

## *Presentation of a Model to Identify the Status quo of Faculty Members' Development based on Informal Learning*

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### **Abstract**

The present study mainly aims to propose a model to identify current status of development of faculty members in Payam-e-Noor University (PNU) based on informal learning. The methodology of current research is of composite-exploratory type that was conducted using successive technique in both qualitative and quantitative parts. The qualitative data were collected and selected by execution of semi-structured interview with 30 academic teachers using non-randomized purposive method and data were analyzed in three steps by means of open coding, axial and selective and then the model was formulated. The qualitative results showed that development of faculty members included three main categories: core effect, causal conditions, contextual conditions, intervention conditions, strategies and consequences either of which also comprised of subcategories. To confirm paradigmatic model, a standardized questionnaire was administered with statistical population including 1200 respondents and sample size of 369 subjects using relational stratified sampling techniques by academic teachers in PNU University. Data were analyzed by means of statistical methods (descriptive and inferential: Exploratory factor analysis, Kolmogorov-Smirnov Test and single-sample T-Test) and this was done by the aid of SPSS (v.25) for statistical analysis. The rate of fitness of model under existing and good conditions was examined and findings indicated that the current and favorable conditions were significantly distant from each other. According to this study status quo of development of faculty members is at relatively favorable level and needs to improvement in Hormozgan province PNU University.

**Key Words:** Identify the Status quo, Development of Faculty Members, Informal Learning.

### **Introduction**

There has been a rising and visible emphasis on academic growth and development of faculty members and related personnel by organizations and systems of higher education in various countries during recent decades. Thus, higher educational institutes have established several units under titles of centers for

development of faculty members to cover range of their activities from entire organization to ordinary programs and they could be used as valuable tools to improve quality of life of faculty members and to facilitate organizational change and transformation and enhance academic climate.

According to definition of POD

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Network<sup>2</sup> in higher education (2014), development of faculty members refers to the plans that are focused on faculty members as trainers (instructors) and experts for these programs provide for advising and guidance in some issues e.g. teaching, classroom management and professional research and activities for faculty members. Payam-e-Noor University (PNU) needs growth and development of academic teachers to achieve the related objectives. The evidences support this claim that the university has not addressed the subject of growth and development of their academic teachers as the most pivotal human capital for the university to acquire their goals and did not take a strategic perspective toward this issue. Alternately, the teachers also devote their individual plan to their own growth and development which has caused such development not to be aligned with academic goals because there may be various notions about subject of growth and development from viewpoints of each of academic teachers. Even if this trend is in line with the given objectives, it may cover few numbers of faculty members or it may proceed slowly. To explain this subject further, some evidences can be presented including absence of a comprehensive plan in the university concerning development of faculty members, sufficing to execution of rules of

Ministry of Sciences to promote faculty members, holding few educational courses for improving their knowledge since date of establishment of the university. Some efforts have been taken about development in the university during recent years; of course, looking at the results of these activities show that if academic authorities pay due attention to this subject, it will noticeably affect it to achieve their goals. To solve this problem, primarily, we need some definitions of development of academic teachers in PNU University and then we express effective factors and requirements for achieving development based on informal learning.

Faculty members' growth:

Growth is assumed as a prerequisite for development of faculty members and as a basic activity that is done by constant rethinking on educational practice and in light of various trends (Blyth & Meiring, 2017). Growth of faculty members occurs as a constant activity by preparation of conditions and prediction of certain mechanisms. The achievement of this activity, which covers growth and standardization of merits of faculty members, depends on active and self-motivated presence of teacher or professor more than anything else (Chalmers & Gardiner, 2015).

Learning

Learning is focused on ability resulting from experience. At the

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<sup>2</sup> - Professional and Organizational Development

same time, this ability that is created by experience should also be favorably stable and endure to call it learning. Accordingly, many experts have accepted the following field as definition for learning:

‘Learning denotes creating relatively stable changes in potential behavior of living organism, resulted from experience.’ (Karimi, 2010)

#### Informal learning

The informal learning is an intentional or unintentional normal process that may occur daily. Informal learning is less organized and structured and it may include all activities within domains of family and workplace and during lifetime of an individual. Informal learning includes self-directed learning, learning by doing tasks, learning by observation, comprehension, reading of book and talking to colleagues. In other words, daily conscious and unconscious processes for acquisition of competencies are called informal learning. Such learning is more random and it may not be identified by the learner (Alonderiene, 2010).

