

Considering Everyday Work Problematic Issues to Recuperate Managers' Competency: A Diagnostic- Recovery Approach

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ABSTRACT: This research addresses managers' competence/incompetence concerning the everyday problematic issues and/or situations. An overview has been made to the theory in relation to the concept of competency. As a consequence a two-side conceptual framework was constituted to show both the characteristic-based and the performance-based streams of competency concept. This was utilized for establishing a theo-hypothetical model. The focus was to find out to what extent there is a relationship between on the one hand, the incompetence of managers in dealing with problematic issues; those are problems, complexities and crises, on the other hand the failure of these managers to diagnose such issues, to select the most fitting method in dealing with them, and to apply properly the selected methods. This relationship has initially been expressed through three main null hypotheses; each contains three sub-hypotheses. Dependent variable was collectively expressed by the former ones or incompetence concerning the different problematic issues while independent variables were separately expressed by the latter ones or the three claimed aspects of manager's failure. A measure was particularly established for the purpose of this research in the form of questionnaire. It was empirically administered to collect data from a stratified random sample of 172 respondents who are proportionally representing the Menoufia University academic and administrative managers. Processing the collected primary data for statistically testing the hypotheses, it was found out that the failure of managers concerning the diagnosis of issues, the selection of fitting method, and the proper application of methods are explanatory factors of their incompetence in dealing with problematic issues. Accordingly the null hypotheses were refused to accept alternatively the inverse ones, those proving the existence of significantly denoted relationship between the dependent variable and those independent ones. The main justification to this result was the unaware of Menoufia University general administrative managers or GAMs concerning the three explanatory variables. That's why recommendations were hub-revolving around their need for awareness in such fields.

Key Words: Competence; Incompetence; Problematic; Issues/situations; Problems; Complexities; Crises; GAMs; Characteristic-based; Performance-based; Theo-hypothetical; Model; Diagnosing; Selecting; Applying; solving; treating; facing; Unawareness; Awareness.

الملخص

INTRODUCTION:

Reviewing analytically the reality of the Egyptian governmental universities, this research tackles one of the most important issues that used to be faced by the general administrative managers. It concerns with showing the incompetence of GAMs - who are distributed on twenty two faculties and institutes contained by Menoufia University - concerning the everyday problematic issues.

Within this context the types, natures, and characteristics to consider for diagnosing these issues, the method that should be used in particular when dealing with the certain type, and the way that has to be followed for properly applying the selected method, were three substantial aspects to cover. Accordingly this research has mainly involved in highlighting to what extent the mistakes that may be made by the GAMs concerning these three axes, could be considered as explanatory variables beyond their incompetence in dealing with the problematic situations.

Owing to the theoretically conditional interdependence, that's commonsensible, among the issue diagnosis, the treating method, and the way of application, these aspects have equally been considered. As a consequence, the research hypotheses, conceptual framework, model, and field study have to be oriented not only by the total concentration on these

three axes but also by considering the room given to each. The focus was to examine in detail whether Menoufia university GAMs incompetence regarding such problematic issues, could actually return to their failure to diagnose these issues, to select the right method for dealing with the certain issue, to apply properly the selected right method, or even to do satisfactorily all these phases.

Research problem:

- **Problem in theory.**

Herein, the interest was to justify the research problem, so as to show that there is - somehow - a vacant gap in theory, in sense that, the topic within its context the problem of interest is tackled has not been covered before, by any of the preceding studies. For clearly highlighting that, a literature review was conducted in order to demonstrate, in terms of a definition-to-model focused perspective, the more relevant previous studies.

- **Definitions and concepts to competency:**

Rumelt (1994) has summarized a broad research stream based upon new concept or notions of competency as organizational learning. Chiesa and Manzini (1997) were much involved in identifying the organization competency by developing new strategies for creating value in markets. Mosakowski and McKelvey (1997) thought out the horizon over which the competency should be applied, they believed that competence/incompetence is a matter of specifying time. Sanchez (1997) has gone to the knowledge as a base on which competency could be grounded, he pointed out that competency is a matter of using know-how and why to get and apply know-what. Baden-Fuller and Volberda (1997) have found - somehow - logic in linking competency attainment with the approach or the complex or simple way in dealing with the work situations. Rispoli (1996) has given more interest to the competency zone of applicability; he argued that some competency aspects are field conditional. Durant and Stein (1997) focused on assets existence; they claim that competency attained by the use of owned resources or others resources.

Winterscheid, et al. (1996) stated that in some competitive situations, competency may appear to be contingent for creating a market value. Within

the same context of competitive strategy, Black and Boal (1997) have tackled competency in terms of efficiency. In their view competency may also result from a combination between company static and dynamic efficiencies. Cavaleri and Fearon, (2000) have proposed an important approach to concept through getting more and more critical in today's turbulent business environment. Although Lombardo and Eichinger (2001) nearly a decade before Spencer and Spencer (1993) have broadened competencies by conceiving them as measurable characteristics of person that are related to success at work or as criteria important to specific, Boyatzis (2006) pointed out that competency is matter of leadership. He stated that a focus of some researchers and many organizations has been to identify and define competencies required of individuals who lead others at various levels of organization. Nyhan, (1998) has considered competency as one of the most critical factors ensuring company's competitiveness. Hamel and Prahalad (1994) defined competence as a bundle of skills and technologies that enables organization to provide benefits for customers rather than single skill or technology. Therefore, competence in their view is to provide a source of competitive advantage.

- **Models explaining competency:**

Spencer and Spencer (1993) established what may be referred to as five characteristics competency model, knowledge and skill as two surface competencies which are able to be developmental and assessable, through training and experience and, three core personality characteristics those are considered as difficult to assess and develop motives, traits, and self-concept. McClelland and McBer as reported by Boyatzis (1982) have had an attribute-based model of competency. However, their followers tend to define competency later on as underlying characteristic of an individual that's causally related to performance reference criterion. In his model as well Sanchez. (2004) has suggested five modes of competency. These were the flexibility to imagine alternative strategic logics, the flexibility to imagine alternative management processes, the flexibility to identify, configure, and deploy resources, the flexibility to resource employing alternative chains or ways, and the flexibility in applying skills and capabilities to available resources. Crawford (2001) developed his competency model - to include seven competence areas; knowledge management, interest groups, technology, processes and procedures,

leadership, project management, and communications and interactions. Suikki, et al. (2006), have taken the same point of reference. They presented a four-side framework of project management competence development. That's derived due to business environment and the need for getting informed concerning it.

In other portion of relevant literature Seng (1994), white et al. (1996), Goldberger (1999) supported by Ivergard, (2000), Sydanmaanlakka (2003), Laughton and Otteweil (2003) have stressed the management and leadership role in ensuring the organization competence development. They recommend most highly learning new ways in doing things, teamwork, communications, focus, and self-management as approaches to be used by organizations for meeting various challenges of their environment. Nordhaug (1991) supported in the same direction by Westera (2001) has given two perspective-model to competence, one is theoretical that conceived competence as cognitive structure which facilitates specified behaviour, and the other is operational which covers the skills and behaviours that represent ability to cope with complex and unpredictable situations. This includes knowledge, skills, attitudes, meta-cognition, strategic thinking, presupposes conscious, and intentional decision-making. These competences are learnt by induction and work experience, they grow from individual factors, organizational culture, and professional and task-specific skills.

PMI (2000) based upon other authors like McConnell (1998), Lienz and Rea (1999) and Meredith and Mental (2000), and Forsberg et al. (2000) organizes project management competences into nine basic knowledge areas; integration, scope, time, cost, quality, human resource, communications, risk, and procurement management. It should be noted that identification to all these areas is based upon the very detailed original functions of management. Briscoe and Hall (1999) have mentioned that organizations use various methods when creating their competency models. They may use research based, strategy based or even value based approaches. Commonly a mix of these approached is used that include traits expected of leaders, values wanted by organization, and technical or functional skills of the work area. Collin, A. (1989) has interested in considering competency according to two streams of initiatives, one was the most prevalent in United States, that's focused on attribute-based competency approach and the other was commonly adopted in United Kingdom, that's performance-based approach.

- **Argumentative views of competency:**

Pointing to managers' competency Skinner and Spurgeon (2005) have agreed with Goleman (2000) that, while models have been developed, processes have been specified, competency lists have been created, there is no a universal agreement as to what really the facets of successful managers. In other words what are the differentiators of managers outperforming others? Grzeda (2005) have stressed this orientation stating that unresolved conceptual ambiguities about managerial competency are left over there. Similar to the debate around the competency concept and the importance of establishing its models, there have been controversial views between to streams of authors concerning the linkage between competency and performance.

Some researchers have not considered any relationship between both Cavallo and Brienza (2004) and Dreyfus (2008) were suspicious whether there is a relationship or not and which one of the two variables will be the independent. They reversely tend to consider that competency may result from perfect levels of performance. Oppositely, Draganidis and Mentzas (2006) have operated on the assumption that there is a linkage between the defined competencies and performance. Carmeli and Josman (2006), Cote and Miners (2006), Dulewicz and Young (2005), and Hawkins, et al. (2007) were amongst those who have published studies that obviously highlighted competency-performance linkage. Boyatzis (2008), Dreyfus (2008), as well as Hopkins and Bilimoria (2008) have argued that there still debate about the real value of defining and creating competency models.

There were some other studies that have addressed the relationship between the competency models and individual performance like Bar-On, Handy and Fund (2006), Ciarrochi (2005), and Dulewicz (2007). Furthermore, Young and Dulewicz (2008) have presented a reasonably persuasive suggestion that competency should predict effective and/or superior performance. Authors such as Grzeda (2005), Gangani, et al. (2006), Catano, Darr, and Campbell (2007), Gentry and Leslie (2007), and Baker, et al. (2008) have had another kind of discussion concerning competency. Those were involved, as well, whether organizations have to establish just an overall competency model for all the managers and employees, or they should distinctly have specific competency model for every certain function or level in the organization. This issue was referred to by Grzeda (2005) as organic versus generic view of competency model.

Their research effort has concluded that both the approaches have successfully been applied by different organizations.

- **Research perspective to competency:**

Making - somehow - a vertical-horizontal analysis to all the previously mentioned core perspectives, those are theoretically and practically tackled competency, it could be stated that; on the one hand, there is no fixed concept or aspects of competency; it is a subject to approach differently according to the field of scholars and/or practitioners varied interests. On the other hand, it could be generally induced that the perception of competency is built on considering its concept either based upon attributes to be found in someone or something to be competent, or criteria to be met or achieved by someone or something in performing certain or common work to be considered as competent in this kind of work. There is proportionally a little magnitude of the work exerted for linking both orientations. In other words to make the concept based upon existing the attributes in some one or something that automatically meet the required criteria of performing whatever work. This research is actually adopting the latter collective orientation. Moreover, the foggy and relatively ambiguous perception to competency makes its concept flexibly extended and widened to encompass too many orientations. This is to large extent is logically acceptable as long as we consider the difference between competence and incompetence is most likely measurable by the difference between the satisfied and dissatisfied performance of individual, teamwork, group, business unit, functional unit, management level or even the whole organization to whatever the job, task, function, partial work, or even total work.

Besides, the common questioning argument in theory concerning the organizations use of either organic or generic models of competency is reasonably answerable. Given that organizations have two main kinds of work, which are managerial and technical, accordingly they have to have two different models of competency because of the big difference in the nature between both kinds of work. Even though, when applying either managerial or technical model of competency, organizations should consider some generic as well as some organic factors in the model. So as to meet homogeneous and heterogeneous aspects or relatively static and dynamic dimensions that inevitably found between individuals, who are practicing work of the same nature. Organizations which have a relatively

little room between managerial and technical work, due to the big number of double-work performing individuals or the big integration area compelled - by nature of activity or field - between both kinds of work, whether preferring one model of competency they should consider the same base of generic and organic factors in establishing such an overall model.

To sum up, considering the above explored views and the discussion that has been presented as a related comment, it could be said that the research subject is revolving within the whole written framework provided by the relevant literature. However, it still different from the distinct single written works, those are previously conducted by researchers in such an area. This is theoretically justifying the tackling of research problem subject. That's will be better clarified as well when establishing later on the research model.

