-fields of study

Perceived personnel practices

-opportunity for two-step salary increases

-factors resulting in two-step salary increases

-opportunity for training in Thailand

-opportunity for training abroad

-disciplinary action taken

Dependent Variables

Development-Orientedness or Value commitment to:

-selflessness

-equality

-change

-commitment to work

-participation

-concern for nation

-result orientation

-tolerance

-action propensity/ risk-taking

-economic development

Ethics levels

Computed from 10 questionnaire items, resulting in low, intermediate, and high levels

Problems faced

- initiative problem   -reward problem

- training problem   -leadership problem

- motivation problem   - succession problem

-control problem   - structure problem

- teamwork problem   - personnel selection problem

-organization goal problem

Causes of problems

- job per se

- interpersonal relationships

- self

Fig. 1 Diagram of hypotheses.

4.4 Socioeconomic characteristics and perceived personnel practices are related to causes of problems faced by new faculty

The hypotheses can be shown in fig. 1.

5. Methodology

5.1 Instrumentation

The data gathered for measuring new faculty 's socioeconomic characteristics, perceived personnel practices, development-orientedness, ethics levels, problems faced by new faculty and causes of the problems is carried out via mailed questionnaires in addition to articles, books and previous researches.

The aforementioned questionnaire is divided into 5 parts: socioeconomic characteristics, perceived personnel practices, development-orientedness, ethics levels, problems faced and problem resolutions, and open-ended questions to tap the problems and problem resolutions.

Questionnaire items on dependent variables- - development-orientedness, problems faced and causes of the problems were Cronbach-tested and have a reliability of 73.3%, 78.4%, and 66.0%, respectively.

5.2 Population and Samples

Population and sample used are almost the same as those of the previous research, Analysis of New Faculty Socialization in Thai Public Universities, in 2004. Populations are 1,005 new faculty from Chulalongkorn University, Mahidol University, Kasetsart University, and Thammasat University. This population is further classified into four disciplinary areas: pure-hard disciplines, applied-hard disciplines, pure-soft disciplines, and applied-soft

disciplines. Out of the 1,005 population, 303 samples stratified by university and disciplinary affiliation are randomly selected, using Arkin and Coltan's criteria.

5.3 Data and Statistical Treatment

A running of frequency of both independent and dependent variables is administered in order to see the distribution of the responses to the questionnaire items on socioeconomic characteristics, perceived personnel practices, development-orientedness, ethics levels, problems and causes of the problems, including problem resolutions reflected from open-ended questions. A summary of the said distributions is presented in appendices 1-6 respectively. With regards to the relationships between variables, cross tabulation, chi-square (χ^2) and Kendall's tau c tests have been administered and the results analyzed. A relationship with a statistical significance of at least .05 or higher is accepted. And the said relationships are presented in appendices 7-15.

6. Results and Discussion

Out of 303 samples, 159 have returned the questionnaires. Majority of the 159 respondents are from Kasetsart University. Most of them are female, aged 31-35, Master's degree holders in applied sciences, and coming from civil servant family (Appendix 1).

In terms of perceived personnel practices, the majority of new faculty have no opportunity for two-step salary increases. Quality of work is perceived as most important for two-step salary increases, while quantity of work, initiative, and knowledgeability are perceived as important for two-step salary increases. Overall factors are considered as moderately important for two-step salary increases. Furthermore, with regard to training opportunities, most of them have had an opportunity for training in Thailand, but none had for training abroad. Last but not least, most of them witnesses punishment on the basis of the severity of wrongdoing (Appendix 2). These findings provide a useful information feedback that new faculty's opportunity for two-step salary increases and for training abroad are still limited, hence should be expanded. The punishment system is quite fair.

