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This Issue aims of Journal of Economics and Administrative Sciences (JEAS) is particular problem that intends to investigate the employment of simulations in different contexts in business and management education. The games of Simulation have become significantly important elements of academic programmed activity during previous years. The simulations use in management and business schools has become the norm as they are considered as important tools for facilitating generative learning, permitting students to experience the challenge, excitement and operational reality of running a virtual organization but in a relatively risk-free and safe environment. Benefit in employing the business simulations is witnessed by the increasing number of research papers on this theme in scientific and academic journals, including the International Journal of Management Education. Therefore, whilst the simulations advantages and benefits are often discussed in the literature, evidence regarding the effect of their employment remains limited. In addition, a requirement exists for more research investigating how the effect of simulation-based learning might be boosted. The articles in the Special Issue pave some way to providing witness concerning the espoused benefits of simulation games and exploring how they may be leveraged to heighten impact. The first article, written by Suzaan Hughes and Frances Scholtz, scrutinizes the major contribution of reflection in simulation gaming. They conclude that the effect on learning of a simulation can be significantly boosted as a result of reflection, providing useful lessons for teachers and educators designing simulation-based learning activities. In addition, the second research paper, discussed by Mark Loon and Robin Bell, recognizes a relationship between the critical thinking of students and their learning based on simulations. Overall, these two research articles recall us that the impact of simulations on learning is contingent on a number of factors. The third paper, by Mark Loon, Jason Evans and Clive Kerridge, discusses this topic by revealing how learning boost can be obtained by effective instructional curriculum design. The last research paper, by Christopher MS cherpereel, underlines the significance of comprehending human decision making in the area of simulation game creation. Overall, this papers collection presents priceless resource for both simulation designers and educators enabling them to develop their practice and boost the effect of their simulation-based teaching and learning activity. He argues that the decision making approach chosen at the design phase affects the use of simulations and their effect on learning.

Kok Chambers
Editor in Chief
Knowledge Management in Action: A Study of Knowledge Management in Management Consultancies

Jezreel Muñoz

ABSTRACT

The chapter focuses on knowledge management and on knowledge sharing in particular. It is based on a study of a wide range of management consulting firms in Denmark. The purpose of the study has been to gain a more profound understanding of what constitutes knowledge sharing in practice. What does knowledge sharing imply? What are the organizational and managerial aspects affecting knowledge sharing and how? Findings from the study demonstrate a series of critical issues related to knowledge sharing: the importance of having a knowledge strategy, the relation between the project organization, power and mobility, the role of office space, the quest for time, the problem of decontextualization in electronic databases, the need for incentives different from financial and promotional ones, the importance of trust among employees, and the necessity of top management support.

Keywords: knowledge storing, knowledge distribution, knowledge exposure, knowledge transfer, knowledge exchange and knowledge collectivism.

Introduction

This chapter is a result of a research project on the production and application of management knowledge in the Danish management consulting industry. Knowledge management is becoming an increasingly important topic in management philosophy and as a management tool as reflected in the growing number of articles and books on the issue. The article database Proquest, for example, contained 45 articles about knowledge management in 1995. By the beginning of 2002, the number has increased to approximately 2000. In 1997, two new journals – the Journal of Knowledge Management and Knowledge and Process Management – were introduced, and in 2000, the Journal of Intellectual Capital emerged. During this same period the number of organizations venturing into the knowledge
management arena has grown as well. While some industries have been highly proactive in this area – particularly consulting, information technology and related advisory-based industries where knowledge is the key resource – knowledge management initiatives are becoming increasingly prominent throughout the corporate landscape. While the knowledge management literature offers some useful insights, many issues (e.g., what is the actual value of implementing knowledge management activities?) remain unclear. In an attempt to begin to fill this void, our research focused on three concerns: (1) the various strategies companies pursue in the knowledge management area, (2) what effect(s) these strategies have on the firms and their members when they are implemented, and (3) the underlying reasons (in terms of explanations rather than causal factors per se) that could clarify some of the dynamics and mechanisms involved in this developing field. In the beginning, knowledge management was all about technology and the new possibilities that company Intranets, e-mail systems and databases could provide. Today, the view of knowledge management has shifted toward broader social and cultural factors, with technology now seen as an enabling factor. Why has this shift occurred? What differences can be found among employees who have been exposed to a technological approach alone and those who have experienced broader exposure to knowledge management practices? One aspect of knowledge management that has been well accounted for is the concept of knowledge itself. It has been outlined in a number of different ways, from the classical philosophical perspective as “justified true belief” to a more pragmatic view as “for action” (Davenport & Prusak, 1998; Christenen, 2001). At the same time, knowledge has become an umbrella for many different words – including data, information, wisdom, codified, personal, proprietary, common, organizational, diffused, migratory, embedded, embodied, encultured, embained, tacit, explicit, sticky, and so forth (cf. Badaracco, 1991; Blackler, 1995; Boisot, 1996; Polanyi, 1958; Nonaka & Takeuchi, 1995; Saint-Onge, 1996; Von Hippel, 1990). Is it just as easy to find several definitions of knowledge sharing in the knowledge management literature? The quick answer is “No.” Knowledge management is about developing, sharing and applying knowledge within an organization to gain and sustain competitive advantage. The concept of knowledge sharing, however, is not been well defined. The ambiguity in the concept, for instance, is reflected in some of the major anthologies about knowledge management published in recent years, from Cortada and Wood’s (2000) Knowledge management Yearbook 2000-2001, to Little, et al’s (2002) Managing Knowledge reader to Dierkes, et al’s (2001) Handbook of organizational Learning and Knowledge. These volumes do not contain any articles dealing specifically with knowledge sharing, knowledge transfer, knowledge distribution, knowledge diffusion and the like – and there are few references in the subject index. Even considering the exponential explosion of knowledge management-related articles in Proquest since 1995, less than 5 percent are linked to the keyword “knowledge sharing.” This apparent void does not mean that knowledge sharing as such is completely absent. A dichotomy between technology and human beings, electronic distribution and human interaction, and IT and HR is often embedded (see, for example, Davenport & Prusak, 1998; Hansen, 1999). These ongoing discussions deal with the question of what kind of knowledge processes we should focus on and where in the organization the knowledge project should be rooted. The main tensions surrounding the technological aspects of knowledge management (KM) focus on the issue of tacit knowledge and how to capture it in knowledge management systems, as well as the challenge of motivating employees to contribute to these systems. Quality control and
updating are issues often raised. Globalization, in contrast, often emphasizes the human dimension, especially in terms of lags in time and space, and the challenges involved in creating a culture of knowledge sharing as opposed to one of knowledge hoarding.

The purpose of this chapter is to create a more profound understanding of what constitutes knowledge sharing in practice, focusing on two key questions:

What is actually meant by knowledge sharing?

What organizational and managerial aspects affect knowledge sharing and how?

The analysis is mainly empirically oriented, examining the empirical data primarily from a "common sense" perspective (Kvale, 1997) and drawing on various theoretical elements in the knowledge management field. Nine issues are identified as important elements in the knowledge-sharing processes in the sample firms. These issues will be highlighted and used to develop a knowledge sharing typology. This framework suggests that the concept of knowledge sharing includes six dimensions: knowledge storing, knowledge distribution, knowledge exposure, knowledge transfer, knowledge exchange and knowledge collectivism.

The Research

The empirical part of the study provided data from a variety of consultancies. Seven management consulting firms participated, including both major international consultancies and medium-sized, Danish-based management consulting firms. Furthermore, information (mainly interview transcriptions) from an additional three management consulting firms and two consulting-engineering firms is included as a secondary source. These data are a relevant supplement to our primary data source, and they provide an interesting comparative perspective, as both engineers and management consultants have similar types of businesses within the consulting industry. Both kinds of firms are knowledge firms in the sense that they primarily make their living from vending knowledge. As such, knowledge management is vital for these firms and, as we will see, both engineering and management consulting firms experience a number of common problems in this area. The number of contacts and type of data generated in each of the companies in our sample varied according to the amount of access we were given, the extent of their willingness to participate in the research, and the time they allocated to us. Furthermore, the contacts were on different levels in the organizations; we have talked with top management, employees, and organizational members who specifically worked with knowledge management, either internally or externally in connection with client projects. In each organization, we attempted to interview people at all levels in each company to get an idea of the contrast between the firms’ visions (top management) and the actual performance (the employees) of the organization. The data are based on semi-structured, tape-recorded interviews and comprehensive notes taken at company meetings. The study also employed an experimental methodology in three of the firms – organizational photography. In these three firms, the researcher walked around in the organization for a day, taking approximately one hundred photos. A selection of the photos were then arranged in six to seven series of four pictures. A group of employees (approximately four in each focus group) were shown the photos, and asked to discuss knowledge sharing in their company, associating from the photo series. The focus group was exposed to a new series of
pictures every twelve minutes, and the researcher remained silent during the one and one half-hour session. The discussion was tape-recorded and transcribed like normal interviews. The idea underlying this approach to data gathering is to get another view of what constitutes knowledge sharing in a particular organization. When using semantic questions (like in face-to-face interviews) instead of visual ones (like the photos), the answers are more likely to fall within the framework of the researcher. By using photos rather than asking questions to prompt people to talk about themselves and their everyday working life, the researcher may receive unanticipated responses – even answers to questions the researcher might not have thought of asking. Using photos, the discussion opens a number of new avenues with respect to the understanding of knowledge sharing in practice. Table 1 summarizes the different types of information that were gathered in the study. In addition to the interviews, meetings and focus groups, the study also drew on publicly accessible material about the firms, e.g. their web sites, financial figures, and various publications published by some of the firms on their knowledge management practices.

Table 1: Research overview

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To Have A Knowledge Strategy – Or Not
The research shows that large management consulting firms have invested heavily in technological knowledge systems, attempting to bring proximity into the global firm, which operates across time and space. There are, however, less well-considered concerns regarding informal knowledge sharing, an issue that several of the consultants in our study noted as a problem. While small management consulting firms may be in a better position to share knowledge informally by virtue of their size, they often operate with a minimum of technology for handling knowledge that in many cases is inadequate. The employees keep their material in private binders, and the consultants increasingly see this lack of common structure as a source of annoyance. Kent Greene (in Andresen & Jakobsen, 1999) points to the fact that small firms are not focusing on knowledge management to the same extent as larger firms, because of the belief that “everybody talks with each other.” This assumption is, in many cases, erroneous and thus becomes a barrier to directing appropriate focus on knowledge management. Although some of the participating management consulting firms in our sample did have an explicit knowledge strategy, others did not. This observation does not necessarily imply that those firms with a formulated strategy are more focused on knowledge sharing and knowledge development, and that those without such a strategy have not reflected on the subject nor implemented initiatives to encourage knowledge sharing. Many firms have activities the primary objectives of which are not necessarily knowledge...
sharing, but in practice have this “side effect.” The opposite may also be the case in firms with an explicit strategy – it is only (empty) words that are not transformed into action. And finally there are firms with a knowledge strategy that try to “walk the talk.” Studies show (e.g., Foote, et al, 2001; Storey & Barnette, 2000) that knowledge management projects often fail because of a lack of a knowledge strategy, a weak relation to the business strategy of the company, and/or a weak anchor and link to the rest of the organization. Other studies show that knowledge management works better in firms with an explicit knowledge strategy, appropriately supported by structure, culture, technology and management (see Apostolou & Mentzas, 1999; Hauschild, et al, 2001; Kluge, et al, 2001). These findings correspond well with our observations. As one of our respondents explained: Our business is divided into four mega processes: sales, service, people, and knowledge. These four mega-processes saturate the entire organization and a number of employee forums have been established. For example, I am a member of the service forum, where we concentrate on the services that we supply. What are our methodological tools, how can we improve and refine them, what is missing today? We then put our ideas into action and communicate them to other areas of the organization if the given issue lies outside our domain. […] I have the chance of getting to know a lot of things and become aware of the fact that the organization is working professionally on our training. Management is aware of our wish to improve our performance. We want to be better at doing what we are doing, and how can we do that? I find this is a big step. We are allowed to participate, to influence, to discuss how to become better, and how we can approach it, how we can affect routines in the organization and what else is needed. I like that.” This quote illustrates, among other things, that in organizations where KM is a basic part of the other business processes and daily practice, employees are more likely to understand the relation between knowledge management initiatives and the company mission. While this point may seem obvious, not everyone necessarily shares this holistic perspective. The research shows, that knowledge management is not likely to succeed when sporadic initiatives within the knowledge field are launched without being integrated into the organization. As an example, the majority of companies today have an Intranet, and the most frequently used argument for having one is that it enables the knowledge sharing across organizational units. However, despite the growing existence of company Intranets, the problem most frequently mentioned when discussing knowledge sharing with employees is that they do not know what colleagues in other departments are working on. In other words, technological initiatives like Intranet and shared databases themselves are insufficient tools for furthering knowledge sharing. The larger international management consulting firms appear to rely on a “rule governed” type of culture, where the mother organization abroad (typically based in U.S.A.) often dictates global company policies. Several employees working in international consultancies, for example, express the attitude of “that’s just the way it is”. They know that they have to comply with firm-based rules to make it all work, and accept that even small changes take a lot of time. This situation is not the case in smaller companies, as illustrated by the comments by a Human Resource manager in a medium-sized consulting firm: The consultants hate centralism. It is difficult to make them report anything. They do not do it, and they do not care to. Here knowledge sharing grows out of local initiatives. There is no general strategy. Knowledge sharing is random. In small management
consulting firms, the consultants, to a large extent, work independently, i.e., each consultant develops, sells and delivers his or her own assignments. This reality, of course, is partly due to the fact that smaller consulting firms have smaller assignments that do not require a formal division of labor. In effect, such firms often develop into units of “one-man firms” in which everybody can do as they please – as long as they sell and deliver.

The Relevance of Project Organizations

In the absence of formal knowledge management policies, organizational structure can be an influential determinant of knowledge sharing. One of our respondents, for example, noted that:

The more people a job requires, the more knowledge the project organization accumulates – assuming that new teams are established now and then. For financial reasons, small jobs are one-man jobs, making it more difficult to disseminate knowledge. This quote is interesting in relation to the role that a project organization structure plays in knowledge sharing. Our study shows that project organizations (or adhocracy in Mintzberg’s (1983) terminology) have had a positive effect as a vehicle for knowledge sharing in several ways, as we will see in the following paragraphs.

Ever since Foucault concluded “it is not possible for power to be exercised without knowledge. It is impossible for knowledge not to engender power” (Allee, 1997) knowledge and power have been intertwined. However, the very aspect of power is surprisingly absent in our empirical data. This observation appears to reflect the project organization structure that is practiced in the majority of the management consulting firms. I have never seen it as a problem that you don’t share knowledge because you simply have to do it…You cannot survive in [the firm] if you don’t share your knowledge, you can’t just sit in your office and say, ‘This is my small world, or my confined domain.’ The project organization, in which everyone in the project group is dependent on the work of each other and where success is measured by the quality of the joint efforts, makes it difficult to survive unless you co-operate and share knowledge with colleagues.

