

Correlation Study between Work Stress, Job Satisfaction, and Leadership Effectiveness with Achievement Motivation

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Abstract

The objective of this study is to examine the relationship between work stress, job satisfaction, and leadership effectiveness with achievement motivation. The study was conducted at the University of Prof. Dr. Moestopo (Beragama), Jakarta in 2001, using the method of survey and multi-stage random sampling, with sample 76 selected randomly. The study concludes that: first, there is a parabolic correlation between work stress and achievement motivation; second, there is a positive correlation between job satisfaction and achievement motivation; third, there is a positive correlation between leadership effectiveness and achievement motivation. Moreover, there is a positive correlation between those two independent variables: job satisfaction and leadership effectiveness with achievement motivation.

Keywords: *Correlation study; Work stress; Job satisfaction, Leadership effectiveness, Achievement motivation.*

1. Introduction

Organizational environment, not least higher education, has recently changed with high intensity, characterized by increasingly sharp competition among organizations. The environmental change means the emerging threats and challenges or opportunities beyond the control of the organization. The ability to respond the threats and challenges will orient the organization to growth or at least to survive. On the other hand, the pace of environmental response is also highly dependent on the ability of human resource as a major factor in the organizational growth [1]. As for the human resource, they are driven by individual to meet their needs. Thus in an effort to achieve its goals, the organization must also consider the needs of individuals within it.

While the ability of controlling the existence of an organization is determined by the extent to which the management quickly and accurately responds to changes occurring in the environment, organizations, and individuals [2]. Therefore, the control of organizational existence requires dynamic involvement of organizational actors in achieving individual and organizational goals; the management should be able to direct actors in the organization to hard efforts to excel [3].

Many factors can spur actors in an organization to have achievements (achievement motivation) [4]. One may ask whether the external and physical environments of the organization, organizational culture, organizational structure, job design, job demand, the demands of the role and the inter-personal demands, reward and punishment system, feedback of work performance, family economy, personality traits, job pressure, job satisfaction, and leadership effectiveness affect achievement motivation? Considering that this study has limitation, then it is directed only to three free variables, presumably affecting one's achievement motivation.

Therefore, this study aims to answer the following questions:

- a. Whether there is a relationship between job stress and achievement motivation?

- b. If there is a relationship between job satisfaction and achievement motivation?
- c. If there is a relationship between leadership effectiveness, and achievement motivation?
- d. Whether there is a relationship between job satisfaction and leadership effectiveness with achievement motivation.

The rest of this paper is organized as follow. Section 2 describes theoretical framework. Section 3 describes proposed framework. Section 4 presents the proposed research method. Section 5 present results and following by discussion. Finally, the conclusion of this work is described in Section 6.

2. Theoretical Framework

2.1. The Essence of Achievement Motivation

In a certain sense, all organismic states are to be understood as motivated and as motivating [4]. Meanwhile, from human biological behavior concerning motives side, human behavior is just partly determined by our own inner need or motive as member of certain species of biological being [5]. Motivation is a hypothetical concept used to clarify a beginning, direction, intensity and persistence from a directed goal behavior. Motivation includes concepts of desire for achievement, desire for affiliation, incentive (reward and punishment), habit, incompatibility, and curiosity [6]. Then, from the terms and theories of motivation mentioned above, and in connection with the nature of achievement motivation, an expert provides characteristics of individual with high need for achievement, namely: enjoy situation in which they can take personal responsibility to find problem solution; tend to be the receiver of moderate level risk and enjoy concrete feedback for their performance so as to find out how well they perform something [7]. The strong need for achievement is the urge to succeed or excel related to how much motivation the individual possesses for performing his duty [8]. Individual with high achievement motivation will be forced to be more frequent and advance in solving problem by himself than individual with low achievement motivation [9]. Achievement seekers enjoy situation in which they have personal responsibility to solve problems; tend to set moderate achievement goal and take counted risk; and require concrete feedback on their work performance [10]. From the analysis above, it can be synthesized that achievement motivation is an urge or willingness of an individual in the effort of attaining achievement towards organizational goals, conditioned by the effort ability to fulfill an individual need.

The urge or willingness in the effort of attaining achievement is reflected in behaviors, such as: (1) Trying to excel; (2) Performing job well; (3) Being rational in achieving success; (4) Enjoy challenges; (5) Taking personal responsibility to be success; and (6) Enjoy work situation with personal responsibility, feedback, and moderate level risk.

2.2. The Nature of Work Stress

A working definition of stress defines it as an adaptable response influenced by individual differences and/or psychological process, namely a consequence of every external (environmental) action, situation, or occurrence which psychology and/or physically demands too much on an individual [11]. Stress is a dynamic condition in which an individual is confronted with an opportunity, obstacle and demand related to his desire and whose result is perceived as uncertain and vital [12]. Stress is a situation occurred when an individual is confronted with environmental demands requiring him to change in various ways [13]. While from process approach, stress is defined as adaptive response signified by individual characteristics and/or psychological process as a

consequence of every external action, situation, or occurrence causing special physical and/or psychological demand on an individual [10].

In connection with the definition of work stress, stress refers to a complex pattern of emotional expression, psychological reaction and is related to response occurring against external demands (stressor). The related term strain refers to the effect of stress, primary deviation of normal situation or performance generated from open situation into stress inducing occurrences. These things can involve physical symptoms, decrease of work and other behavior [14]. Stress is an unpleasant emotional expression as a result of a perception in which demand of work on an individual is perceived as beyond his capability and it is vital to meet the work demand [15].

Undermining the basic concept of the connection between stress and performance, in moderate level, stress can stimulate individuals to work harder and better. An exact measure of the stress can be helpful. A stress with positive impact (*eustress*) occurring when there is pressure on performance helps someone achieve more. However, when the level of stress escalates too high, an employee can become emotional towards his surrounding, at least in a short term, and it reduces his urge and energy [16]. Work stress can derive from three sources, namely: (1) Work environment, including almost everything, from dysfunctional machineries, wrong materials, strict schedule, inadequate budget, to stubborn Bosses, uncooperative colleagues and uninterested employee; (2) Our own self, on the capabilities including the loss of confidence, sensitivity to critiques on performance, fear of failure, doubt of ability to overcome stress wherever it come from; and (3) Interpersonal relationship formed from both sources above and completely on interpersonal relationship [17].

From the analysis above, it can be synthesized that work stress is a psychological or physical condition or experience or inner perception of an individual as a result of being confronted with an excessive demand and obstacles in work organization environment, in connection with what he desires and with perceptively uncertain and unimportant result. The condition or experience above is a dimension and indicator in which someone experiences work stress which consists of: (1) Psychological experience: (a) anxiety and fear; (b) unpleasant feeling; and (c) irritated and out of control feeling. (2) Physical experience: (a) tiredness, heartthrob, and (b) pain. (3) Perceptual experience: (a) impression and (b) belief.