In response to the first research objective in describing new faculty's level of development-orientedness, ethics, and related problems faced and their causes, the findings of this study can be concluded as follows. In terms of each individual dimension of development-orientedness, the majority of new faculty scores the highest on selflessness and scores the lowest on economic development

(Appendix 3). In terms of ethics, the majority score high on the ethics (Appendix 4). In terms of problems faced by new faculty in each individual dimension, the majority of them perceive initiative problem as most serious, while leadership problem as least serious (Appendix 5). This last finding is consistent with the findings on development-orientedness of Thailand's elite civil servants (Prachyapruit, 1987). It also suggests that, like in the civil service system, improvement of faculty's initiative should be a priority in faculty development. In terms of the causes of the problems at the aggregate level, the majority of the new faculty perceive interpersonal relationships as most serious, followed by job, while self being least serious (appendix 6). Therefore, university administrators may need to figure out better strategies to promote collegial working environment.

In response to the second research objective in identifying the relationships between socioeconomic characteristics and perceived personnel practices (independent variables) and development-orientedness (dependent variables), findings of this study can be concluded as follows. Some socioeconomic characteristics are related to certain individual dimensions of development-orientedness: University affiliation, sex, age related to development-orientedness in change dimension; age and father's occupation related to development-orientedness in participation dimension; age and fields of study related to development-orientedness in the tolerance dimension; and sex related to development-orientedness in economic development and action propensity (risk-taking) dimensions (appendix 7). However, none is related to aggregate/ macro development-orientedness at a satisfactory statistical significance (appendix 8). These findings can be useful information for considering faculty recruitment and faculty development based on learnered-centered philosophy.

Some perceived personnel practices are found to be related to certain individual dimensions of development-orientedness: perceived quantity of work performed and knowledgeability as criteria for two-step salary increases and an opportunity for training in Thailand related to change dimension; an opportunity for training in Thailand relates to participation dimension; punishment related to tolerance dimension; perceived quantity of work performed as a criterion for two-step salary increases relates to economic development dimension; perceived knowledgeability as a criterion for two-step salary increases related to concern for nation dimension; perceived quantity of work performed,

quality of work performed, knowledgeability, and overall factors as criteria for two-step salary increases related to selflessness dimension; and punishment related to result orientation dimension. These findings suggest the importance of promotion based on merit system on new faculty's development-orientedness, whether the criterion is based on quantity of work, quality of work, knowledgeability, or these overall factors. It also reflects the importance of training on new faculty's development-orientedness, as well as some relationships between punishment and development-orientedness (appendix 12).

In response to the third research objective in identifying the relationships between socioeconomic characteristics and perceived personnel practices (independent variables) and ethics (dependent variable), it can be concluded that: some socioeconomic characteristics, that is sex, relate to ethics levels (appendix9). A perceived personnel practice also relates to ethics, that is, those perceive knowledgeability as the most important for two-step salary increases score the highest on ethics (appendix 14).

In response to the fourth research objective in identifying the relationships between socioeconomic characteristics and perceived personnel practices (independent variables) and problems faced by new faculty (dependent variables), the findings can be concluded as follows. Some socioeconomic characteristics are found to be related to some individual problems encountered by new faculty: Age and education level related to personnel selection problem; father 's occupation related to motivation problem; university affiliation, age and father's occupation related to initiative problem; field of study related to teamwork problem; age related to leadership problem; father's occupation and fields of study related to organization goal problem; age related to reward problem (Appendix 10). These findings signal administrators attend to differences among individual new faculty.

Some perceived personnel practices are found to be related to some individual problems encountered by new faculty: punishment related to personnel selection problem: perceived quantity of work performed, quality of work performed, initiative and knowledgeability, overall factors as criteria for two step-salary increases and punishment related to structure problem; perceived quality of work performed, initiative, knowledgeability, overall factors as criteria for two-step salary increases and punishment related to motivation problem; opportunity