- **Problem in reality.**

In this part, the objective is to justify the research problem by showing that it is true rooted in reality. An exploratory study that is mainly based upon structured interviews has been conducted. In addition to the participant observations that are by and large utilized by the researcher who is working in Menoufia University as a full-time academic staff 25 years ago, about, 45 structured interviews were personally carried out with 22 academic and 23 administrative staff in order, as individuals of research population. Interviews main question and included sub-questions have exactly been based upon the same variables and sub-variables included later on by the first question in the research questionnaire. That's developed to examine the existence of the research problem or the dependent variable of hypotheses. The reason is to be able to utilize the data collected from respondents to this part of questionnaire to verify in large, once again, the research problem existence in reality. The interview main question directed to the targeted two groups of interviewees was, to what extent you consider that general administrative manager in your faculty is sufficiently capable to use the universal givens of work situations, those are allowed through their characteristics as individuals, their functions as managers, their organization keystone factors, and their organization environment, to deal successfully with different everyday work problematic issues, such as problems, complexities, and crises ?

Table (1) Results of exploratory study

| | |
|--|----------------------------------|
| Aspects to be used by GAMs in dealing with everyday problematic issues | Measure levels and cells weights |
|--|----------------------------------|

| | | Agree 1 | | Neutral 2 | | Disagree 3 | | H. W. A. | HV W. A. |
|---|--------------|------------|------|--------------|------|---------------|------|----------------|----------------|
| | | F | % | F | % | F | % | | |
| Using individual aspects: | | | | | | | | | |
| skills | Problems | 5 | 0.11 | 2 | 0.04 | 38 | 0.85 | 2.7 | 2.8 |
| | Complexities | 3 | 0.07 | 5 | 0.11 | 37 | 0.82 | 2.8 | |
| | crises | 1 | 0.02 | 4 | 0.09 | 40 | 0.89 | 2.9 | |
| capabilities | Problems | 1 | 0.02 | 3 | 0.07 | 41 | 0.91 | 2.9 | 2.9 |
| | Complexities | 1 | 0.02 | 2 | 0.04 | 42 | 0.94 | 2.9 | |
| | crises | 2 | 0.04 | 4 | 0.09 | 39 | 0.87 | 2.8 | |
| knowledge | Problems | 2 | 0.04 | 3 | 0.07 | 40 | 0.89 | 2.9 | 2.8 |
| | Complexities | 3 | 0.07 | 5 | 0.11 | 37 | 0.82 | 2.8 | |
| | crises | 2 | 0.04 | 7 | 0.16 | 36 | 0.80 | 2.8 | |
| experience | Problems | 0 | 0.00 | 7 | 0.16 | 38 | 0.85 | 2.8 | 2.8 |
| | Complexities | 1 | 0.02 | 5 | 0.11 | 39 | 0.87 | 2.8 | |
| | crises | 2 | 0.04 | 3 | 0.07 | 40 | 0.89 | 2.8 | |
| Using management functions: | | | | | | | | | |
| planning | Problems | 1 | 0.02 | 2 | 0.04 | 42 | 0.94 | 2.9 | 2.9 |
| | Complexities | 0 | 0.00 | 5 | 0.11 | 40 | 0.89 | 2.9 | |
| | crises | 2 | 0.04 | 7 | 0.16 | 36 | 0.80 | 2.8 | |
| organizing | Problems | 1 | 0.02 | 6 | 0.13 | 38 | 0.85 | 2.8 | 2.8 |
| | Complexities | 3 | 0.07 | 3 | 0.07 | 39 | 0.87 | 2.8 | |
| | crises | 3 | 0.07 | 3 | 0.07 | 39 | 0.87 | 2.8 | |
| directing | Problems | 3 | 0.07 | 6 | 0.13 | 36 | 0.80 | 2.7 | 2.8 |
| | Complexities | 1 | 0.02 | 7 | 0.16 | 37 | 0.82 | 2.8 | |
| | crises | 1 | 0.02 | 5 | 0.11 | 39 | 0.87 | 2.8 | |
| controlling | Problems | 0 | 0.00 | 5 | 0.11 | 40 | 0.89 | 2.9 | 2.9 |
| | Complexities | 2 | 0.04 | 3 | 0.07 | 40 | 0.89 | 2.8 | |
| | crises | 1 | 0.02 | 3 | 0.07 | 41 | 0.91 | 2.9 | |
| Using organizational aspects : | | | | | | | | | |
| Human resources | Problems | 3 | 0.07 | 5 | 0.11 | 37 | 0.82 | 2.8 | 2.8 |
| | Complexities | 0 | 0.00 | 6 | 0.13 | 39 | 0.87 | 2.9 | |
| | crises | 2 | 0.04 | 5 | 0.11 | 38 | 0.85 | 2.8 | |
| Non-human resources | Problems | 2 | 0.04 | 2 | 0.04 | 41 | 0.91 | 2.9 | 2.9 |
| | Complexities | 1 | 0.02 | 3 | 0.07 | 41 | 0.91 | 2.9 | |
| | crises | 0 | 0.00 | 3 | 0.07 | 42 | 0.94 | 2.9 | |
| Managers' power | Problems | 2 | 0.04 | 4 | 0.09 | 39 | 0.87 | 2.8 | 2.8 |
| | Complexities | 1 | 0.02 | 5 | 0.11 | 39 | 0.87 | 2.8 | |
| | crises | 1 | 0.02 | 2 | 0.04 | 42 | 0.94 | 2.9 | |
| Organizational climate | Problems | 1 | 0.02 | 4 | 0.09 | 40 | 0.89 | 2.9 | 2.9 |
| | Complexities | 0 | 0.00 | 4 | 0.09 | 41 | 0.91 | 2.9 | |
| | crises | 2 | 0.04 | 4 | 0.09 | 38 | 0.85 | 2.8 | |
| Using environmental aspects: | | | | | | | | | |
| Internal environment. | Problems | 2 | 0.04 | 2 | 0.04 | 41 | 0.91 | 2.9 | 2.8 |
| | Complexities | 2 | 0.04 | 3 | 0.07 | 40 | 0.89 | 2.8 | |
| | crises | 2 | 0.04 | 6 | 0.13 | 37 | 0.82 | 2.8 | |
| Direct external environment . | Problems | 3 | 0.07 | 6 | 0.13 | 36 | 0.80 | 2.7 | 2.8 |
| | Complexities | 1 | 0.02 | 6 | 0.13 | 38 | 0.85 | 2.8 | |
| | crises | 1 | 0.02 | 4 | 0.09 | 40 | 0.89 | 2.9 | |
| Indirect external environment. | Problems | 2 | 0.04 | 4 | 0.09 | 39 | 0.87 | 2.8 | 2.8 |
| | Complexities | 1 | 0.02 | 5 | 0.11 | 39 | 0.87 | 2.8 | |
| | crises | 3 | 0.07 | 4 | 0.09 | 38 | 0.85 | 2.8 | |
| Global environment. | Problems | 4 | 0.09 | 4 | 0.09 | 37 | 0.82 | 2.7 | 2.7 |
| | Complexities | 4 | 0.09 | 5 | 0.11 | 36 | 0.80 | 2.7 | |
| | crises | 0 | 0.00 | 6 | 0.13 | 39 | 0.87 | 2.9 | |
| HWA: Horizontal weighted average. AVWA: Horizontal-vertical weighted average. | | | | | | | | | |

Source: Based upon the primary data collected by exploratory study

However, the answer was shown in detail by the Table (1), as results have indicated that at minimum (36) individuals or (80%) of interviewees have gone with initial consideration of research problem, while at maximum (9)

individuals or (20%) interviewees were oppositely distributed between the ones who disagree with research problem initial consideration and others who take a neutral position concerning it. At the same schedule, previous results have been supported by the weighted average of answers, concerning every single sub-variable at the level of every single one of the three problematic issues, and also concerning every single variable at the level of the collective three problematic issues, it was at minimum (2.7) in every case in order. In a short statement the research problem it could be expressed in the say that “university general administrative managers (GAMs) are incompetent in dealing with the everyday work problematic issues and/or situations”.

Research objectives:

- Highlighting the aspects of managers' competence/incompetence concerning the different problematic issues faced by their organizations.
- Specifying the reasons to consider beyond the managers incompetence in dealing with these issues and situations.
- Proposing a diagnostic-recovery approach that based upon a building a conceptual framework and then a theo-hypothetical model to be utilized in dealing with problematic issues.
- Utilizing a relevant conceptual framework and the suggested model for particularly establishing an oriented measure, and verifying both validity and reliability of the measure.
- Examining the proposed model through an empirical study to show the extent to which it may help in improving managers' competency concerning such issues.

Research hypotheses:

- There is no statistically-indicative significant relationship between the managers' incompetence in dealing with the work problematic issues and their failure to diagnose the type, nature and characteristics of these issues. (null hypothesis 1)
 - As problems. (null hypothesis 1/1)
 - As complexities. (null hypothesis 1/2)
 - As crises. (null hypothesis 1/3)
- There is no statistically-indicative significant relationship between the managers' incompetence concerning the work

problematic issues and their failure to select the particularly fitting method in each case. (null hypothesis 2)

○ In case of problems. (null hypothesis 2/1)

○ In case of complexities. (null hypothesis 2/2)

○ In case of crises. (null hypothesis 2/3)

- There is no statistically-significant relationship between the managers' incompetence concerning the work problematic issues and their failure to apply properly the fitting method in each case. (null hypothesis 3)

○ In case of problems. (null hypothesis 3/1)

○ In case of complexities. (null hypothesis 3/2)

○ In case of crises. (null hypothesis 3/3)

Research Methodology:

• Research population and sample:

It should be noted that the investigated units which the research works on, and as a consequence, the hypothesis and variables are built to revolve around, are the general administrative managers (GAMs) in Menoufia university different faculties. Those who are representing the middle level of management, which includes 22 GAMs working in 22 faculties and institutes contained by the university. Accordingly the research population and sample could be shown as follows:

Population consists of two sections. One is the university top management including the president, vices-president, deans, and vice-deans and heads of academic departments. The other is represented in the heads of the main administrative departments that are contained by the previously mentioned university varied units. Considering that population is relatively small, countable, has easily accessible individuals by the use of both names and positions, and also two-sectional one, that's sectional and sub-sectional inter-heterogeneous but still somehow intra-homogenous, within the smaller groups included by its two sections - in terms of the research measurement objective, the sample is selected to be sort of probable samples that's based upon considering between sections as well as groups segregation.

A stratified random sample has been considered as the most fitting one in such a case. It includes two main strata. The stratum of university top-management staff that contains (5) sub-stratum. These are president and vice-presidents, deans, vice-deans, heads of academic departments. and, the

university general administrative manager and his assistances. The stratum of the main administrative departments heads in (22) university faculties, which contains (13) sub-stratum. These are the heads of managerial affairs, education and student affairs, financial affairs, post-graduation affairs, culture relations affairs, student care affairs, engineering and maintenance affairs, purchasing and storage affairs, library affairs, diversified affairs, heads of deans' offices, heads of vice-deans for student affairs offices, and heads of vice-deans for post-graduation offices.

Population size contains a total number of (568) individuals divided into (282) individual working as university top management staff member (TMSs) and (286) individual working as main administrative departments heads (ADHs). Sample size is calculated as a total number according to the two equations of ($n = z^2 * p * q / d^2$ and then $n_0 = n / 1 + n/N$) to be [$n = (1.96)^2 * 0.80 * 0.20 / (0.05)^2 = (245.8624)$, and so the $n_0 = 245.8624 / 1 + (245.8624 / 568) = 171.5891$ or approx. = (172) sampling units] divided proportionally into (85) TMS sampling units and (87) ADH sampling units, according to the size of population two sections. The sampling unit contains two sorts of respondents, the member of the university top management staff (TMSs) and the head of administrative department (ADHs).

- **Data collection process:**

- Instrument of data collection.

In addition to participant observation, exploratory study is essentially based upon the structured interviews, while field study is conducted by employing questionnaire that was the only one instrument of data collection in such a substantial phase of study.

- Measurement.

Liker-type scale has been depended on, with a bit liberal orientation from the original conditions of the Likert traditional scale, so it could be preferable to consider the research measure as itemized-rating scale or Likert-based rather than Likert scale. This has been shown in particular in the grades topics - that based upon a definite commence and end and also central cell on the five-cell scale that allows an opportunity for a normal grading instead of the common neutrality shown by Likert. The core point considered here was actually the expected type of data which is commonly known as ordinal. This was considered as the most fitting type to have when surveying views regarding estimating-based issues.

- Questionnaire design.