2.3. The Nature of Job satisfaction

Job satisfaction is an emotional impression or response to a job [18]. Job satisfaction as a pleasant or positive emotional expression derives from an achievement in one's job or activity. Job satisfaction is a result of employee's perception on how well their work can provide things regarded as important. There are 3 (three) important dimension of job satisfaction, namely: (1) Job satisfaction is an emotional response of work situation which is invisible but conclusive; (2) Job satisfaction is often defined as how well the result is, equal to or exceed expectation; and (3) Job satisfaction presents some interrelated behavior [19]. Satisfaction is produced when work can meet or ease achievement of values and standard of the individual, and dissatisfaction occurs when work is perceived as obstacle for result of achievement [20].

In connection with satisfaction, for employees themselves, it emerges when benefit suggested by their work exceeds marginal cost spent which is adequate for the employees [21]. Job satisfaction is a satisfaction produced by a perception in which a work possesses by an individual enables the individual to fulfill important work value [15]. Job satisfaction is a general attitude of an individual towards his work [12]. Formally, job satisfaction is defined as individual cognitive, affective, and evaluative reaction towards his work [14]. Job satisfaction is a collection of like or dislikes feeling and related to employees' emotion in perceiving their work. Job satisfaction is an affective attitude on

relative like and dislikes feeling on something (for example, various duties and others [22]).

From the analysis above, it can be synthesized that job satisfaction is emotional response on like or positive feeling on work aspects which give important meaning on psychological and physical needs fulfillment as a reflection of how satisfied an individual is in perceiving his job. Emotional response on like or positive feeling on work aspects which give important meaning on psychological and physical needs fulfillment, meaning that an individual has a tendency of liking a condition in which their work aspects provides a good opportunity that can lead to job satisfaction. Next, this emotional response is reflected in like and dislike feeling or satisfied and unsatisfied feeling on work aspects, which consist of: (1) Response on context and content of work; (2) Response on colleagues' attitude; (3) Response on work condition; and (4) Response on reward system.

2.4. The Nature of Leadership Effectiveness

Leadership is a process of influencing or urging subordinates to participate in achieving organizational goal [19]. Leadership is a process in which a member (as the leader) of a group can influence other members of the group towards achieving specific goal of the group [23]. Leadership is a process of directing and/or influencing activities related to the work of the members of the group [24]. The key function of a leader is to stabilize basic vision (meaning, mission, goal or agenda) of the organization.

The leader distinguishes the final goal as well as the most effective strategy for achieving it [25]. Leadership is the process of urging and helping others to work enthusiastically in achieving goal. The main role of the leader is influencing others to willingly and enthusiastically achieve the determined goal. The leader formulates others vision and inspires them to achieve this vision and restricts himself away from their formal ability [22].

Concerning the meanings above, the actual leadership effectiveness can be defined in two aspects. First, observed from performance aspect, leadership effectiveness is how far the organizational unit of the leader can successfully perform their duties and achieve the goals. Second, observed from subordinate perspective aspect, leadership effectiveness is how much contribution of the leader can be felt by followers concerning the qualities of his leadership processes [26]. Viewed from follower (subordinate) perspective, the meaning of leadership process qualities can be observed from several approaches, namely: (1) Characteristic approach, consisted of six characteristics, namely: ambitious and energetic; leading desire; honesty and integrity; confidence; intelligence; possession of knowledge relevant to duties [27]. (2) Behavior approach, in which there are two aspects of effective leadership behavior, namely: (a) Leadership function which is maintaining of group and duties related to activities which must be provided by the leader or others for the group to work effectively; (b) Leadership style which is various behavior patterns possessed by the leader during the process of directing and influencing employees [8].

From the analysis above, it can be synthesized that leadership effectiveness can be defined as how much the leader's contribution can be felt by followers concerning qualities of his leadership processes. The size of leader's contribution concerning his leadership processes qualities that can be felt by followers is perceived by followers as efforts that can lead to the group and organization goals.

The qualities of leadership processes can be reflected in the leader personality both in the processes of performing duties and in the process of influencing, directing, and motivating followers as can be perceived by followers. These qualities of the processes are, among others: (1) Characteristics, namely: (a) determination, such as: vitality (physical, mental, and emotional) and tenacity; (b) talent, such as: confidence, emotional stability, honesty and integrity; (c) desire or motivation to lead, such as: using authority to achieve group and organization goals. (2) Skills, namely: technical and interpersonal

skills. (3) Behavior, namely: (a) Directing, persuading and guiding followers; (b) Motivating and respecting followers and maintaining group solidarity.

3. Proposed Framework

The framework employed in this study is that there is a correlation between work stress (X_1) and achievement motivation (Y), and there is a correlation between job satisfaction (X_2) and leadership effectiveness (X_3) both separately and collectively with achievement motivation (Y). When work Stress (X_1) is low, achievement motivation (Y) is also low; when work stress (X_1) reaches positive stress level (*eustress*), achievement motivation (Y) also reaches its peak; and when work stress (X_1) becomes so high as to exceed positive stress limit, then achievement motivation (Y) will become lower. Moreover, when job satisfaction (X_2) and leadership effectiveness (X_3) both separately and collectively can be escalated, then achievement motivation will also escalate.

3.1. Correlation between Work Stress (X_1) and Achievement Motivation (Y)

Stress with positive impact (*eustress*) occurs when pressure on performance helps an individual attaining achievement. However, when the stress level escalates too high, employees can become emotional in their environment, at least for a short term, and it reduces their motivation and energy [16]. Therefore, work stress can be perceived as a psychological or physical condition or one's perception in facing a burden or demand, obstacle and various aspects of his work, deemed important and uncertain. The lower the burden or demand, the lower the stress and performance; The higher the burden or demand to some extent, the stress will escalate to positive stress limit (*eustress*) and performance will reach its peak; However, when the burden or demand keeps escalating to excessive level, then the stress will escalate over positive stress level (*eustress*) and performance will decrease. Thus, in the condition in which stress moves from lowest to highest level, achievement will move from lowest to highest and then goes down to worst performance (achievement) level.

Achievement motivation includes the need, want, tension, displeasure, and hope. Arousal is a basic behavior as a drive or pull to take action since there is an imbalance or dissatisfaction in the relation between individual and environment. He identifies goals and feels the need to behave such as to be able to achieve the goals [10]. Thus, achievement motivation emerges when there are demands, both individual and work environment related. Then these demands arouse want, hope and imbalance or dissatisfaction, followed by tension that will finally create stress in an individual. When someone experiences this condition, he will attempt to overcome it, which will arouse a motivation to take action and behave towards goal achievement. When the goal keep directing to individual performance for organization goal, the attempts will create an urge to attain achievement. This demand driven strain motivates individual to make high or low efforts, depending on how big the demand or problems confronted by him.

Thus, it can be expected that there is a parabolic correlation between work stress and achievement motivation. So, when work stress is getting lower, achievement motivation will also get lower, and when stress escalates to positive stress limit (*eustress*) then motivation will also escalate to its top limit. However, if the stress keeps escalating beyond positive stress limit (*eustress*), then achievement motivation will get lower (worse).

