Analyzing the Attitudes of Prospective Mariners Towards Work on Ships

By

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Abstract

The background of organizational theories underlines four basic management perspectives. These are Scientific Management, Human Behavior, Integrated perspectives, and Postmodern, Critical and Feminist Perspectives. The core of these perspectives, however, could be highlighted in two main approaches towards management: Scientific Management and Human Behavior Perspectives. While the former focuses on extrinsic motivation, the latter is based on intrinsic motivation, particularly in terms of how management assumes employees. The managers in the former perspective assume that employees do not like work and will avoid responsible labor so they must be kept under strict control. On the other hand, the managers favoring the Human Behavior Perspectives assume that employees can be self-directed and self-controlled, and they believe that there must be mutual trust between management and employees. While favoring and adopting either of these two perspectives, organizations must consider the overall attitudes of employees towards work. The purpose of this study is to analyze the attitudes of mariners towards these two distinctive management assumptions. To do this, a questionnaire was developed by the author and conducted through the students, prospective mariners, studying at two higher maritime education institutions. The analysis of the data collected revealed that the prospective mariners would be the employees described in the Human Behavior Management Perspectives.

1.   Introduction

The philosophical base of such diverse management views as experimental, developmental, professional, and convivial are pragmatism, wholism, rationalism, and humanism respectively. The attitudes prevailing them are respectively sensations, intuition, thinking, and feeling. How each of these diverse managers handles management principles is important if manager-employee relations are to be fruitful and favorable (Calori R. & Woot P., 1995). In other words, "one of the keys to successful management is the ability to understand and apply modern management principles and techniques effectively" (Pindur, Rogers, & Kim 1995, p. 59). Concerns and debates on basic management techniques date back to 3000 BC when Sumerian priests tried to "keep written records as a means of recording business transactions", and throughout the history, thoughts on management have varied, it was , for example , defined by Socrates as "a skill separate from technical knowledge and experience… a separate art and promoted principle of specialization" and by Attila the Hun "the responsibility of directing the actions of others to achieve the goals of the organization" (Pindur, Rogers, & Kim 1995, p. 59). Since the Industrial Revolution, four major perspectives have been introduced and discussed: the Scientific Management, Human Behavior, Integrated, and Postmodern, Critical, and Feminist Perspectives (Shockley-Zalabak, 2002). The major concepts of the Scientific Management approach have been developed by Frederick Taylor, Henri Fayol, and Max Weber. Taylor, often referred to as the father of Scientific Management, developed " four essential elements he viewed as the foundation of scientific management: careful selection of workers, inducing and training the worker by the scientific method, equal division of work between management and workers, and discovering the scientific method for tasks and jobs" (Shockley-Zalabak, 2002, p. 89) and Taylor's views on " the principle of scientific decision making and techniques such as time study, standardization, goal setting, money as a motivator, scientific selection, and rest pauses… have been generally accepted,"(Locke, 1982, p. 14). Henri Fayol, a French manager-engineer,

"was the first writer to advance a formal statement of management elements and principles" (Wren and Bedeian, 2009, p. 211). Max Weber, frequently referred to as the father of bureaucracy, claimed in his studies that "the bureaucratic model for organizations should be based on authority relationships that emphasize depersonalization and task competence" (Shockley-Zalabak, 2002, p. 93). Since its emergence, "the Industrial Revolution when people were brought together to work in factories as opposed to the handicraft system whereby people worked in small shops or in homes" (Pindur, Rogers, & Kim 1995, p. 60). The Scientific management perspectives have been criticized in terms of various aspects. It, however, "is not a failed system replaced by more sophisticated behavioral theories, but a set of guiding principles which continue to inform and influence the role and function of modern management"(Stoney, 2001, p. 27).