#### *Literature of researches*

In a study titled ‘Impact of short-term study abroad program: In-service teachers' development of intercultural competence and pedagogical beliefs’, Lundgren and Pynes (2017) found that sending academic teachers to other countries for education and research might significantly affect their cultural and educational

development. In a study done under title of ‘Expansive learning in teachers’ professional development: a case study of intercultural and bilingual preschools in Chile’, Becerra-Lubies and Vaghese (2017) showed that professional development methods might provide necessary mechanism for constant learning.

In their investigation under the title of ‘Teachers’ professional development through university–school partnerships’, Grau et al. (2017) found that academic involvement in educational and research subjects might influence in development of faculty members.

Marie-Louise et al. (2016) conducted a study titled ‘Communities of teaching practice in the workplace’ (Evaluation of faculty development program). This study was done to explore impact of faculty development program in educational workplace of instructors. The findings of this mentoring study indicated positive reflection and feedback. Participation in group discussions and cooperation were led to enhancement of organizational culture and awareness. These educational programs and policies caused more self-confidence in doing of tasks and improvement in performance of instructors. Depending on interest and enthusiasm existing in communities, this will results in some fluctuations in various communities, of course.

In his survey titled ‘Enhancing

informal learning to improve job satisfaction in workplace', Andries (2015) concluded that informal learning in workplace might be more important than formal learning for personnel to develop human resources. However, formal learning might be more focused and addressed.

Brian Lee et al. (2013) carried out a study under the title of 'Social media as an informal learning platform: Case study on adult learning at SIM University, Singapore'. They have referred to the public relations given by department of art and social sciences at this university (the only university for adult language learners in Singapore) after analysis on effect of using digital and social media as learning platform.

Jamil Abd et al. (2013) conducted a study titled 'Relationship between informal learning cultures in teachers, organization and students'. Spearman's correlation test showed in this study that there was no significant relationship among informal learning and culture with gender, age and working background in the organization. There was impression of learning culture in organization among high-level teachers and practices by teachers at organization.

Peter Hudson et al. (2012) carried out a survey under title of 'learning about being effective mentors: Professional learning communities and mentoring'. This study aimed to examine perception of experienced

mentors of professional learning communities, counseling and leadership. In this survey, 27 experienced mentors were analyzed in terms of playing various roles e.g. academic teachers, school principals, teachers and supporting personnel. The findings indicated that professional growth might vary in teachers under different situations and professional training of teacher might serve as an economical strategic leverage for professional knowledge progress.

In a study titled 'Informal Learning: Flexible Contexts and Diverse Dimensions', Lynn Butler (2012) found that informal learning could complete formal learning that might occur by interactions and during daily activities and it is especially important. Informal learning is done naturally or randomly similar to language learning in children and or based on curiosity and requirement. This learning may occur through interactions with family, cohorts, mentors, environment, and culture and in society and during activity.

Zeraatkar et al. (2015) carried out a study titled 'Design of informal learning model for directors of human resources in national great-size organizations using a narrative approach'. Their research findings showed that these directors have utilized 21 learning techniques to develop their competencies. Similarly, personality-behavioral and organizational-administrative characteristics have been

identified as effective factors in employing informal learning. Directors of human resources in this study acknowledged that informal learning have been followed with individual and organizational consequences and also some consequences for human resource unit.

Rezaian et al. (2014) have carried out a study titled 'Recognition of effective factors in development of faculty members at University of Imam Sadegh (PBUH)'. Descriptive survey of cross-sectional type was used as methodology in this study and data were collected by means of librarian data and analysis on documents and interview. Data analysis was also done using content analytical method. The findings of this study included foremost effective factors on development: individual and procedural factors, organizational management and relations and strategic human resources management. This investigation concluded that a major part of subjects regarding development of faculty members is concerned with human resources management (HRM) field and preparation of academic teachers before the processes of playing six roles i.e. training, educational, research, counseling, leadership and executive. Thus, we need to pay attention to all effective factors on development to obtain development results. Mohebzadegan et al. (2013) carried out a study under title of 'Formulation of a model for development of faculty members

by an approach based on fundamental data theory'. Data were collected using interviews by means of leading generalities and in semi-structured form. Both methods of revising participants and review of non-participant experts were employed for acquiring validity and reliability of data. Data were examined by content analysis method. Development of faculty members is the pivotal subject in the current study in which mediating strategies were codified and final model was proposed accordingly and analyzed in three individual, professional and educational dimensions and with respect to causal and contextual and intermediary conditions.