When advocating the usefulness of knowledge management, a rationale often heard is that when a competent or key employee leaves, the firm loses vital knowledge – and, in worst case scenario, part of its competitiveness (e.g., Hildreth, et al, 2000). With the growing mobility in the labor market, companies should give substantial attention to this problem, focusing on improving the conditions for knowledge sharing within the company. The dogma that knowledge sharing is a good idea due to the increasing mobility on the labor market, however, is apparently not of immediate importance to the management consulting business due to its project orientation. A consultant in one of the firms in our sample explains it as follows:

You seldom work alone on a project, so even though Robert is no longer here, then Michael is, and the two of them worked together. So if I can remember that they’ve worked on something which is relevant to me, Michael ensures that the information is available. Another employee pointed out: One way or the other I do not think that we lose much knowledge. We do lose some competent people, but I do not really think that they take a lot of knowledge with them when they leave. The knowledge remains in-house – somewhere – and it keeps accumulating. Even the tacit part of it will in most cases be shared, because you have been working [on a project] together. Only a few of those leaving the firm take critical knowledge with them. This quote raises an interesting question: Are management consulting firms less dependent on unique competencies compared to engineering firms, where a company might win an assignment based on the expertise
of one of its members (e.g., underwater asphalting)? One consultant noted Our concepts are very overlapping. It’s the way we work, 90 to 95% [of what we do is based on] general knowledge and only a small part is specific. This means that what disappears [when an employee leaves the firm] may be an expertise, but the joined insights remain. So the joined quantity of knowledge is really quite large, larger than you would think. These quotes suggest that the management consulting business might not require as specific qualifications as other kinds of professional services businesses, as might be found in the highly specialized requirements of engineer or lawyer consultants. In effect, the loss of any one consultant is not perceived as a loss of knowledge. A high degree of turnover, of course, poses a problem in relation to knowledge sharing (as well as many other problems). The period of introducing and socializing new employees can also be time consuming and expensive, and clients may decide to follow a particular consultant who has left the firm instead of staying with the company. The problem of mobility appears to be more critical higher up in the hierarchy, where the consultant more often works alone. One management consulting firm experienced this when a key employee was given new assignments in the firm and no one could replace him. As they lamented, “we now know that every king needs a successor.”

The Role of Office Space
The consulting firms in the study are organized very differently – from an office landscape to the farmhouse idyll associated with small one-man offices. There are extremely many – and different – opinions on the various models, but it is quite evident that the physical frames of the organization do influence knowledge sharing. Physical space and layout influence the way in which employees move around in the organization and thus whom they interact with during the day. Several firms were quite aware of this relationship and have chosen to create an open office plan with flexible workstations. As illustrated by the following quote, several statements indicated this structural approach to knowledge sharing was a good idea: You often hear something accidentally when you sit in the open office and then you think, ‘I’ve done that before, let me give them some input’. You’re not going to catch those situations if you sit isolated in your office. In fact, I think quite often that people from quite unexpected positions are able to offer input. Other statements, however, point in different directions. The following example is from a focus group discussion: [In an open office] knowledge sharing can actually become an obstacle as you may be confronted with it all the time. You can meet a hundred people all the time. You are on your way to the lavatory, there are four people at the café table, and you haven’t seen some of them for a while. What has happened since we last met, what are you doing, etc.? You can spend your entire day knowledge sharing, if that’s what you want. I fully agree. I can tell you of a funny example from yesterday. I stopped by one of my colleagues, and he said: Hey, see what I am working on now. I spot some interesting problems – and I can’t let it be because I’m curious – and I share my thoughts with him and propose to forward that mail to me so I can look it over. But what the hell – I don’t have the time for it! And suddenly you’ve spent one and a half-hours on a colleague and you don’t get home before eight o’clock that evening. It takes a lot of discipline. As this dialogue suggests, although open office arrangements facilitate interaction and the resulting knowledge sharing that comes from person-to-person contact, it can become an all-encompassing, time-consuming task.
As a result, people can feel that it disrupts rather than facilitates accomplishing their tasks and objectives. Several employees noticed that when working in an open office environment they always chose to occupy the same desks, and an informal way of organizing begins to emerge. In addition, there is the problem of noise and questions of inefficiency. In this context, Moberg's (1997) study of efficiency in open work places is interesting in because it demonstrated that even though the employees felt that their efficiency decreased, their overall productivity actually increased. Many people, however, feel that their creativity is restricted in open workspaces because of the high degree of consideration that needs to be demonstrated – some of the respondents even talked about the atmosphere of a “burial chamber”. In fact, many of these individuals reported staying at home if they needed to concentrate on a specific task, which might prove to be counterproductive in a culture where consultants already spend much of their time off-site with clients, thus leaving less time to interact with colleagues and be a part of the organization. The dynamics associated with such (physical) unavailability might explain why so many consultants are enthusiastic about the idea of a project room, i.e., a room allocated to the entire project group as its “workplace” at the start of a new project. Respondents reported that they liked to take over a “completely naked” room with white walls, allowing the project group to “build their own world” with decorations, posters and pictures on the walls. One consultant said that, in the consulting business, employees do not function as a community working towards common goals, such as in traditional production companies where the common goal is to produce certain products. Such traditional, common goals constitute an “organizational kit” which is absent in the management consulting firm, where the product mainly consists of individual services. Furthermore, with frequent physical absence it becomes difficult to create the feeling of a community that is important to knowledge sharing. Project rooms seem to be a way of creating a feeling of “belonging.” Several respondents raised the question of whether it would be better to have a desk close to colleagues from the same department or to be physically closer to colleagues from other departments as a way of enhancing knowledge sharing. While being together with close colleagues provides one with security and ready access to create a community of practice, such proximity emphasizes the functional division of labor and confines the way in which individual consultants work together, possibly limiting the variety of methods used. One of the consultants in the study commented on the advantages of interdisciplinary workplaces: We are four different departments and the mixing of departments is evidently advantageous. You talk and somebody listens – ‘Is that really what you are doing? We can help you out on that and that.’ Such situations generate more knowledge sharing. If you are working in the same field professionally, you often use the same databases, identical material, and so forth. For example, I talked to Peter, and in his department they had some super material that I had never seen before. I discovered this by pure accident – just because we were sharing office space – and they heard what we were doing, ‘Oh, that is what you are working with, we actually have something here….’ Finally it should be noted that most management consulting firms are not very good at using office space to show who they are, telling others about themselves and their products. There is an incredible amount of (trivial) art on the walls instead of plates, pictures and other symbols that could communicate knowledge within and about the firm. Corridors are obvious places to communicate such knowledge as the following quote illustrates: In connection with [a project], I had a large colored poster on our door and a lot of our colleagues knocked on the door asking what it meant – ‘what is it you have here?’
It sure looks interesting. Can we help, or would you tell us about it?” The effect it had…. Manufacturing companies always have showcases or exhibitions of products in public arenas, but in knowledge companies, where the production is more intangible, this dimension is often neglected. This is unfortunate as material objects do play a part in shaping the corporate identity – employees become aware of what goes on in the other departments and it is good public relations (PR), providing greater visibility when clients visit the firm.

The Quest for Time
It is well known that consultants are busy people. Time is – to draw on a rather stale cliché – “money.” Consultants sell their knowledge by the hour, attempting to invoice as much time as possible to the client to enhance (human) resource utilization. Hours that cannot be invoiced to the client are regarded as costs – despite the fact that in the long run they might represent an investment of high return if, for example, the time is spent on research and development or an extension of skills and capabilities. Utilization is – in the words of one of our respondents – “the underlying value controlling all behavior.” This perspective is not hard to understand when the consultant’s bonus and promotions to a high degree depends on his or her utility value. As knowledge development and knowledge sharing activities are, to a large degree, regarded as internal activities (there are, of course, many examples of clients paying indirectly for this activity) striving for such utility becomes a fundamental barrier to efficient knowledge sharing. It is surprising that only one management consulting firm expressed a specific attempt to resolve this problem: One thing I wanted to abolish was the utilization rate, i.e., the foundation for our performance management system. Today everything [billable and non-billable hours] has become productive time… It is the day-to-day things, the fundamental techniques that create the employees you have. That is my starting point. It is the way in which you have to make your weekly reporting, account for your time, invoice your time, and how you refer to what is important. Moving away from such time-oriented regimentation does not necessarily imply making out-of-house activities invisible, but instead might mean that consultants would not have to assess all activities in relation to billable hours. When asked how their firm handles the time problem, most of the consultants in our study merely sighed. However, one of these individuals who had just started working in the firm quoted above, (that had just introduced a system of measuring time in terms of productive hours), stressed: I don't have to hide time spent on service forum activities under administration or some kind of desk research. It is simply called service forum. So, it is visible in the system and accepted that we spend time on this forum. I think that it is an example of how well the company has resolved the problem of spending time on non-billable activities. Knowledge sharing can easily be neglected in everyday practice – even though KM has been appointed a focus area in mission statements etc. – if the infrastructure of the company does not support it. It requires a shift in the attitude among the employees to integrate knowledge sharing in all aspects of job performance, and this shift can only be provoked if the way daily practice is valued, measured and talked about changes as well. Another problem that the consultants pointed to in relation to time is the question of tailoring or recycling services. The ability to offer customized services is a strong value in the
management-consultant business, as reflected in almost all of the management consulting firms’ PR material: Services are tailored to meet specific and individual needs … [we focus] on the specific preconditions and characteristics of your company in order to create and utilize new opportunities. The desired image is that the services offered are not pre-packaged, off-the-shelf responses. Solutions and services are always tailored to match the needs of the client. Thus, the underlying assumption is that selling standardized consulting services does not have the same attraction as customized services. Clients must believe that they are unique, but this also signals to the consultants that they have to “start from scratch” in each engagement. This orientation creates a paradox with respect to knowledge management. The purpose of knowledge sharing in management consulting firms is to recycle as much knowledge as possible (by storing concepts and tools that are accessible to everybody), in essence making it unnecessary to start from scratch every time. The reality is that most management consulting firms are selling standardized services adapted to meet the requirements of the individual client – meaning that the term “customized” should be taken “with a grain of salt.” It is difficult for the consultant to make the two ends meet – meeting the client’s expectation for a unique product, while turning a standard product into a customized service. The consultant is caught in a dilemma. He or she wants to furnish the client with a tailor-made solution, making the client more than satisfied (one of the consultants’ biggest fears is that their solution does not make a difference, and that the client company just continues on as if nothing happened). At the same time, due to the emphasis on billable hours (time registration) the consultant is forced to recycle solutions. On top of this dynamic, it is important to bear in mind that knowledge workers prefer professional challenges and the ability to influence their day-to-day work activities. Thus, they are tempted to create unique solutions, even though a database may offers recipes that have already been served by colleagues, ready to be recycled. An HR manager of an engineering firm claimed that the company’s engineers often delivered more than they were asked – and paid – to do. This was due to the fact that the engineers often turned (routine) assignments, where old solutions could be applied, into a greater challenge, where new knowledge could be developed. This urge for professional challenges seems to be a common trait for knowledge workers in particular, and is often neglected by management.

The Problem of De-contextualization in Electronic Databases
The assumption has gradually gained ground that knowledge stored as text in a database is not necessarily the same when it is retrieved by someone else, simply because we perceive, understand and interpret information differently. When sharing knowledge stored electronically, the best-case scenario is that different perceptions of the same information result in new and innovative knowledge. The worst-case scenario is that the information is misinterpreted, leading to genuine mistakes. One consulting firm, for example, reported that assessment tools stored on their Intranet were downloaded and used by someone from another department who did not have the authority or the necessary prerequisites for using them. The outcome could have been disastrous, but was not in this case. The empirical data of our study questions the usability of stored knowledge. There are many indications of the dubious value of explicit knowledge (in terms of textual depiction) as reflected in the following statements made by respondents in different management
consulting firms:
It is my experience that writing down our ideas is minimally helpful – I can consult the system, but I do not learn anything from the model I see. I learn from what somebody explains to me about the model or the tool. Then I suddenly understand… just look at the one [model] I got from [department]. If I had just looked at it, my response would have been, ‘oh, well.’ But when I looked at it together with someone who briefly commented on it, I realized, ‘wow, this is brilliant!’

What other people have done seems alien to you. But you can use the information stored in the database for inspiration.

Even though, as a project manager, you run into a lot of problems that interest many colleagues – if you had to summarize your experience in one page I don’t know whether the account would be too fuzzy for anybody to make sense of it.

I really don’t know.

Management consulting firms are well known for their excellence in orienting new employees to the company, during which they are presented with company values and “the way we think here.” Thus consulting firms attempt to create a common language, to the point where employees feel there is “a common understanding of what things represent here,” presumably minimizing the risk of misinterpretation and error. However, as the above quotations reflect, colleagues are not necessarily able to exploit the knowledge of others just because it is written down. Within knowledge management, the latent assumption has been that as long as knowledge is made explicit and available everything is all right. It gives people access to knowledge, which they are able to employ as it is. Yet, as the quotes suggest, this is not always the case. If knowledge is to be understood as information applicable by others, the level of detail must be extremely high – and even then one cannot be sure that the textual information will answer all the reader’s questions, especially to the point where he or she will be able to effectively act on that knowledge. Unfortunately, as the required detail level of the text increases, it is often perceived as taking up too much time to produce, raising the question of utility value.

Communication personnel operate with a three-tier structure in relation to the effects of good communication when planning a campaign (Sepstrup, 1999). First, you change people’s knowledge by telling them something they did not know in advance. Since they may not necessarily agree, effective communication is also about making people change their attitude(s) – preferably on the basis of the new knowledge they have been given. A changed attitude is, however, still not sufficient for communication to succeed – the recipient must also change behavior, which can be very difficult to achieve. Similarly, there are a number of steps that the employee (being a recipient) must go through in order to be able to successfully use stored documents in a database: Does the recipient understand the message? Does the recipient agree? Would the recipient prefer to use the knowledge rather than inventing his/her own? The problem most frequently cited within knowledge management is the challenge of turning tacit knowledge into explicit knowledge – and the solution so far has been documentation, documentation, documentation. The question remains as to whether this “solution” is the right way of approaching the problem. The case of Shell is an excellent illustration of the decontextualization issue. During
the mid-nineties, Shell decided to create a database, a skill-pool based on their document archives of past assignments and problem solutions. Several years and a million dollars later, the company found that no one made use of the system. Whenever employees had a problem, they turned to colleagues instead of the database. Shell discovered that the employees wanted contextual answers, i.e., answers that corresponded with the specific problems they were experiencing. Drawing on this insight, Shell developed eleven mega-communities of practice across the world. Whenever employees have problems, they pose their questions online within their community, and, in general, receive an answer from a colleague within three hours, and usually three to four answers from different colleagues are submitted to each question. The answers are personal ("I had a similar problem, see the attached file but notice on page 15, that...") and hence are viewed as more contextual in nature. Our study also shows, that people typically find that the most valuable knowledge sharing takes place while talking to colleagues: Really, the most important source and perhaps biggest source of inspiration is actually person-to-person communication, which is the most important means of knowledge sharing. Nothing can replace it – neither systems, post-its, or slogans,... As this brief quote suggests, knowledge sharing is an activity that requires dialogue, at least before you can start acting upon the knowledge acquired (see also Apostolou & Mentzas, 1999; Davenport & Prusak, 1998). Several of the respondents talked about knowledge sharing as being most valuable when meeting a colleague and talking together about a specific problem or assignment. When knowledge sharing is linked to a purpose, the necessity is embedded in the present situation: [Knowledge sharing] is indeed linked to special people and tied to certain situations in which you jointly must prepare some kind of client proposal ... It actually takes some time to talk each other into a level of knowledge sharing that works, and it does take the equal amount of time to establish a situation in which you can be mutually creative and stimulating. It isn't just there, it is something that has to be build up nicely and quietly... I don't do it with just anybody. As another respondent emphasized, dialogue is one of the most informative types of communication, as it includes all senses:

Being [physically] together when sharing knowledge you capture more aspects as your questions can be clarified immediately. You can see the look on their face and how they act when telling their stories.