The Human Behavior perspectives, unlike the Scientific Management, emphasized the interactions of individuals, their motivations, and their influence on organizational events; rather than the structure of organizations, work design, and measurement. In other words, this viewpoint of management has assumed that work is accomplished through people and thus underlined the importance of cooperation, participation, satisfaction, and interpersonal skills. The major advocates of the Human Behavior Management Perspectives have been Mary Parker Follet, who has focused on the principles of coordination, Elton Mayo, who has introduced the Hawthorne Effect, Douglas Mc Gregor, who has developed Theory X and Theory Y, and Rensis Likert, who has advanced (worked on) Participative Management. The most famous concept Follet has introduced, "law of the situation", "posits that authority does not come from a person or a position, but from what needs to be done under the situation. Thus, employees do not subject themselves to the orders of managers, but rather they perform their duties because the situation ordains so" (Gibson et al, 2013, p. 448). In terms of leadership, Follet implies that "the problem is not how to make people obey but how to discover what the order of the situation should be". Follet's contribution to conflict management is also of great importance. According to her, "in a business, conflicts should be given the full opportunity so that different desires will come together for the whole field of desired to be viewed… and integration is the best method of conflict resolution" (Gibson et al, 2013, p. 452). Another advocate of Human Behavior perspectives, Mayo, "was among the first to apply psychology to managerial and organizational contexts… and articulated a compelling view of human nature and what should be done about it" (O'Connor, 1999, p. 223-246). McGregor, the consummate process consultant, whose behavior was derived not from his philosophy of participation but from his theory of human behavior, changed the path of management thinking and practice. "Questioning some of the fundamental assumptions about human behavior in organizations, he outlined a new role for managers: rather than commanding and controlling subordinates, managers should assist them in reaching their full potential" (Schein, 2001: p. 156; Kopelman et al, 2008, p. 255).

The Integrated Perspectives have emerged from certain criticisms on both the Scientific Management and Human Behavior Perspectives. They have been criticized "for their failure to integrate organizational structure, technology, and people with the larger environment in which organizations exist" (Shockley-Zalabak, 2002, p. 105). The theorists of the Integrated Perspectives have been concerned about how people, technologies, and environments integrate to influence the activities within organization. Joan Woodward, for example has worked on contingency theory, according to which organizations must adopt to changing circumstances and the environment in which the organization operates. She compared "organizations on the basis of their production technologies" and worked on "the behavioral consequences of management control systems" which has "laid a major foundation stone for the contingency approach to organization" (Klein, 2006, p. 1155). Eric L. List, who has worked on sociotechical integration, has conceptualized self-directed work teams; developed the notion of organizations as open systems in the context of environments with unique casual textures and formulated social ecology as a new field of inquiry (Pasmore & Khalsa, 1993). Herbert Simon, who has worked on decision-making approach, has introduced the concept of "satisfying", "which viewed administrative choice as a process of maximizing" (Brown, 2011, p. 240). He has sought to understand people's decision

processes -the descriptive goal- and studied whether the same processes lead to good decision -the prescriptive goal- (Katsikopoulos & Lan, 2011)

"The Postmodern and Critical Perspectives theories discussed focus on power as domination or the challenging of traditional hierarchical and patriarchal systems of authority" (Shockley-Zalabak, 2002, p. 129). The concept of culture for organizational analysis, for example, has been the matter of discussion. The intersection of culture theory and organization theory has been discussed in terms of comparative management, corporate culture, organizational cognition, organizational symbolism, and unconscious processes and organization (Smircich, 1983). Another interesting example which could be placed in the Postmodern and Critical Perspectives is a "critical postmodern reading of the century-and-a-half empowerment –disempowerment debate on Follet's theory of co-power and Clegg's circuits-of-power theory" (Boje and Rosile, 2001, p. 90). "Since the late 1970's, the social sciences, including organization studies, have been influenced by diverse theoretical perspectives… "postmodern" has been used to identify many of these theories, for they appear to share some features, including… a reconsideration of subjectivity and power" (Calas and Smircich, 1999, p. 649).

2. Methodology

The Aim and the Scope of the Research
The aim of this research is to analyze the attitudes of mariners towards two basic and distinctive management assumptions; scientific management vs. human behavior management. The idea behind this aim is to underline the importance of effective communication on board merchant ships. In other words, while tasks are assigned, allocated, getting implemented, and assessed, the management assumption might play a crucial role in efficiency and effectiveness of the performance. When the attitudes of employees are recognized, the management might think of adopting the more effective management perspective in full compliance with the revealed attitudes.

Data Collection
To reveal the attitudes of mariners, a distinctive group was selected as the sample which comprised the students studying at two higher maritime education institutions. The sample consisted of the freshmen, sophomores and seniors studying at the marine engineering and marine transport engineering departments of Dokuz Eylul University Maritime Faculty and Maine Maritime Academy. The juniors studying at these departments were excluded as they were out at sea as cadets to carry out their on board cadet training.