In a study titled 'Analysis and comparison of status of formal and informal learning and related sources among academic students (Case study: Imam Ali Military Officer University)', Najafi et al. (2012) indicated that variable of formal learning was related to learning of students at lowest level and methods of two variables of informal learning has the highest relation with learning in students. Likewise, resource methods of social- human interactions are related to learning of students at highest level.

Ejtehadi et al. (2011) carried out a study under title of 'Identifying of growth dimensions and elements of faculty members to present a conceptual model' and by expressing dimensions of development of faculty members in five educational, research,

organizational, individual and moral dimensions, they imply that current status is not favorable for development of faculty members in terms of aforementioned dimensions in Islamic Azad University.

### *Research Question and Hypothesis*

The present research aims to identify status quo of development of faculty members based on informal learning and to propose a model to achieve favorable condition. Accordingly, research questions as follows:

- 1- How is the current status of development of faculty members based on informal learning according to the suggested model?
- 2- What model can be presented to identify status quo of development of faculty members based on informal learning?
- 3- How much is the suggested model fitted according to attitude of faculty members?

### *Methodology*

This is one of the applied studies in terms of type of data and composite (qualitative and quantitative) and exploratory type. The sampling method is of non-randomized purposive type in qualitative part for which the selection criterion included fulltime faculty members with PhD degree and at least three years of teaching service at PNU University. In quantitative part, statistical population comprises of all academic teachers in PNU University branches existing in Hormozgan Province including

1200 teachers, who are working in 14 branches at this province and relational stratified sampling technique was used for this purpose and with respect to the product of Cochran's formula, 291 subjects were selected so that 400 questionnaire forms were distributed among respondents for more precision and prevention from approximation bias and 369 questionnaire forms were collected from teachers in Hormozgan Province PNU University after completion. Data collection tools were semi-structured interview and standardized questionnaire (71 items including 6 major categories and 12 minor categories base on Table No.2 till No.8). Test-retest reliability and subjective internal consistency techniques have been utilized in qualitative part. Using test-retest to measure reliability, six interviews were selected and each of which has been encoded by researcher within time interval (10 days). The rate of retest reliability was obtained 0.89 for the conducted interviews in this study and whereas this rate was greater than 0.60 thus it was acceptable. Similarly, in order to perform subjective internal consistency for two encoders, it was asked from a research colleague to recode interviews. After conducting the necessary tests regarding encoding techniques, six interviews have been re-coded by researchers and colleague encoder. The reliability among encoders was calculated 0.91 in this study. Given that the

value of this coefficient was derived higher than 0.80 therefore reliability of coding processes was approved so that it can be claimed the interviews were reliable.

In order to analyze internal structure of questionnaire and to discover constituent elements of any construct, the construct validity was carried out using Exploratory Factor Analysis (CFA). The Kaiser- Meyer-Olkin measure (KMO) Sampling adequacy test and Bartlett test were used for research constructs. The exploratory factor analysis has been utilized to measure rate of reliability of measurement tool in this study. The rate of adjustment was tested among theoretical and experiential constructs in this method. The result of KMO test (0.780) shown for data fitting signifies that there is potential for conducting factor analysis on research data. Furthermore, based on result of Bartlett test (10039.277), data correlation matrix is not an identity matrix. Namely, on the one hand items are highly correlated with each other inside any factor and on the other hand correlation rate among items of a factor with items of another factor is at low level.