3.2. Correlation between Job satisfaction (X_2) and Achievement Motivation (Y)

Job satisfaction is an emotional impression or response to a job [19]. Job satisfaction as a pleasant or positive emotional expression derives from one's job or activity achievement. Job satisfaction is the result of employees' perception on how well their

work can provide things regarded as important [19]. Thus, it can be said that job satisfaction is an emotional response to enjoy or positive feeling on work aspects which gives important meaning for fulfillment of psychological and physical needs as a reflection of how satisfied an individual is regarding his job. There is a situation affecting an individual attitude on his job which can be distinguished into two groups, namely satisfier group as motivator and dissatisfies group which is also called hygiene factors. This satisfier factor or group is the one that can trigger or force someone to perform his job well and passionately. The more fulfilled these motivating factors, the bigger their satisfaction and therefore the bigger the attempts or motivations they have to work better (attaining achievement). The idea is that people, satisfied in their job, tend to have high commitment which will drive or motivate them to achieve. Achievement motivation as discussed above is a drive to make high attempt (attaining achievement).

Thus, it can be expected that there is a positive correlation between job satisfaction and achievement motivation. So, if job satisfaction escalates, then achievement motivation will also escalate. On the other hand, when job satisfaction decreases, then achievement motivation will also decrease.

3.3. Correlation between Leadership Effectiveness (X3) and Achievement Motivation (Y)

Leadership effectiveness is a measure of how far a leader of an organization unit performs his leadership function to achieve his goals. Leadership effectiveness can also be perceived as how much a leader contribution can be felt by his followers concerning qualities of processes in performing his leadership to achieve organization, group and members of the group goals. Leadership as a process influences interpretation of occurrences for the followers, options for group or organization goals, organization of work activities to achieve those goals, followers' motivation for achieving goals, maintaining of cooperation and teamwork, and acquisition of support and cooperation from people outside the group or organization [28]. Leadership is defined as a process of directing and affecting activities concerning the work of group members [18].

The measures of effective leader vary widely and dependent to the approach employed. Various outcome are also employed, including performance and growth of the group and organization of the leader, his willingness in responding to challenges and crises, satisfaction of subordinates (followers) towards their leader, followers commitment to group goals, psychologic welfare, and followers development, maintaining high status of leader, and leader advances towards higher hierarchy inside the organization, is a general indication. Therefore, a measure of an effective leader seen from follower or subordinate perspective is how much the leader contribution can be felt by followers concerning quality of his leadership processes. So, the more contribution of the leader is felt by followers, the more successful they are in driving the followers in the attempt of achieving the determined goals, be it individual, group or organizational goals.

Meanwhile, achievement motivation as is analyzed above is an urge to make high attempt (achievement), one of which is triggered by how much leader contribution concerning quality of leadership processes is felt by followers and perceived by followers as the attempt that can lead to group and organization goals. This means that the bigger the leader contribution concerning quality of leadership processes can be felt by followers, then the bigger subordinate (follower) motivation to perform the duties well (achievement).

Thus, it can be expected that there is a positive correlation between leadership effectiveness and achievement motivation. So, when leadership effectiveness escalates, achievement motivation will escalate. On the other hand, if leadership effectiveness decreases, achievement motivation will also decrease.

3.4. Correlation between Job satisfaction (X₂) and Leadership Effectiveness (X₃) with Achievement Motivation (Y)

Achievement motivation (Y) is a measure of how much an individual (employee) motivation possessed in conducting high attempts (achievement) to attain individual, group and organizational goals. When two independent variables as have been discussed above seen through each separate correlation with dependent variable, then job satisfaction (X₂) variable and leadership effectiveness (X₃) variable has a positive correlation with achievement motivation (Y). Further, correlations between job satisfaction (X₂) and leadership effectiveness (X₃) variables and independent variable shows an indication that achievement motivation (Y) will escalate when job satisfaction (X₂) and leadership effectiveness (X₃) also escalate. Therefore, it can be said that job satisfaction (X₂) and leadership effectiveness (X₃) collectively have positive correlation with achievement motivation (Y).

Thus, it can be expected that there is a positive correlation between job satisfaction (X₂) and leadership effectiveness (X₃) collectively with achievement motivation (Y).

3.5. Research Hypothesis

From the framework analyzed above, a research hypothesis can be formulated as follows: *First*, there is a parabolic correlation between Work stress (X₁) and achievement motivation (Y); *Second*, there is a positive correlation between job satisfaction (X₂) and achievement motivation (Y); *Third*, there is a positive correlation between leadership effectiveness (X₃) and achievement motivation (Y); *Fourth*, there is a positive correlation between job satisfaction (X₂) and leadership effectiveness (X₃) collectively with achievement motivation (Y). In other word, when work stress is low, then achievement motivation is also low, and when stress escalates to positive stress limit (*eustress*), then motivation will reach its peak. However, when stress keeps escalating beyond positive stress limit (*eustress*), achievement motivation will get lower (worse). Furthermore, when job satisfaction and leadership effectiveness escalates, achievement motivation will also escalate.

4. Research Methodology

This research aims at studying whether there is a correlation between work stress and achievement motivation, and whether there is a correlation between job satisfaction, and leadership effectiveness with achievement motivation, both separately and collectively. This research employs the method of surveying non-educative employees in University of Prof. Dr. Moestopo (Beragama), Jakarta, from April to May of 2001.

This study is conducted with the framework that achievement motivation variable as dependent variable is influenced by 3 (three) independent variables, namely work stress, job satisfaction and leadership effectiveness variables both separately and collectively. From the concept, theory, and view of experts on these variables, an indicator is constructed and composed into points and then formulated into questionnaires. There are four questionnaires, each for achievement motivation, work stress, job satisfaction and leadership effectiveness variables, all of which are ordinal. These ordinal data is then altered into interval data using score rating scale.

The study populace is non-educative employees in accredited higher education organizations in DKI Jakarta region, expected to have similar "characteristics". The attained populaces are non-educative employees of one accredited higher education organization in DKI Jakarta region, namely the non-educative employees at Universitas Prof. Dr. Moestopo (Beragama) Jakarta organization ring. Samples are taken from 76 persons employing multistage random sampling technique and purposive technique, then the data is picked in simple random technique through the following steps: (1)

Determining which higher education organization will be chosen as the object of the study, which in this case are 77 (seventy-seven) “accredited” higher education organizations in DKI Jakarta region. (2) Determining which working unit in University of Prof. Dr. Moestopo (Beragama) ring will be the object of the study, based on the involvement of the working unit in performing *Tridharma Perguruan Tinggi* (three principles of education). (3) Determining the size of samples from each working unit employing purposive technique, namely choosing the number of each unit based on employees’ number proportion. Furthermore, bearing in mind that the researcher is a structural officer of the organization, some employees with emotional attachment are not involved in this study in order to avoid bias in data collecting.