**Communication modes and knowledge sharing**

Figure 1 illustrates different means of communication ranked by degree of dialogue – and thus of active knowledge sharing. At the bottom of the figure, the degree of dialogue is low. There is not much dialogue in stored documents or information passed on as one-way communication. Although text-based, the Intranet is more contextual than documents in databases as hyperlinks can help set a piece of information into a larger context. Mail can be viewed as a kind of dialogue although “delayed,” as the recipient does not always answer immediately. When mail is used as a means of mass communication, the personal dialogue is not inherent, but still possible since the recipient always has the opportunity to reply. Electronic chat is written dialogue; it is oral language made textual, the exchange is immediate, and different emoticons (signs) help communicate the sender’s feelings and body language/facial expressions – such as various “smileys” (e.g., :-) signaling happiness or :-( indicating displeasure) and predefined expressions (e.g., ROFL which is short for rolling on floor laughing) shared by peers in the virtual community.
High degree

Figure 1: Different Means of Communication, Ranked by Degree of Interpersonal Dialogue

The videoconference is the only electronically mediated communication form that includes “physical” interaction, and, therefore, has a great potential – especially as bandwidth becomes standard. Dave Snowden proposes that we should manage what we say instead of what we write – as a way of sharing context instead of simply focusing on content.5. Videoconferences and video-clips on the Internet and company Intranets will certainly help achieve this goal. If dialogue is defined by the spoken word, face-to-face interaction is the means of communication where the sharing of complex knowledge is most valuable. This does not mean that databases and corporate intranets are useless knowledge management tools. The point is that different modes of communication are suitable for different types of knowledge sharing, which will be elaborated at the end of this chapter.

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Figure 1: Different Means of Communication, Ranked by Degree of Interpersonal Dialogue

The Importance of Trust

The concept of trust is fundamental to successful knowledge sharing – and is perhaps therefore often neglected or presupposed in knowledge activities. As illustrated by the comments of one of the respondents, the study shows that trust is a key concept in relation to several aspects of knowledge sharing:

Being among people that you like also facilitates the wish to show vulnerability – that there is something that you don't know and you are not afraid of showing it if you trust the people you are with.

And you are not afraid of giving feedback even though it is harsh. So it does create a different environment. It can be vulnerable to show your ignorance – and, per haps, especially in a culture, where the vending of knowledge is the core business. Therefore, knowledge employees tend not to like exhibiting their ignorance by seeking advice or asking what might be perceived as “silly questions.” It also requires trust to critically evaluate the knowledge forwarded by colleagues,
which is important in order to prevent a culture of “back scratchers” from emerging. Unless sufficient trust is embedded in the organization, these realities may subsequently lead to substandard results. In addition to such explicit issues surrounding trust, many employees are humble about their competencies and performance. (This might be a cultural trait specific to Denmark. Employees in international companies mention that they don't recognize this behavior among their American colleagues). Such self-criticism was widespread in our study, creating a real barrier to knowledge sharing: And several times I have realized, that the things I’ve been working with – if I had to do them again I would do it differently. I can see it already - next time I will do it differently. And then I don’t feel like uploading the deliverables from that assignment. If you don't find it good enough compared to what you are able to?

Yes. 
In a time with access to more information than ever before – many large companies operate with more than a thousand different databases – the interviews seem to reflect a sense of powerlessness. As one of the respondents noted:
It is also a matter of how humble you are about what you have produced - of whether you think that your way of approaching the task is completely novel compared to what is already stored everywhere.

Other studies also show that self-criticism, post-rationalizations and a “who-do-you-think-you-are-attitude” reduce the personal communication of knowledge (Henriksen, 2001).

Finally it requires trust to (re)-use other people’s knowledge – especially when stored in a database. As mentioned earlier, making use of existing knowledge presupposes that you understand and agree with the material presented. This willingness often requires professional respect for and trust in the person who produced it. As reflected by the comments of a consultant in the study, it also requires trust in the system – is the knowledge in question updated or is there a better piece of information elsewhere? Really, my experience with [the joint files] is that you have to ask questions anyway. If it is an issue with which you are not totally familiar, you have to ask anyway: Is this the last version and where precisely can I find something about this and this. Trust is created through social activities: Being together is very important to … well to professionalism - to be able to give proper feedback. And to be able to ask in the right way about the right things. Reflecting on why such interpersonal interaction is so important, another consultant explained: I profit more from knowledge sharing with people who I know well, that is, people that I have talked with. We do not necessarily have to be personal friends; it just has to be that for some time we have had contact with each other, there is some kind of socializing and language creation in it. So, you’ve got to get to know each other, and begin to understand the other person’s words. Then things start rolling. Because knowledge sharing, to a large extent, involves creating social relations and informal talks between colleagues, coffee breaks and corridor chats should be viewed positively rather than as situations to avoid. Whether social activities take place during formal settings, such as workshops and seminars, or informal settings like lunch breaks and other social gatherings, the study shows that the social life of the organization is a strategic element with respect to knowledge sharing.

Incentive Systems: Beyond Financial Rewards and Promotions
The knowledge management literature often emphasizes that incentives are decisive for successful knowledge management projects (cf. Davenport, et al. 1998; Hanley, 1999; McDermott, 2001).
Employees need incentives to be motivated to contribute their knowledge to the community and exploit the knowledge already available. Traditionally, incentives equal bonus and promotion, i.e., visible testimonials that it is advantageous to share knowledge – both economically and career-wise. However, companies in our study that have implemented such incentive systems already, e.g., in connection with performance appraisals, still have problems with motivating organizational members and related barriers to knowledge management. The study indicates that such incentive systems should expand beyond financial and promotion-based rewards. When respondents were asked directly what would make them share (more) knowledge, only a few mentioned a cash bonus. While this reaction may reflect a socially-desirable response bias (it is possible that they were reluctant to show that money matters), they focused on culture, structure and management. As mentioned earlier, it appears that a knowledge management orientation must be a part of the company culture – that it matters whether you do it or not: The idea that when everybody does it, and if you are expected to do it – then it will be done, but there are no real expectations that it is done [from the management and the project manager]. Knowledge sharing should be incorporated into daily procedures and routines, thus making it an intrinsic part of the work and not an extracurricular, time-consuming activity:

There should be a structured access securing that everybody just does it. It is the same as when you start a project; you start a quality assurance procedure, you open a file and you do lots of things. The other part – closing down the project – should be as integrated into the project.

One firm, for example, is experimenting with integrating its sales system with a documentation database. It is not possible for the project manager to close a job and invoice the client before the project is documented, as the system does not release the job code where the job expenses are invoiced. This process-oriented approach is intended to embed the knowledge sharing process into the basic way in which work is carried out in the firm. There are other ways of building incentives into the system, although they are subtler. We often tend to see behavioral changes as an information problem – as long as people are told why they should change behavior and how, everything will work out. Sometimes, however, it is more appropriate to start the other way around. As reflected by the following interview, this can be done through a structural (organizational) change where employees are assigned new roles and are thus forced to act differently: Before there was a tendency to keep your knowledge, your competence to yourself. And if somebody came and asked, can I borrow some slides, people would react a bit reserved… Why was it like that? Because if you had developed a concept, then the others shouldn’t just think that they could run around delivering it. First of all, they have to know something about it, secondly it is my design, it provides my ‘bread,’ and I was involved in the development. So it becomes small one-man firms, and you keep your knowledge to yourself.

What created that orientation?
… the only thing our incentive structure was based on was booking and delivery.

What created the change in attitude?

Today, our incentive structure has become much more varied. There are now several ways of being successful and this helps deconstructing the knowledge hoarding behavior.
This management consulting firm shifted to an organizational structure where some consultants sell, others deliver and others develop, giving the consultants new roles. The role of the experienced consultants (who in the past had kept their knowledge to themselves) was changed to one of pure sales functions to take advantage of their client network. Suddenly they became dependent on the rest of the organization because they needed to consult with their colleagues who delivered the jobs: “The new role has resulted in different needs, and all of a sudden they have started to ask questions!”

Another of the firms in our sample is very committed to train new consultants in using the firm’s databases and knowledge universe. This focus appears to have had a positive impact on the knowledge culture:

I think it is a question of time, training and insight. That they [the consultants] become attentive. And they [the newcomers] don’t just sit in one department, they are spread all over the organization. It is very clear that in some departments they have communicated that knowledge [about the systems] to the older consultants - who have had their jobs for a long time - by saying: Look here… And then they [the older consultants] also change.

Finally, employees expect that management will define the guidelines for how and when knowledge sharing is appropriate in the specific organization. Confusion about fundamental questions like these can also prevent an effective knowledge culture from emerging. “The table must be laid” as one of the respondents pointed out, and another respondent explained:

We must have some rules. There need to be some frames and some things that are indisputable, and other things have to be much more value based. ‘OK, I’ll document, if I want to. You document, if you'd like to’ – really, you can’t have that as a value. You just have to say, ‘Alright - in any case we do have to document this, this and that.

In sum, knowledge sharing needs to be an integral part of the core business (“what we do”) and integrated into daily routines (“how we do it”). Such change requires the full support of top management.

**Top Management Support**

Experience shows that if top management does not fully support a project on knowledge sharing it will not achieve the impact needed in order for it to become successful and thus valuable to the organization (cf. Davenport, et al, 1998; Earl & Scott, 1999; Foote, et al, 2001). Our study also shows, that to create a culture where knowledge sharing is legitimate and desirable, management should first and foremost act as role models. As illustrated by the comments of one of the respondents, however, this is not always the case:

One thing I miss around here, is the partners socializing. Again, they create the frames but why on earth don’t they participate in these [social] things? You can’t force management to do so, but it is a damned good signal.

While top management in consulting firms seems to acknowledge the value of knowledge management, there appears to be a discrepancy between the stated goals, company practices and resource allocation when it comes to reality.

In management consulting firms, it is frequently the case that practice (behavior) counteracts the signal value of the messages originating from top management. The right words are followed by
wrong actions, which only confuses the overall picture and understanding of the firm’s goals and how they should be achieved: At the same time management provides ample arguments in support of the necessity and importance of knowledge sharing, but the organizational setup places an emphasis on billable hours and allows employees to hoard knowledge. The following remark by an employee indicates the importance of upper management in the managerial process:

We have a management that really prioritizes it [knowledge management], and to a very high degree are exponents of this enormous - you can say knowledge sharing, openness, communication, etc. That’s decisive. We could live in a box, we can close down our net and we would exist anyway. That is my hypothesis.

An interesting point in the study in relation to management concerns the discussion of whether a firm should have a Chief Knowledge Officer (CKO) (or Knowledge Manager, as some companies entitle the function) or not. In general, our findings suggest that the advantages of having a CKO compensate for its disadvantages. The firms with a CKO (or similar position responsible for knowledge management) are much more dedicated to initiatives in the knowledge area, have a more vivid knowledge culture (e.g., employees who are judged to be more conscious about knowledge sharing), and understand the value of both contributing to and exploiting the knowledge base in the organization. Although it is a general belief that knowledge management should be decentralized and “everyone’s responsibility” through the creation of a knowledge culture, studies indicate (cf. Earl & Scott, 1999; Foote 2001) that unless there is a person responsible for initiatives in the knowledge field, it is easily “nobody’s responsibility” and organizational acceptance is weak.

(Re)-Defining Knowledge Sharing

The empirical data in our study indicate that the concept of knowledge sharing is both unambiguous and manifold. Unambiguous in the sense that technology plays such an important part and manifold because the conceptions of what constitutes or should constitute knowledge sharing are multi-faceted. Knowledge sharing covers a variety of activities: a talk with a colleague at the coffee pot, an educational situation, a document in a database, an e-mail, an information board with notices, and so forth. As such, knowledge sharing takes place each time you communicate who you are, what you are doing, or what you know to somebody else.

Based on our study, it is possible to crystallize the concept of knowledge sharing (KS) in a number of sub-categories, creating a knowledge sharing typology (see Table 2). Knowledge sharing is, to a high degree, about communication and thus concepts such as sender, recipient, message and medium (or channel of communication) are highly relevant. Since the message is influenced by the medium through which it is conveyed, it is important to offer as many channels of communication as possible, so that the sender can “choose” (not necessarily a conscious act) the optimal channel related to message, recipient and distance (time/space).
The typology of knowledge sharing is presented as a starting point for revising the way in which we think about the concept of knowledge sharing and its different possibilities and limitations. The purpose is to provide a more grounded platform for understanding the different means available in the knowledge sharing processes. It is assumed that the ambiguous nature of knowledge sharing prevents many people from using or practicing the concept, as they seek to reduce the complexity of knowledge sharing by simply focusing on one or two of the approaches in Table 2. Such emphasis is not deliberately intended to neglect the other aspects, but rather emerges from the reality that our perception of the types of knowledge sharing that have the biggest impact on efficiency and productivity – and thus value creation – is too narrow. When acts are made visible they are legitimated, and visibility and value are often equated. Knowledge materialized in a database is more tangible than knowledge inside people's heads or knowledge “floating” between colleagues in everyday interactions. However, the invisible and intangible knowledge, which is abundant among employees, create just as much – if not more – value for the firm.

Several firms in our study were aware of this paradox and emphasized that their knowledge management initiatives are still only at a starting point. As a first step, most have focused on the tangible aspects of knowledge, especially in terms of implementing systems and procedures to strengthen knowledge flows within the firm. While efforts to deal with explicit, tangible knowledge clearly have their limits, this starting point is an important foundation for working with the softer, more intangible issues of knowledge sharing. As several firms in our study have indicated, the next steps in the area of knowledge management will be to work on more implicit, cultural issues.