**Table1- Results of KMO and Bartlett test**

Initially, 30 questionnaire forms were filled up to test reliability of the questionnaire and then they were examined and confirmed using Cronbach's alpha test and then the rest of

questionnaire forms were distributed. The value of Cronbach's coefficient is greater than 0.7 for each of research parameters that may show high internal reliability for the questions and thus internal correlation between variables to measure the given concepts. As a result, the current research possesses the necessary confidence or reliability. Statistical descriptive and inferential (exploratory factor analysis, Kolmogorov-Smirnov test and single-sample T-test) methods were used for analysis on quantitative data and this was done by the aid of statistical analytical software (SPSS v.25 and Excel). Open, axial and selective coding method was utilized for analysis on qualitative data

**Findings** The results of study in qualitative section:

The development phenomenon via informal learning includes a model which comprises of specific conditions; namely, they explain the group of events and accidents created by dependent situations and issues on this phenomenon and describe the quality and reason for answers given by respondents (faculty members) concerning those conditions. These conditions originate from social culture and environment and individual

	Value	D.f	P
KMO test	0.780	-	-
Bartlett test	10039.277	595	0.000

motives and characteristics of

each of faculty members as observed in Table 2 where each of

them is potential source for creation of these conditions.

**Table 2- Frequency of major and minor categories of core effect**

	Major categories	Minor category
Central phenomenon: Development via informal learning	Field of development of faculty members	Specialized- scientific
		Organizational- administrative
		Sociocultural
		Moral
		Educational
		Research
		Commercialization and income earning
		Servicing
		Individual
		Academic
Learning domain		Trans-academic

The causal conditions are a group of events and accidents that affects development phenomenon by informal learning. Among these conditions, one could refer to

individual, occupational and organizational factors that influence in the growth of faculty members based on implicit learning.

**Table 3- Frequency of major and minor categories of causal conditions**

	Major categories	Minor category
Causal conditions	Individual factors	Potential for creating mutual trust
		Diligence and persistence for learning
		Motive and eager for learning
		Communicative potential
		Challenging spirit
		Interest in specialized field
		Demographic characteristics (age, work background, scientific degree)
		Learning culture and constant improvement
	Occupational and organizational factors	Performance evaluation system
		Learning incentive and motivation system and bonus
		Enhancement and promotion policies
		Occupational features
		Job satisfaction
		Learning opportunities in the university
		Knowledge sharing culture



The intervention conditions originate from unexpected circumstances and conditions so that it is required for meeting of interaction with them. These

conditions denote factors beyond control of faculty members such as scientific level in students and academic policies and rules etc.

**Table 4- Frequency of categories of intervention conditions**

Intervention conditions	Categories
	Technological infrastructure (access to internet and information, scientific and specialized websites)
	Living status, salaries and bonus
	Scientific level in students and their expectation level
	Academic policies and rules

The contextual conditions show a certain group of conditions to create some circumstances and events to which the faculty members react to through their interaction with them. The contextual conditions show that why development phenomenon acts strongly for some of faculty

members while it is weak regarding other ones. The contextual conditions stem from causal and intervention conditions and combination of them with other factors is designated for development pattern by informal learning.

**Table 5- Frequency of categories of contextual conditions**

Contextual conditions social capital (trust and in	Categories
	Social capital (trust and involvement)
	Centralization and decentralization
	Support from directors
	Work size
	Flexibility of working program of teachers
	Physical space arrangement
	Access to reliable, various and updated sources
	Organizational relations
Support from colleagues	

Strategies indicate the way the conditions should be managed by faculty members when exposed to the problems. These strategic interactions are deliberative actions

done by faculty members to solve the problem and formed by occurrence of the given phenomenon.

**Table 6- Frequency of categories of strategies**

Strategies	Major categories	Minor category
		Talking to colleagues

	Interactive and collective methods	Communication between teachers with other domestic and foreign universities
		Membership in various specialized workgroups
		Creation of model from others
		Discussion and dialogue with others
		Consultation with elites and various experts
		Membership in domestic and foreign professional and expert associations
		Participation in scientific, pilgrimage and recreational campuses
		Learning from non-educational environments: Museums, galleries, scientific centers, parks and recreational spaces etc.
	Comprehensive and independent methods	Participation in domestic and foreign conferences and seminars
		Reading books
		Comprehension and delving into their own measures and activities and given results
		Observation of others
	Cooperative and assistance methods	Reading of scientific specialized and professional journals and periodicals
		Doing of challenging tasks
		Cooperation and partnership with others
		Exchange and sharing of curricular sources and contents with others
Technological-base methods	Presentation of expert and professional counseling to the society	
	Working with students and solving their problems	
	Searching in professional internet websites	
		Use of virtual social networks
		Using mass media e.g. TV and newspapers

The consequences for or to maintain a situation done by commission or omission of a certain activity in responding to a problem faculty members have created these outcomes.