As a proper instrument for the research, a questionnaire was developed by the author. The questionnaire was based on McGregor's description of management assumptions about employees (Shockley- Zalabak, 2002). McGregor categorized the management assumptions into two theories: Theory X and Theory Y, which respectively reflects the Scientific Management and Human Behavior perspectives. According to this classification, Theory X managers assume that employees dislike work and will avoid work when possible; they are not ambitious and prefer direction; they avoid responsibility and are not concerned with organizational needs; they must be directed and threatened with punishment to achieve organizational productivity; and they are not highly intelligent or capable of organizational creativity. Theory Y managers, on the other hand, assume that employees view work as natural as play; they are ambitious and prefer self-direction; they seek responsibility and feel rewarded trough their achievements; they are self-motivated and require little direct supervision; and they are creative and capable of organizational creativity. The pre-test was carried out with 26 students (14 from the Marine Transport Engineering Department and 12 from the Marine Engineering Department). Based on the feedback collected, minor corrections were carried out in wording. The questionnaire conducted on May 5 through May 22, 2014 consisted of 18 items each of which comprised five options. The options in each item involved the assumptions of both Theory X and Theory Y. The participants were asked to indicate their attitudes towards each option by circling any of the Five-Point Likert Scale (1 completely agree; 5 completely disagree). The lecturers were given enough number of questionnaires prior to their lectures and the

questionnaires were collected from the lecturers at the end of the relevant lecturing hours. Totally 307 students responded the questionnaire items, 59 of whom were marine engineering students. 117 of the Marine Transport Engineering students were from Maine Maritime Academy and 131 were from Dokuz Eylul University. The SPSS reliability statistics indicated Cronbach's Alpha value as 83.

3. Data Analysis

The preferences with the highest mean can be seen in Table 1. According to the options chosen with the highest mean, the prospective ship officers and marine engineers consider the contribution of the task assigned to improving their competencies; try to see some enticing part of the task; want to set the method for performing the task themselves; wish their views were considered regarding the process; want the management to trust them; do not like being supervised; favor questioning and evaluating the instructions; concern with the success of the institution they work for and their contribution to this success; want to feel free to discuss with their superintendents over any conflict encountered; consider the whole target while working on any task; favor cooperation between the management and the employees and effective communication among the employees; want to get involved in and contribute to formulation standards and rules; emphasize the importance of mutual confidence and collective responsibility in effective corporate culture; want to apply the methods they think are the best and expect the institutions they work for to trust them and believe their sense of responsibility. Such preferences of the prospective mariners point to the fact that they like to be treated on board ships in compliance with the "Theory Y Assumptions" listed by McGregor which reflects the principles involved in the "Human Behavior Management Perspective".

Table 1: The Most Favored Options

Item	The Options with Highest Mean	Mean	Std. Deviation
1B	Regarding the task I am assigned, the most important thing I consider is its contribution to improving my competencies	4.07	.819
2C	When I am given a task that I dislike doing, I try to see some enticing part of it	3.43	.992
3D	While working on a task I am given, I'd rather set the method myself, which would save my self-confidence	3.58	1.008
4E	While working on a task I am assigned, I wish my views were considered regarding the process	4.00	.904
5A	In case any misfortune takes place while working on a task, I want the management to trust my verbal explanations, which would enhance my sense of responsibility	4.32	.822
6A	While working on a task, I dislike being supervised, which would hinder my concentration	3.54	1.224
7B	I believe following any instructions with no questioning could be restraining, suppressing creativity	3.34	1.118
8B	Regarding the performance of the institution I work for, feeling contributed to its success is of my great consideration	3.94	.906
9D	In case of having a conflict, or encountering a disagreement with any superintendent, I must feel free to discuss with him/her if I have convincing data	4.12	.953
10C	Regarding the task I am working on, I consider the task an important component of a whole target	3.93	.861

11D	Regarding how to do the task, cooperation between the management and the doers effects the outcome positively	4.07	.917
12B	Improving communication among employees provides a variety of approaches	3.96	.937
13C	The environment required for effective corporate work is the extensive flow of horizontal communication	3.70	.912
14C	While formulating standards and rules, contributions from the staff must be provided	3.88	.840
15A	The effective corporate work prioritizes the confidence of management in the staff	4.11	.885
16B	To succeed, the corporate culture must emphasize collective responsibilities	3.94	.880
17A	While working on the task I am assigned, my priority is applying the method which I think is the best	4.05	.893
18D	My expectations from the institution I work for is to be trusted and believed in my job responsibility	4.06	.863