Variables to measure are actually expressed in a form of a bit extended statements under broadened axes to be easily understandable, instead of using short sentences or just characteristics. However, it was taken into consideration that words have to be generally understandable, technically simple, precisely indicative, and out of double meaning. The governing factor in getting the questionnaire ordered was the commonsense of research subject that was reflected by the logic sequence of the hypotheses and also the included variables and sub-variables. There was a sufficient room for questions and answers, as well as margins that made the data collection instrument looks more attractive and comfortable. Alphabetical letters and serial numbers have sequentially been applied in conjunction for coding the questions, variables and sub-variable included in questionnaire according to the very common way of ordering. This coding is actually committed with, in making the computer data-entry and analysis.

○ Validity and reliability.

Considering that questionnaire - that's based upon in conducting the empirical study of this research - has been particularly established for this reason. Both the validity and reliability of the measures included in questionnaire have been given a sufficient magnitude of verification.

The same number and individuals who have been interviewed for conducting the exploratory study have been investigated again for establishing the validity and reliability. For establishing the validity about six group-interviews have been held, each one was for about two hours with a mixed number (about 7 to 8) of academic and administrative staff contained by the research population. The objective was on the one hand to verify the measure face validity through excluding word and form deficiency and irrelevancy. On the other hand to verify the content validity as well through ensuring that item and non-item aspects are most suitable in terms of quantity and quality to measure the concepts for which they were existed in the measure. As a consequence many rather than few extractions and adjustments in different portions of the questionnaire concerning wording, formulation, ordering, logic, sequence, and layout have been occurred to give a prime indication of consistency. Then the questionnaire has been separately taken to three management specialist professors to judge once again its face and content validity. This additional step results in no more corrections; alternatively there was a

large room of consensus amongst them. Reliability has been also established by separately distributing the valid questionnaire on the targeted (45) mixed administrative and academic staff selected from the population. The objective was to verify the accuracy of the measure, which has been proved in this research case by the homogeneity amongst the responses concerning the measure's included items, or in other words the inter-item correlation.

Item-subgroup and item-group correlations have been statistically testified to show a lowest limit of correlation coefficient equal to (0.9648) and (0.9646) in order. It indicated a very high level of measure consistency. Moreover, it has depended on these high levels of inter-item correlation to calculate C. alpha to show minimum values in the two cases equal to (0.9873) in each case. Other details could be shown in Table (2). It has come out that the highest values of alpha if item excluded from the sub-groups number (GA/1),(GA/2), (GA/3), (GA/4), (GB/1), (GB/2), (GB/3), (GC/1), (GC/2), (GC/3), (GD/1), (GD/2), and (GD/3) were (0.9927), (0.9899), (0.9881), (0.9902), (0.9879), (0.9915), (0.9921), (0.9847), (0.9762), (0.9811), (0.9964), (0.9961), and (0.9949) in order. Those were lower than the parallel values of alpha if all items included in the same sub-groups which respectively were (0.9939), (0.9905), (0.9896), (0.9909), (0.9894), (0.9927), (0.9933), (0.9867), (0.9899), (0.9901), (0.9966), (0.9964), and (0.9952) in each case of comparison. It has been found as well that the maximum values of alpha if item deleted from the groups number (GA),(GB), (GC), and (GD),were (0.9976), (0.9971), (0.9861), and (0.9986), in order. Those were lower than the values of alpha if all items have not been deleted from the same groups, which were (0.9978), (0.9972), (0.9873), and (0.9987) respectively.

A comparison in each case could be obviously shown by the Table (2). This indicated that there is no need for item-excluding and the whole research questionnaire is properly valid and reliable as an instrument for primary data collection.

o Administration of the questionnaire.

A mixed way that's combined together both the personal and electronic administration of questionnaire has been used; this is occurred in accordance with the ease of using each. The same way used as well in collecting questionnaires. Distribution of questionnaire was essentially fitting to the number of representatives of every single stratum and sub-stratum in sample that originally based upon the disproportionate number of stratum and sub-stratum individuals in the whole research population. This could be shown in Table (3).

Table (3) The number of distributed, responded and correct questionnaire

| Stratum | Sub-stratum | No in P. | No. in S. | dist. quest. | | respo. quest. | | corr. Quest. | |
|-----------|-------------|---------------|-----------|---------------------|----|---------------|----|--------------|----|
| | | | | ss | s | ss | s | ss | s |
| 1 TMSs | 1/1 | 5 | 2 | 2 | | 2 | | 2 | |
| | 1/2 | 22 | 6.6 | 7 | 85 | 7 | 78 | 7 | 76 |
| | 1/3 | 66 | 19.9 | 19 | | 18 | | 17 | |
| | 1/4 | 185 | 56 | 56 | | 50 | | 45 | |
| | 1/5 | 4 | 1.2 | 1 | | 1 | | 1 | |
| 2 ADHs | 2/1 | 22 | 6.6 | 7 | | 3 | | 3 | |
| | 2/2 | 22 | 6.6 | 7 | | 3 | | 3 | |
| | 2/3 | 22 | 6.6 | 7 | | 4 | | 3 | |
| | 2/4 | 22 | 6.6 | 7 | 87 | 7 | 73 | 6 | 61 |
| | 2/5 | 22 | 6.6 | 7 | | 4 | | 6 | |
| | 2/6 | 22 | 6.6 | 7 | | 7 | | 7 | |
| | 2/7 | 22 | 6.6 | 7 | | 7 | | 7 | |
| | 2/8 | 22 | 6.6 | 7 | | 7 | | 7 | |
| | 2/9 | 22 | 6.6 | 7 | | 7 | | 7 | |
| | 2/10 | 22 | 6.6 | 6 | | 6 | | 6 | |
| | 2/11 | 22 | 6.6 | 6 | | 6 | | 6 | |
| | 2/12 | 22 | 6.6 | 6 | | 6 | | 2 | |
| | 2/13 | 22 | 6.6 | 6 | | 6 | | 2 | |
| Total | | 568 | 172 | 172 | | 151 | | 137 | |
| | | P: population | S: sample | SS: Sample sections | | | | | |

Source: Based upon real data

The process that questionnaire was administered has been carried out in about forty days – including non-working days – ten days for questionnaires distribution, ten days for being left with the respondents, ten days for collection and ten days for delay after the deadline time. This was initially considered in advance so as to allow a highest level of responding, although the time required by the respondents to deal with the questionnaire, according to their views, was actually ranged between (40 and 60) minuet. It should be noted as well that every single sampling unit has been given two copies of questionnaire one was in Arabic language while the other was in English language. Deeming the easier to every one, respondents have been allowed a free room to answer optionally either the questionnaire in Arabic or in English copy.

o Testing sample representation.

It should be noted that sample representation to research population has been considered at three levels. First when identifying the population individuals to be represented in the stratified random sample - of total size (172) sampling units, it has been depended on the very traditional way of using small peaces of paper to put names/positions/ places of population individuals in, and then randomly picking up - with no replacement - the required number of individuals for each sub-stratum of sample. The motive behind this was the small number of individuals that's originally included in every single category of population. Second, when collecting the questionnaires, it has been found that the respondents number was (151) sampling units. That's why it was required to testify whether the sample according to the new number still keeping the representation of population as a whole and at the level of every single one of its categories or not. Kolmogrov-Smirnov test that based on a comparison of the cumulative proportion of the observed values in each category with the cumulative proportion in the same category for the specified population is used. The reason was testing whether the distribution of the observed data (number and category of respondents) differs significantly from specified population or not. As shown in schedule number (4) the biggest cumulative proportion at the level of stratum and sub-stratum in order was (0.023) and (0.015), and each one was bigger than (0.01) for a sample size of (151). This revealed that there is no significant difference, the sample still representing the population.

Table (4) Sample representation to the research population in all phases

| No. of Sec. | Dist. quest. | | | | Respo. quest. | | | | Valid quest. | | | | Cumulative differences | | | | |
|-------------|--------------|---------------|--------|-----|---------------|---------------|--------|-----|--------------|---------------|--------|-----|------------------------|--------------|--------------|-----|---|
| | No | | Comu.1 | | No. | | Comu.2 | | No. | | Comu.3 | | comu.1-comu.2 | | Comu.1-com.3 | | |
| 1 | 1/1 | 2 | | 0.0 | | 2 | | 0.0 | | 2 | | 0.0 | | 0 | | 0 | |
| | 1/1 | | | 12 | | | | 13 | | | | 15 | | | | | |
| | 1/2 | 7 | | 0.0 | | 7 | | 0.0 | | 7 | | 0.0 | | 0 | | 0 | |
| | 1/2 | | 8 | 41 | 0.4 | | 7 | 8 | 46 | 0.5 | | 7 | 6 | 51 | 0.5 | | 0 |
| | 1/3 | 1 | 5 | 0.1 | 94 | 1 | 8 | 0.1 | 16 | 1 | 6 | 0.1 | 55 | 0 | | 0 | |
| | 1/3 | | | 10 | | | | 19 | | | | 24 | | | | | |
| | 1/4 | 5 | | 0.3 | | 5 | | 0.3 | | 4 | | 0.3 | | 0 | | 0 | |
| | 1/4 | | 6 | 26 | | 0 | | 31 | | 9 | | 58 | | | | | |
| 1/5 | 1 | | 0.0 | | 1 | | 0.0 | | 1 | | 0.0 | | 0 | | 0 | | |
| 1/5 | | | 06 | | | | 07 | | | | 07 | | | | | | |
| 2 | 2/1 | 7 | | 0.0 | | 3 | | 0.0 | | 3 | | 0.0 | | 0.0 | | 0.0 | |
| | 2/1 | | | 41 | | | | 19 | | | | 22 | | 22 | | 19 | |
| | 2/2 | 7 | | 0.0 | | 3 | | 0.0 | | 3 | | 0.0 | | 0.0 | | 0.0 | |
| | 2/2 | | | 41 | | | | 19 | | | | 22 | | 22 | | 19 | |
| | 2/3 | 7 | | 0.0 | | 4 | | 0.0 | | 3 | | 0.0 | | 0.0 | | 0.0 | |
| | 2/3 | | | 41 | | | | 26 | | | | 22 | | 15 | | 19 | |
| | 2/4 | 7 | 8 | 0.0 | | 7 | 7 | 0.0 | 0.4 | 6 | 6 | 0.0 | 0.4 | 0 | 0.0 | 0 | |
| | 2/4 | | 7 | 41 | 0.5 | | 3 | 46 | 83 | 2 | 1 | 44 | 45 | 0.0 | 23 | 0.0 | |
| | 2/5 | 7 | | 0.0 | | 4 | | 0.0 | | 2 | | 0.0 | | 0.0 | | 0.0 | |
| | 2/5 | | | 41 | | | | 26 | | | | 15 | | 15 | | 26 | |
| | 2/6 | 7 | | 0.0 | | 7 | | 0.0 | | 7 | | 0.0 | | 0 | | 0 | |
| | 2/6 | | | 41 | | | | 46 | | | | 51 | | | | | |
| | 2/7 | 7 | | 0.0 | | 7 | | 0.0 | | 7 | | 0.0 | | 0 | | 0 | |
| 2/7 | | | 41 | | | | 46 | | | | 51 | | | | | | |
| 2/8 | 7 | | 0.0 | | 7 | | 0.0 | | 7 | | 0.0 | | 0 | | 0 | | |
| 2/8 | | | 41 | | | | 46 | | | | 51 | | | | | | |
| 2/9 | 7 | | 0.0 | | 7 | | 0.0 | | 7 | | 0.0 | | 0 | | 0 | | |
| 2/9 | | | 41 | | | | 46 | | | | 51 | | | | | | |
| 2/10 | 6 | | 0.0 | | 6 | | 0.0 | | 6 | | 0.0 | | 0 | | 0 | | |
| 2/10 | | | 35 | | | | 40 | | | | 44 | | | | | | |
| 2/11 | 6 | | 0.0 | | 6 | | 0.0 | | 6 | | 0.0 | | 0 | | 0 | | |
| 2/11 | | | 35 | | | | 40 | | | | 44 | | | | | | |
| 2/12 | 6 | | 0.0 | | 6 | | 0.0 | | 2 | | 0.0 | | 0 | | 0.0 | | |
| 2/12 | | | 35 | | | | 40 | | | | 15 | | | | 20 | | |
| 2/13 | 6 | | 0.0 | | 6 | | 0.0 | | 2 | | 0.0 | | 0 | | 0.0 | | |
| 2/13 | | | 35 | | | | 40 | | | | 15 | | | | 20 | | |
| Total | | 172 | | | | 151 | | | | 137 | | | | | | | |
| | | 0.015 > 0.01, | | | | 0.023 > 0.01, | | | | 0.019 > 0.01, | | | | 0.061 > 0.01 | | | |

Third, checking the rightness of responded questionnaires, result indicated that the number of appropriate questionnaire to be ready usable for data entry and statistical test was (137). Herein the previously mentioned steps were actually conducted once again to make sure that correct number and category of respondents still representing the specified population. As shown in schedule number (4) the biggest cumulative proportion at the level of stratum and sub-stratum in order was (0.061) and (0.019), and each one was bigger than (0.01) for a sample size of (137). This revealed that there is no significant difference, in other words the sample still representing the population.