**Table 7- Frequency of categories of consequences**

Major categories	Minor category
Consequences	Enhancement of individual and professional merits
	Improving lifetime learning in academic teachers
	Improvement of quality of life for faculty members
	Higher self-efficacy of academic teachers in doing of tasks
	Learning culture and constant improvement

	Organizational	Formation of professional earning communities
		Improvement of quality and effectiveness of education
		Facilitation for organizational changes and transformations
		Rising social trust in university
		Upgrading quality of knowledge in learners
		Creating love and interest in learning in students

*Research results in quantitative section*

1- How is the current status of development of faculty members based on informal learning according to the suggested model? The results of test showed that most of items have mean scores lesser than 3. Only 28 items include

means score greater than or equal to 3, out of which the highest value belongs to research category of development of central phenomenon i.e. 3.62 and the mean score of the rest 43 items varies from 2.02 to 3.

**Table 8- Status quo- favorable status**

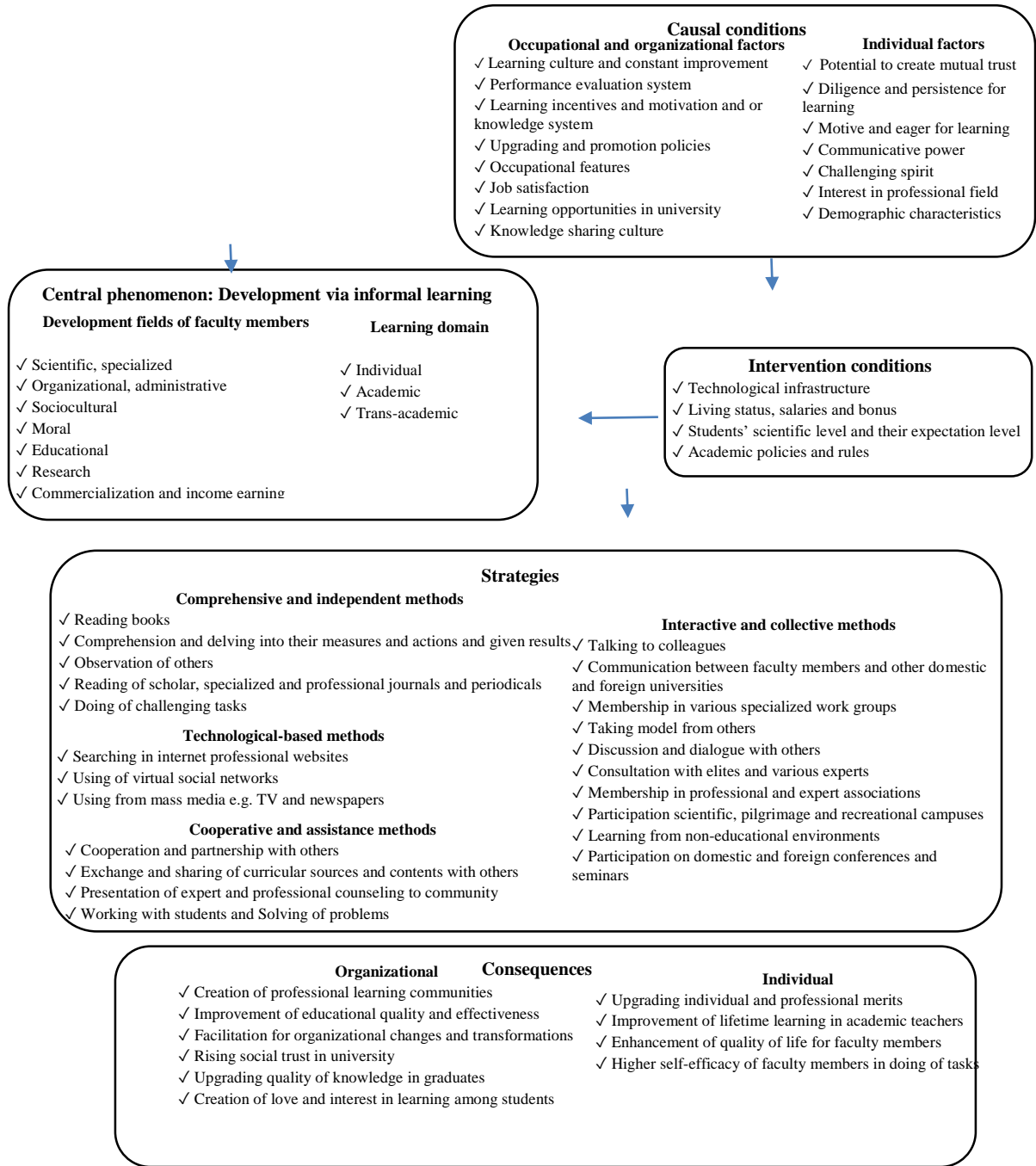
Major category	Mean	Status quo	Item (status quo)		
	Good condition		Number of subcategory	Mean <3	Mean >3
Central phenomenon	4.01	3.11	11	5	6
Causal conditions	4.02	2.86	15	9	6
Contextual conditions	3.99	2.48	9	9	0
Intervention conditions	4.02	2.51	4	4	0
Strategies	3.99	2.97	22	10	12
Consequences	3.99	3.02	10	6	4
Sum of findings	4.01	2.83	71	43	28