The preferences with the lowest mean are indicated in Table 2, which reveals that very few prospective mariners prefer to pass over the task if they are not supervised; like being supervised, which reflects a lack of self-confidence; do not concern about the quality of the outcome; readily welcome punishment; feel threatened by any supervision; feel humiliated by accepting any instruction with no questioning; do not concern about the performance of the institution they work for; strictly obey traditional corporate culture which discourages free discussions with the superintendents; consider the work merely for earning living; are against cooperation and communication; favor position and status distinctions; underline the importance of formal internal communication; emphasize the significance of the culture of the society and the manner dictated by the employer; and expect not to be held responsible for the performance of the institutions they work for. The preferences with the lowest mean correspond to the "X Theory Assumptions" categorized by McGregor. The low mean implies that the assumptions involved in "Scientific Management Perspectives" are not widely welcomed by the prospective mariners, and very few of them prefer to be treated onboard ships in compliance with the assumptions adopted by these perspectives.

Table 2: The Least Favored Options

Item	The Options with Lowest Mean	Mean	Std. Deviation
1A	Regarding the task I am assigned, the most important thing I consider is its entertaining, or enjoying nature	3.511	1.011
2D	When I am given a task that I dislike doing, I pass over the task I am not supervised	2.00	1.110
3A	While working on a task I am given, I like being supervised, which would prevent any likely errors	2.60	1.129
4D	While working on a task I am assigned, I do not think whether the required outcome is sufficient	2.07	1.100
5C	In case any misfortune takes place while working on a task, I believe I have deserved to get punished	2.39	1.131
6D	While working on a task, I consider supervision as a threat, so I have serious misgivings	2.35	1.093
7C	I believe following any instructions with no questioning could be humiliating, damaging self-respect	2.50	1.173
8A	Regarding the performance of the institution I work for,	2.11	1.109

	its success or failure is of the management's concern, not mine		
9E	In case of having a conflict, or encountering a disagreement with my superintendent, I must avoid discussing, it is against our traditional corporate culture	2.02	1.107
10E	Regarding the task I am working on, I consider the task as a means of earning my living only	2.36	1.112
11E	Regarding how to do the task, cooperation is waste of time	2.05	1.245
12A	Improving communication among employees brings about chaos	1.77	1.024
13E	The environment required for effective corporate work is the one that emphasizes the difference among positions	2.90	1.215
14B	While formulating standards and rules, status distinctions must be taken into consideration	3.25	1.025
15E	The effective corporate work prioritizes strict application of written formal internal communication	3.30	1.117
16C	To succeed, the corporate culture must consider the culture of the society	3.64	.981
17B	While working on the task I am assigned, my priority is working in a manner dictated by the employer	3.40	.983
18A	My expectations from the institution I work for is not to be held responsible for its performance unless I am a part of the management	2.75	1.173

According to Table 3, in 14 of the items both groups of the students exhibit the same attitudes. The differences appear in four items; 1, 2, 3 and 14. The difference in item 1 reveals that the most important thing considered by marine engineering students is the employer's satisfaction while it is the contribution of the task to the improvement of competencies for the marine transport engineering. In item 2 while the marine engineering students try to see some enticing part of a task that they dislike doing, marine transport engineering students wish it were over soonest possible. In item 3, while working on a task marine engineering students want the method to be clarified marine transport engineering students would rather set the method themselves. In item 14, the difference appears in the least favored approaches while formulating standards and rules. While the marine engineering students consider status distinctions least important, the marine transport engineering students consider the contributions from the staff least important.

Table 3: The Revealed Distinctive Attitudes of Marine Engineering and Marine Transport Engineering Students Towards Management Assumptions

Attitudes of Marine Engineering Students				Attitudes of Marine Transport Engineering Students			
Most Favored		Least Favored		Most Favored		Least Favored	
Item	Mean	Item	Mean	Item	Mean	Item	Mean
1E	4.08	1A	3.49	1B	4.10	1A	3.53
2C	3.51	2D	1.86	2B	3.43	2D	2.09
3C	3.63	3A	2.70	3D	3.65	3A	2.54
4E	3.94	4D	2.14	4E	4.04	4D	2.03
5A	4.27	5C	2.44	5A	4.35	5C	2.36

6A	3.42	6D	2.23	6A	3.61	6D	2.41
7B	3.35	7C	2.45	7B	3.33	7C	2.54
8B	3.96	8A	2.10	8B	3.93	8A	2.11
9A	4.20	9E	1.90	9A	4.03	9E	2.08
10C	3.97	10E	2.10	10C	3.91	10E	2.32
11D	4.15	11E	1.90	11D	4.03	11E	2.14
12B	4.02	12A	1.69	12B	3.93	12A	1.81
13C	3.73	13E	2.86	13C	3.68	13E	2.92
14C	3.95	14B	3.23	14C	3.84	14E	3.11
15A	4.14	15E	3.38	15A	4.10	15E	3.24
16B	4.01	16C	3.68	16B	3.90	16C	3.63
17A	4.11	17B	3.36	17A	4.01	17B	3.43
18D	4.22	18A	2.83	18D	3.96	18A	2.71