• Research limits

Academic subject covered by this research has precisely been specified in studying the competence/incompetence of general administrative managers. In using personal, managerial, organizational, environmental related aspects to deal - through diagnosing the situation type, nature and characteristics and then selecting and applying the appropriate method - with the everyday problematic issues – those defined as problems, complexities, and crises – which are faced by their organizations. Any branched subjects out of this area were considered as research irrelevant. Research field study has only been focused on Menoufia University as one of the Egyptian governmental universities. The research was working on general administrative managers (GAMs) of the different faculties and /or institutes in this university as investigated middle management level. Accordingly, the survey has covered both the upper and lower levels of management to evaluate – somehow – the middle one within the context of this university. Any other governmental or non-governmental universities are research irrelevant.

Research Model:

This research is based upon creating a model of manager's competency that theoretically linking - and then hypothetically examining the relationship - between two sides of a suggested conceptual framework. As shown by Figure (1). A collective view that's based upon one-size fits all has to be adopted to provide an aggregately taxonomic profile to managers' general competencies. Those are relevant to the usage of individual, managerial,

organizational, and environmental factors commonly allowed to them no matter the work situation.

From those authors who partially tackled competency attributes and aspects see for example; Collin, A. (1989), Prahalad, CK., et al. (1990), Burnes, B. (1991), Heywood, L., et al. (1992), Finn, R. (1993), Kilcourse, T. (1994), Currie, G., et al., (1995), White, et al. (1996), Chiesa, V. et al. (1997), Mahoney, JT., et al. (1997), Nyhan, B. (1998), Goldberger, A. (1999), Bove, K., et al. (2000), Crawford, LH. (2001), Sydanmaanlakka, P. (2003), Sanchez, R. (2004), Crawford, L. (2005), Suikki, R., et al. (2006), Lettl, C. (2007), Boyatzis, R.E. (2008), Dreyfus, C.R. (2008), and Hopkins, M., et al. (2008).

- In this part of the conceptual framework, that shown in the right-hand side of figure (1), the theory of research-based competency model has been utilized. The focus was to demonstrate the attributes that should be found in manager to be described as competent, regardless of the work performance. Unlike most of the area previous researches, that have only given importance to manager individual or self attributes, this research model of competency gives an equal importance to those attributes that are additionally given to the manager by his function as manager, by his organization, and also by the environment in which his organization is working. In other words it has adopted an extended focus to make the personal attributes of the manager as an individual weighted by the another three attributes given to him by his function and position as manager. The reason behind this could be logically perceived by considering those managers' individual attributes and position attributes are actually inseparable in the work varied situations. Although these three additional attributes could be fractionally pointed out, hinted, or implicitly perceived by some previous studies, they have firstly been utilized by this research to provide an attempt for developing them in a collectively categorized profile. The group of sub-competencies that's included in each one of the four manager attributes has considered to be broad, clear, and simple, in order to be practically sensible and most fitting. Also to avoid

the big argument raised by using research-based models of competency.

- Specifying precisely reference criterion or area of interest that being focused on, as just one of the work performance varied aspects. That's dealing with everyday problematic issues or those to be classified into problems, complexities and crises. From those authors who interested in linking generally competency to performance, further to the previous ones see for instance; Sujan H., et al. (1988), Collen BJ et-al (1990), Spencer LMJ. et al. (1993), McVeigh, CBJ., (1995), Christensen, Lindsay, PR., et al. (1997), Caupin, G., et al. (1999) Miller, J.S., et al. (2000), Drejer, A. (2000), Abraham, S. E., et al. (2001), Soderlund, J. (2004), Grzeda, M.M. (2005), Carmeli, A., et al. (2006), Cote, S. (2006), Catano, V.M., et al. (2007), Gentry, W.A., et al. (2007), Hawkins, J., et al. (2007), Gentry, W.A., et al. (2008), Young, M., et al. (2008) and Herlen, M. (2009). As shown in the left-hand side of the figure (1). Both value and strategy based theories of competency that are collectively referred to as performance-based theory of competency, have been utilized as well. In order to make obvious the aspects and/or the context of managers' performance within which this research is examining their competence/incompetence. In other words, to identify the reference criteria against which competence/incompetence of managers could be judged. Since managers work-performance could be passed throughout either normal or up normal situations, and perceiving that both the cases of circumstance are commonly faced by managers in performing their work, this research is considering the up normal work-performance situations as main reference criteria. Up normal manager work situations are referred to as problematic issues in which manager will be faced by problem, complexity or even crisis. The justification behind such a focus could be recognized if it is considered that the success or failure of managers in dealing with up normal situations - rather than the normal ones - will be a much highlighted indicator of their competence/incompetence. Further to this, the research is precisely focusing the performance concerning the everyday problematic issues that are more related

to running the work. That's why it is unavoidably observable reference criteria to judge managers' competence. Sub-competencies that are standardized in every one of three problematic issues faced by the manager were, specifying type and characteristics of the problematic issue, selecting the most fitting method to deal with it, and applying effectively the chosen method for solving problem, treating complexity and facing crisis.

- Establishing a hypothetical link - or the relationship to be practically examined – that takes into consideration three conditions:
 - Manager capability to identify nature and characteristics of problematic issue. From those who covered the area of investigating and diagnosing such work situations, see for instance Adamson, R.E., (1953), Sanchez R., et al., (1997), and Dreyfus, C.R., (2008).
 - Manager capability to select the most fitting method to deal with a particular problematic issue. (See for instance Schein, 1992, Baden-Fuller and Volberda, 1997, and Westera, 2001).
 - Manager capability to apply properly the chosen method to deal with a certain problematic issue.

Adding vertically a linkage part in the middle between the two sides of the research conceptual framework - as shown by the Figure (1) - was intentionally occurred, so as to be able to turn the latter into a competency theo-hypothetical model. The explanation of this step is to be considered by the difference in orientations provided by competency relevant literature. One stream of authors, was theoretically stress on attributes or characteristics of person, as the only one basis that could be used in building the competency model. Those were totally ignoring the performance in establishing such a model. However their call has been met by the first part of the research competency model. In contrary, there was another stream of authors who were practically valuing the performance criteria attainment as the only one basis that worthy interest in creating the competency model. They were completely ignoring the attributes of individuals compared with their performance achievements against pre-set reference criteria. The existence of these two directions for long, has lately led to the emergence of

a third new stream of competency authors. Those are interested in considering both person attributes and performance criteria as well. There call for double-based competency models was not just an attempt for finding a middle-ground resolution between both the previous two extreme streams, it was rationally comprehensible. While the first stream was the most common and popular one in theory, may be due to its early come into view, the second stream has always been of stronger proof that rely on performance criteria, rather than attributes. Despite of the performance based call adopted by the second stream, most of the studies and researches in competency models built on an assumption relationship between competency and performance. Additionally it could be stated that some of them have failed to show which one is the independent variable and which one is the dependent one. That's why most of the late competency studies that are conducted by the new stream authors, are not only considering the link or relationship between competence and performance but also considering the measurement and proving of this relationship in reality.

This research belong to the new stream in creating competency model, it considers first, the attributes or characteristics based theory, second, the performance or reference criteria based theory , third, the link or relationship between attributes and performance criteria, fourth, the proving of such a relationship through measuring it in reality.

Research field study:

Herein the focus is to show to what extent the research main hypotheses have sub-hypothetically proved. That's why a vertical analysis which is based upon the sub-hypothesis common subject - such as diagnosing the characteristics of problematic issue, selecting the method to deal with each, and applying properly the selected method when dealing with the certain problematic issue - has been preferred to the horizontal analysis that may based upon separately tackling these subjects within the context of every problematic issue. The reason was to allow an opportunity for a nearby or close consideration to the differences amongst the problematic issues concerning each subject.

- **Diagnosing the type, nature, and characteristics of the different problematic issues:**

The hypothesis (1) will be testified in detail through examining the relationship between variable (A) collectively represented by the mode of its sub-variables and the variables (B/1, B2, And B/3) separately represented in detail by all the variables included by each.

Within this context the data is presented, statistically analyzed and interpretatively discussed as follows:

Table (5) Relationship between the dependent v. (A) and the independent v. (B/1)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&b1.1 | 371.83 | 0.00 | 283.84 | 0.00 | 127.61 | 0.00 | 0.93 | 2053.81 | 0.00 | 45.32 | 0.00 | 0.94 | 0.97 |
| a&b1.2 | 325.54 | 0.00 | 281.65 | 0.00 | 125.58 | 0.00 | 1.12 | 1626.17 | 0.00 | 40.33 | 0.00 | 0.92 | 0.96 |
| a&b1.3 | 359.39 | 0.00 | 266.47 | 0.00 | 122.55 | 0.00 | 1.07 | 1229.88 | 0.00 | 35.07 | 0.00 | 0.90 | 0.95 |
| a&b1.4 | 442.05 | 0.00 | 319.50 | 0.00 | 131.67 | 0.00 | 0.94 | 4102.79 | 0.00 | 64.05 | 0.00 | 0.97 | 0.98 |
| a&b1.5 | 320.44 | 0.00 | 238.81 | 0.00 | 119.77 | 0.00 | 1.05 | 995.98 | 0.00 | 31.56 | 0.00 | 0.88 | 0.94 |

Source: Based upon empirical study

The null sub-hypothesis (1/1) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to diagnose type, nature, and characteristics of the problems was refused. On contrary the alternative one that was based upon the existence of such a relationship has been accepted. The approval of the latter was statistically justified according to many phases. At the level of significance or generalization on the whole population, this relationship has significantly been proved, as the minimum calculated value of (Ch)² according to both person and likelihood were (320.44) and (283.81) > the equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01) and df equal to (16). The sig. or (p) value was approximately (0.00) in all the times, this is shown by Table (5). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type It represents sort of causality, since the lowest values of both the calculated (F) and (T) were (995.98) and (31.56) in order > their parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05), with a df (1,135) and (136) respectively. The highest sig. or (p) of both (F)

and (T) was approximately (0.00) in all cases. Moreover, this relationship concerning the form was linear. Since the lowest value of linear by linear (Ch)² was (119.77) > its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01) respectively, with a df equal to (16) while sig. or (p) was approximately (0.00). The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β), those previously confirmed by the significance of both F-ratio and T-test, were positive-signal ones and ranging between (+0.93) and +1.12) Furthermore, it was strong in terms of the direction and form, since the lowest values of both (R) and (R)² were (0.94) and (0.88) respectively. Those were positive and > (0.9) in the case of (R), while they were > (0.5) in the case of (R)². All these values could be shown in detail by the same Table (5).

Statistical verification of such a relationship could be analytically justified, when considering that the university GAMs failure to diagnose the type, nature, and characteristics of problems may return to their unaware concerning the aspects to recognize for being capable to do so. These aspects may be collectively expressed - in the case of the problem as one of the every day problematic issues - through five axes:

- Problems used to be born as big. This means that it is to a large extent a sensible issue for all the concerned parties.
- Problems used to found as clear and/or visible. All related parties are aware of its real foundation; no one can logically find a reason to deny this existence.
- Problems used to be acute. Insisting for getting resolved, to the extent that's strongly motivating the related parties to get rid of it.
- Problems used to finished/shift as small. When being recovered people used to feel that it is smaller than its starting point size. Particularly if it has no consequences.
- Problems used to have a resolution. Either by the hand of the relevant parties, or by their hand supported by others, or even the resolution completely provided by an external hand.