2- What model can be presented to identify status quo of development of faculty members based on informal learning? The final conceptual model was formulated with respect to conditions of national higher educational system after discussion over the existing theoretical bases and interview with faculty members in Hormozgan Province PNU [Biannual Journal of Education Experience](#)

University. The fitting parameters were examined in three categories (absolute, comparative and intermediary) in which significance conditions were satisfied for factor loadings and a model was designed for development of faculty members based on informal learning. The goodness of fit was examined by using the following criteria: [Journal of Education and Spring](#)

- Contextual conditions**
- ✓ Trust and participation as social capital
  - ✓ Centralization and decentralization
  - ✓ Support from directors
  - ✓ Work size
  - ✓ Flexibility of working plan by academic teachers
  - ✓ Physical space arrangement
  - ✓ Access to reliable, various and updated sources
  - ✓ Organizational communications
  - ✓ Support from colleagues

model was extracted as follows:



**Research conceptual model**

3- How much is the suggested model fitted according to attitude of faculty members?

The results of test indicated that the items were typically with mean scores about 4 and greater and this showed acceptability of the model.

Data were distributed normally in Kolmogorov-Smirnov test. According to the following table in single-sample T-test, the significance value (P-value) of test is smaller than 0.05 for the studied items. Therefore, it can be implied

that there is significant difference of 3 at confidence level (95%) and since there is also positive difference among all variables thus it can be accepted that all tested items are fitted. With respect to

value of total mean it can be expressed that fitness value of the model is 4.0086 and this model is adequately fitted according to attitude of faculty members.

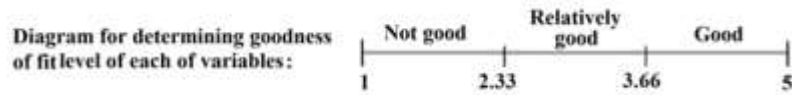
**Table 9- Single-sample T-test for all items of the model**

Items	Quantity	Mean	Standard deviation	Mean standard deviation
Total	369	4.0086	0.10791	0.00562
Items	T-statistic	Degree of freedom	of Significance level	Mean difference
Total	179.553	368	0.000	1.00861

**Discussion and conclusion**

The research findings done by some researchers may show that stable effectiveness of universities and higher educational institutes is subject to development of faculty

members (Ferasatkhah, 2010). The goodness of fit spectrum was used to judge on goodness level of the calculated mean as follows (Bazargan et al. 2008).



Given research findings and according to spectrum at above, rate of goodness of fit for development of faculty members based on

informal learning in Hormozgan Province PNU Universities under existing conditions is as shown in Table 10.