Data is collected from questionnaires employing interval scale with four choices for each one. Instrument is set as results of theoretical study over concept, theory, synthesis, and construct. These materials are synthesized and finally formulated into conceptual construct or definition. From this conceptual definition, a dimension and indicator of each variable is formulated, and the instrument to be employed is set. The next step is setting the points of the study instruments. Then these instrument points are validated through seminar and discussion between students and experts as Academic and Promotor Commission. From this concept validation process, instrument points are corrected and revised to come up with ready-to-be-tested concept instruments. These concept instruments then are tested for *validity* and *reliability*. From this validity and reliability test, invalid and unreliable instrument points are dropped, and a new set of instruments, or final instruments, which are qualified for study instruments are composed.

The results of validity test of each instrument are: (1) for achievement motivation instrument, there are 15 of 40 test points dropped; (2) For work stress instrument, there are 22 of 43 test points dropped; (3) For job satisfaction instrument, there are 16 of 42 test points dropped and (4) for leadership effectiveness instrument, there are 9 of 42 test points dropped. Meanwhile, the results of reliability calculation of the four instruments are consecutively: 0.9174 for achievement motivation; 0.8740 for work stress; 0.8907 for job satisfaction; and 0.9380 for leadership effectiveness. The reliability value of over 0.7 is acceptable. Therefore, the instruments are qualified for use in the study.

5. Results and Discussion

The results of the study can be presented in: (1) Data description, namely: centering tendency measurement, variability measurement, skewness and kurtosis measurement; (2) Analysis requirement test, namely *normality test* (Lillefors test) and *homogeneity test* (Bartlett test); and (3) Research hypothesis test, namely: regression test, regression significance and linearity test, correlation coefficient, correlation coefficient significance test, partial correlation coefficient, partial correlation coefficient significance test, double correlation coefficient, and double correlation coefficient significance test.

5.1. Data Description

Data description of the study can be summarized as presented in Table 1 as follows.

Table 1. Data Description

Statistic s	Y	X ₁	X ₂	X ₃
Mean	87,4342	41,5263	80,5263	97,0263
Median	88,0000	41,0000	82,0909	97,0000
Mode	81,00	51,00	82,00	98,00
Std. Dev.	7,4321	9,1862	11,8428	12,5984

Variance	55,2356	84,3860	140,2526	158,7193
Minimum	71,00	21,00	50,00	69,00
Maximum	100,00	59,00	104,00	128,00
Skewness	-0,340	-0,281	-0,493	0,154
Kurtosis	-0,477	-0,755	-0,070	-0,101

Explanation:

- Y = Achievement motivation
- X₁ = work stress
- X₂ = job satisfaction
- X₃ = leadership effectiveness

5.2. Analysis Requirement Test

Analysis requirement test is conducted through normality test (*Liliefors test*) and homogeneity test (*Bartlett test*). Normality test based on *Liliefors test* on work stress variable (X₁), job satisfaction (X₂) and leadership effectiveness (X₃) can be summarized in estimated error data as presented in Table 2 below.

Table 2. Summary of Results of Normality Test of Estimated Error Data

Estimated Error	α	L_{count}	L_{table}	Decision
Y over X ₁	0,05	0,079681	0,101640	normal
Y over X ₂	0,05	0,100298	0,101640	normal
Y over X ₃	0,05	0,078580	0,101640	normal
<p>$n = 76$ $\alpha =$ Level of reality</p> <ol style="list-style-type: none"> 1. $L_{count} (0,079681) < L_{table} (0,101640)$: data is normal 2. $L_{count} (0,100298) < L_{table} (0,101640)$: data is normal 3. $L_{count} (0,078580) < L_{table} (0,101640)$: data is normal 				

From this normality test, it can be concluded that zero hypothesis (H_0) of the three independent variables to dependent variable is acceptable and the population is distributed normally. Meanwhile from homogeneity test (*Bartlett test*) variants between variable Y over variable (X) scores can be summarized as presented in Table 3 below.

Table 3. Summary of Homogeneity Test Results of Variants between Variable y over x Scores

Inter Variable	χ^2_{count}	dd	χ^2_{table} ($\alpha = 0,05$)	Decision
Y over X ₁	22,720510 ¹⁾	26	41,30	homogen
Y over X ₂	18,609600 ²⁾	35	49,80	homogen
Y over X ₃	7,598103 ³⁾	39	54,60	homogen

dd = degree of dependency	1) $\chi^2_{\text{count}} (22, 720510) < \chi^2_{\text{table}} (41, 30)$: variants homogen
	2) $\chi^2_{\text{count}} (18, 609600) < \chi^2_{\text{table}} (49, 80)$: variants homogen
	3) $\chi^2_{\text{count}} (7, 598103) < \chi^2_{\text{table}} (54, 60)$: variants homogen

Table 3 above shows that data of variable Y over X_1 , Y over X_2 , and Y over X_3 has homogeneity variants, so that Y variable data is valid for hypothesis test seen from variant homogeneity requirement.

5.3. Hypothesis Test

5.3.1. Correlation between Work Stress (X_1) and Achievement Motivation (Y)

Correlation between work stress (X_1) and achievement motivation (Y) is shown by parabolic regression equation

$$\hat{Y} = 50.608 + 1.032X_1 - 0.003334X_1^2$$

Meanwhile, parabolic regression significance test is presented in Table 4 below.

Table 4. Parabolic Regression Significance Test $\hat{Y} = 50.608 + 1.032X_1 - 0.003334X_1^2$

Source of Variants	JK	dd	RJK	F_{count}	F_{table}	
					0,05	0,01
Total	4142,6710	75				
Regression	3695,2325	2	1847,6163	301,440**	3,122	4,908
Balance	447,4385	73	6,1293			

**** = Very significant regression ($F_{\text{count}} = 301,44027 > F_{\text{table}} = 4,908$)**

JK = Sum of square
RJK = Average sum of square
dd = degree of dependency

Table 4 above shows that in regression significance test, hypothesis zero is rejected, since $F_{\text{count}} (= 301.44027)$ is bigger than $F_{\text{table}} (0.99:2:73) (= 4.908)$.

Thus, parabolic regression equation

$$\hat{Y} = 50.608 + 1.032X_1 - 0.003334X_1^2$$

is highly significant.

This equation shows that every change of 1 (one) work stress score, will cause a change of: 1,032 – 0,003334 achievement motivation score, at the Constanta of 50.608.

5.3.2. Correlation between Job Satisfaction (X_2) and Achievement Motivation (Y)

Correlation between job satisfaction (X_2) and achievement motivation (Y) is shown by linear regression equation

$$\hat{Y} = 41.398 + 0.572X_2$$

Regression significance and linearity test is presented in Table 5 below.