Table (6) Relationship between the dependent v. (A) and the independent v. (B/2)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&b2.1 | 379.81 | 0.00 | 280.78 | 0.00 | 127.23 | 0.00 | 1.03 | 1957.79 | 0.00 | 44.25 | 0.00 | 0.94 | 0.97 |
| a&b2.2 | 391.82 | 0.00 | 269.19 | 0.00 | 126.56 | 0.00 | 0.94 | 1808.90 | 0.00 | 42.53 | 0.00 | 0.93 | 0.97 |
| a&b2.3 | 289.28 | 0.00 | 242.14 | 0.00 | 122.27 | 0.00 | 0.88 | 1202.54 | 0.00 | 34.68 | 0.00 | 0.90 | 0.95 |
| a&b2.4 | 367.33 | 0.00 | 263.23 | 0.00 | 123.52 | 0.00 | 1.02 | 1335.85 | 0.00 | 36.55 | 0.00 | 0.91 | 0.95 |
| a&b2.5 | 454.48 | 0.00 | 309.88 | 0.00 | 131.25 | 0.00 | 0.98 | 3728.44 | 0.00 | 61.06 | 0.00 | 0.96 | 0.98 |

Source: Based upon empirical study

The null sub-hypothesis (1/2) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to diagnose type, nature, and characteristics of complexities was refused. On contrary the alternative one that was based upon the existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to many phases. At the level of significance or generalization on the whole population this relationship has significantly been proved, as the minimum calculated value of (Ch)² according to both person and likelihood were (289.28) and (242.14) > their equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01) and df equal to (16). The sig. or (p) value was approximately (0.00) in all times, this is shown by Table (6). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type it represents sort of causality, since the lowest values of both the calculated (F) and (T) were (1202.54) and (34.68) in order > their parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05),

and df equal to (1,135) and (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00) in all cases. Moreover, this relationship concerning the form was linear. Since the lowest value of linear by linear (Ch)² was (122.27) > its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01), with a df equal to (16) while sig. or (p) was approximately (0.00). The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β), those previously confirmed by the significance of both F-ratio and T-test, were positive-signal ones and ranging between (+0.88) and (+1.03). Furthermore, it was strong in terms of the direction and form, since the lowest values of both (R) and (R)² were (0.95) and (0.90) respectively. Those were positive and > (0.9) in the case of (R), while they were > (0.5) in the case of (R)². All these values could be shown in detail by the same Table (6)

Statistical verification of such a relationship could be analytically justified, when considering that the university GAMs failure to diagnose the type, nature, and characteristics of complexities may return to their unaware concerning the aspects to recognize for being capable to do so. These aspects may be collectively expressed - in the case of the complexity as one of the every day problematic issues - through five axes:

- Complexities used to be found as big and continuous. For the one who is firstly faced with the complexity he may consider that it is big. However, by continuity people get familiar with it. That's why it may be recognized by continuity rather than size.
- Complexities used to be easily findable or recognized. It is less than visible for first time, but when being repeated it attracts the attention to be not only findable but also historically recognized.
- Complexities used to look acute while it is chronically found. It willingly/or unwillingly takes an evitable room of people's interest, and this may be for long.
- Complexities used to be fluctuated finished as small and then shift to be bigger. That's why it should be given a fluctuated magnitude of managers' interest.
- Complexities used to have no solution but multi-facet balancing point. For being secured of its effects managers have to have a periodically renewable balance point that mostly based upon their level concerning its acceptance.

Table (7) Relationship between the dependent v. (A) and the independent v. (B/3)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co.(β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&b3.1 | 493.89 | 0.00 | 323.44 | 0.00 | 132.65 | 0.00 | 0.97 | 5348.78 | 0.00 | 73.14 | 0.00 | 0.98 | 0.99 |
| a&b3.2 | 376.04 | 0.00 | 285.35 | 0.00 | 127.91 | 0.00 | 0.93 | 2134.68 | 0.00 | 46.20 | 0.00 | 0.94 | 0.97 |
| a&b3.3 | 408.85 | 0.00 | 279.67 | 0.00 | 127.70 | 0.00 | 0.94 | 2077.51 | 0.00 | 45.58 | 0.00 | 0.94 | 0.97 |
| a&b3.4 | 376.61 | 0.00 | 290.10 | 0.00 | 128.19 | 0.00 | 0.94 | 2215.53 | 0.00 | 47.07 | 0.00 | 0.94 | 0.97 |
| a&b3.5 | 405.63 | 0.00 | 276.17 | 0.00 | 127.15 | 0.00 | 0.99 | 1939.76 | 0.00 | 44.04 | 0.00 | 0.94 | 0.97 |

Source: Based upon empirical study

The null sub-hypothesis (1/3) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to diagnose type, nature, and characteristics of crises was refused. On contrary the alternative one that was based upon the significant existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to many phases. At the level of significance or generalization on the whole population this relationship has significantly been proved, as the minimum calculated value of (Ch)² according to both person and likelihood were (376.04) and (276.17) > the equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01), with df equal to (16). The sig. or (p) value was approximately (0.00) in all times, this is shown by table (7). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type it represents sort of causality, since the lowest values of both the calculated (F) and (T) were (1939.76) and (44.04) in order > the parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05), and df equal to (1,135) and (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00) in all cases. Moreover, this relationship concerning the form was linear. Since the lowest value of linear by linear (Ch)² was (127.15) > its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01), with a df equal to (16) while sig. or (p) was approximately (0.00). The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β), those previously confirmed by the significance of both F-ratio and T-test, were positive-signal ones and

ranging between (+0.93) and +0.99) Furthermore, it was strong in terms of the direction and form, since the lowest values of both (R) and (R)² were (0.97) and (0.94) respectively. Those were positive and > (+0.9) in the case of (R), while they were > (0.5) in the case of (R)². All these values could be shown in detail by Table (7).

Statistical verification of such a relationship could be analytically justified, when considering that the university GAMs failure to diagnose the type, nature, and characteristics of crises may return to their unaware concerning the aspects to recognize for being capable to do so. These aspects may be collectively expressed - in the case of the complexity as one of the every day problematic issues through the following five axes:

- Crises used to be born as relatively small, it could be even infinitesimal. It is for organization like cancer for human body start by just one cell.
- Crises used to be for long invisible and then suddenly discovered as obligatory existed circumstances. However, there is too much confusion faced by managers to differentiate between the time in which crisis is born and the time in which it is discovered.
- Crises used to be chronic, this occurs before during and after being found out. It used to be there for long before being discovered, used to faced for long after being discovered, and used to cause for long or even for ever consequences.
- Crises are finished or shift to be seriously big; it could be even described as. It is an enormous, strong, negative, stressful, and sudden situation to be faced by the managers. That's incredibly challenging and crossing over their capabilities.
- Crises are definitely not curable they have no resolution; however they could have at maximum a balancing point. Managers are left mislay or unable to find but negative compulsories, all of them lose, lose,...or lose.
- **Selecting the method fitting to deal with the different problematic issues:**

The hypothesis (2) will be testified in detail through examining the relationship between variable (A) collectively represented by the mode of its sub-variables and the variables (C/1, C2, and C/3) represented in detail by all the variables included by each. Within this context the data is presented, statistically analyzed and interpretatively discussed as follows:

Table (8) Relationship between the dependent v. (A) and the independent v. (C/1)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&c1.1 | 404.22 | 0.00 | 290.39 | 0.00 | 128.91 | 0.00 | 1.02 | 2453.02 | 0.00 | 49.53 | 0.00 | 0.95 | 0.97 |
| a&c1.2 | 359.84 | 0.00 | 293.55 | 0.00 | 129.16 | 0.00 | 0.96 | 2214.12 | 0.00 | 45.12 | 0.00 | 0.94 | 0.97 |
| a&c1.3 | 443.55 | 0.00 | 327.51 | 0.00 | 134.65 | 0.00 | 0.93 | 4112.78 | 0.00 | 53.15 | 0.00 | 0.97 | 0.98 |
| a&c1.4 | 342.75 | 0.00 | 289.81 | 0.00 | 126.43 | 0.00 | 0.91 | 2276.52 | 0.00 | 46.25 | 0.00 | 0.94 | 0.97 |
| a&c1.5 | 458.43 | 0.00 | 319.76 | 0.00 | 129.25 | 0.00 | 0.98 | 3738.44 | 0.00 | 51.07 | 0.00 | 0.96 | 0.98 |

Source: Based upon empirical study

The null sub-hypothesis (2/1) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to select the fitting method to deal with problems was refused. On contrary the alternative one that was based upon a significant existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to two phases. At the level of significance or generalization to the whole population, this relationship has significantly been verified. As the lowest calculated value of (Ch)² according to both person and likelihood were (342.75) and (289.81) > the equivalent tabulated ones (23.6) and (32.00) respectively, at level of sig. (0.05) and (0.01), with df equal to (16). The sig. or highest (p) value was approximately (0.00), this is shown by the Table (8). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type, it reflected sort of causality, since the lowest values of both the calculated (F) and (T) were (2214.12) and (45.12) in order > the parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) at the levels of sig. (0.05), and df (1,135), (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00). In addition, the form of this relationship was linear. Since the minimum value of linear by linear (Ch)² was (126.43) > its tabulated one that previously mentioned above as (26.3) and (32.00) at the same levels of sig. and df, while the highest sig. or (p) was (0.00). Regarding the direction this relationship has been proved as directly proportional one, the values of the regression coefficient or (β), that was previously confirmed by the significance of both F-ratio and T-test, has come to light as positive-signal ones and at minimum equal to (+0.91). Furthermore, in relation to its

strength, it was strong in terms of the direction and form, since the lowest values of both (R) and (R)² were (0.97) and (0.95). It was positive and > (0.9) in the case of (R), while it was > (0.5) in the case of (R)². All these values could be shown as well by same Table (8).

Statistical verification of such a relationship could be analytically justified, when considering that the university GAMs incompetence in dealing with problem may return to their failure to select the fitting method for solving it. They are not aware that problems - no way - should subject to sort of systematic method to get resolved. The systematic method that's unrecognized by the university GAMs could be described in short through the following items:

- It is a step by step method that's commonly known as decision making method.
- The outputs of the certain step are considered as inputs to the successive one, and so forth.
- It allows the managers optionally positive alternatives or resolutions to choose amongst them.
- The preference of one resolution to others is based upon pre-set criteria.

Ignoring such a systematic method means that managers are improbably capable to get an optionally logic resolutions to the problems they may face. As consequence they will not have an efficient resolution to it. Alternatively they will be most probable deviating from the right course concerning the way of dealing with everyday work problems. The efficient decision or resolution to the problem as one of the everyday problematic issues faced by managers is no way a function of adapting the systematic method to reach it.

Table (9) Relationship between the dependent v. (A) and the independent v. (C/2)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|--------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R. Co. |
| a&c2.1 | 376.83 | 0.00 | 279.86 | 0.00 | 127.35 | 0.00 | 1.04 | 1943.97 | 0.00 | 43.25 | 0.00 | 0.94 | 0.97 |
| a&c2.2 | 471.87 | 0.00 | 327.17 | 0.00 | 132.77 | 0.00 | 0.97 | 5547.67 | 0.00 | 74.48 | 0.00 | 0.98 | 0.99 |
| a&c2.3 | 324.45 | 0.00 | 280.64 | 0.00 | 126.05 | 0.00 | 1.09 | 1625.88 | 0.00 | 40.43 | 0.00 | 0.92 | 0.96 |
| a&c2.4 | 360.03 | 0.00 | 265.99 | 0.00 | 125.00 | 0.00 | 1.05 | 1546.98 | 0.00 | 39.68 | 0.00 | 0.92 | 0.96 |
| a&c2.5 | 419.81 | 0.00 | 323.95 | 0.00 | 130.99 | 0.00 | 0.92 | 4210.01 | 0.00 | 64.11 | 0.00 | 0.97 | 0.98 |

Source: Based upon empirical study

The null sub-hypothesis (2/2) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to select the fitting method to deal with complexities was refused. On contrary the alternative one that was based upon the significant existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to two phases. At the level of significance or generalization to the whole population, this relationship has significantly been verified. As the lowest calculated value of $(Ch)^2$ according to both person and likelihood were (324.45) and (265.99) $>$ the equivalent tabulated ones (23.6) and (32.00) respectively, at level of sig. (0.05) and (0.01), with df equal to (16). The sig. or highest (p) value was approximately (0.00), this is shown by Table (9). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type, it reflected sort of causality, since the lowest values of both the calculated (F) and (T) were (1546.98) and (39.68) in order $>$ the parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) at the levels of sig. (0.05), and df (1,135), (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00). In addition, the form of this relationship was linear. Since the minimum value of linear by linear $(Ch)^2$ was (125.00) $>$ its tabulated one that previously mentioned above as (26.3) and (32.00) at the same levels of sig. and df, while highest sig. or (p) was (0.00). Regarding the direction this relationship has been proved as directly proportional one, the values of the regression coefficient or (β), that was previously confirmed by the significance of both F-ratio and T-test, has come to light as positive-signal ones and minimum equal to (+0.92). Furthermore, in relation to its strength, it was strong in terms of the direction and form, since the values of both (R) and $(R)^2$ were (0.92) and (0.96). It was positive and $>$ (+0.9) in the case of (R), while it was $>$ (0.5) in the case of $(R)^2$. All these values could be shown by the same Table (9)

Statistical confirmation of such a relationship could be analytically justified, when considering that the university GAMs incompetence in dealing with the everyday complexities may return to their failure to select the fitting method for treating them. They are not aware that complexities - no way - should subject to sort of system-ic-atic method to get a successfully balancing point concerning such issues and/or situations. The system-ic-atic method that's unrecognized by the university GAMs could be described in short, as a mix of systemic and systematic methods, through the following items:

- It systemically uses a big and varied number of systems to deal with the complexity.
- It systemically uses a big and varied number of approaches to apply the feasible systems.
- It systematically rotates the application of both the systems and the approaches in dealing with complexity.
- It periodically considers deletion-addition or replacing regarding the systems and the approaches to be used in dealing with such a type of problematic issues.