Conclusions
This chapter has explored some of the parameters and problems constituting knowledge sharing in the management consulting business. The study shows that knowledge management in practice
is still at a preliminary stage. Although there is a growing recognition of the value embedded in more systematic and holistic KM activities, many firms are still concerned with relatively fundamental problems in knowledge management. In fact, some of the firms in the study still only have a vague idea of what knowledge represents in their firms, thus making it more difficult to develop an appropriate strategy. The study has reinforced that an explicit knowledge strategy and support from top management are key drivers in institutionalizing knowledge management processes in management consulting firms. Signals from top management that indicate what is expected from employees with regard to knowledge management clarify uncertainties and enhance action. The organizational infrastructure and the accompanying rhetoric also have a significant impact on firm culture and day-to-day activities, especially influencing the ways in which knowledge is shared and utilized. An over-arching emphasis on time utilization and billable hours counteracts knowledge management initiatives – especially when time utilization is linked to performance reviews – undermining the essence of knowledge sharing. The study has illustrated that a knowledge strategy that is rooted in the business strategy and implemented throughout the organization and organizational processes serves as an incentive in itself. When knowledge sharing is a fully integrated part of the business, organizational members are more likely to think of knowledge sharing as an advantage rather than an obstacle – and therefore act accordingly. If interacting with colleagues is a prerequisite for successful job performance, employees are more likely to ask for and contribute knowledge when needed. Project organizations and related structures where colleagues are dependent on each other’s work to achieve high-quality outcomes make it harder to hoard knowledge and create a small kingdom. In this respect it is important to bear in mind that trust is an important factor when collaborating with others. There is a tendency, especially in management consulting firms, for knowledge employees to avoid any appearance of ignorance (by seeking advice or asking “silly questions”). They may also be reluctant to critically evaluate the knowledge forwarded by colleagues. Self-criticism and information overload are additional rationales that are often prevalent in the employee’s mind. Organizational members prefer to share knowledge with people they know well and in connection to a current, specific problem. The view of knowledge management proposed in this chapter shifts the emphasis on knowledge management processes from a technology-centric view to one where information technology acts as an enabling factor. It is not enough to simply make knowledge available, for example in databases, because it does not mean that the knowledge will be shared and utilized as intended. This is partly due to the fact that when knowledge is represented as a text in a document, it is decontextualized. “Man is a social animal” as Aristotle pointed out. People typically prefer talking to colleagues about problems rather than looking for solutions in databases. Even though the recipient who eventually reads the text may comprehend the words, it is not certain that the person will necessarily be able to effectively use the newly acquired knowledge. Since knowledge only has value in action, it is doubtful whether the efforts of documenting, quality assuring and updating documents in databases create the desired outcomes. While information technology will continue to play a significant role in knowledge management systems and knowledge sharing practices, the real challenge of knowledge management has been – and will continue to be – balancing the interplay between technology and people.
References


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Management Performance and Individuality Property against to Middle School Superintendents in Kuantan Province, Malaysia

Mohd Abu Bakar

ABSTRACT

The objective of this study was to examine personality traits versus management performance among middle school superintendents in Kuantan school system. This study was a descriptive-correlation research. Statistical population included all middle school superintendents in Kuantan school system during academic year 2015-2016. The study sample included 130 subjects (61 females and 69 males) selected randomly through stratified sampling. Data collection was performed by administrating two questionnaires, namely, Personality Trait Questionnaire (NEO-Five Factor Inventory with 60 items) and Management Performance Questionnaire (with 30 items). Cronbach alpha was used to evaluate consistency reliability of the questionnaires which were measured at 0.96 and 0.95, respectively. Data analysis was through descriptive statistics including frequency, mean, and standard deviation. Study variables were evaluated by Pearson correlation coefficient and regression analysis. Study findings revealed significant positive correlation between personality traits and management performance in studied school superintendents. In ranking the predicting variables for management performance, openness to experiences ranked the highest with neuroticism ranked next in the predictive model.

Keywords: Personality Traits, Neuroticism, Extroversion, Openness to Experience, Conscientiousness, Management Performance.

Introduction

Social progress and advancement are dependent on performance of various active organizations. Most organizations are established with the objective to provide for certain human needs. They need professional and efficient human resources in order to fulfill their predetermined objectives. Organizations are increasing in diversity and number. Furthermore, individuals who work for these organizations are turning more complex in terms of behavior, personality traits, and motivations making their understanding all the more difficult (Shabani, B., et al, 2004).

Management scholars believe success or failure of organizations is rooted at the various management styles that are governing those organizations. Peter Drucker viewed management as
the main and critical element of an organization. Harold Koontz considered management as a major human activity. Organizations rely on strong management as a crucial vehicle to drive them out of crisis (Dalvi and Jamshidian, 2000, P. 25).

Managers are responsible for directing employees, pursuing improvement, implementing strategies, and organizing various functions. They are responsible for development and improvement of organizational culture (Hansaker and Cook, 2009, p. 84). Managers do not function the same way. Individual differences, talents, motivations, preferences and tendencies influence management practices. Managers have diverse attitudes, knowledge, and value systems (Naderian, et al, 2007).

**Problem Definition**

Human behaviors are exhibited because of different motivators and may vary from one person to another. Even when two behaviors exhibit similar characteristics, they can be perceived differently by various individuals. Conversely, similar behaviors may have different motivators. Human behaviors are, nevertheless, dependent on individual personalities and personal reaction under influence of various situations and conditions. The exhibited behavior represents the strength or weakness of this influence (Gohari Moghaddam, 2007).

Personality affects behavior, decision making, and performance of managers (Naderian, et al, 2007). Personality traits are certain characteristics that help individuals in their endeavor to discover self and gain a better understanding of others. These traits make an individual pleasant for others and strengthen interpersonal relationships (Alavi, 1992). Costa and McCrae (1985) identified five main personality traits, namely, neuroticism (N), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C).

1. **Neuroticism** is the general tendency toward negative emotional experiences such as fear, sadness, anxiety, anger, guilt, and aversion. Neuroticism is more than being receptive to psychological predicaments. Males and females who score high in neuroticism are prone to have irrational beliefs, uncontrollable impulses, and poor reactions to stressful stimuli (Garoosi Farshi, 2001).

2. **Extraverts** are sociable individuals. They love people and prefer group activities. They are daring, active, and talkative. Extraverts welcome arousal and excitation. They tend to be joyful, energetic, and optimistic (Costa and McCrae, 1985).

3. **Openness** is a less known personality dimension. Fantasy, aesthetics, feelings, actions (experiences), ideas (curiosity), values (judgments) are openness elements. These traits are mentioned in personality theories and evaluations. However, their collection into a wide spectrum and formation as a personality trait were rarely subject of discussion (Costa and McCrae 1985).

4. **Agreeableness** is another form of interpersonal tendency similar to extraversion. Agreeable individuals are compassionate and cooperative. They view others as having similar properties.

5. **Conscientious individuals** are objective oriented, decisive, and determined. Successful individuals, great musicians, and famous athletes show high levels of conscientiousness (Costa, McCrae, and Bush, 1986, as quoted in Garoosi Farshi, 2001).
Research Literature
Management includes a set of activities that are organized in the direction of achieving defined objectives. Management is the task of establishing relations between available resources and organizational performance through active decision making and participation of others. The principal objective of management in an organization is to coordinate various resources toward achievement of organizational objectives. For example, objectives of educational institutions are advancement of education and learning (Alagheband, 1995, p. 15). Management tasks have historically been involved in planning. Organizing, directing and coordinating tasks require planning because they materialize over time (Gilbreth, Taylor, and Gantt, 1990, p. 46). Management scholars have defined management as a collection of responsibilities that every manager should undertake. Some of them emphasized on specific responsibilities and some others have only mentioned general responsibilities for managers. Gulick and Urwick were the first ones to list management responsibilities and dubbed them POSDCORB. Their list included planning, organizing, staffing, directing, coordinating, reporting, and budgeting. Most management experts agree on four responsibilities, namely, planning (decision making), organizing, directing (leadership), and control. A manager performs these tasks in an endeavor to achieve organizational objectives. Actual performance of these functions represents the effectiveness of organization and management.

This study examines five management responsibilities, namely, planning, organizing, coordinating, staffing, and evaluating.

1. Planning. Planning involves selection of the most suitable approach among various alternatives for achieving organizational objectives. Planning process defines organizational objectives, sets departmental goals, and selects the proper approaches for achieving those objectives and goals. Planning is central to management activities and involves other management responsibilities (Alvani, 1999, p. 138).

2. Organizing: Organizing is defined as identification and classification of the required tasks, grouping of necessary activities into achievable goals, assignment of each group to a manager, delegation of authority for supervision, plus vertical and horizontal coordination of activities within an organization (ibid).

3. Coordinating: Coordinating means unifying departmental activities within an organization toward effective realization of defined objectives and goals. Departmental activities may swerve from organizational objectives if the required arrangements and provisions are not planned and projected (Alagheband, 1995, p. 54).

4. Staffing. Staffing represents the overall human relations in an organization. Proper staffing helps organizations to boost employee morale which is a collection of feelings, emotions, and thoughts. Employee morale translates into job satisfaction which is a collection of spiritual and material satisfaction employees draw from their organizational activities (Safi, 2000, p. 75).

5. Evaluating: Evaluating is required to measure the effectiveness and quality of performance. Evaluation process help managers to determine how much of objectives have been realized. Quality control also requires evaluation. Evaluation knowledge and experience should be one prerequisite for individuals who are being appointed to managerial posts (Acheson and Gall, 1999,
Managing these five functions requires leadership. Leadership is the art of directing and energizing others in voluntarily pursuing and committing to leader's views (Cutler, 1990, p. 14). Leaders determine objectives and perspectives, then, organize members to voluntarily commit to those objectives and perspectives (Cheng and Filzah, 2011, p. 908).

Leadership in education has special standing because of diverse activities, various implementations, and complicated objectives. Today's complicated educational system requires attention to personality characteristics when selecting educational managers. The objective of this study was to examine the relations between personality traits of educational managers and their performance in order to determine which personality traits may be good predictors of educational managers' effectiveness in performing their responsibilities.

**Research Background**

Kaykhanjegd (2008) studied the relationship between philosophical intellect and performance of responsibilities in middle school managers of Zahedan school system. She found a significant direct relation between the two variables. The direct relationship means the higher philosophical intellect the higher performance of managerial responsibilities.

Naderian Jahromi and Amir Hussieni (2007) examined the relationship of job skills versus personality traits and demographic information of sports managers. They reported significant relation between introversion personality traits and perceptional and technical skills. Extroversion personality traits had significant relation with human skills. Demographic variables such as age, gender, marriage status, management experience, and sports background did not have significant relation with human skills. Education and management experience had significant relation with perceptual skills. Sports experience and field of study had significant relation with technical skills.

Khakpour (2004) in his thesis studied the association between personality traits and job performance in superintendents of Hamedan intermediate schools during academic year 2003-2004. The findings of this study revealed that job performance had significant relations with extroversion, emotional stability, and agreeableness personality traits. Job performance had no significant relations with age or job experience. Khakpour study found no significant difference in job performance of female and male superintendents. Bazr Afshan Moghaddam (1996) studied the relations between personality traits and performance in elementary school superintendents. The findings showed no significant relation between effective and non-effective superintendents and their personality traits. Byrne, et al (2005) examined the relationship between personality traits and job performance. They reported that conscientiousness as a good predictor of job performance (as quoted in Na'ami, 2005). Kurk et al (2003) analyzed the relationship between five personality traits and job performance. They found that conscientiousness had the highest correlation with job performance. Friedson (1999) concluded in a study that introverts reacted better to tensions. This characteristic helps an introvert individual to perceive and assess problems and difficulties as controllable. Introverts resort more to problem solving approaches and less to emotional strategies when facing stressful situations when compared to extroverts. Yuonnes (1993) studied 87 male and female managers to discover that gender is only effective in decision making but not in job or professional performance. Lewin (1965) concluded in a study that extrovert managers are mostly sociable. They are more effective in establishing successful relations with
colleagues, subordinates, and customers. They live in complete conformance to requirements of their surrounding environment.

**Research Objectives**
The objective of this study was to identify the relationship between personality traits and management performance in middle school superintendents working for Kuantan school system.

**Research Questions**
1- Is there a significant relation between personality traits and management performance?  
2- Are personality traits good predictors of management performance?

**Research Methodology**
This study used descriptive-correlation method as determined by its subject and objectives. Statistical population included all middle school superintendents in Kuantan school system totaling 189 persons. The size of study sample was determined to be 130 by Morgan table. Study subjects were selected randomly using stratified sampling. This study used NEO-FFI for examining personality traits. This questionnaire had 60 items divided into five areas (neuroticism, extroversion, openness to experience, agreeableness, and Conscientiousness), each having 12 items. This study used a researcher-made questionnaire adapted from the one used by Kaykhanejad (2008) for examining management performance. This questionnaire had 30 items divided into five areas (planning, organizing, coordinating, staffing, and evaluation) each having 6 items. Cronbach alpha was used to evaluate consistency reliability of the questionnaires which were measured at 0.96 and 0.95 respectively. This study used both descriptive and inferential methods for data analysis. Descriptive method used statistical measures such as frequency, mean, and standard deviation to describe available data. Inferential method used statistical tests including Pearson correlation coefficient, regression analysis, and one-way analysis of variance to evaluate study questions.

**Research Findings**
Question 1: Is there a significant relation between personality traits and management performance?  
Table 1 provides descriptive statistics including mean and standard deviation for personality traits and management performance obtained from the study sample.
**Table 1.** Descriptive Statistics  
Personality Traits versus Management Responsibilities

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personality Traits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>49.08</td>
<td>4.89</td>
</tr>
<tr>
<td>Extroversion - Introversion</td>
<td>40.75</td>
<td>4.61</td>
</tr>
<tr>
<td>Openness to New Experiences</td>
<td>49.80</td>
<td>3.87</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>49.73</td>
<td>5.14</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>49.31</td>
<td>4.62</td>
</tr>
<tr>
<td><strong>Management Responsibilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>26.29</td>
<td>3.33</td>
</tr>
<tr>
<td>Organizing</td>
<td>23.96</td>
<td>2.43</td>
</tr>
<tr>
<td>Coordinating</td>
<td>23.80</td>
<td>3.44</td>
</tr>
<tr>
<td>Staffing</td>
<td>25.51</td>
<td>3.12</td>
</tr>
<tr>
<td>Evaluating</td>
<td>23.80</td>
<td>3.81</td>
</tr>
</tbody>
</table>

Pearson correlation coefficient was used to examine question one. Table 2 shows the results of inferential statistics.

**Table 2.** Pearson Correlation Coefficient  
Personality Traits versus Management Responsibilities

<table>
<thead>
<tr>
<th>Personality Traits</th>
<th>Planning</th>
<th>Organizing</th>
<th>Coordinating</th>
<th>Staffing</th>
<th>Evaluating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>0.648</td>
<td>0.509</td>
<td>0.611</td>
<td>0.489</td>
<td>0.552</td>
</tr>
<tr>
<td>Extroversion - Introversion</td>
<td>0.583</td>
<td>0.341</td>
<td>0.622</td>
<td>0.466</td>
<td>0.379</td>
</tr>
<tr>
<td>Openness to New Experiences</td>
<td>0.707</td>
<td>0.529</td>
<td>0.704</td>
<td>0.580</td>
<td>0.582</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.534</td>
<td>0.415</td>
<td>0.535</td>
<td>0.516</td>
<td>0.503</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.611</td>
<td>0.441</td>
<td>0.613</td>
<td>0.476</td>
<td>0.536</td>
</tr>
</tbody>
</table>

\( p = 0.000 \)
Table two indicates that the relations between personality trait and management responsibilities are significant at 99 percent level of confidence ($p < 0.01$). Therefore, we conclude that personality traits have significant direct relation with management performance.

Question 2: Are personality traits good predictors of management performance?

This study used step-by-step regression analysis for analysis of personality traits versus management performance. Table 3 shows the results of this analysis.