**Table 10- Rate of goodness of fit for variables of development of faculty members in status quo**

Row	Domain	Items	Status quo	
			Mean	Goodness
1	Development fields	Scientific- specialized	3.46	Relatively good

2	Development fields	Organizational- administrative	2.56	Relatively good
3	Development fields	Sociocultural	2.57	Relatively good
4	Development fields	Moral	3.53	Relatively good
5	Development fields	Educational	3.58	Relatively good
6	Development fields	Research	3.62	Relatively good
7	Development fields	Commercialization and income-earning	2.02	Not good
8	Development fields	Servicing	2.96	Relatively good
9	Learning domain	Individual	3.51	Relatively good
10	Learning domain	Academic	2.95	Relatively good
11	Learning domain	Trans-academic	3.49	Relatively good
12	Causal-individual conditions	Potential to create mutual trust	3.49	Relatively good
13	Causal-individual conditions	Diligence and persistence for learning	3.5	Relatively good
14	Causal-individual conditions	Motive and eager for learning	3.52	Relatively good
15	Causal-individual conditions	Communication potential	3.02	Relatively good
16	Causal-individual conditions	Challenging spirit	3.16	Relatively good
17	Causal-individual conditions	Interest in specialized field	3.55	Relatively good
18	Causal-individual conditions	Demographic features (age, work background, scientific degree)	2.56	Relatively good
19	Causal-organizational conditions	Learning culture and constant improvement	2.52	Relatively good
20	Causal-organizational conditions	Performance evaluation system	2.55	Relatively good
21	Causal-organizational conditions	Learning incentives and motivation system and bonus	2.52	Relatively good
22	Causal-organizational conditions	Promotion and upgrading policies	2.57	Relatively good
23	Causal-organizational conditions	Occupational features	2.42	Relatively good

24	Causal-organizational conditions	Job satisfaction	2.51	Relatively good
25	Causal-organizational conditions	Learning opportunities in university	2.51	Relatively good
26	Causal-organizational conditions	Knowledge sharing culture	2.47	Relatively good
27	Intervening	Technological infrastructure (access to internet and information, scientific and specialized websites)	2.49	Relatively good
28	Intervening	Living status, salaries and bonus	2.49	Relatively good
29	Intervening	Scholar level of students and their expectation level	2.52	Relatively good
30	Intervening	Academic policies and rules	2.52	Relatively good
31	Contextual	Social capital (trust and involvement)	2.57	Relatively good
32	Contextual	Centralization and decentralization	2.46	Relatively good
33	Contextual	Support from directors	2.4	Relatively good
34	Contextual	Work size	2.57	Relatively good
35	Contextual	Flexibility of working program of academic teachers	2.47	Relatively good
36	Contextual	Physical space arrangement	2.5	Relatively good
37	Contextual	Access to reliable, various and updated sources	2.42	Relatively good
38	Contextual	Organizational relations	2.44	Relatively good
39	Contextual	Support from colleagues	2.48	Relatively good
40	Strategies	Talking to colleagues	2.86	Relatively good
41	Strategies	Communication between teachers and other domestic and foreign universities	3.01	Relatively good
42	Strategies	Membership in various expert workgroups	3	Relatively good
43	Strategies	Taking model from others	2.89	Relatively good
44	Strategies	Discussion and dialogue with others	3.03	Relatively good
45	Strategies	Consultation with elites and various experts	2.96	Relatively good

46	Strategies	Membership in domestic and foreign professional and expert associations	2.98	Relatively good
47	Strategies	Participation in scientific, pilgrimage and recreational campuses	2.98	Relatively good
48	Strategies	Learning from non-educational environments: Museums, galleries, scientific centers, parks and recreational spaces	3.02	Relatively good
49	Strategies	Participation in domestic and foreign conferences and seminars	3.1	Relatively good
50	Strategies	Reading books	3.01	Relatively good
51	Strategies	Comprehension and delving into their own measures and activities and the given results	3.03	Relatively good
52	Strategies	Observation of others	2.98	Relatively good
53	Strategies	Reading of scientific, specialized and professional journals and periodicals	3.02	Relatively good
54	Strategies	Doing of challenging tasks	3	Relatively good
55	Strategies	Cooperation and partnership with others	2.98	Relatively good
56	Strategies	Exchange and sharing of curricular sources and contents with colleagues	3.09	Relatively good
57	Strategies	Presentation of expert and professional counseling to the society	2.92	Relatively good
58	Strategies	Working with students and solving their problems	3.07	Relatively good
59	Strategies	Searching in expert internet websites	2.95	Relatively good
60	Strategies	Use of virtual social networks	2.99	Relatively good
61	Strategies	Using mass media e.g. TV and newspapers	2.97	Relatively good
62	Consequences	Enhancing individual and professional competencies	3.03	Relatively good
63	Consequences	Improvement of lifetime learning of faculty members	2.94	Relatively good
64	Consequences	Enhancement of quality of life for faculty members	3.21	Relatively good
65	Consequences	Higher self-efficacy of academic teachers in doing of tasks	2.98	Relatively good
66	Consequences	Formation of professional learning communities	2.92	Relatively good
67	Consequences	Improving quality and effectiveness of education	2.98	Relatively good
68	Consequences	Facilitation for organizational change and transformations	3.01	Relatively good