for two-step salary increases, perceived quantity of work performed, quality of work performed, initiative, knowledgeability, overall factors as criteria two-step salary increases and punishment related to teamwork problem; opportunity for training in Thailand and punishment related to leadership problem; perceived quantity of work performed, quality of work performed, initiative, overall factors as criteria for two-step salary increases, opportunity for training in Thailand and punishment related to succession problem; perceived quality of work performed, initiative, knowledgeability as criteria for two-step salary increases, opportunity for training in Thailand, and punishment related to organization goal problem; perceived quantity of work performed as criteria for two-step salary increases and punishment related to reward problem (appendix 15). This finding reflects that despite the use of merit system, considering quantity, quality, initiatives, knowledeability as criteria for two-step salary increases, many individual problems that new faculty encountered still persist. Therefore, further in-depth institutional research may be needed to find the loophole in existing promotion and reward system based on merit system in order to better design an effective promotion and reward systems that are appropriate for cultures of higher education and individual academic institutions. It also confirms the importance of training and punishment in modifying human resource behaviors.

In response to the fifth research objective in identifying the relationships between socioeconomic characteristics and perceived personnel practices (independent variables) and causes of problems faced by new faculty (dependent variables), the findings can be concluded as follows. Some socioeconomic characteristics are found to be related to causes of problems encountered by new faculty: university affiliation related to job related problems; age related to interpersonal problems; father's occupation related to self problems (appendix11). These findings confirm the importance for administrators in recognizing differences among new faculty.

Some perceived personnel practices are found to be related to the causes of problems faced by new faculty: perceived quantity of work performed as a criterion for two-step salary increases and punishment related to job related problems; punishment related to interpersonal relationship problems; perceived overall factors as criteria for two-step salary increases and punishment related to self problems (appendix 16).

7. Recommendations

Based on above findings, some implications for institutional practices and future research are suggested: In terms of recommendations for institutional practices, firstly, opportunities for training abroad should be expanded for new faculty. Faculty developers and administrators should give priority to developing faculty's initiative and collegial working environment. Second, in implementing any faculty development intervention or institutional policy, faculty developers and administrators should take into account differences among individual new faculty. Third, to encourage new faculty' development-orientedness and ethics, while alleviating their work problems, fair treatment in the promotion, reward, and punishment system need to be in place. However, the terms fairness can vary by the beholders. Therefore, individual universities need to further conduct institutional research to develop rewarding and punishment systems that are accepted in their university communities as fair and effective and serve their institutional missions well.

In terms of suggestions for further research, there are a lot of terra incognita on new faculty in Thailand, namely: (1) new faculty's workload requirement and reward systems; (2) new faculty and issues on gender and diversity; (3) recruitment and selection of new faculty; (4) new faculty and e-learning - -to mention but a few.

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Appendix: Summary of Findings

Appendix 1: Summary of the distribution of socioeconomic characteristics of new faculty:

1) University Affiliation: Those from Kasetsart University account for the highest percentage (33.30%)
2) Sex: Most of them are female (58.50%)
3) Age: The age group of 31-35 years accounts for the highest percentage (42.10%)
4) Education level: Most of them have earned as M.A. degree (50.64%)
5) Father's occupation: Most of them come from civil servants families (32.27%)
6) Field of study: Most of them belong to applied sciences (40.30%)

Appendix 2: Summary of the distribution of Perceived Personnel Practices of New Faculty:

1) Opportunity for two-step salary increases: Most of them have not had such opportunity (73.43%).

2) Importance of quantity of work performed for two-step salary increases: Most of them consider quantity of work performed as important (3 out of a scale of 4) for two -step salary increases (47.72%).

3) Importance of quality of work performed for two-step salary increases: Most of them consider quality of work performed as being most important for two-step salary increases (47.06%).

4) Importance of initiative for two-step salary increases: Most of them consider initiative as important (3 out of a scale of 4) for two-step salary increases (35.95%).

5) Importance of knowledgeability for two-step salary increases: Most of them consider knowledgeability as important (3 out of a scale of 4 for two-step salary increases (41.17%).

6) Importance of overall factors for two-step salary increases: Most of them consider overall factors as moderately important (2 out of a scale of 3) for two-step salary increases at a moderate level (71.90%).

7) Opportunity for training in Thailand: Most of them have had an opportunity for training in Thailand (86.08%).