The absence of the system-ic-atic method as well as the failure to adopt a multi-facet approach for applying it is more often than not result in managers incapability to get an acceptably balancing point in dealing with such situations. Alternatively they will be most probable deviating from the right course concerning the way of treating everyday work complexities. This is occurs in particular, when incorrectly considered it as a problem, and as a consequence wrongly involved for long in finding out a clear-cut resolution to it, while it has no one. The maximum to reach in the complexity case is a balancing point jus to be satisfactorily secure in treating with it, while it is no way staying their all the time.

Table (10) Relationship between the dependent v. (A) and the independent v. (C/3)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&c3.1 | 362.73 | 0.00 | 281.23 | 0.00 | 126.84 | 0.00 | 1.49 | 1763.11 | 0.00 | 41.93 | 0.00 | 0.94 | 0.97 |
| a&c3.2 | 431.87 | 0.00 | 307.19 | 0.00 | 128.98 | 0.00 | 0.93 | 2717.45 | 0.00 | 51.09 | 0.00 | 0.95 | 0.98 |
| a&c3.3 | 474.56 | 0.00 | 312.13 | 0.00 | 130.98 | 0.00 | 0.95 | 3784.15 | 0.00 | 60.94 | 0.00 | 0.97 | 0.98 |
| a&c3.4 | 369.27 | 0.00 | 288.54 | 0.00 | 128.09 | 0.00 | 0.90 | 2186.71 | 0.00 | 46.76 | 0.00 | 0.94 | 0.97 |
| a&c3.5 | 400.97 | 0.00 | 277.17 | 0.00 | 127.13 | 0.00 | 0.97 | 1938.66 | 0.00 | 44.12 | 0.00 | 0.94 | 0.97 |

Source: Based upon empirical study

The null sub-hypothesis (2/3) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the

problematic issues and their failure to select the fitting method to deal with crises was refused. On contrary, the alternative one that was based upon the significant existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to many phases. At the level of significance or generalization to the whole population, this relationship has significantly been verified. As the calculated value of $(Ch)^2$ according to both person and likelihood were (369.27) and (277.17) > the equivalent tabulated ones (23.6) and (32.00) respectively, at level of sig. (0.05) and (0.01), with df equal to (16). The highest sig. or (p) value was approximately (0.00), this could be shown by the Table (10). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type, it reflected sort of causality, since the lowest calculated values of both (F) and (T) were (1763.11) and (41.93) in order > the parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) at the levels of sig. (0.05), and df (1,135), (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00). In addition, the form of this relationship was linear. Since the lowest value of linear by linear $(Ch)^2$ was (126.84) > its tabulated one that previously mentioned above as (26.3) and (32.00) at the same levels of sig. and df, while the highest sig. or (p) was (0.00). Regarding the direction this relationship has been proved as directly proportional one, the values of the regression coefficient or (β), that were previously confirmed by the significance of both F-ratio and T-test, have come to light as positive-signal ones and at minimum equal to (+0.90). Furthermore, in relation to its strength, it was strong in terms of the direction and form, since the minimum values of both (R) and $(R)^2$ were (0.97) and (0.94). It was positive and > (+0.9) in the case of (R), while it was > (0.5) in the case of $(R)^2$. All these values could be shown by same Table (10).

Statistical attestation of such a relationship could be analytically justified, when considering that the university GAMs incompetence in dealing with the everyday crises may return to their failure to select the fitting method for facing them. They are not aware that crises - no way - should subject to sort of systemic method to get a successfully balancing point concerning such issues and/or situations. The systemic method that's unrecognized by the university GAMs could be described in short through the following items:

- Systems - as too many varied ones - are generally thought of for facing whatever crisis, these include knowledge and real systems.
- Systems should simultaneously work together through allowing a relatively suitable room for the roles played by them.
- Systems should no way move quickly to fit the sudden, gigantic, serious, and in hurry declining situation of crisis.
- Systems at maximum collectively looking forward to reach one-shot balance point, that's why side effects and unfavourable consequences are common givens in facing crises situation.

In order to consider the need for employing a systemic method in facing crisis, it should be recognized that this systemic method is a governing condition to get the most effective balancing point. This point even though cannot change the crisis situation as incurable one. Unless we look at the company that sells its product with too much loss due to the sudden loosing of market, the wife lives with a husband she hates scarifying for kids, or the one who hopelessly take medicine because he got an extremely bad case of cancer, or the people who obligatory move to defend their country land against invaders are examples to ones who choose to do so. They are definitely forced to do it in facing crisis situations. Subjecting to compulsories with a losses and disadvantages in all cases is unlike choosing between options or alternatives with gains and advantages in each case.

- **Applying the method fitting to deal with the different problematic issues:**

The hypothesis (3) will be testified in detail through examining the relationship between variable (A) collectively represented by the mode of its sub-variables and the variables (D/1, D2, and D/3) represented in detail by all the variables included by each. Within this context the data is presented, statistically analyzed and interpretatively discussed as follows:

Table (11) Relationship between the dependent v. (A) and the independent v. (D/1)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&d1.1 | 389.92 | 0.00 | 300.07 | 0.00 | 129.61 | 0.00 | 0.93 | 2737.21 | 0.00 | 52.32 | 0.00 | 0.95 | 0.98 |
| a&d1.2 | 474.56 | 0.00 | 310.05 | 0.00 | 131.33 | 0.00 | 0.96 | 3798.16 | 0.00 | 61.63 | 0.00 | 0.97 | 0.98 |
| a&d1.3 | 446.25 | 0.00 | 301.45 | 0.00 | 129.71 | 0.00 | 0.99 | 2782.78 | 0.00 | 52.75 | 0.00 | 0.95 | 0.98 |
| a&d1.4 | 430.03 | 0.00 | 306.68 | 0.00 | 129.96 | 0.00 | 1.02 | 2902.70 | 0.00 | 53.88 | 0.00 | 0.96 | 0.98 |
| a&d1.5 | 416.83 | 0.00 | 323.23 | 0.00 | 131.68 | 0.00 | 0.92 | 4115.01 | 0.00 | 64.15 | 0.00 | 0.97 | 0.98 |
| a&d1.6 | 454.54 | 0.00 | 304.85 | 0.00 | 130.78 | 0.00 | 0.95 | 3381.48 | 0.00 | 58.15 | 0.00 | 0.96 | 0.98 |
| a&d1.7 | 360.67 | 0.00 | 289.05 | 0.00 | 127.13 | 0.00 | 0.96 | 1936.04 | 0.00 | 44.00 | 0.00 | 0.94 | 0.97 |
| a&d1.8 | 346.75 | 0.00 | 294.82 | 0.00 | 128.33 | 0.00 | 0.87 | 2258.62 | 0.00 | 47.52 | 0.00 | 0.94 | 0.97 |
| a&d1.9 | 399.86 | 0.00 | 284.96 | 0.00 | 128.10 | 0.00 | 0.98 | 2187.99 | 0.00 | 46.78 | 0.00 | 0.94 | 0.97 |

Source: Based upon empirical study

The null sub-hypothesis (3/1) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to apply properly the selected method to solve the everyday work problems was refused. On contrary the alternative one that was based upon the existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to many phases. At the level of significance or generalization to the whole population this relationship has significantly been verified. As the minimum calculated value of (Ch)² according to both person and likelihood were (346.75) and (284.96) > the equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01), with a df equal to (16). The highest sig. or (p) value was approximately (0.00) in all the times. This could be shown by Table (11). At the level of relationship denotation, this relationship has been confirmed as statistically indicative one. In terms of the type It represents sort of causality, since the lowest values of both the calculated (F) and (T) were (1936.04) and (44.00) in order > their parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05), with a df (1,135) and (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00) in all cases. Moreover, this relationship concerning the form was linear. Since the lowest value of linear by linear (Ch)² was (127.13) > its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01) respectively, with a df equal to (16) while the highest sig. or (p) was

approximately (0.00). The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β), those previously confirmed by the significance of both F-ratio and T-test, were positive-signal ones and ranging between (0.87) and (0.99). Testifying the strength of such a relationship, it was strong in terms of both direction and form, since the lowest values of (R) and (R)² were (0.97) and (0.94). Those in the case of (R) were positive and $> (+0.9)$, while in relation to (R)² they were $> (0.5)$. All these values could be shown by the same Table (11).

Statistical authentication of such a relationship could be analytically justified, when considering that the university GAMs failure to apply properly the selected method for solving problems may return to their unaware concerning the aspects and conditions to recognize for successfully applying such a method. These could be highlighted - in the case of problem - as pointed out below:

- Identifying carefully the phenomena indicate the existence of the problem.
- Specifying accurately the problem as true reason behind phenomena.
- Specifying primarily the probable reasons - or hypotheses - behind problem.
- Conducting measurement to collect the data for testifying the hypotheses.
- Identifying precisely the reasons behind the problem foundation.
- Suggesting the optional resolutions to use in dealing with the problem.
- Subjecting these alternative resolutions to sort of evaluation.
- Selecting the most efficient one of these optional resolutions.
- Applying the efficiently selected resolution to deal with the problem.
- Reviewing the resolution to fit the change in circumstances.

Step by step or systematic method is the one that's logically has to be followed in getting problem resolved, since the resolution of problems used to be through a decision making. The process traditionally defined in short as choosing amongst different options. The availability of alternatives to select amongst is the case that has never been met but in problems as one type of problematic issues. Accordingly it could be claimed that the failure

of the university GAMs in dealing with the everyday problems has occurred due to the unaware of the conditional steps to follow, in terms of the content of every single step and also the chronological logic of all the required steps for taking right decisions.