**Table 3. Regression Analysis**

Personality Traits versus Management Responsibilities

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Openness to New Experiences</td>
<td>0.70</td>
<td>0.49</td>
<td>127.20</td>
<td>0.70</td>
<td>11.27</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>Openness to New Experiences + Neuroticism</td>
<td>0.75</td>
<td>0.57</td>
<td>85.56</td>
<td>0.50</td>
<td>7.03</td>
<td>0.000</td>
</tr>
</tbody>
</table>

$N = 130 \quad p < 0.01$

In ranking the predictable variables for management performance, openness to new experiences could predict 49 percent of management performance variance. In the next step, neuroticism was added to the predictive model. These two variables together could predict 57 percent of management performance variance. This means that neuroticism can only add 8 percent to prediction variance. Standard beta coefficient in regression model was measured 0.50 for openness to new experiences and 0.34 for neuroticism. Both of them are significant at 99 percent level of confidence ($p > 0.01$).

**Discussion and Conclusion**

Management is a critical function of an organization. Organizations rely on strong management as a crucial vehicle to drive them out of the crisis they may face. The examination of the first research question showed significant relation between personality traits and management performance. The relationship is significant at 99 percent level of confidence ($p > 0.01$). Therefore, we can conclude that personality traits have significant direct relation with management performance. This conclusion conforms to the results reported by similar studies (Kalantari, 2007; Naderian Jahromi and Amir Hosseini, 2007; Khakpour, 2004; Bazafshan Moghaddam, 1996; Byrne, et al, 2005; and Kurk, et al., 2003). The examination of the second research question and the ranking of predicting variables of management performance indicated that openness to new experiences could predict 49 percent of variance. In the next step, neuroticism was added to the predictive model. These two variables together could predict 57 percent of management performance variance. This means that neuroticism can only add 8 percent to prediction variance. Standard beta coefficient in regression model was measured 0.50 for openness to new experiences and 0.34 for neuroticism. Both of them are significant at 99 percent level of confidence ($p > 0.01$). This conclusion conforms to the results reported by similar studies (Kalantari, 2007; Naderian Jahromi and Amir Hosseini, 1999; Khakpour, 2004; Bazafshan Moghaddam, 1996; Byrne, et al, 2005; and Kurk, et al., 2003).
Moghaddam, 1996; Byrne, et al, 2005; and Kurk, et al., 2003). Therefore, it is possible to conclude that personality traits affect management performance. Those managers who enjoy positive personality traits are most likely to be more successful managers. They can make higher contribution to achievement of educational objectives and plans. They are able to establish better relation with school employees, teachers, students, parents, and other stakeholders. Openness to new experiences and neuroticism could predict a relatively higher percentage of management performance among personality traits under study. This confirms the effect of personality traits on management performance. The findings of this study show that organizations, in general, and educational institutions, in particular, should consider personality trait of the candidates for managerial positions before making their final selection. This approach can guarantee better performance for our school system. Organizations should ask psychologists and specialists to administer personality tests on employees in order to identify those who may qualify for managerial positions. After identifying candidates, organizations should invest on their further training to prepare them for the managerial positions they are most qualified for.

References
2. Cheng, wei hin. & filzah md . isa (2011) Leadership Styles, Management Styles and Personality Traits of Successful Women Entrepreneurs in Malaysia; Annual Summit on Business and Entrepreneurial Studies

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Administers Educational Requirements in the Industrial Area of Jalan Suria

Raija Cincinnatoc

ABSTRACT

Present investigation has been carried out with the objective of assessing the educational requirements of administrators in the industrial area of Johor, famous as Jalan Suria. It uses descriptive - correlation based Research method. Its population was comprised of 1000 administrators in the industrial city situated in Johor province. A random sample of 278 individuals was scrutinized among them based on Chris and Morgan. The research tool was a questionnaire including business administration, management, subordinates, and component characteristics of Directors, its management, management, internal relations and external relations department of the institutions. The t-test results showed by student that all variables comprise the educational requirements of administrators.

Key words: Education, Training for Managers, Industrial City.

Introduction

So the life of the organization largely depends on the skills and knowledge of its employees and each of these skills can be improved upon and be more adaptable to the changing environment. So human resources education not only has effective role of knowledge and skills but also it causes them to be involved in improving the efficiency and effectiveness of the organization and adapt itself with the environment changing Pressures. Education entered as a separate issue related to psychology and scientific management in 1960. But before of it Taylor emphasized to staff selection and training in scientific management book's at 1911. Monsterberg after he also had stressed frequently to the importance of education, employment, administrative and military. And it is mentioned as a major problem in selecting employees (Latham, 1998). However, recent research on education and related issues are seen that could be done more systematically on topics related to industrial psychology organizations. These needs to be defined Training needs, will be resolved through education. These needs in are discussed the areas of knowledge, skills and attitudes. Educational needs solving in these areas were listed in ascending order, which is more difficult and more complex. In fact, the educational needs are the current level and ideal level ability of individuals (or organizations) in carrying out their duties and responsibilities. Educational needs can lack the necessary knowledge, behavioral skills and or circumstances that that will prevent from
Favorable and satisfactory work (Fathi & vajargah, 2006). Accordingly, improvement and equipping personnel with professional skills and expertise required is best practices for sustainable development. In other hand the era of innovation, evolution and science achievement, impose a drastic change into organizations to that however preparing manpower to keep track of the changes will be necessary (Abbaszadegan, 2007). Understanding of change and its relationship to teaching basic point is indicated manpower injection of the creativity, vitality and dynamism to organization, This requires continuous training of human resource (Afsari, 2008.) So education program managers is a vital requirement for most organizations. The goal of improving management skills and prepare them for the future. Depth studies on factors affecting the change of society and the advancement Indicates that there is a period of dynamic growth and prosperity with education organizations coincided (Ross, 2008). And the most efficient and powerful forces have been qualitatively and quantitatively (Ross, 2008). Recognizing the importance and urgency of this issue, is based on management duties systematic training needs assessment to determine the needs of managers. Can result in effective management practices, promote and evaluate their performance would be useful. This paper is an attempt to answer the basic question to be said In Johor, Jalan Suria Industrial Zone managers to do their job to the best roles and responsibilities, what knowledge, skills and attitudes, and with what degree of priority need.

Research Objectives
The overall goal of this research is to study the educational needs of managers working in factories Taman Purnama Industrial Johor. The objectives of this study included:
- Personal Characteristics of Leaders
- Investigate the relationship between individual characteristics and educational needs of their managers
- Assessment of training needs of managers
- Study the educational priorities of managers

Materials and Methods
The study and application of descriptive, correlational. The population consisted of middle managers factories in the industrial town of 1000 people Taman Purnama Johor. According to Morgan and a random sample of 278 people, has been studied. This study was conducted to collect data, a questionnaire consisting of 32 questions related to the educational needs of five middle managers Their office, office job, office subordinates, managing inter-organizational relationships and managing external relations and organizational designed and respondents were presented. In this study the managers’ individual characteristics including age, education, gender, education and work experience has been. Statistical tests used in the study to examine the relationship between personality characteristics and educational needs
of managers are the Pearson correlation coefficient. To evaluate the effect of gender on the educational needs of managers in my test White reed, Student t test to determine the educational needs of managers and to prioritize the educational needs of the Friedman rank test was used.

Results
1- Characteristics Leaders
A total of 278 patients were studied, of whom 242 (87.0%) males and 36 (13.0%) were women. The average age of managers is in 38/5 years to 42/5 years. The youngest is 28 years old and the oldest 56 years. In the 30-40 years age related to the field of economics and management, 54% and 46% of other academic disciplines. In terms of academic qualifications, expertise with 0.69%, master’s15.2%, doctoral9.0% and professional degree 6.8% respectively. The average work experience of managers in this study was 9 years with the minimum of 1 year and a maximum of 21 years.

Table 1 - Distribution of Leaders Individual Features

<table>
<thead>
<tr>
<th>Individual Characteristics</th>
<th>Categories</th>
<th>Abundance</th>
<th>Percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>male</td>
<td>242</td>
<td>87.0</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>36</td>
<td>13.0</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td>20 to 30 years</td>
<td>67</td>
<td>24.1</td>
<td>24.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>47.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 to 40 years</td>
<td>131</td>
<td></td>
<td>71.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>More than 40 years</td>
<td>80</td>
<td>28.7</td>
<td></td>
</tr>
<tr>
<td>Field of Study</td>
<td>Management related</td>
<td>150</td>
<td>54.0</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>Uncommitted</td>
<td>128</td>
<td>46.0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Associate Degree</td>
<td>25</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Academic qualifications</td>
<td>Bachelor</td>
<td>192</td>
<td>69.0</td>
<td>78.0</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>42</td>
<td>15.2</td>
<td>93.2</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>19</td>
<td>6.8</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To 10 years</td>
<td>164</td>
<td>59.0</td>
<td>59.0</td>
</tr>
<tr>
<td>Work experience</td>
<td>11 to 20 years</td>
<td>76</td>
<td>27.3</td>
<td>86.3</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>38</td>
<td>13.7</td>
<td>100</td>
</tr>
</tbody>
</table>

2 - The relationship between personality characteristics and educational needs of their managers results of Pearson correlation coefficients
(Table 2) show a significant relationship between managers and their educational needs exist. However, education level and work experience with the educational needs of their managers, there is a significant negative correlation, Whatever the directors of
education and work experience, they are more likely to rate their educational needs are less.

Table 2 - Results of the Pearson correlation coefficient between the variables studied

<table>
<thead>
<tr>
<th>Type of Relationship</th>
<th>Variable 1</th>
<th>Variable 2</th>
<th>r</th>
<th>P</th>
<th>Managers age</th>
<th>Managers education</th>
<th>Managers work experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative and significant</td>
<td>0.002</td>
<td>0.181</td>
<td>-0.114</td>
<td>0.048</td>
<td>Educational needs</td>
<td>Educational needs</td>
<td>Educational needs</td>
</tr>
<tr>
<td>No</td>
<td>0.917</td>
<td>0.007</td>
<td>Educational needs</td>
<td>Educational needs</td>
<td>Managers age</td>
<td>Managers education</td>
<td>Managers work experience</td>
</tr>
</tbody>
</table>

The white Ney test results in Table 3 show me, between the two groups in terms of educational needs of male and female managers, there is no significant difference. In other words, man or woman, they had no effect on the educational needs of managers.

Table 3 - The results of White Ney test about the relationship between gender and educational needs

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Two groups Rank</th>
<th>sig</th>
<th>z</th>
<th>w</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Leaders</td>
<td>Education Needs</td>
<td>Male 141.72 female 124.56</td>
<td>0.232</td>
<td>-1.195</td>
<td>4.484</td>
<td>3.818</td>
</tr>
</tbody>
</table>

3 - Determine the educational needs of managers
For statistical analysis Student's t-test was used to collect data. Statistical analysis of the data in Table 4 show that all studied variables (Their management, jobs handling, subordinates administration, organizational relationships within the organization and external relations managing) are as leaders educational needs.
Table 4 - Results of Student's t-test mean for managers to identify training needs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample mean of</th>
<th>t</th>
<th>sig</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Management</td>
<td>2.886</td>
<td>68/602</td>
<td>**%000</td>
<td>Need Exist</td>
</tr>
<tr>
<td>Jobs Management</td>
<td>2.478</td>
<td>44/187</td>
<td>**%000</td>
<td>Need Exist</td>
</tr>
<tr>
<td>Subordinates Management</td>
<td>3.083</td>
<td>63/414</td>
<td>**%000</td>
<td>Need Exist</td>
</tr>
<tr>
<td>inter-organizational relationships</td>
<td>2.116</td>
<td>49/785</td>
<td>**%000</td>
<td>Need Exist</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External organizational relations</td>
<td>1.848</td>
<td>45/411</td>
<td>**%000</td>
<td>Need Exist</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant level 5%  
** Significant level 1%

Conclusion
In this study, we tried to define what administrators need training to be provided and it is further Taman Purnama Industrial Johor's training needs of managers be studied. Results of the study showed a significant relationship between age and gender with the educational needs of their managers. But managers of education and work experience with their educational needs, there is a significant negative correlation. This shows the importance of education and work experience in executive management needs. So based on statistics results obtained, whatever educational level and work experience of directors was higher, their educational needs are less. Also based on the results of the Student t test, all variables were included in the management, jobs handling, subordinates administration, organizational relationships within the organization and external relations managing Leaders are their educational needs. It clear the importance of in-service training courses for managers. Of course among these factors, their management and subordinates administration are of the most critical needs of educational administrators.

Reference
Ross, John A (2008). Cost–utility analysis in educational needs assessment,
RAJJA CINCINNATOC, Department of Educational Studies, Ghent University, Henri Dunantlaan 2, B-9000 Ghent, Belgium
Roots of a Modern State in the Middle Age

Seema Narayan

ABSTRACT

One of the significant but less identified periods since human history is related to middle Ages. Scholars and Thinkers that have investigated this period often deal with this phenomenon by critical and reproachful view. One of the paper’s purpose is the removal of such type of view on the middle Ages. Other viewpoint that this written treat view that encounter the history by epistemological dissociation. On the other hand, this view shows that concepts and theories and generally the thinking framework in all periods belong to same period and by ending of every history period this formwork is transformed too and certainly likelihood of knowledge dialogue and interaction between different periods is cut entirely. This article by criticism of this outlook, defends thought’s linear route and suggests that every thinking and thought has root and extraction. This literature suggests that could search the roots of modern State in the Middle Age and obtain to that. In this paper medieval prominent political thoughts are investigated comprehensively and later by comparative view to modern State constituents. Is shown closeness of these thoughts with modern State components.

Keywords: The Middle Age – Modern State – Modern State components – Holy Agustin – Tomas Akoinas – Marsilius Padoaei.

Introduction

One of the important but less recognized periods of Europe history is called the middle Ages. This period is called to different names and titles by thinkers, historians and philosophers. Petrification age, obscurantism age, Degmatism period and opinions inspection and the other title that have negative timbre. Though great philosophers such as Etin Jilson have tried that by multiple and bright works deferd of thought credit and think route at this period, but still negative view and rejoicing analysis is prevailing in which according to Hogli, the Middle Ages is as a negative thesis against very positive modernity anti thesis, though, on their synthesis identity and whatness there is many difference and discuss. This is right that the Middle Age was opinion inspection age, but it was Holy Akoinas age too. He was great philosopher who became Founder of Tomism School. The Fact is that at this period great thinkers and philosophers have lived whose remained works indicat their think
extent and thought power. This essay doesn’t aim to study route of philosophical thought and think because this is not possible nor desire. This written concentrates on one of the thinking aspects at Middle Ages, indeed is political thought. Namely, on the one hand, at this period is studied and examined the whole flow of political thought and on the hand is introduced wellknown thinkers at this area and searched their votes. One of the major function of this essay is challenge and contrast with view that encounter to history by epistemological dissociation. On the other hand, this view indicates that thoughts and theories and as a whole thinking framework at every period belong to same period and by expiration of every period of history this Framework is changed too and certainly possibility of knowledge dialogue and interaction between different periods is cut totally. From this point of view, the concepts like democracy human rights, modern policy, citizen rights and . . . all belong to modern periods. And every kind of try and struggle to find trace from these concept on premodern history is abortive struggle and fruitless try. While, from point of view of this literature, every thought and concept has lineage in which can be obtained profoundly another time. In other words, thought and concepts is not created in vacuum and all of them are product of history that was always and after this exist too. At this point of view thinking string doesn't cut by multiple dissociation. One of concepts that is applied and treated by political sciences thinkers and philosophers and scientists is concept of modern State, as its name indicates, often political thinkers believe this concept absolutely belong to modern period and try to define modern State by mention of components and qualities of this concept, as though completely is product of new period and premodern mankind cannot understand this concept. Another function of this research, is criticism of this opinion and try to prove this point, that though modern State is product of thinking, social and economic conditions of modern period, but should find root of this concept in mediral soil.