Table 5. Regression Significance and Linearity Test $\hat{Y} = 41.398 + 0.572X_2$

Source of Variants	JK	dd	RJK	F_{count}	F_{table}	
					0,05	0,01
Total	585143,00	76				
Regression (a)	581000,33	1				
Regression (b/a)	3437,95	1	3437,964	361,014*	3,970	6,990
Balance	704,707	74	9,523			
Tn. Suitable	298,685	34	8,785	0,865	1,721	2,162
Error	406,022	40	10,151	n.s.		
** = Very significant regression ($F_{count} = 361,014 > T_{table} = 6,990$) n.s. = Linearly Regression ($F_{count} = 0,865 < T_{table} = 1,721$)				JK = Sum of square RJK = Average sum of square dd = degree of dependency		

Table 5 above shows that in regression significance test, hypothesis zero is rejected, since $F_{count}(= 361.014)$ is bigger than $F_{table}(0.99:1:74)(= 6.990)$. Moreover, in regression linearity test, hypothesis zero is also rejected, since $F_{count}(= 0.865)$ is smaller than $F_{table}(0.95:34:40)(= 1.721)$. Thus, regression equation

$$\hat{Y} = 41.398 + 0.572X_2,$$

is highly significant and linear.

This equation shows that for every escalation of 1 (one) job satisfaction score, there is an escalation of 0.572 achievement motivation score at the constant of 41.398.

The strength of correlation between job satisfaction (X_2) and achievement motivation (Y) is shown by correlation coefficient (r_{y_2}) = 0.911. Correlation coefficient significance test between job satisfaction variable (X_2) and achievement motivation (Y) is shown in Table 6 below.

Table 6. Correlation Coefficient Significance Test between Job Satisfaction (X_2) and Achievement Motivation (Y)

Coefficient		t_{count}	t_{table}	
r_{y_2}	$r^2_{y_2}$		0,05	0,01
0,911	0,830	19,000**	1,666	2,378
** = correlation coefficient is very significant ($t_{count} = 19,000 > t_{table} = 2,378$)				

Table 6 above shows that in correlation coefficient significance test, hypothesis zero is rejected, since $t_{count}(= 19.900)$ is bigger than $t_{table}(0.99:74)(= 2.378)$. Thus, correlation coefficient (r_{y_2}) of 0.911 between job satisfaction (X_2) and achievement motivation (Y), is highly significant. Correlation coefficient of 0.911 with determination coefficient ($r^2_{y_2}$) = $(0.911)^2 = 0.83$ or 83%, shows that 83% achievement motivation (Y) variant can be determined by job satisfaction (X_2).

Correlation between job satisfaction (X_2) and achievement motivation (Y) by controlling leadership effectiveness variable (X_3) generates partial correlation coefficient ($r_{y_2.3}$) = 0.877. This partial correlation coefficient test is presented in Table 7 below.

Table 7. Partial Correlation Coefficient Significance Test between Job Satisfaction (X₂) and Achievement Motivation (Y), by Controlling Leadership Effectiveness (X₃)

Coefficient	t _{count}	t _{table}	
		0,05	0,01
r _{y_{2,3}} = 0,877	15,564**	1,66 6	2,379
** = correlation coefficient partial very significant (t _{count} = 15,564 > t _{table} = 2,379)			

Table 7 above shows that in correlation coefficient significance test, hypothesis zero is rejected, since t_{count}(= 15.564) is bigger than t_{table}(0.99:73)(= 2.379). Thus, partial correlation coefficient (r_{y_{2,3}}) of 0.877 between job satisfaction (X₂) and achievement motivation (Y) by controlling leadership effectiveness (X₃) is highly significant. This means that by controlling leadership effectiveness (X₃), there is a positive correlation between job satisfaction (X₂) and achievement motivation (Y).

5.3.3. Correlation between Leadership Effectiveness (X₃) and Achievement Motivation (Y)

Correlation between leadership effectiveness (X₃) and achievement motivation (Y) is shown by linear regression equation

$$\hat{Y} = 57.919 + 0.304X_3.$$

Regression linearity and significance test is presented in Table 8 below.

Table 8. Regression Significance Test and Linearity Test $\hat{Y} = 57.919 + 0.304X_3$

Source of Variants	JK	dd	RJK	F _{count}	F _{table}	
					0,05	0,01
Total	585143,0 0	76				
Reg. (a)	581000,3 3	1				
Reg. (b/a)	1101,533	1	1101,533	26,804**	3,970	6,990
Balance	3041,138	74	41,096			
Tn. Suitable	1885,709	38	49,624	1,546	1,734	2,189
Error	1155,429	36	32,095	n.s.		
** = Regression is very significant (F _{count} = 26,804 > F _{table} = 6,990) n.s. = Linearly regression (F _{count} = 1,546 < F _{table} = 1,734)				JK = Sum of square RJK = Average sum of square dd = degree of dependency		

Table 8 above shows that in regression significance test hypothesis zero is rejected, since F_{count}(= 26.804) is bigger than F_{table}(0.99:1:74)(= 6,990). Likewise, in regression linearity test hypothesis zero is also rejected, since F_{count}(= 1.546) is smaller than F_{table}(0.95:38:36)(= 1.734). Thus, regression equation

$$\hat{Y} = 57.919 + 0.304X_3,$$

is highly significant and linear.

This equation shows that for escalation of 1 (one) leadership effectiveness score, there is an escalation of 0.304 achievement motivation score on Constanta of 57.919. The correlation strength of leadership effectiveness (X_3) and achievement motivation (Y) is shown by correlation coefficient (r_{y3})= 0.516. Correlation coefficient significance test between leadership effectiveness (X_3) and achievement motivation (Y) variables is presented in Table 9 below.

Table 9. Correlation Coefficient Significance Test between Leadership Effectiveness (X_3) and Achievement Motivation (Y)

Coefficient		t_{count}	t_{table}	
r_{y2}	r^2_{y2}		0,05	0,01
0,516	0,266	5,177**	1,666	2,378
** = correlation coefficient is very significant ($t_{count} = 5,177 > t_{table} = 2,378$)				

Table 9 above shows that in correlation coefficient significance test hypothesis zero is rejected, since $t_{count}(= 5.177)$ is bigger than $t_{table}(0.99:74)(= 1.666)$. Thus, correlation coefficient (r_{y3}) of 0.516 between leadership effectiveness (X_3) and achievement motivation (Y) is highly significant. Correlation coefficient of 0.516 between leadership effectiveness (X_3) and achievement motivation (Y) with determination coefficient of $r^2_{y3}=(0.516)^2 = 0.266$ or 26,6%, shows that 26.6% achievement motivation (Y) variants can be determined by leadership effectiveness (X_3).

Correlation between leadership effectiveness (X_3) and achievement motivation (Y) by controlling job satisfaction (X_2) variable generates partial correlation coefficient ($r_{y3.2}$) = 0.027. This partial correlation coefficient significance test is presented in Table 10 below.