Table (12) Relationship between the dependent v. (A) and the independent v. (D/2)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|-------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and Degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R Co. |
| a&d2.1 | 431.88 | 0.00 | 306.98 | 0.00 | 129.54 | 0.00 | 0.93 | 2708.47 | 0.00 | 52.04 | 0.00 | 0.95 | 0.98 |
| a&d2.2 | 459.16 | 0.00 | 315.98 | 0.00 | 131.13 | 0.00 | 1.01 | 3634.74 | 0.00 | 60.29 | 0.00 | 0.96 | 0.98 |
| a&d2.3 | 355.16 | 0.00 | 296.72 | 0.00 | 127.21 | 0.00 | 0.97 | 1952.81 | 0.00 | 44.19 | 0.00 | 0.94 | 0.97 |
| a&d2.4 | 509.88 | 0.00 | 326.99 | 0.00 | 133.28 | 0.00 | 0.99 | 6605.34 | 0.00 | 81.27 | 0.00 | 0.98 | 0.99 |
| a&d2.5 | 454.24 | 0.00 | 314.55 | 0.00 | 131.32 | 0.00 | 0.97 | 3786.24 | 0.00 | 61.53 | 0.00 | 0.97 | 0.98 |
| a&d2.6 | 396.55 | 0.00 | 311.43 | 0.00 | 130.50 | 0.00 | 0.91 | 3201.44 | 0.00 | 56.58 | 0.00 | 0.96 | 0.98 |
| a&d2.7 | 360.08 | 0.00 | 277.89 | 0.00 | 125.09 | 0.00 | 1.06 | 1547.61 | 0.00 | 39.34 | 0.00 | 0.92 | 0.96 |
| a&d2.8 | 462.08 | 0.00 | 324.87 | 0.00 | 132.57 | 0.00 | 0.97 | 5218.82 | 0.00 | 72.24 | 0.00 | 0.97 | 0.99 |
| a&d2.9 | 378.72 | 0.00 | 295.21 | 0.00 | 128.85 | 0.00 | 0.91 | 2434.02 | 0.00 | 49.34 | 0.00 | 0.95 | 0.97 |

Source: Based upon empirical study

The null sub-hypothesis (3/2) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to apply properly the selected method to treat the everyday work complexities was refused. On contrary the alternative one that was based upon the existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to many phases. At the level of significance or generalization on whole population this relationship has significantly been proved, as the minimum calculated value of (Ch)² according to both person and likelihood were (355.16) and (277.89) > the equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01) and df equal to (16). The sig. or (p) value was approximately (0.00) in all the times, this could be shown by Table (12). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type It represents sort of causality, since the lowest values of both the calculated (F) and (T) were (1547.61) and (39.34) in order > the parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05), with a df (1,135) and (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00) in all cases. Moreover, this

relationship concerning the form was linear. Since the lowest value of linear by linear $(Ch)^2$ was $(125.09) >$ its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01) respectively, with a df equal to (16) while sig. or (p) was approximately (0.00) . The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β) , those previously confirmed by the significance of both F-ratio and T-test, were positive signal ones and ranging between $(+0.91)$ and $(+1.06)$. Testifying the strength of such a relationship, it was strong in terms of both direction and form, since the lowest values of (R) and $(R)^2$ were (0.96) and (0.92) . Those, in the case of (R) were positive and $> (+0.9)$, while in relation to $(R)^2$ they were $> (0.5)$. All these values could be shown in detail by the same Table (12)

Statistical substantiation of such a relationship, as previously shown, could be analytically justified when considering that the university GAMs failure to apply properly the selected method for treating complexities may return to their unaware concerning the aspects and conditions to recognize for successfully applying the system-ic-atic method. These could be summarized - in the case of complexity - as follows:

- Identifying properly all the systems which are expected to participate occasionally in treating the complexity.
- Specifying all the approaches to be adopted, for employing the different chosen tangible and intangible systems.
- Applying both systems and relevant approaches is conditionally based upon not only the nature of complexity but also its phases' ups and downs.
- Considering that this system-ic-atic method has a big flexibility ranging from one package of systems to another and from one package of applying approaches to another.
- Reference criterion concerning the usable systems and approaches is normally absent, until being really experimented in treating the complexity and acceptably resulted in positive consequences.
- Packages of both systems and approaches will be systemically applied while the change in each kind of package should follow sort of systematic rotation.
- The balancing point that's - at maximum - gotten when treating complexities is an occasionally changeable one, that's why it should periodically reviewed.

- Approaches to use in treating complexity should be looked at as extended orientations that may include a variety of actions such as:
 - Ignoring complexity while paying attention to it.
 - Neglecting complexity as if it does not exist there.
 - Partition of complexity according to priority of its aspects.
 - Living with complexity based upon a considerable consensus.
 - Learning from complexity for improving the way to deal with it.
 - Investing in complexity by continually showing its positive consequences.
 - Colonizing beyond complexity by simultaneously keeping self and others benefits.
 - Creating common understanding to complexity through clarification and agreement.
 - Focusing on the complexity core while considering other aspects as marginal.

Unlike problems complexities have a changeable balancing point rather than resolution; they are long-living problematic issues. That's why the systemic method is providing the know-how for correctly treating them as long as they continually exist.

Table (13) Relationship between the dependent v. (A) and the independent v. (D/3)

| No. of var. | Testifying the relationship | | | | | | Testifying its denotation | | | | | | |
|-------------|-----------------------------|----------|-------------------------------------|----------|-------------------------------------|----------|----------------------------------|----------|----------|----------|----------|--------------------|--------|
| | Pearson (Chi) ² | | Likelihood Ratio (Chi) ² | | Linear by Linear (Chi) ² | | Type, direction, form and degree | | | | | | |
| | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Cal. value | Sig. (P) | Reg. Co. (β) | Cal. (F) | Sig. (P) | Cal. (T) | Sig. (P) | Co. R ² | R. Co. |
| a&d3.1 | 378.76 | 0.00 | 305.23 | 0.00 | 129.86 | 0.00 | 0.89 | 2853.62 | 0.00 | 53.42 | 0.00 | 0.95 | 0.98 |
| a&d3.2 | 469.07 | 0.00 | 321.88 | 0.00 | 132.50 | 0.00 | 0.99 | 5104.97 | 0.00 | 71.45 | 0.00 | 0.97 | 0.99 |
| a&d3.3 | 359.48 | 0.00 | 294.55 | 0.00 | 128.17 | 0.00 | 0.90 | 2210.11 | 0.00 | 47.01 | 0.00 | 0.94 | 0.97 |
| a&d3.4 | 352.03 | 0.00 | 293.89 | 0.00 | 126.70 | 0.00 | 1.08 | 1838.20 | 0.00 | 42.87 | 0.00 | 0.93 | 0.97 |
| a&d3.5 | 402.38 | 0.00 | 302.00 | 0.00 | 129.68 | 0.00 | 0.91 | 2768.44 | 0.00 | 52.62 | 0.00 | 0.95 | 0.98 |
| a&d3.6 | 371.86 | 0.00 | 247.95 | 0.00 | 123.14 | 0.00 | 0.97 | 1292.26 | 0.00 | 35.95 | 0.00 | 0.91 | 0.95 |
| a&d3.7 | 390.07 | 0.00 | 305.59 | 0.00 | 130.09 | 0.00 | 0.90 | 2973.70 | 0.00 | 54.53 | 0.00 | 0.96 | 0.98 |
| a&d3.8 | 363.70 | 0.00 | 282.17 | 0.00 | 126.32 | 0.00 | 1.05 | 1761.23 | 0.00 | 41.97 | 0.00 | 0.93 | 0.96 |
| a&d3.9 | 373.86 | 0.00 | 277.91 | 0.00 | 127.23 | 0.00 | 1.03 | 1957.79 | 0.00 | 44.25 | 0.00 | 0.94 | 0.97 |

Source: Based upon empirical study

The null sub-hypothesis (3/3) that was based upon the non-existence of significant relationship between the incompetence of GAMs to deal with the problematic issues and their failure to apply properly the selected method to face the everyday work crises was refused. On contrary the alternative one that was based upon the existence of such a relationship has been accepted. The acceptance of the latter was statistically justified according to two phases. At the level of significance or generalization on the whole population this relationship has significantly been proved, as the minimum calculated value of $(Ch)^2$ according to both person and likelihood were (352.03) and (247.95) > the equivalent tabulated ones (26.3) and (32.00) respectively, at level of sig. (0.05) and (0.01) and df equal to (16). The sig. or (p) value was approximately (0.00) in all the times, this is shown by Table (13). At the level of denotation, this relationship has been confirmed as statistically indicative one. In terms of the type It represents sort of causality, since the lowest values of both the calculated (F) and (T) were (1292.26) and (35.95) in order > their parallel tabulated values, which were for (F) and (T) equal to (3.92,) and (1.98) in order at the levels of sig. (0.05), with a df (1,135) and (136) respectively. The highest sig. or (p) of both (F) and (T) was approximately (0.00) in all cases. Moreover, this relationship concerning the form was linear. Since the lowest value of linear by linear $(Ch)^2$ was (123.14) > its tabulated one that's mentioned above as (26.3) and (32.00) at the same levels of sig. (0.05) and (0.01) in order, with a df equal to (16) while sig. or (p) was approximately (0.00). The direction of this relationship has been proved to show a directly proportional one, the values of the regression coefficient or (β), those previously confirmed by the significance of both F-ratio and T-test, were positive signal ones and ranging between (+0.89) and (+1.08). Testifying the strength of such a relationship, it was strong in terms of both direction and form, since the lowest values of (R) and $(R)^2$ were in order (0.95) and (0.91). Those in the case of (R) were positive and > (+0.9), while in the case of $(R)^2$ they were > (0.5). All these values could be shown in detail by the same Table (12).

Statistical confirmation of such a relationship, as previously shown, could be analytically justified when considering that the university GAMs failure to apply properly the selected method for facing crises may go back to their unaware concerning the aspects and conditions to recognize for successfully applying the systemic method. These could be summarized - in the case of crises - as follows:

- Selecting a package of systems that are inevitably required for facing the certain crises.
- Employing a mix of both knowledge systems or disciplines and real systems to face the crises.
- Considering that all the chosen systems have to work simultaneously to complete each other.
- Balancing proportionally the roles of the systems that may contribute in facing the crises.
- Considering the required change in the package of systems mix according to the phase of crisis.
- Making the required qualitative change in the nature of the roles done by the crisis-facing systems.
- Fulfilling the required quantitative change in the room of the roles played by the crisis-facing systems.
- Considering the integration, interface and separation amongst crisis-facing systems roles.
- Taking into account that the maximum to reach when facing crisis is a one-shot balance point.
- Being aware that the more the efficiency in specifying the included systems the more the efficiency in getting the balance point.
- Reaching to whatever balance point will not prevent the existence of negative consequences to accept and deal with.

The systemic method could be considered as the most suitable for facing crises when recognising that the one who is defending his home land against suddenly coming invaders will never leave any mean to do so. Similarly the situation of crisis should make managers using all systems to face it. In general there are three indicative words concerning the deference among these problematic issues; problems have to be resolved, complexities have to be treated, while crises have to be faced.

More recognition to the differences, similarities and interrelations amongst the every day three problematic issues could be interpretatively shown by the figure (2).

Conclusions and recommendations:

Getting the null hypotheses refused and alternatively accepting the inverse ones, the **results** of this research could be shown as follows:

- The GAMs in Menoufia University have considerably failed to diagnose the everyday problematic issues faced by them in work place. As a consequence they have looked at all the different problematic issues - which are problems, complexities, and crises - as one type which is most probably the problems.
- The GAMs in Menoufia University have considerably failed to select the fitting method to use when dealing with the different problematic issues. In other words they were incapable to recognise the unlike usage of systematic, systemic, and systemetic methods in the case of problems, complexities, and crises in order.
- The GAMs in Menoufia University have considerably failed to apply properly the selected methods that may fit dealing with a particular type of everyday work problematic issues. This was occurred due to the unaware of the governing conditions to consider when applying every single method.

However, generally it could be said that the considerable failure of Menoufia University GAMs to diagnose the every day work problematic issues, to select, and apply properly the method to be used in dealing with each, is an explanatory factor behind their incompetence in dealing with these issues.

In view of the above mentioned conclusions, the **recommendations** to suggest could be hub-revolving around creating the GAMs awareness in the field of managing the everyday work problematic issues and/or situations. Within this context four main axes were to be focally highlighted as follows:

- Organizing specialized training programs for practically showing the GAMs how to deal efficiently with the different everyday work problematic issues. These programs should be renewably permanent ones and based upon lectures, case studies, real experiments, and simulation as well.

- Establishing a new centre for GAMs support, that will be specialized in providing this key level of management with a permanent advisory work generally concerning the running of everyday work. However the big part of this centre's work should be mainly focused on introducing in hurry and crucial help in the critical times faced by the GAMs particularly in the cases of problems, complexities and crises.
- Establishing- in conjunction with the above mentioned centre – competence/incompetence research groups those will be functionally involved in showing the sources, reasons, phases, places, times, and parties of incompetence concerning the every day work problematic issues. The results of this specialized research work should be utilized continually for recuperating the GAMs competency.
- Linking practically the importance of increasing the GAMs competency, concerning the management of every day problematic issue, with the university more commonsensible purposes such as; fulfilling total quality assurance, getting international accreditation, and other imperative development programs.

Future research-relevant topics:

In addition to the ease of using the same research topic according to many other different perspectives and also diversified empirical fields, there are some relevant topics to be tackled in the future as well. From those worthy mentioning topics the following ones:

- Evaluating the reflection of manager's competence/incompetence on time management.
- Problems, complexities, and crises as workers' personal versus vocational issues.
- Managers' incompetence as a multi-source of both stress and conflict

References:

- Adamson, R.E., (1952). Functional fixedness as related to problem solving: a repetition of three experiments. *Journal of Experimental Psychology* 44(4), 288-291.