**Major body**

Idiometrically, Middle Ages in Persian is translation of its European Terms. This historical period is called the Middle Ages in English. Certainly, before European new languages this term was used in Latin language, as see in A. D 1469 to Media Tempesta and in 1518 to medi aetas. Period that last more than thousand year and is placed between Greek – Roman Period that is called preliminary period and new period, historian called it the Middle Ages. Usually, at common history books, beginning of the Middle Ages is considered A. D Fifth century coincident with falling of western Roma empire by Germans, also ending of that is considered rensaissance appearance in A. D 16 centeries.Ilkhani, Mohammad, philosophy history on Middle Ages and renaissance, Tehran, Way, 1382 , First edition, Page 5). For Entering into major discussion is not irrelevance that glance to Europe political situation at the Middle Ages:
Europe political situation at the Middle Ages:
By falling of Rome empire political discipline, gradually the church was replaced, that and changed to pop empire at next centeries. At that time, conditions of governor on society structure was so that prepared apt basis for church appearance on different areas. At this situation, invader tribe culture that had conquered Rome empire was replaced roman culture. At period that Flourished Fedalism, Feodals to justify injury and harm on peasants, enjoyed Christmas religion to keep self situation. One of common belief at that time was pain and difficulty is as a result of human initial sin and to be cleaned by suffer and taking pain and finally to be saved. (Keivani, Rasoul). Among this, Church also like Feodals had property and Flock and the other tools. The church propagated that paradise is result of pain and suffer in the world. In 393 christmas religion was accepted as formal religion. And in 1054 , Church wad dirided to Two part of western and eastern that western catholic church propagated Feodalic culture and aggravated it in which had benefit for church (Same reference). Among this, The kings also were present but had weak place, however, church to exhibit national unity supported them against feodals, unaware of the fact that these kings will became antagonist for church at future. Role of kings at that time was that act as a judge among feudal involvements and had ceremonial place under title of national unity symbol. At the time, real power was in the hands of feodals and king and church had not so power. Realy, king was a Feodal who just can govern at area of self kingdom. Among this, relation between church and Feodals was such that church created thoughts in which was useful for this discipline and propagated them, Instead feodals were paying church contribution. What history shows is that both feodals and church domi nated over people. Then at major part of Middle ages, power had three basis. The first basis, Feodals, second basis, church and pop and third basis king, that this power was weakened from first basis to third basis. (Vaezi, Asghar, Base of West Thought, day, Keihan 1383/4/25).
This was Schema of Europe political situation at the Middle Ages. Now, its time to deal with general flow of philosophical think and thought at the Middle Ages in Summary, until from heart of that enter into political thought of the Middle Ages.

General Flow of Philosophical think and Thought
After being current Christianity in Europe and converging of Church power with empire power, science center was influenced by govern system. One of the important Features of this period is church domination on science centre and university and school course. Also, philosophical thought at this period have religious complexion and is influenced by catholic Christianity. Can be said that philosophical thought at this period is composed of Christianity and plate and Aristotle philosophical opinions. Major thinkers at the Middle Ages tried to making clear Christianity belief with philosophical bases especially platonic and new Plato opinions. One of the major character of this age is holy Augustine, He was opposed of Aristotle dialectical philosophy. Gradually, chruchmen didn't tolerate against tendency wave to pure philosophy and finally, Tomas Aquinas accept many of
Aristotle philosophy opinions and reflected them on his books. Gradually, opposed to Aristotle philosophy was decreased, and at some of science centre became dominant tendency. On the Middle Ages philosophy that is wellknown as scholastic, beside on rationale, theology, morality and policy, part of natural sciences and orbit sciences that was acceptable by church included. And by this way, philosophy at the time was found more wide area and concept. Major function of philosophy at this time was catholic Christianity believes reasonable express and rational justify of these believes that culminated on Aquinas and Augustin Opinions. At this period, Faith was prior to wisdom and understanding was figured reward of faith. "Tough, At these periods, thinking had religious complexion and viewed tools for faith, but was performed so thinking tries that communicated political thought field that will be treated indetails on next pages."

**Political thought at the Middle Ages**

Though on the major part of the Middle Ages Feodal States were at work and Feodalic relations governed on State and political communications of that time, but thinkers appeared at this period and presented new opinions that by deeply examination of their opinions can measure political thought at the Middle Ages and extract modern State roots from heart of opinions and their works. There is three major thinker who treated political thought clearly and presented political opinions at this period and here their opinions are considered in summary included: Holy Agustin, Tomas Akoinas and Marsilius Padoaei.

**A) Holy Agustin and negative view to State:**

As we know, Agustin have two major work, the first is confessions and the next God city. This book, God city, is the largest Agustin work after confessions. "At God City book, there is many subjects. Body resurrection, future life, duties of Christian slave on his / her relations with civil officials" (Foster, Michle, Lord of Political thought, translated by Javad Sheikholeslami, Amir Kabir Publications, Forth edition, 1371, P. 239). Chief part of political thought has come in God city Agustin book. "As we know and to extent that related to Agustin political philosophy, He says, political compositions is not For virtue inculcation but their duty is peace apparent Figure protection in polluted world. To sin. According to Agustin, State is not by nomeans tools for human perfection and deliverance rather is encumbrance composition that at the best condition can justify as a cure for sin" (George kisko, political philosophy history of Middle Ages, Second volume, Translated by Khashayar dayhimi, Ney Publication, first edition, 1390, p 75). Agustin says: People to reach special worths don't form State, rather State merely is their same unity. Human beings have needs and demands and join together. To meet these needs and demands and cause of this joint is their common wealths. Then State is merely agent that people adapt to reach what they like (Previous, P 78). As seen, Agustin views to State toolistic, that could call Tomas Habbes and John Locke. This Agustin opinion about origin of State is the same bridge that join his political thought to modern State opinions (social contract). The other basic feature that Agustin
believers for States is State ability for self defense. Here, Agustin's subject "Political life" is by form that realy exist. Here, Agustin point of view be of importance for this reason that avoid of many questions about worths, namely, according to him, States are free of goals that follow. He by separating State from moral apprehension, smooths the way for realistic deduction from realist policy or State. "On realistic deduction, policy is a tool to keep order and avoid roit, anarchy and lawlessness. Order as a policy goal can exist without justice, freedom, welfare and morality. The most famous realistic deduction of policy is found on Nicolomakiavely's thought, that in whose book Shahriar theorized about that (political knowledge training, Hossein Basharieh, contemporary view publication, 8 edition, 1386, p 84 – 85). Nicolomakiavely is one of the first modern policy and view theorists to State and this section of Agustin's thought is as another bridge to modern State thought. According to Agustin, State is encumbrance existence and necessary evil that exists for human sinful nature. Free of Agustin belief to human sinful nature, his emphasis on to be encumbrance and necessary evil of political thought State, approach him to liberal political theory. Pessimism in relation to State as a inevitable evil is one of the major elements of liberalism Ideology (John Lock, English philosopher said: politicians potantially are fierce animals that can control them by applying continues opinions (previous, p 136). The other thoughts that Agustin for the first time has treated, is thought of world peace. Agustin speaks positive peace, that world discipline free of nation instructions, all are subject to that. It means, its scope became wide and spread that encompass throughout the world. Agustin's world peace theory, after appeared on Imanoel Kant's, German famous philosopher, opinions and became foundation of united nation coming into existence. So, Agustin's word peace thought can be considered another bridge to modern world and A policy.

**Generally:**

1) Agustin who don’t view duty of political composition, virtue inculcation, but he knows just peace keeping approach to realistic deduction of policy.

2) This Agustin's theory that State merely has agency function and one of its function is ability to defend self, approach to Tomas Hobbes and John Locke deduction and Theory of social agreement.

3) Agustin distinguishes his account from classic theory by separating State from moral apprehension.

4) On Agustin theory, State is a necessary evil that its existence is essential for human sinful nature. His emphasis on to be encumbrance and necessary evil approach him to liberalism modern ideology (negative view to State).

So, Agustin's political thoughts on four key case almost approach to modern understand and deduction of State and policy.

B) Tomas Aquinas and affirmative look to State:

Tomas Aquinas organizes his political philosophy influenced by Aristotle, He declares by return to Aristotelian roots that human naturally is social and political
animal in which nature wanted to live in group, then if human naturally is social so need to governance. He declares "when governance Is accurate and just that be for the sake of people benefit and when is bad and unjust that merely be for the sake of self governer" (Klosko, George, Previous volume 2 , P 155). By this expression, Aquinas reaches to affirmative comprehension and deduction and declares that duty of governance is to creat public benefit fields not just security and peace. Justification that Tomas Aquinas presents about State origin is completely natural and by this justification, he ignores theological view about State origin and consideres it merely terrestrial. Tomas Aquinas Says: "Since State Originate from human needs and nature, be examined at human level completely, be searched independent of theological values. Thus, even non – Christians State have positive function, because meet their subjects public benefit" (Klosko, Previous, volume 2, P 157). This Tomas Aquinas's Theory about State origin, approach his political philosophy to modern opinions, because at modern political philosophy, also State separate of heaven and become phenomenon by terrestrial functions merely. Tomas Aquinas, addition to prefer Monarchy to other form of governance, also defends mix governance. Though is aware of individual governers possible corruption risk and knows thranyn the worst form of governance. But what Tomas's political philosophy approach more and more to modern comprehension of governance is trying to put limitation for governance power that he try to do it in a different ways. 

Tomas Aquinas counts four basic laws consist of: 
1) Eternal law 
2) Natural law 
3) Divine law 
4) Human or enactment law 

He says on definition of eternity law: "There is law by name of eternity law that consist of present wisdom in God mind" (B.Faster, Micle, God of Political Thought, Translated by Javad Sheikholeslami, Amir Kabir publication, Raha edition, 1376, P. 429). Tomas Aquinas Says: "For intelligent being, eternity law and orders appear on their wisdom plate. So themselves by freedom adapt self with these orders. Eternity law in a way that place in intelligent beings wisdom plate is the same that Aquinas view it natural Law" (Taheri, Abolghasem, Previous, 162). Tomas definition of natural law constitutes skeleton of his political philosophy. Tomas Aquinas like the other major persons on natural law tradition says, natural law directly is identified from wisdom, so its orders are true, from Tomas Aquinas Point of view, every law That be not compatible with natural law, is not necessary. This his opinion has radical and modern political consequences. One of the consequences is that laws governers enact, if be incompatible with natural laws, else has not legitimacy. He by this word creates limitation on unjust governance, and conditions power to observe natural low. "From Tomas point of view, governers became tyrant by two way:
1) When their governance claim has defect. 2) when don’t govern justly. Thus we have two kind tyrant. Usurper tyrant and unjust tyrant. Tomas proceeds to the extent that defends to kill unsurpers. So, Tomas opposes with power that be obtained incorrectly" (Alem, Abdolrahman, history of west political philosophy, publication of ministry of State, Tehran 1381, P 267).

On one hand, description and creation of natural law and put limitation for governers power on the other hand approach Tomas opinion to modern political philosophy, in another way:

1) According to Tomas, since State existence is not related to sin, He can find natural justification for political governance.
2) Importance of Tomas political philosophy is putting limitation on governance power that be done by different methods.
3) According to Tomas, there is four law, eternity, natural, divine and enactment law and political laws originate from natural laws.
4) Tomas for the first time set forth resistance discussion against illegal governance and defends of resistance possibility and roit against that.

But, at Tomas Aquinas political philosophy what more than others is near to modern ideologies, is resistance discussion against power. This is one of the basic elements on liberalism modern ideology. "Liberalism initially was resistance ideology against arbitrary and absolute power. From lock point of view, the greatest liberalism defender, when governers exert power without having right, set self in a quarrel position with people. Thus, when people encounter with self-right violation, have resistance and roit right against powerfuls" (Basharieh, Hosein, previous, P 127 – 128) Then, Tomas political philosophy at many cases overlap to modern political philosophy and four said cases from his thoughts is our claims proving at this case.

c) Marsilius padoaei and constitutional Government Marsilius Padoaei is the most modern political theorist at the middle Ages. Marsilius Fame is for his political philosophy especially his important work, Defensorpakis (Peace defender). Marsilius Padoaei’s great innovation and genuineness at three important field has basic importance to understand policy modern:

1) Constitution
2) Governance
3) Democracy or Public governance" (Kolsko, Gorge, previous, P 191).

Marsilius for fostering his look to State, uses naturalistic reasoning and deprives whole church hierarchy from every kind of especial priviledge and authority at this world. To clear his constitutianism that has a great relation to modern State, we should first present a definition of constitutionism in which be compatible with Marsilius look. "Constitutional governance that its excellent example is constitutional law of USA and the other same, has decisive reciprocity with tyrantical or willfully governance. Constitutional governance is limited and bound one. Governer can not be absolute, and should govern in favour of public benefit not self personal benefit. But limitation that in constitutional governance is exerted on governor differs the other limitations that be exerted in different way. Not only
constitutional governance should be limit but also must limit in a especial method. Namely this limitation should perform by permanent and legal composition and as policy" (Klosko, Gorge, previous, p 193 – 194). Another element at constitutional governance is that power belong to people and just be deposited. "Interestingly, know western tradition of constitutional and modern governance originated church, what on sight world and what on act world" (Previous, p 196). The Middle Ages church, before hand was informed formation of modern government and was divulged modern State Features of self. Into church breaked out constitutional combat between pop who wanted concentrated control and bishops who wanted to keep degree of independence. For their self. Bishops on combat with Rome church often used terrestrial power efforts to limit pop power and so shaped constitutionalism combats. "Marsilius like Tomas believers to four kind of law, divine, eternity, natural and human law, but at basis of law deduction exist incompatibility among them. Tomas believe, when human law is necessary that be compatible to natural law, but marsilius, don’t condition necessity of human law to compatibility with natural law" (Lidman, Asven Eric, political believes history from plato till habermas, translated by Saeid Moghaddam, Daneshe Iran publication, Tehran, 1379). On the contrary San Tomas, Marsilius is serious theorists on separation State from church. (According to marsilius, basis of west government is public governance. Final political authority must belong to people that marsilius calls, them lawgiver. If laws are not along with people approval, roit and dispersion become comprehensive all over. (Alem, Abdolrahman, History of west political philosophy from beginning to end of middle enturies, Ministry of State publication, Fifth edition, Tehran, 1381). Marsilius was one of the anti-POP theorists as we know on quarrel between State and church what had many value for kings was this fact that they could enjoy others support and help for the first time. Among this there were who suppporing kings were against disagree with pop posi- tion. One of them was Marsilius. His support from kings against pop and his theorization at this case, smoothed the way to appear next modern absolute States. History evidence, introduce Marsilius as a one of the consultisms: "This belief that Church authority is on its members not pop, has become to consultism. Consultists believed that power belong to church consultation not pop" (klosko, George, previous, P 205). Marsilius presents a structured report from State nature and church structure and function to invalidate pop look, that is deriven Aristotle. He by following of Aristotle, believes that State created to keep life but exist to be life in comfort. He contrary to other medial theorists who their concentrations was on goals that government should guide people toward that respect to qualities and features that government must have to do rightly its functions. (How to govern rather who govern). Marsilius believes that "For government do its function rightly, law giving power should be on public's hand. According to he, law giver or preliminary cause are doer cause of public law or part of them that have more weight and be expressed through election (Democracy) (Klosko George, previous, P 215). "Governor at Marsilius State is just executor law
and is not enactor law. Because authority of law enactment is at people hand. His governor is maximum a constitutional king. Final power is at law maker people hand that choose governor, meanwhile governor is responsible against law giver and should confirm the law that law giver enact if not can be dismissed. (Previous, p 219). Marsilius at his belief that forcer power should be unique and under view of lawgiver, approach to one of the basic features of modern States. According to max vabber description, State is human community that is claimant of lawfull usage exclusiveness from forcible power at a given territory. Marsilius humanity lawgiver, also is claimant of such power exclusiveness at his territory. In sum up can be said that Marsilius is defender of constitutional government. On his belief, power is in the heart of society and give it to governor to proceed community benefits. The otherwise can be dismissed that but at the other aspect, law giver has governmentalistic authority. Though lawgiver act with governor mediation, but has authority without limitation. At this sense, Marsilius, beforehand informs next development of western European constitutional States. This was overview of three person opinions from most famous mediral political theorists and description of mediral political theorists relation and description of their opinions relation to modern State. At this brief essay was tried to express opinions that theses thinkers divulged on political philosophy, its relation and link to modern State be measured that hope could perform this duty.