Table 10: Partial Correlation Coefficient Significance Test between Leadership Effectiveness (X_3) and Achievement Motivation (Y), by Controlling Job Satisfaction (X_2)

Coefficient	t_{count}	t_{table}	
		0,05	0,01
$r_{y3.2} = 0,027$	0,227 n.s.	1,666	2,379
** = correlation coefficient parsial is very significant ($t_{count} = 0,227 < t_{table} = 1,666$)			

Table 10 above shows that in partial correlation coefficient significance test hypothesis zero is accepted, since $t_{count}(= 0.227)$ smaller than $t_{table}(0.95:73)(= 1.666)$. Thus, partial correlation coefficient ($r_{y3.2}$) of 0.027 between leadership effectiveness (X_3) and achievement motivation (Y) by controlling job satisfaction (X_2) is insignificant. This means that by controlling job satisfaction (X_2) variable, there will be no correlation between leadership effectiveness (X_3) and achievement motivation (Y).

5.3.4. Correlation between Job Satisfaction (X_2), and Leadership Effectiveness (X_3), with Achievement Motivation (Y)

Correlation between job satisfaction (X_2) and leadership effectiveness (X_3) with achievement motivation (Y) is shown by double linear regression equation

$$\hat{Y} = 41.013 + 0.567X_2 + 0.007791X_3.$$

This double regression equation significance test is presented in Table 11 below.

Table 11. Double Regression Significance Test $\hat{Y} = 41.013 + 0.567X_2 + 0.007791X_3$

Source of Variants	JK	dd	RJK	F_{count}	F_{table}	
					0,05	0,01
Regresi	3438,463	2	1719,232	178,220*	3,122	4,908
Balance	704,208	73	9,647			
Total	4142,671	75				

** = Double correlation coefficient is very significant ($F_{count} = 178,220 > F_{table} = 4,908$)

JK = Sum of square
 RJK = Average sum of square
 dd = degree of dependency

Table 11 above shows that in regression significance test hypothesis zero is rejected, since $F_{count}(= 178.220)$ is bigger than $F_{table}(0.99:2:73)(= 4.908)$. Thus, double regression equation

$$\hat{Y} = 41.013 + 0.567X_2 + 0.007791X_3$$

is highly significant.

This equation shows that for each escalation of 1 (one) job satisfaction score, there will be an escalation of 0.567 achievement motivation score, and each escalation of 1 (one) leadership effectiveness score causes escalation of 0007791 of achievement motivation score, on the Constanta of 41.013.

The strength of correlation between job satisfaction (X_2) and leadership effectiveness (X_3), with achievement motivation (Y), is shown by correlation coefficient (R_{y23})= 0.911. This correlation coefficient significant test is presented in Table 12 below.

Table 12. Double Correlation Coefficient Significance Test between Job Satisfaction (X_2) and Leadership Effectiveness (X_3) with Achievement Motivation (Y)

Coefficients		F_{Count}	F_{table}	
R_{y23}	R^2_{y23}		0,05	0,01
0,911	0,830	178,220 **	3,122	4,908

** = Double correlation coefficient is very significant ($F_{Count} = 178,220 > F_{Table} = 4,908$)

Table 12 above shows that in correlation coefficient significance test hypothesis zero is rejected, since $F_{\text{count}} (= 178.220)$ is bigger than $F_{\text{table}} (0.99:2:73) (= 4.908)$. Thus, correlation coefficient (R_{Y23}) of 0.911 between job satisfaction (X_2), and leadership effectiveness (X_3) with achievement motivation (Y) is highly significant.

Correlation coefficient of 0.911 between job satisfaction (X_2), and leadership effectiveness (X_3), with achievement motivation (Y), with determination coefficient of $R^2_{Y23} = (0.911)^2 = 0.83$ or 83% shows that 83% of achievement motivation (Y) variants can be determined by job satisfaction (X_2) and leadership effectiveness (X_3) collectively.

Hypothesis test above shows that correlation between job satisfaction (X_2) and achievement motivation (Y) is at *first* position, with correlation coefficient (r_{y2}) = 0.911 and determination coefficient (r^2_{y2}) = 0.830 or = 83.0%. Further, correlation between leadership effectiveness (X_3) and achievement motivation (Y) is in *second* position, with correlation coefficient (r_{y3}) = 0.516 and determination coefficient (r^2_{y3}) = 0.266 or = 26,6%. Collective correlation between job satisfaction (X_2), and leadership effectiveness (X_3) with achievement motivation (Y), with correlation coefficient (R_{Y23}) = 0.911 and determination coefficient (R^2_{Y23}) = 0.830 or = 83.0%, is in the same sequence with the first sequence.

Furthermore, determining the rank of the strength of correlation of each independent variable to dependent variable by controlling 1 (one) other independent variable, can be explain as follows: Correlation between job satisfaction (X_2) and achievement motivation (Y) by controlling X_3 is at *first* position, with partial correlation coefficient ($r_{y2.3}$) = 0.877. Correlation between leadership effectiveness (X_3) and achievement motivation (Y) by controlling X_2 is at *third* position, with partial correlation coefficient ($r_{y3.2}$) = 0.027.

Thus, it can be said that job satisfaction variable is the most dominant variable in contributing to achievement motivation. This means that the higher the job satisfaction of employees, the higher the achievement motivation. Meanwhile, leadership effectiveness variable is a variable that can also contribute to achievement motivation. This means that the higher the leadership effectiveness, the higher the achievement motivation. However, when controlled by job satisfaction variable, correlation between leadership effectiveness and achievement motivation becomes insignificant in its independence level.

5.4. Implication

The aforementioned conclusion proves that achievement motivation can be affected by work stress, job satisfaction and leadership effectiveness. This shows that employees' achievement motivation can be increased using the role of motion function through the efforts of increasing and keeping work stress condition at positive level (*eustress*) and advancing job satisfaction and leadership effectiveness inside the work organization. These efforts are clarified below:

5.4.1. Managing Work Stress

Work stress is viewed as a condition, in which an employee is confronted with a burden or demand, problem, opportunity, perception and various aspects in his job deemed important and uncertain. Stress experienced by an individual lies at one point of a line, between stress emerging from elimination of necessary elements and stress emerging from excessive accumulation of unnecessary elements. Thus, there is a point in which one's stress reaches the lowest level, then to positive stress limit (*eustress*) and keeps on to highest level. The lower the burden or demand, the lower the stress experienced and performance becomes low. The higher the burden or demand increases inside tolerable limit, the higher work stress increases to *eustress* level which will push one to achievement motivation increase. However, if this work stress keeps increasing beyond *eustress* limit to the maximum level, it will start to disrupt achievement motivation, even aggravates performance. Therefore, in order to create and maintain work stress at *eustress* level (positive impact stress) it is essential to conduct these following things:

First, discover the cause of work stress. A job is a huge source of satisfaction and challenges. However, a job can also contain potential disrupting elements. The causes of stress in workplace in general include: (1) Factors related to duties, including physical environment (such as, inept lighting, excessive noises, extreme temperature, and air pollution), job (such as pace of work, lack of burden, excessive burden, and too much or too little variation), technology and pressure; (2) Roles in organization including position, role coverage and responsibilities, such as role conflict, which for a manager are ambiguous responsibility and contradictive expectation and need; (3) Inter-organizational relation, such as superior and subordinate relation, job relation, and sharing; (4) Career development, such as obstruction in career advance, role conflict, equilibrium between work and house, and discrimination; and (5) Organization change, such as workplace closure, shelter, human resource excess, restructuration and merger.