8) Opportunity for training abroad: Most of them have not had such opportunity (64.2%)

9) Punishment: Most of them witness punishment in accordance with the severity of the wrongdoing (52.60%).

Appendix 3: Summary of the distribution of individual dimensions of development-orientedness of new faculty

Most of them consider selflessness as being the most important; economic development, the least; while all other dimensions are somewhere in between, as shown below:

Development-orientedness dimension	$\bar{x}$	Rank
		(Most important)
1) Selflessness	3.66	1
2) Equality	3.36	2
3) Change	3.31	3
4) Commitment to work	3.24	4
5) Participation	3.15	5
6) Concern for nation	3.06	6
7) Result orientation	2.98	7
8) Tolerance	2.81	8
9) Action propensity (risk-taking)	2.60	9
10) Economic development	2.11	10
		(least important)

Appendix 4: Summary of the distribution of ethics levels.
Most of them possess the highest on ethics levels (51.60%).

Appendix 5: Summary of the distribution of problems faced by new faculty in each individual dimension.

Most of them consider initiative problem as the most serious problem: leadership problem, the least; while all other dimensions of the said problems are somewhere in between, as shown below:

Problem dimensions	$\bar{x}$	Rank
		(Most serious)
1) Initiative problem	3.20	1
2) Training problem	3.17	2
3) Motivation problem	3.00	3
4) Control problem	2.89	4
5) Teamwork problem	2.73	5
6) Personnel selection problem	2.71	6
7) Structure problem	2.68	7
8) Succession problem	2.43	8
9) Organization goal problem	2.22	9
10) Reward problem	2.13	10
11) Leadership problem	1.78	11
		(least serious)

Appendix 6: Summary of the distribution of causes of problems faced by new faculty at the aggregate level.

Most of the new faculty perceive interpersonal relationships as the most serious causes of problem ($\bar{x}$ =2.99), followed by job itself ($\bar{x}$ =2.95), while self as the least serious($\bar{x}$ =2.50)

Appendix 7 : Summary of the Relationships between socioeconomic characteristics and each individual dimension of development-orientedness - - only the relationship between variables which is statistically significant at .05, the least or higher will be reported (*= at .05; **= at .01) :

	χ^2	df	tau c
1) Change by university affiliation:	18.57*	9	-
- Change by sex	12.96**	3	-
- Change by age	-	-	0.11*
2) Participation by age	-	-	0.13*
- Participation by father's occupation	32.88*	21	-
3) Tolerance by age	-	-	0.13*
-Tolerance by field of study	28.63**	9	-
4) Economic development by sex	9.36*	3	-
5) Action propensity by sex	9.94*	3	-

Appendix 8: Summary of the relationship between socioeconomic characteristics and aggregate/ macro development-orientedness.

Socioeconomic characteristics were not found to be related to aggregate/ macro development-orientedness.

Appendix 9: Summary of the relationship between socioeconomic characteristics and ethics level

	χ^2	df	tau c
- Ethics levels by sex	5.20*	1	-

Appendix 10: Summary of the relationship between socioeconomic characteristics and each individual problem faced by new faculty

		χ^2	df	tau c
(1)	- Personnel selection problems by age	-	-	0.13*
	- personnel selection problems by education	-	-	0.12*
(2)	- Motivation problem by father's occupation	30.86*	21	-
(3)	- Initiative problem by university affiliation	14.74*	9	-
	- Initiative problem by age	-	-	0.12*
	- Initiative problem by father's occupation	39.00*	21	
(4)	- Teamwork problem by field of study	23.30**	9	-
(5)	- Leadership problem by age	-	-	-0.15*
(6)	- Organization goal problem by father's occupation	31.27*	21	-
	- Organization goal problem by field of study	15.14*	9	-
(7)	- Reward problem by age	-	-	0.15*

Appendix 11: Summary of the relationship between socioeconomic characteristics and causes of problems faced by new faculty