Conclusion:
As was mentioned at the introduction, the Middle Ages was less recognized relation to classic age and modern periods and very less was recognized and studied relation to the other periods. And this is because of the middle Ages infamy at one hand and analytical attractions of other periods at other hand. This written tried to show, its right that at the Middle Ages there was opinion inspection law court and critical and free thinking followed heavy price for thinker, but this was not all story. At the same period, philosopher and scientists appeared and presented new and strange opinions, kept bright philosophical think and reasoning torch. This essay is as invitation from clear—sighted persons till by solid purpose and free of presumption that have about the Middle Ages, deal with to study and review of this period and fill the research vacuum about this period. On the other hand this written tried to challeng with view that encounter to History by epistemological dissection and believe that thoughts and theories and thinking framework at every period belong to same period and by expiration of every period at history this framework is changed. From this point of view, concept like modern State, modern policy, human rights, Democracy and . . . belong to modern period and there is not no trail from this concept at other periods. This study by following and highlighting modern State roots on mediral thinker thoughts and works and showing these roots goes to battle with this point of view and shows that every thought and concept have lineage and by exact genealogy and deep research can be obtained that and smoothed possibility of dialogue and knowledge that and smoothed possibility of dialogue and knowledge speak between
different periods of mankind history. At this essay addition to overview on mediral economical and political condition, was examined thoughts of the most three famous people at this period and was studied in detail their political opinions and was searched link and relation of these political thoughts with modern State concept deeply. Holy Agustine and negative look to State, Aquinas and affirmative look to State and Marsilius padoei of constitutional State was from. Parts that examined, and at every case their opinions and their relation to modern State was measured. From essay point of view, modern State has roots that must be sought in the middle Ages soil and this essay tried to access these roots by ploughing this soil and shows history has linear route thought and every stage is foundation of another stage without there is dissaciation. This essay is the first to begin at this case and hope can be more and more exact research at this field.

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Communicative skills and its relation with strategies of Conflict management between educational schools' principals in George zone 2

Pilar Quesada

ABSTRACT

The prevalent objective of this research paper is to find relation of communicative skills with strategies of conflict management in educational managers of different schools zones of George City. The method of present research is correlation type. The Statistical population includes all educational administrators of schools (i.e. primary, middle and high schools) in zone 2 of George City. Sample numbers include 103 numbers which are selected randomly. Questionnaire of communicative skills and questionnaire of strategies of Rabin’s conflict management were employed for information collection. Pearson’s correlation factor and analysis of one-way Variance were used for hypothesis test. The result analysis indicates that there is a significant negative relation between communicative skills and the selection of control and avoidance strategies for conflict management in Alpha %5 level, it means that the manager’s communicative skills is more, the selection of control strategy and not conflict strategy is less and contrary. The analysis of result shows that there is a significant positive relation between communicative skills and selection of oriented solution strategy for conflict management in the level of Alpha 5%, it means that the manager’s communicative skills is more, the using of oriented solution strategy is more and vice versa. In According to the considered F, the analysis of one-way Variance shows that there is not significant difference between 3 groups of managers of schools (primary, middle and high) in the level of Alpha 5% in the using of communicative skills.

Key words: Communicative skills, Conflict management, Educational managers,

Introduction

The educational places is as a executive factor that it is effective to behave people as useful citizen, and also, it provides necessary manpower for the society. The educational places developed in the other communities, so, the large numbers of
Agreement, participation and cooperation that all of them based on communicative skills. (Belick and moton 2004, Ganeri and spitsberg Batter, waydrohatfild)

Avoiding from involved subjectivity is one of another effective factors that the managers should do it. (Soltani, 1380) The managers shouldn’t hurt to the others character when he/she has relation with others. The researchers shows that the managers who have emotional intelligence and communicative skill, in comparison to the others, they can settle and solve the conflict problems in a good way. (Golman, 2000) In accordance to inadequate information about communicative skills with strategies of conflict management, there is a question that how much the role of communicative skills are important to manage and organize conflict between educational managers.

**The purpose of this research:**

**The main aim:**
The general purpose of this research is to determinate relations of communicative skills with strategies of conflict management between educational managers of schools of region 2 of George City.

**Special objectives:**
There are general purposes in this research such as:
1) The determination of relations between communicative skills and strategies of oriented solutions between educational managers.
2) The determination of relations between communicative skills and strategies of oriented solutions of Control between educational managers
3) The determination of relations between communicative skills and strategies of oriented solutions of avoidance between educational managers.

**Hypothesis of this research:**
There is a relation between communicative skills with strategies of conflict management between educational managers of schools of region 2 of George City. guidance schools and high schools in district No.2 of George who are 140 persons. The volume of sample according to the Morgan table has determined 103 persons. For selecting this sample used of educational managers in coincidental sampling method. In this research used of the Pierson’s correlation coefficient and the one-way (ANOVA) variance analysis for the test of hypothesis. Below questionnaires are the tools for collecting information.

1- Questionnaire of communicative skills

Questionnaire of communicative skills measures three components include: verbal skill, hearing skill and feedback skill. This questionnaire was standardized by Moghimi in 1380.

Questionnaire communicative skills presented for measuring the rate of communicative skills. This questionnaire of 18 questions which measures verbal skill, hearing skill and feedback skill. Each testing receives 4 separate score is total.
Questions 3,4,7,12,15,17 measure verbal skill, question 2,6,8,10,14,18 measure effective hearing skill, questions 1,5,9,11,13 and 16 measure feedback skill. Answers are in the form of 5 degree and orderly. The reliability of the questionnaire of communicative skills is reported 0.89 by Ketanbakh Alfa.

2- Questionnaire of conflict management strategies

Questionnaire of Rabinz conflict management strategies measures five methods of conflict management which put into three strategies (avoidance, solution-orientated and control). Questionnaire was standardized by Ghorbani in 1378. This questionnaire has 30 questions which specify three strategies: avoidance, solution-orientated and control on the scale 7 value. The score that each testing gets from questionnaire of conflict management shows which kind of strategies of conflict management shows kind of strategies uses in facing with conflict.

In this questionnaire, questions 2,5,7,12,14,15,23,24,25,27,28 and 29 are related to the avoidance strategy, questions 1,4,6,8,9,11,13,16,19,20 and 21 are related to the solution-orientated strategy and questions 3,10,17,18,22,26 and 30 are related to the control strategy. The reliability of questionnaire was calculated by the use of Kerbakh Alfa 0.7885 for the avoidance strategy and 0.7985 for the control strategy and 0.8135 for the solution-orientated strategy.

Finding:

Theory1: There are a relation between the communicative skills and the control strategy in educational managers.

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>(N)</th>
<th>r</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative skills and control strategy regarding</td>
<td>103</td>
<td>-0/6543</td>
<td>0/0059</td>
</tr>
</tbody>
</table>

By regarding the table information, the mentioned hypothesis by using Pierson correlation is examined. The result shows there is meaningful negative relation between communicative skills and selecting control strategy for conflict management in 0/05 Alfa level. P-value=0/0059 < α=0/05. so the hypothesis is confirmed and the relation between these two variables is negative and inverse. It means as much as the communicative skills of managers are high, the probability of selecting control strategy is less and vice-versa.

Hypothesis 2: three is a relation between communicative skills and avoidance strategy in manager.
Table 2: The relation between communicative skills and avoidance strategy in managers

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>(N)</th>
<th>r</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative skills and avoidance strategy</td>
<td>103</td>
<td>-0.458</td>
<td>0.0012</td>
</tr>
</tbody>
</table>

By regarding the table information, the mentioned hypothesis by using Pierson correlation test is examined. The result shows that there is meaningful negative relation between communicative skills and avoidance strategy for conflict management in 0.05 Alfa level. $P-value=0.0012 < \alpha=0.05$. So the hypothesis is confirmed and the relation between these two variables is negative and inverse. It means as much as the communicative skills of managers are high, the probability of selecting avoidance strategy is less and vice-versa.

Hypothesis 3: There is relation between communicative skills and solution-orientated strategy in managers.

Table 3: The relation between communicative skills and strategy in managers

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>(N)</th>
<th>r</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative skills and solvable</td>
<td>103</td>
<td>0.5501</td>
<td>0.0051</td>
</tr>
</tbody>
</table>

By regarding the table’s information, the mentioned hypothesis by using Pierson correlation is examined. The result shows there is meaningful negative relation between communicative skills and $P-value=0.0051 < \alpha=0.05$. So the hypothesis is confirmed and the relation between these two variables is negative skills of managers are high, the probability of selecting solution-orientated strategy is less and vice-versa.

Hypothesis 4: There is no difference in using communicative skills among women managers.

Table 4: The table of summary of one-way variance analysis for the marks of communicative skill in three managers’ groups

<table>
<thead>
<tr>
<th>The source of alternations</th>
<th>Free degree(D.F)</th>
<th>Total squares(SS)</th>
<th>Total average</th>
<th>F</th>
<th>The amount of probability (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among groups</td>
<td>2</td>
<td>3503/088</td>
<td>1751/544</td>
<td>0/31</td>
<td>0/4130</td>
</tr>
<tr>
<td>Inter groups</td>
<td>100</td>
<td>10811/16</td>
<td>108/12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>14314/245</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the table’s information, this hypothesis is examined by using variance analysis (ANOVA). The result shows the calculated F for using communicative skill in three groups has no meaningful difference in 0.05 Alfa level. $P-value=0.4130 >$
\(\alpha=0.05\). So this hypothesis is confirmed and by 95\% confidence we can say in (elementary schools, guidance schools and high schools) sections.

Hypothesis5: There is no difference in using communicative skills among managers in (elementary schools, guidance schools and high schools) sections.

**Table5: The table of summary of one-way variance analysis for the marks of control strategy in three managers’ groups**

<table>
<thead>
<tr>
<th>The source of alternations</th>
<th>Free degree (D.F)</th>
<th>Total squares (SS)</th>
<th>Total average</th>
<th>F</th>
<th>The amount of probability (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among groups</td>
<td>3</td>
<td>2/783</td>
<td>0/928</td>
<td>0/9</td>
<td>0/4424</td>
</tr>
<tr>
<td>Inter groups</td>
<td>89</td>
<td>91/298</td>
<td>1/0258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>94/081</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the table’s information, mentioned hypothesis is examined by using variance analysis (ANOVA), the result shows the meaningful difference in 0.05 Alfa level. P-value=0/4424 > \(\alpha=0.05\). So this hypothesis is confirmed and by 95\% confidence we can say there is no difference in using control strategy among 3 managers’ groups in (elementary schools, guidance schools and high schools) sections.

Hypothesis6: There is no difference in using avoidance strategy among managers in (elementary schools, guidance schools and high schools) sections.

**Table6: The table of summary of one-way variance analysis for the marks of avoidance strategy in three manager’s groups**

<table>
<thead>
<tr>
<th>The source of alternations</th>
<th>Free degree (D.F)</th>
<th>Total squares (SS)</th>
<th>Total average</th>
<th>F</th>
<th>The amount of probability (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among groups</td>
<td>3</td>
<td>0/577</td>
<td>0/192</td>
<td>0/32</td>
<td>0/8074</td>
</tr>
<tr>
<td>Inter groups</td>
<td>89</td>
<td>52/68</td>
<td>0/592</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>53/26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the table’s information, mentioned hypothesis is examined by using variance analysis (ANOVA), the result shows the calculated F for using avoidance strategy in three groups has no meaningful difference in 0.05 Alfa level. P-value=0/8074 > \(\alpha=0.05\). So this hypothesis is confirmed and by 95\% confidence we can say there is no difference in using avoidance strategy among 3 managers’ groups in (elementary schools, guidance schools and high schools) sections.

Hypothesis7: There is no difference in using solution-orientated strategy among managers in (elementary schools, guidance schools and high schools) sections.
Table 7: The table of summary of one-way variance analysis for the marks of solution-orientated strategy in three managers’ groups

<table>
<thead>
<tr>
<th>The source of alternations</th>
<th>Free degree (D.F)</th>
<th>Total squares (SS)</th>
<th>Total average</th>
<th>F</th>
<th>The amount of probability (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among groups</td>
<td>3</td>
<td>3/185</td>
<td>1/06</td>
<td>1/13</td>
<td>0/3425</td>
</tr>
<tr>
<td>Inter groups</td>
<td>89</td>
<td>83/845</td>
<td>0/942</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>87/03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the table’s information, mentioned hypothesis is examined by using Pierson correlation test, the result shows the calculated F for using solvable strategy in three groups has no meaningful difference in 0.05 Alfa level. P-value=0/3425 > α=0.05 so this hypothesis confirmed and by 95% confidence we notice there is no difference in using solution-orientated strategy among 3 manager’s groups in (elementary schools, guidance schools and high schools) sections.