4. Conclusion and Discussion

The overall assumptions of management are basically categorized in two groups. According to the first group, which reflects the principles of Scientific Management perspectives, management assumes that employees dislike work and will avoid work when possible; they are not ambiguous and prefer direction; they avoid responsibility and are not concerned with organizational needs; they must be directed and threatened with punishment to achieve organizational productivity; and they are not highly intelligent or capable of organizational creativity. According to the second group, which reflects the principles of Human Behavior perspectives, management assumes that employees view work as natural as play; they are ambitious and prefer self-direction; they seek responsibility and feel rewarded through their achievements; they are self-motivated and require little direct supervision; and they are creative and capable of organizational creativity. The purpose of this research is to analyze the attitudes of prospective mariners towards these two basic management perspectives. To do this, an 18-item questionnaire was developed by author, taking into consideration the above mentioned points of these two assumptions, and conducted through the students studying at the marine engineering and marine transport engineering departments of two higher maritime education institutions. It is thought that the sample chosen stands for the prospective mariners likely to get employed onboard ocean going ships. The data analysis reveals that the participants, or prospective mariners, consider the improvement of their competencies most important; they try to see some enjoyable part of any task they dislike doing; they prefer to set the method themselves; they want their views to be considered regarding the process; they want the management to trust them; they do not like being supervised; they are for questioning the instruction they are assigned (they are against following the instructions with no questioning); they like feeling contributed to the success of the institutions they work for; they want to feel free to discuss with their superintendents in case of encountering any conflicts or disagreements; they consider any task assigned as an important part of the whole target; they believe that cooperation and effective communication between the management and the employees are important in achieving effective corporate culture; they think contributions from the staff must e considered while setting standards, rules and regulations; they prioritize the confidence of management in staff; they emphasize the importance of collective responsibility; they want to apply the methods they think are the best; and they expect the management to trust them and believe in their sense of responsibility. The above mentioned attitudes clearly point to the Human Behavior perspectives. On the other hand, what they consider least could be highlighted as follows: passing over the task when not supervised; working under strict supervision; not concerning with the outcome; readily accepting to get punished and threatened; being against questioning any instructions assigned; not concerning with the performance of the institutions they work for; considering the work/task as a means of earning their living; believing that cooperation is waste of time and communication brings about chaos; overestimating

the power of positions, status distinctions, written formal internal communication and culture of the society; emphasizing the importance of working in a manner dictated by the employer; and expecting the management not to hold them responsible for the overall performance unless they are a part of the management. The above mentioned attitudes point to the assumptions involved in the Scientific Management perspectives. Since these are the least favored attitudes according to the data analyzed, it could safely be concluded that the prospective mariners do not like to be treated onboard ships in compliance with the Scientific Management perspectives. The overall analysis of the data collected through this research also reveals that there is a strong similarity (in 14 out of 18) between the attitudes of the marine engineering students and marine transport engineering students.

This research is hoped to attract the attention of the management in shipping to the importance of taking into consideration the attitudes of the mariners toward the tasks they are assigned on board ships. Adoption of certain management assumptions might play an important role in reaching the effective corporate culture and achieving the desired organizational excellence. The results of this research imply that cooperation, participation, interactions, intrinsic motivation and effective communication are the cornerstones if organizations are to make the best use of their human resources. The results also imply that organizations must believe that workers can be self-motivated, self-directed, and self-controlled; management is to trust employees; employees must feel free to discuss job-related concerns with their supervisors; peer-group interaction has a positive influence for productivity; interactions at all levels must be encouraged; oral channels must be emphasized, with little emphasis on written models of communication. In short, organizations must keep in mind that employees at all levels are people not machines, and effective productivity is accomplished through people.

This research is based on a questionnaire conducted through a group of prospective mariners limited to a small group. In addition to this limitation, the research did not take into consideration the cultural differences and medium of instructions the participant had been exposed to. Certain similar researches could more broadly cover participants presently employed onboard ships. The future researches could also get concentrated on the factors likely to affect the attitudes toward work environment. The more researches on the attitudes of employees could lead to the more fruitful guidelines for shipping organizations on the way to the desired organizational excellence.

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