69	Consequences	Upgrading quality of knowledge for graduates	2.98	Relatively good
70	Consequences	Rising social trusts in university	3.06	Relatively good
71	Consequences	Creating love and interest in learning in students	2.89	Relatively good

With respect to data in Table-10, it is characterized that goodness of fit for development of faculty members by informal learning in Hormozgan Province PNU Universities is not under appropriate conditions and all variables of development, except one case, are relatively good. Variables of commercialization and income-earning, which have been discussed in this study for the first time, are placed lower than all variables and with Likert mean (2.02) in non-good spectrum. This means that due to paying inadequate attention and dealing with variables of commercialization and income-earning, these variables have been yet ignored and they are assumed as the lowest variables for development of faculty members under current conditions. The existing conditions in this field is highly far from good conditions compared to other sections so that it is duly to pay more attention to this subject by directors and decision-makers at PNU University so that to result in development of faculty members informally.

Meanwhile, variable of research field of development was evaluated as the best variable under current conditions with Likert value (3.62) and it was also ranked at favorably good level. Total mean of Likert number is 2.89 relating all 71 parameters under current conditions and this value highly differs from

good conditions. These findings indicate that there is a significant distance between good condition and status quo. As a result, some modern programs should be formulated for development of faculty members by policymakers in PNU University so that to realize upgrading of knowledge in learners for whom the given impact will be certainly evident in national growth and prosperity. The noticeable point is that the rating of dealing with each of development dimensions may vary based on type of needs for individuals as well as in different universities.

Furthermore, difference of requirements for development among faculty members is tangible in various universities, as an academic human not an organizational (employed) human where with respect to facilities and capacities of any university and their faculty members and also various temporal and spatial conditions they can differ from each other and it will be futile to consider identical development needs, procedure-writing and inflexible regulations regarding development of faculty members based on informal learning for various universities and this may probably be lead to removing motive and creating despair among faculty members to development. Hence, localization of the model in various universities is crucially important. The subject

of development has not been duly addressed in the field of commercialization and income-earning in the previous studies. Income-earning and commercialization in PNU University may need to preparation of necessary platform and technology and it is obvious by rising income, the improvement will be tangible in all academic infrastructures and cornerstones. It is highly important to produce technology inside the country under current conditions e.g. oppressive international sanctions and for localization of production process and support from domestic production given that domestic production of technology starts from conducting study and income-earning takes place by commercialization of technology so we will witness national growth and prosperity in various industries. It is beneficial to support development of faculty members by using informal learning in order to support applied studies and to develop the PNU University and to realize commercialization goals.

#### Suggestions

- 1- It is suggested for a development program of faculty members to identify requirements and priorities of development of faculty members in the university by a need analytical program.
- 2- It is recommended to faculty members to allocate some part of their working day to (general and specialized) study and use of computer.
- 3- All developmental programs of faculty members require for paying attention and supporting from

academic directors and chancellors through holding joint sessions with the related departments and groups.

4- To increase learning by interactions, it is suggested to educational planners to prepare conditions by which the students could communicate more within framework of question and answer sessions, workshops and sessions for exchange of thoughts etc. with related experts and specialists.

5- Visiting processes, products and services presented in related public exhibitions, conferences and seminars on this field by academic teachers can improve learning level in them.

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