**Conclusion**

Hypothesis 1: There is a relation between communicative skills and control strategy among educational managers. Findings show that there is negative relation between communicative skills and selecting control strategy for conflict management in 0/05 Alfa level. This hypothesis was confirmed. The results show there is a meaningful negative relation between these two variables and this relation is inversely. It means as much as the communicative skill of manager be high, the probability of using control strategy in solving conflicts become less and vice-versa. Finding of this research in this field has harmonization with Celment research results, and colleagues (2002 and Ashkan (1382). The manager uses control strategy for solving conflicts and acts opposite against party’s demands, he has tendency to fulfill his benefits without any consideration that matter is opposite to other person. Manager opposes persons in this strategy and also forces his demands or views or opinions to them. But at last these forces will lead to anger and hostility. The ideal social relations and sympathy with others are the personalities of persons with the high communicative skill which avoid manager to use control strategy in conflict management. (Barron, 2007, quoted Baloch, 1389)

Hypothesis 2: There is a relation between communicative skills and avoidance strategy among educational managers. Finding show that there is a negative relation between communicative skills and selecting avoidance strategy for conflict management in skills and selecting avoidance strategy for conflict management in 0/05 Alfa level. This hypothesis was confirmed. The results show there is a meaningful negative relation between these two variables. According to the features of communicative skills and this strategy, Results have harmonization with gained research in this field. (Afzalvor and colleagues, 2002). A manager who has a high communicative skill who is not reluctant to feeling and emotions of its subset and without any tendency to avoid conflict or giving a score to opposite party or sacrificing a person
to another person just by finding an arranged solution and by regarding to other’s and itself benefits to solve the conflict. The mangers know well by the correct and active relation could manage affairs correctly and ideally and achieve organization’s goals. (Parhizkar,1388).Skill of manner’s technique with staff(communicative skill), having effective hearing, accepting suggestion and other’s critiques are techniques that some persons without regarding to their scientific degrees have them or they gain them within repeat and observation.Hypothesis3: There is a relation between communicative skills and solution-orientated among educational managers.Findings show that there is a positive between communicative skills and selecting solution-orientated strategy for management in 0/05 Alfa level. This hypothesis was confirmed. The results show there is a meaningful positive relation between these two variables. The means as much as the communicative skill of manager be high, the probability of using solution-orientated in solving become less and vice-versa. Finding of this research have harmonization with findings and opinions which have done during previous years by (Ganry and Spetizrbrg, 20102, Vayder and Hatfeld, 2006, Batler, 2004 and Kelment and colleagues,2002)Research has shown that the cooperation is an effective method in solving conflict which needs collaboration and sympathy and it is only happen in an atmosphere which is full of honesty and equality.(Bilk and Morton,2004). As a result, those persons with the high communicative skills can create a friendly atmosphere without any “wining and lost”. Research introduced the style of collaboration as an ideal style in conflict management, because by this style gaining the goals is more possible (Vayder and Hatfield,2006).In this method, a manager examines the solutions for confronting conflict by cooperation and sympathy of subset and try to select the best solution (Bazaz jazayeri,1387)Hypophesis4: there is no difference in using communicative skills among mangers of (elementary schools, guidance schools and high schools) sections.

The result by 95% confidence, there is no meaningful difference in using communicative skills among managers of three groups. Finding of research has harmonization with finding which have done during previous years by (Sander. 2010 and Parlonef 2009). The important issue of management of human strength is to consider and solve the problem directly.Dealing with employees skill (communication skill), having effective hears, acceptance of proposed and criticism are other techniques that some people regardless of academic rank have them or they gain those skills by experienced, repetition and observation.

Hypothesis 3: there is relation between communication skills and solution strategies tendency among educational leadersThe findings showed that there is a significant positive relationship between communication skills and strategy selection for conflict management there is a significant positive association at Alfa level (p<0.005). This means that the more higher communication skills, the more strategy selection and vice versa . Our results are similar to the results which were gain by Ganrry and Spitzberg (2010), Eider and Hatfiled (2006), Batler (2004) and Kelment and et al (2002). Those results have been shown that collaboration is the most
effective way to solve the conflicts; this needs participation, consultation and cooperation; all those things will be effective if there is honesty and equality in the environment (Blake and Moton 2004). So the people who have strong communication skills can create such environments to change the situation and turn it to a situation without winning or losing. The studies show Cooperation is the most proper solution for conflict management, because through it reaching to goals is more possible. In this kind of management method, people through cooperation, partnership and like-minded, investigate the available solutions to deal with conflicts and at last they will chose the best solution (Bazaze Jazayeri, 1387).

Hypothesis 4: The use of communication skills among managers of three schools (elementary, middle, high school), is no different. Results showed that there is no difference in using communication skills between managers of three schools (elementary, middle, high school) (95% confidence) and there is no significant relevancy. Our results are similar to the results which were gain by Sander (2010) and Parlonf (2009). One of the important issues in human resources management is analyzing problems, problem solving, the basis of management ability is to solve problems through face to face method. The management who is a good speaker, listener, sender and receiver can use communication and negotiation method for solving problems; these are characteristics which are existential and inherent principles for management. Communication skills are blend of inherent and adventitious abilities.

Hypothesis 5: In choosing control strategy for conflicts among the three principals (elementary, middle, high school), there is no difference. Results showed that there is no difference in choosing control strategy for conflicts among the three principals (elementary, middle, high school) (95% confidence). Our results are similar to the results which were gain by Bozorgi (1387) and so many others. Every manager in the service process does some studies in the field of management and organizational behavior or gets familiar with behavioral aspects of individuals in the organization. Accordingly, it can say that most of managers learn more about the positive and negative effects of conflicts and also learn to choose proper strategy for solving different problems; they don't use power and force to solve the conflicts, this can be same in most managers. In order to solve the conflicts in organizations, managers use different strategies; these different strategies depend on several factors such as personality, organizational position, the opponent's personality, leadership style, level of power, culture and knowledge of the organization and also proficiency in conflict management styles; so the managers experiences have important role in the choice of strategies to deal with conflict.

Hypothesis 6: Choosing avoidance strategy among the three principals (elementary, middle, high school), has no difference. Results showed that there is no difference in choosing strategy among the three principals (elementary, middle, high school) (95% confidence). Related findings to this topic in ten years which have been gained by Goldman (1998-2008) are similar to our results. A manager who has high communication skill has more preparation than others to resolve conflicts and weaknesses of the team and organization and he/she
doesn't see any reason to avoid conflict and apathy towards the opponent, therefore he/she uses this method less. Hypothesis 7: choosing perfect solution strategy has no difference among management levels (elementary, middle, high school).

Results showed that there is no difference in choosing prefect strategy among the three principals (elementary, middle, high school) (95% confidence). Our results are similar to the results which were gain by Bozorgi (1387). The managers who were tested show good communication skills. The more higher communication skills in managers, more choosing solution orientation strategy will happen. The most important skill for addressing psychological issues of conflict is being good at listening, this is a vital skill in facing with conflicts that few people are doing it. In conflicts people don't listen to each other and don't think about a proper solution.

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The System Dynamics for Training and Vocational Education Management Pattern

Chzia Poaw Sim

ABSTRACT

The present paper is the comparative result of training and vocational education (VET) management in distinct countries. By comparative investigation in such countries, we can quote effective parameters in management and find their interactive relations. Training and vocational education management, if identifies the requirements accurately, it could arrange plans for at the appropriate time and according to needs and coordinates responsible corporations with plans and controls them, will perform successfully and will heighten the quality of human resources. After that, considering the dynamics of VET management both terms of »stock & flow« has been presented for it. Consequently, the likelihood of dramatizing the pattern has been supplied by vensim software.

Introduction

Management in the current communities is one of effective factors and other factors are influenced so much by it unfortunately, while management has critical importance in under developing countries, but there is a poor attention on this issue in different organizations. The main faint is the management. Through this research, VET management has been studied in the sample countries comparatively. The sample countries have been selected by considering their problem in educational demands and supply which have been classified in 3, following groups: The first group consists of some under developing countries which have great growth in working-forces and low growth in employment, locating in Africa and mid-east. South Africa, Tanzania, Egypt and Jordan are as above mentioned countries. The second group consists of the countries which their economy tends to exports. High growth in employing skilled workers in these countries encountered them with a problem in supplying skilled working-force. Some are from southern America and eastern Asia like Korea, Indonesia, Malaysia, China, Chile and Mexico. The third group consists of the countries which unemployment through them is resulted from low growth of working-forces and employment. The main countries in this group are from former communist states which are going forward to free
markets, some are, Russia, Hungary, Poland, Czech Republic and Kazakhstan. By studying these countries comparatively, we can find their weakness and strength and extract effective parameters in VET and present an appropriate model for under developing countries.

The Position of Vet Management through World

As industry and technology develop, using skilled human sources in necessary. Thus, this factor has been studied by industrialists and education specialists deeply all over the world. Vet play an apparent role in training skilled human sources needed for communities and in evolutions in the sciences and technologies. This resulted that world countries increasingly focus on the issue of technical educations. Vet management through different countries is undertaken by many organizations. In most countries, ministries of education and labor under take this task. The other public organizations and private section also participate in this management. As you can see in the table, ministry of education undertakes technical educations in the most sample countries. Education prior to employment and supplementary educations are majorly undertaken by ministry of labor. Education during service time is performing by ministry of labor and other ministries. So we can discuss that in the sample countries, there are meaning full dividends for all kind of education sand organizations. It means that the most countries prefer to represent official technical educations by the ministry of education. While preferring to represent unofficial educations by ministry of labor and other ministries.

Table I. The Management of System In Sample Countries

<table>
<thead>
<tr>
<th>Other agencies</th>
<th>Ministry of labor</th>
<th>Ministry of education</th>
<th>VET educational subsets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech republic, Kazakhstan, Zambia, Egypt</td>
<td>Hungary, Mexico</td>
<td>Czech republic, Hungary, Poland, Russia, Kazakhstan, China, Korea, Indonesia, Malaysia, Chile, Mexico, South Africa, Tanzania, Egypt</td>
<td>Official technical education</td>
</tr>
<tr>
<td>Hungary, Kazakhstan, China, Indonesia, Malaysia, South Africa, Tanzania, Zambia, Egypt</td>
<td>Czech republic, Poland, Russia, Kazakhstan, China, Korea, Indonesia, Chile, Mexico, Tanzania, Jordan</td>
<td>Czech republic</td>
<td>Education in kind of working in factory</td>
</tr>
<tr>
<td>Czech Republic, Hungary, Poland, Russia, China, Korea, Indonesia, Malaysia, Chile, Mexico, South Africa, Tanzania, Egypt</td>
<td>Indonesia, Mexico, Jordan</td>
<td>Education prior to employment and supplementary education</td>
<td></td>
</tr>
</tbody>
</table>
Dynamics of the Vet Management System

The causal-loop diagram is all important tools to decade the feedback structure of systems. For many years, these graphs are used in the academic researches. Today, increasingly, are used also in the commercial affairs. CLD graphs are important for the following reasons: (1) Gaining the theories about the dynamic reasons; (2) Extracting and establishing mental models for individuals or teams; (3) Linking the important feedbacks which are considered to be the reason for happening the issues (Forrester, 1985). The principles for depicting the causal-loop diagram are simple, but must be followed faithfully. A causal-loop diagram consists of the variables which are connected by directive lines to express the causal effects between mentioned variables. The important feedback loops are also specified in these graphs. These variables are liked by causal communications which are shown by directive lines (Richardson, 1997, 13).

As you see in figure II, the variable of country population is linked to the variable of the youth without skills with positive polarity. It means that if population increases, unskilled searching-for-job youth will increase too (Stewart, 1989). But this relation just shows the causality and structure of this issue and can’t explain the system behavior. Also increasing the unskilled youth variable will increase the variable of demand for technical education. This issue also will influence the presenters of technical education. If technical education is presented, the quality of human force will increase too. If the quality of function for demanding people increases, the possibility to find a job for them will increase. Anyway the amount of employment will increase. The variable of employment with negative polarity is linked to the variable of job-demanding unskilled youth. It means that more increasing in employment, more decreasing in the unskilled job-demanding youth. By following the causal and effective variables which affect one another positively and negatively, our loop will be completed. While determining the loop polarity,
indeed, we determine the thing which is known as the sign of reversing signals of open loops through other loops in the control theory (Sterman, 1999).

\[
\text{SGN}(\partial X_i^0 / \partial X_1^1) = \text{SGN}[(\partial X_i^0 / \partial X_n^0)(\partial X_n^0 / \partial X_{n-1})(\partial X_{n-1} / \partial X_{n-2})\ldots(\partial X_2 / \partial X_1)]
\]

Because the sign is resulted from multiplication of all signs, so the loop polarity can be calculated by the following formula:

\[
SGN(\partial X_i^0 / \partial X_1^1) = SGN(\partial X_1^0 / \partial X_n^0) * SGN(\partial X_n^0 / \partial X_{n-1}) * SGN(\partial X_{n-1} / \partial X_{n-2}) * \ldots * SGN(\partial X_2 / \partial X_1)
\]

Stock demonstrates the system condition and consists of the data which the decisions are made according to. Stock causes the durability of data in the systems and provide the with a memory, stock, by establishing a compression which resulted from diversity between input and output rate of a process, makes some delays.
Stock is the cause of difference between flows (input and output rates) and consequently is the source of unbalanced in the system dynamics. Although people daily experience the storage and flow but often don’t understand the difference between them. For the most people, even politicians responsible for general country politics, the reply to this question is not clear. The lack of perception of differences between flow and stock often results in inappropriate estimation of time delays, short time focus and resistance versus adopted policies (Lancaster, 2002, 63, 65). The population will change over the time dynamically and following it, the rate of unskilled youth will change too. The demand for technical educations. In addition to the unskilled youth, will be strengthened by the employed workers who have left their position or are dismissed or want to promote (ILO, 2006, 44). On the other hand, general education and the costs for educations are weakened and will be influenced by the salaries of skilled workers and unskilled samples and technology changes. Technical educators, in addition to the effects of motivation for the demands for educations, are controlled by the educational policy makers and the general education section and under these effects will present the technical educations. The private presenters analyze their benefits and disadvantages and if consider to any benefit in this industry, will perform some services and in the challenging conditions, will increase their quality. Public section will perform its services under the effect of mass educational policies and its existing facilities. If education is presented adequately, and with the best quality and is appropriate with existing demands, which is possibly by need measurement mechanism and good management, can increase the actual quality of the unskilled working-force. The model can be dramatized by different inputs and can provide the possibility for studying the issue dynamics.

**Conclusion**

As you see in the figure III, this system without management factor, can survive, because this is a negative and self-control loop. It means that more we present technical educations, less demand for it. Also if this education is presented more than ever, with qualitatively promotion, will cause more decreasing in the people demanding for VET and again helps the loop to be fixed. This issue also is true on the contrary. It means that if demands for education increase, presenters will be motivated to develop their activities, If they are private, catch more advantages and if public, do their task for community and response to their needs. But this issue will face to some problem actually, because if presenters don’t have exact information about demand, we will have two conditions:

A) Offering educational skills might be less than demand which causes a compression of unskilled job-searching youth and will increase unemployment.
B) Offering educational skills might be more than demand for them which if presenter is public, this system will result in wasting sources and decreasing efficiency and if private, presenting this education will result in their disadvantage. By exiting private section from this system in the next periods, (A) case will be repeated. It means that again we will have compression in unskilled youth. Management, by entering to the VET loop, can act like a catalyst and run other relative factors. Also by arranging and controlling as a regulator, set relations between other factors. So management factor, by its appropriate actions, Can strengthen the fixation of education loop and organize VET system. For example, when demands for educations increase, it informs presenters in according to it and strengthen them by its supports. Also, in contrary, when demands for technical education decrease, or it is predicted that during next periods, needs for a job will decrease, it informs presenters about conditions. As you see in the structure of model, factors shaping the matter of VET, and their interactive relations can be dramatized during different time ranges and with different entries and can be compared with reality. Also we can use this model for other countries by modifications in entries and assistant variables.

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