	χ^2	df	tau c
1) Job by university affiliation	16.08*	9	-
2) Interpersonal relationship by age	-	-	-0.09*
3) Self by father's occupation	30.65	21	-

Appendix 12: Summary of the relationship between perceived personnel practices and each individual dimension of development-orientedness

		χ^2	df	tau c
(1)	-Change by quantity of work performed	-	-	-0.12*
	- Change by knowledgeability	-	-	-0.12*
	- Change by opportunity for training in Thailand	10.76*	3	-
(2)	-Participation by opportunity for training in Thailand	7.92*	3	-
(3)	-Tolerance by punishment	11.00*	6	-
(4)	-Economic development by quantity of work performed	-	-	-0.11*
(5)	-Concern for nation by knowledgeability	-	-	0.11*
(6)	-Selflessness by quantity of work performed	-	-	0.15**
	- Selflessness by quality of work performed	-	-	0.13**
	- Selflessness by knowledgeability	-	-	0.15**
	- Selflessness by overall factors for two-step salary increases	-	-	0.13*
(7)	-Result orientation by punishment	12.42	6	-

Appendix 13: Summary of the relationship between perceived personnel practices and aggregate dimensions of development-orientedness

	χ^2	df	tau c
- Aggregate dimensions of development-orientedness by an opportunity for two-step salary increases	6.08*	2	-

Appendix 14: Summary of the relationship between perceived personnel practices and ethics levels.

	χ^2	df	tau c
-Ethics levels by knowledgeability	-	-	0.20*

Appendix 15: Summary of the relationship between perceived personnel practices and each individual problem faced by new faculty.

	χ^2	df	tau c
1) -Personnel structure by punishment	12.84*	6	-
2) -Structure by quantity of work performed	-	-	- 0.16*
- Structure by quality of work performed	-	-	- 0.16*
- Structure by initiative	-	-	- 0.11*
- Structure by knowledgeability	-	-	- 0.12*
- Structure by overall factors for two-step salary increases	-	-	- 0.12*
-Structure by punishment	27.04*	6	-
3) -Motivation by quality of work performed	-	-	- 0.23**
- Motivation by Initiative	-	-	- 0.14*
- Motivation by knowledgeability	-	-	- 0.12*
- Motivation by overall factors for two-step salary increases	-	-	- 0.16*
- Motivation by punishment	20.01**	6	-
4) -Teamwork by opportunity for two-step salary increases	9.10*	3	-
- Teamwork by quantity of work performed	-	-	- 0.14*
- Teamwork by quality of work performed	-	-	- 0.24**
- Teamwork by initiative	-	-	- 0.17*
-Teamwork by knowledgeability	-	-	- 0.14*
- Teamwork by overall factors for two-step salary increases	-	-	- 0.19**
- Teamwork by punishment	16.78*	6	-
5) Leadership by opportunity for training in Thailand	10.59*	3	-
- Leadership by punishment	17.04**	6	-
6) -Succession by quantity of work performed	-		-0.12*
- Succession by quality of work performed	-		-0.18**
- Succession by initiative	-		-0.12*
- Succession by overall factors for two-step salary increases	-		-0.13*
- Succession by opportunity for training in Thailand	8.38*	3	-
- Succession by punishment	24.88**	6	-
7) -Organization goal problem by quality of work performed			-0.12*
-Organization goal problem by initiative			
-Organization goal problem by knowledgeability			- 0.11*
- Organization goal problem by opportunity for training in Thailand	8.49*	3	-
- Organization goal problem by punishment	25.28**	6	-
8) -Reward by quantity of work performed	-	-	-0.12*
- Reward by punishment	17.96**	6	-

Appendix 16: Summary of the relationship between perceived personnel practices and causes of overall problems faced by new faculty

	χ^2	df	tau c
1) - Job by quantity of work performed	-	-	0.09*
2) - Job by punishment	16.52*	6	-
3) - Interpersonal relationship by punishment	12.96*	6	-
4) - Self by overall factors used for two-step salary increases	-	-	0.14*
5) - Self by punishment	16.38*	6	-