- Baden-Fuller, C. & Volberda, HW. (1997). Strategic renewal in large complex organization: a competence based view. In: Heene, A., Sanchez, R., Competence-based strategic management. Chichester, Wiley, 89-110.
- Bar-On, R., Handley, R., & Fund, S. (2006). The impact of emotional intelligence on performance. In V.U. Druskat, F. Sala & G. Mount (Eds.), *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups* (pp. 3-19). Mahawy, NJ: Lawrence Erlbaum Associates, Inc.
- Black, JA. & Boal, KB. (1997). Assessing the organizational capacity to change. In: Heene, A., Sanchez, R., Competence-based strategic management. Chichester, Wiley, 151-168.
- Bove, K., Harmsen, H. & Grunert, K. (2000). The link between competencies and company success in Danish manufacturing companies. In: Sanchez, R., & Heene, A., editors. *Implementing Competence based strategies*. *Advancies in applied business strategy* 6(B), 23-44.
- Boyatzis, R. E. (2006a). Developing emotional intelligence competencies. In J. Ciarrochi & J.D. Mayer (Eds.), *Applying emotional intelligence: A practitioner's guide* (pp.28-52). New York: Psychology Press.
- Boyatzis, R. E. (2006b). Using tipping points of emotional intelligence and cognitive competencies to predict financial performance of leaders. *Psicothema*, 18, 124 -13.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5-12.
- Briscoe, J. P., & Hall, D.T. (1999). An alternative approach and new guidelines for practice. *Organizational Dynamics*, 28(2), 37-51.
- Burnes, B. (1991). Managerial competence and new technology do not shoot the piano player – he is doing his best. *Behavior Information Technology* 10(2), 91-109.
- Carmeli, A., & Josman, Z. E. (2006). The relationship among emotional intelligence, task performance, and organizational citizenship behaviors. *Human Performance*, 19(4), 403-419.

- Catano, V. M., Darr, W., & Campbell, C. A. (2007). Performance appraisal of behavior-based competencies: A reliable and valid procedure. *Personnel Psychology*, 60(1), 201 -230.
- Caupin, G., Knopfel, H., Morris, P., & Pannenbaker, O. (1999). ICB: IPMA competence baseline. Germany international Project Management Association.
- Cavaleri, S. A. & Fearon, D. S. (2000). Integrating organizational learning and business praxis: A case for intelligent project management. *The Learning Organization* 7(5), 251-258.
- Cavallo, K. & Brienza, D. (2004). *Emotional competence and leadership excellence at Johnson & Johnson: The emotional intelligence and leadership study*. Retrieved 8/9, 2008.
- Chiesa, V. & Manzini, R. (1997). Competence levels within firms: a static and dynamic analysis. In: Heene, A., Sanchez, R., Competence-based strategic management. Chichester, Wiley, 195-214.
- Christensen, JF. & Foss NJ. (1997). Dynamic corporate coherence and competence based competition: theoretical foundations and strategic implications. In: Heene, A., Sanchez, R., editors. Competence-based strategic management. Chichester, Wiley, 287-312.
- Collin, A., (1989). Managers' competence rhetoric, reality and research. *Pres Rev* 18(6), 20 -25.
- Collin J., et-al. (2001). *Good to great*. New York, HarperCollins Publisher Inc.
- Cote, S. & Miner, C. (2006). Emotional intelligence, cognitive intelligence and job performance. *Administrative Science Quarterly* 51(1) , 1-28.
- Crawford, L. H. (2001). Project management competence: the value of standards, DBA Thesis ed, Henely Management collage, Brunel University.
- Crawford, L. H. (2005). Senior management perceptions of project management competence. *International Journal of Project Management* 23, 7-16
- Currie, G., & Darby, R. (1995) Competence based management development. *Journal of European Industry Training* 19(5), 11-15.

- Dosi, G., & Teece DJ. (1993). Organizational competences and the boundaries of the firm. Market and organization: the competitive firm and its environment. France.
- Draganidis, F. & Mentzas, G. (2006). Competency based management: a review of systems and approaches. *Information management and computer security*, 14(1), 51-64.
- Drejer, A. (2000). Organizational learning and competence development. *The learning Organization* 7(4), 206-220.
- Drejer, A. (2001). How can we define and understand competencies and their development? *Technovation* 21, 131-146.
- Dreyfus, C.R., (2008). Identifying competencies that predict effectiveness of R&D managers. *Journal of Management Development*, 27(1), 76 -91.
- Dulewicz, C., Young, M., & Dulewicz, V. (2005). The relevance of emotional intelligence for leadership performance. *Journal of General Management*, 30(3), 71-86.
- Finn, R., (1993). A synthesis of current research on management competencies. Henley Management Collage, *HWP 10*(93)
- Forsberg, K., Mooz, H., & Cotterman, H. (2000). Visualizing Project Management. Willy, USA.
- Gadeken, DOC. (1991). Competencies of project managers in the MOD procurement executive. Royal Military Collage Sci.
- Gangani, N., McLean, G., & Braden, R. (2006). A competency-based human resource development strategy. *Performance Improvement Quarterly*, 19(1), 127-140.
- Gentry, W.A., Harris, L. S., Baker, B. A., & Leslie, J. B. (2008). Managerial skills: What has changed since the late 1980s. *Leadership & Organizational Development Journal*, 29(1), 167-181.
- Gentry, W. A. & Leslie, J. B. (2007). Competencies for leadership development: what's hot and what's not when assessing leadership-implication for organization development. *Organizational Development Journal*, 25(1), 37-46.
- Goldberger, A. & Rubin K. R. (1995). *Succeeding with objects: Decision frasmework for project management*. Addison-Wesley, Reading, MA.

- Goldberg, A. (1999). Chaos theory and creativity: The biological basis of innovation. *Journal of Innovative Management* 4(3), 15 – 23.
- Goleman, D. (1998a). What makes a leader? *Harvard Business Review*, 76(6), 82-91.
- Goleman, D. (1998b). *Working with emotional intelligence*. New York: Bantam Books.
- Goleman, D. (2000) Leadership that gets results. *Harvard Business Review*, 78(2), 78-90.
- Grzeda, M. M. (2005). In competence we trust? Addressing conceptual ambiguity. *Journal of management Development*, 24(6), 530-545.
- Hamel, G. & Heene, A. (1994). Competence based competition. Chichester, Wiley, 11-33.
- Hamel, G. & Prahalad, C. K. (1994). *Competing for the Future*. Harvard Business School Press, Boston.
- Hawkins, J. & Dulewicz, V. (2007). The relationship between performance as a leader and emotional intelligence, intellectual and managerial competencies. *Journal of General Management*, 33(2), 57-78.
- Herlen, M., (2009). An Examination of Managerial Competencies and Their Relationship to Performance. Unpublished Doctoral Dissertation, St. Ambrose University.
- Heywood, L., Gonczi, A. & Hager P. (1992). *A guide to development of competency standards for professions*. Canberra, Australian government publishing Service.
- Hopkins, M., & Bilimoria, D. (2008). Social and emotional competencies predicting success for male and female executives. *Journal of Management Development*, 27(1), 13-35.
- Jyrki, et al., (2003). Managing knowledge and knowledge competences in projects and project organizations. *International Journal of Project Management* 21, 571-582.
- Kilcourse, T., (1994). Developing competent managers. *Journal of European Industry Training* 18(2), 309-590.
- Landy, F. J. (2006). The long, frustrating, and fruitless search for social intelligence: A cautionary tale. In K.R. Murphy (Ed), *A critique of emotional intelligence: What are the problems*

and how can they be fixed? (pp.81-123). Mahaway, NJ: Lawrence Erlbaum Associates, Inc.

- Laughton, D. & Ottewill, R. (2003). Developing corporate skills in a cross-cultural setting: the contribution of action research. *Educational Research*, 11(3), 429-446.
- Lettl, C. (2007). User involvement competence for radical innovation, *Journal of Engineering and Technology Management* 24, 53-75
- Lienz, B. P. & Rea, K. P. (1999). *Breakthrough Technology Project Management*. Second ed., Academic Press, London.
- Lindsay, PR. & Stuart, R. (1997). Reconstructing competence. *Journal of European Industry training* 21(9), 326-332.
- Lombardo, M. M., & Eichinger, R. W. (2001). *The leadership machine: Architecture to develop leaders for any future*. Minneapolis: Lominger.
- Mahoney, JT., & Sanchez R. (1997). Competence theory building: reconnecting management research and management practice. In: Heene, A., Sanchez, R., Competence-based strategic management. Chichester, Wiley, p. 43-63.
- McVeigh, CBJ. (1995). The right stuff – revisited: a competency Perspective of army program manager. *Program Manager (Jan-Feb)*, 30-34.
- Meredith, J. R. & Mental, S. J. (2000). *Project management: a managerial approach*. Wiley, USA.
- Miller, J.S. & Cadry, R. L. (2000). Self-monitoring and performance appraisal: rating outcomes in project teams. *Journal of Organizational Behavior* 21, 609-626.
- Mosakowski, E., & McKelvey, B. (1997). Predicting rent generation in competence based competition In: Heene, A., Sanchez, R., Competence-based strategic management. Chichester, Wiley, P. 65-88.
- Nordhaug, O. (1991). *The Shadow Educational System*. Adult Resource Development, Scandinavian University Press.
- Nyhan, B. (1998). Competence development as a key organizational strategy. *Industrial and Commercial Training* 30(7), 267-273.
- Ott, J.S. & Shafritz, J. M. (1994). Toward a Definition of Organizational Incompetence: A Neglected Variable in

Organization Theory. *Public Administration Review* 54(4), 370-377.

- Prahalad, CK. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review* 68(3), 79-93.
- Rispoli, M. (1996). Competitive analysis and competence-based strategies in the hotel industry. In: Sanchez, R., Heene, A., Thomas, T, editors. Dynamics of competence-based competition: theory and practice in the new strategic management. London, 119-38.
- Sanchez, R. (1996). Strategic product creation: managing new interactions of technology, markets, and organizations. *Eur Management Journal* 14(2), 121-139.
- Sanchez R. (1997a). Managing articulated knowledge in competence-based competition. In: Sanchez, R., Heene, A., editors. Strategic learning and knowledge management. Chichester, Wiley, P. 163-187.
- Sanchez, R., (1997b). Strategic management at the point of inflection: systems, complexity, and competence theory. *Long Range Planning* 30(6), 939-946.
- Sanchez, R., (2004). Understanding competence-based management: Identifying and managing five modes of competence, *Journal of Business Research* 57, 518-532.
- Skinner, C. & Spurgeon, P. (2005). Valuing empathy and emotional intelligence in health leadership: A study of empathy, leadership behavior, and outcome effectiveness. *Health Service Management Research* 18(1), 1-12.
- Soderlund, J. (2004). On the evolution of project competence: empirical regularities in four Swedish, *Proceeding of the IRNOP VI, Turku, Finland 2004* pp. 599-619.
- Spencer L. M. & Spencer, S. M. (1993). *Competence at work*. New York, NY: John Wiley & Sons, Inc.
- Suikki, R., Tromstedt, R., & Haapasalo, H. (2006). Project management competence development framework in turbulent business environment. *Technovation*, 26, 723-738.
- Sujan H., Sujan M., & Bettman J.R. (1988). Knowledge structure differences between more effective and less effective salespeople. *Journal of marketing research* 25, 81-86.

- Sydanmaanlakka, P. (2003). Intelligent leadership and leadership competencies. Developing a leadership framework for intelligent organizations. HUT Industrial Management and Work and Organizational Psychology, Dissertation Series, No.4.
- Thompson, J. & Cole, M. (1997). Strategic Competency; the learning challenge. *Journal of Workplace Learning* 9(5), 153-162.
- Westera, W. (2001). Competencies in education: a confusion of tongues. *Journal of Curriculum studies* 33(1), 75-88.
- White R., Hodgson, P., & Crainer, S. (1996). *The Future of Leadership. Riding the Corporate Rapids into 21st century*. Pitman, USA.
- Winterscheid, BC. & McNabb S. (1996). From National to global product development competence in the telecommunication industry: structure and process in leveraging core capabilities. In: Sanchez, R., Heene, A., Thomas, H. editors. Dynamics of competence based competition: theory and practice in the new strategic management. London, P. 279-298.
- Young M. & Dulewicz, V. (2006). Leadership styles, change context and leader performance in the royal navy. *Journal of Change Management*, 6(4), 383-369.
- Young M. & Dulewicz, V. (2008). Similarities and differences between leadership and management: High-performance competencies in the British royal navy. *British Journal of Management*, 19(1), 17-32.