Second, maintain the limit of compatible stress. Management need to maintain compatible stress limit in which the positive aspects far above the negative aspects. Sufficient stress is needed to avoid rust out, but it should not be so much so as to cause burnout and tiredness. Concerning this matter, it is important to learn the cause of stress and the idea of providing compatible stress. Procurement of moderate level stress can stimulate individuals to work more energetically and better. The exact measure of the stress can be beneficial. It depends on two important aspects, namely organizational (system) and situational (contingency) aspects. Stress with positive impact (*eustress*) occurs when pressure on performance helps individual to have achievement. Nevertheless, when the stress level escalates too high, employee can become emotional in his surrounding, at least in a short term, and it will reduce their motivation and energy.

Third, procurement of compatible stress level. The idea of procuring compatible stress level, when connected to organization design and management practice, includes: (1) Uncertainty and excessive control can accuse distress; (2) Pressure, limbo (neglect), and lack of control can cause distress; (3) Responsibility. The lack of responsibility or insignificance can cause distress; (4) Achievement assessment and the lack of feedback on achievement can cause distress; and (5) Ambiguity of role and job description that inhibit personality can cause distress. These five aspects need to be managed in such a way that stress will not be at too low or too high level, but in *eustress* (positive impact) level. Apart from some stress inducing factors discussed above, it should also be noted by leader or manager to attempt to control or balance procurement of compatible stress limit. Job characteristics such as pace of work, lack of burden, excessive burden, and too much or too little variation for example should be maintained so that the impact is work stress is at compatible level.

5.4.2. Escalating Job Satisfaction

Job satisfaction is an individual condition in which there is general nature (feeling positively or negatively about the job); there is environment as job factors; there is interaction between individual and work environment; and individual feeling on his job simultaneously a reflection of his attitude towards the job. Job satisfaction is not absolute, its low border with dissatisfaction is hard to be distinguished and in reality this low border between the two is not existed. Satisfaction and dissatisfaction concern situations experienced before with their own or with others. On the other hand, the effort of finding satisfaction rarely is human goal that can be explicitly stated. People do not try to find satisfaction, they tend to pursue various goals, which more or less determined beforehand, and by doing so, find satisfaction. Therefore, job satisfaction is a part of unlimited continuity but also a personal feeling, which sometimes contradict group feeling since each person goals differ in each situation from time to time. Job satisfaction as a goal will pass quickly and keep distancing. Human capability is such that when a goal at one time is reached, he will get used to the life level and accept it as a norm, and then seek another satisfaction level. So, in other word, job satisfaction is not a goal to reach but the result of

individual general characteristic in responding to work environment in which perception matches the expected reality.

Concerning this general feeling, satisfaction or dissatisfaction towards the job, individual bases it on the expectation of fulfilling psychological need; there is a perception on the important value of the job owned; there is no difference between what is expected and perception on reality; and feels equity over a situation. To improve someone's job satisfaction, fundamentally factors that can determine job satisfaction or satisfiers should be searched. In a work organization environment, these satisfiers are among other: (1) Mentally challenging job; (2) Supportive colleagues; and (3) Proper reward. These four factors must be create in such a way that a condition is actualized wherein employees feel satisfied and have positive attitude on various aspects of their job.

Mentally challenging work. Management in this matter need to create a condition in which job can provide various opportunities, such as opportunity to practice the skill, to exploit physical and rational ability, to perform various duties, and freedom in completing duties and get feedback. Some fundamental reasons are: (1) Employee tends to enjoy challenging work characteristics that can provide opportunity to practice his skills and abilities, offer various duties and feedback or achievement assessment on how well he completes the work. (2) Less challenging work creates boredom and too challenging work creates frustration and failure feeling.

Supportive colleagues and superior. Management need to create a condition in which every employee in performing their duties and surpassing the work problems get supports from their colleagues and superior. Some fundamental reasons are: (1) Job is not just about materializing achievement and money, but also fulfilling the need for social interaction. (2) Friendly and supportive colleagues and superior leads to improving job satisfaction. (3) Employees job satisfaction is expected to increase when superior or manager behaves friendly and understandingly, offers compliment for good performance, listens to employees' opinions, and shows personal attention to them.

Supporting work condition. Management need to create a supporting work condition. This is the condition in which there are sufficient light, fresh air, sufficient equipment, work safety insurance, and work continuity insurance which are vital factors the management need to concern with. Some fundamental reasons are: (1) Employees care for good work environment for personal comfort and easier work execution. (2) Employees prefer safe and untroubled physical condition. (3) Employees prefer environmental factors such as light, noise, temperature, and others to not be extreme such as too bright or too dim. (4) Employees in general enjoy working close to home, in a clean and relatively modern facility, and with sufficient equipment and tools.

Fair reward. Management need to create a condition in which every employee acquire fair rewards, such as fair payment, compliment and acknowledgement, expectation, fair promotion, respect and fair treatment. Some fundamental reasons are: (1) Employees want a payment system and promotion policy they feel as fair, not double meaning, and in line with their expectation. (2) When payment seen as fair judged on work demand, skill and community payment standard, it is highly likely that there will be satisfaction. (3) Bearing in mind that not everybody is after money, the key to connect payment and satisfaction is perception on fairness. (4) Likewise, for policy and practice such as fair promotion, it can give opportunity for personal growth, more responsibilities, and expected social status. (5) Therefore, individual percepts that promotion decision is executed fairly will highly likely to have satisfaction in his job.

5.4.3. Improving Leadership Effectiveness

Leadership effectiveness is a measure of how much leader contribution is felt by followers concerning quality of leadership processes. The level of leader contribution on quality of leadership processes felt by followers can be seen by followers as efforts that can lead to achievement of group and organization goals. Related to this view of

subordinate perception, effective leader behavior can drive subordinate to behave in positive way too. Thus, to learn effectiveness of a leader, it is necessary to measure some relevant indicators. One of which is by learning quality of the leadership processes which is reflected in the leader person, both in the process in which he performs his duties and in the process of affecting, directing and motivating followers as can be observed by followers.

Qualities of the processes are as follow: (1) Characteristics, namely: (a) Determination, such as: vitality (physical, mental and emotional), and perseverance; (b) Talent, namely: confidence, emotional stability and integrity; (c) Desire or motivation to lead, such as: using authority to reach group goals and organization goals. (2) Skills, such as: conceptual skill and interpersonal skill. (3) Behavior, such as: (a) Directing, persuading and guiding followers; (b) Motivating followers and maintaining group solidarity.

However, the effective behavior in performing the two leadership functions is also dependent on situation or situational. This means that the more able managers are in adapting their leadership behavior style to the situation and need of their followers, the more effective they are in achieving personal and organization goal. A leader must adapt their leadership style as a response to the need for success in the job, experience, and the ability and will of their subordinates which constantly change. The most effective leadership style varies with employees "readiness" which is defined as the will to have achievement, responsibility, and ability concerning duty, skill, and experience [24]. From the analysis above, it is clear that the measure of leadership effectiveness varies greatly. Therefore, it is important to find which measure that can summarize various approaches. Thus, these measures are expected to answer the problems concerning effective and ineffective leader behavior as has been discussed above.

Characteristic based measure. This measure is based on characteristic approach which states that effective leader is not intentionally devised (or behavior that can be learned) but naturally created. However, someone who becomes a leader might become effective if he can possess these characteristics, and if needed, improved them. Management need to learn which leader possesses traits such as energy level and tolerance towards stress, confidence, emotional maturity and integrity, power motivation and success orientation. Thus, planning the career of an individual to be promoted as a leader can be relatively easy to conduct.

Behavior based measure. Based on behavior approach, leader can be learned and not born as one. The leader behavior is reflected in activities he conducts in the process of influencing, namely influencing interpretation of occurrences for followers, options of group or organization goals, organizing of work activities to achieve these goals, motivating followers to achieve goals, maintaining cooperation and teamwork, and getting support and cooperation from people outside the group or organization.

Moreover, when based on behavior (style) approach, the leadership behavior in general can be divided into two behaviors, namely duty oriented and relation oriented. Duty oriented style is a function related to duty or problem solving. Manager or leader with duty oriented style monitors employees strictly to make sure that the duty is executed satisfyingly. Meanwhile, relation oriented style is a function that maintains group or social. Relation oriented style emphasizes more on motivating than controlling subordinates, seeking friendly relation, mutual trust and respect with employees, and providing opportunities to participate in decision making. Which leadership behavior or style is most effective depends on the situation (contingency). This means that management need to develop leadership style models compatible with situation or readiness of employees (followers) so that in every situation, the efforts of improving leadership can be reached.

5.4.4. Suggestion

Concerning the results of this study, for the working organization in higher education ring, especially in Universitas Prof. Dr. Moestopo (Beragama), it is suggested to, in order to develop management functions, do these steps as follow:

First, the result of the study shows that work stress variable have a role that can define or predict changes in employees achievement motivation. Definition of work stress in this matter does not mean creating work stress condition commonly exists in work organization in excess or completely eradicates them, but is an effort on how to manage employees work stress so as to reach positive stress level (*eustress*). The result of the study shows that maximum score value of work stress is only at score level= 59. Meanwhile, positive stress limit (*eustress*) is in total score = 155. This means that work stress condition of employees at the moment of the study is where the burden or demand of the job has not met a certain point, so that work stress has not reached *eustress* level or limit. Therefore, in order to get employees in high achievement motivation level (peak) burden or demand of employees' duties must still be escalated. Conditioning employees in a burden or demand of duties at *eustress* level or limit is by attempting to get each employee to always have burden or demand of duties, problem, perception and other aspects of his work inside his capability limit. Beyond this limits, work stress will be in low condition so that achievement motivation is also low, which will produce tiredness which will lower achievement motivation even further.

Second, apart from work stress, other variable needed more concern in escalating employees achievement motivation is job satisfaction. The result of the study shows that job satisfaction variable have a vital role in defining or predicting escalation of employees achievement motivation. The result of the study shows that job satisfaction variable determining coefficient to achievement motivation is at 0.83 or 83%. This means that employees' job satisfaction has gotten near relatively high level. Therefore, various efforts in managing organization to reach determined goals through increasing employees' achievement motivation, then creation of condition which can develop employees' job satisfaction must be maintained or even improved. These efforts can be conducted by maintaining and if possible improving function of satisfier factor (motivator or intrinsic factor) and eliminating or at least reducing function of dissatisfaction ensuing factor (maintaining factor).

Third, it is important to improve leadership effectiveness inside organization since it also affects increase in employees' achievement motivation. Nevertheless, the result of the study shows leadership effectiveness variable determining coefficient to achievement motivation is at 0,266 or 26.6%. This means that leadership effectiveness is still at low level, or it can be said that leaders in organization ring where the study is conducted have not play their leadership function effectively. Therefore, it is suggested for the management to keep developing movement function model in playing leadership function more suitable for the organization situation. In the higher education system, these models need to be directed to the importance of developing instrument input (for example, statute, development master plan, and others) which is accommodated to the vision, mission, and goals of the concerning organization. Some elements of instrument input concerning leadership function must be create in such a way so as not creating rigid situation, but a clear and elastic one. This is vital for the leaders in playing their function and provides them with freedom in developing the organization vision and mission. It is laso suggested to leaders in the organization wherein this study conducted to develop their management skills and leadership style in conformation with organization situation.

Fourth, this study only reveals 3 (three) independent variables, namely work stress, job satisfaction and leadership effectiveness which are presumed as having influence in predicting or determining achievement motivation. The study hypothesis test proves that work stress has powerful and parabolic influence over changes in achievement motivation. In such manner job satisfaction and leadership, both separately or

collectively, have positive and vital correlation to achievement motivation. It is expected that the conclusion of this study can be made a point of consideration of management in evaluating organization performance simultaneously in formulating goals of organization in which this study is conducted in the future.

6. Conclusion

From the hypothesis tests above, it can be concluded that:

First, there is a hyperbolic and vital correlation between work stress and achievement motivation. This means that when work stress is in low level, achievement motivation will also be in low level. When work stress start escalating to positive stress level (*eustress*), achievement motivation will also keep escalating to its peak (an ideal condition). However, when work stress keeps on escalating beyond *eustress* limit, it will show negative effect (namely tiredness both physically and mentally) which will move achievement motivation in constant descending until it reaches its lowest level. In this condition, achievement motivation will get worse. In other word, this conclusion also explains that achievement motivation can be escalated by increasing work stress to the positive stress limit (*eustress*) and keeps it from getting beyond this limit.

Second, there is a positive and vital correlation between job satisfaction and achievement motivation. This means that the higher the job satisfaction, the higher the achievement motivation. On the contrary, the lower the job satisfaction, the lower the achievement motivation. In other words, this conclusion clarifies that achievement motivation can be escalated by increasing job satisfaction.

Third, there is a positive and vital correlation between leadership effectiveness and achievement motivation. This means that the higher the leadership effectiveness, the higher the achievement motivation. On the contrary, the lower the leadership effectiveness is, the lower the achievement motivation. In other word, this conclusion clarifies that achievement motivation can be escalated by increasing job satisfaction.

Fourth, there is a positive and vital correlation between job satisfaction and leadership effectiveness, both separately and collectively, and achievement motivation. This means that the higher the job satisfaction and leadership effectiveness, the higher the achievement motivation. On the contrary, the lower the job satisfaction and leadership effectiveness, the lower the achievement motivation. In other word, this conclusion clarifies that achievement motivation can be escalated by increasing job satisfaction and leadership effectiveness.

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