Teacher Motivation, Stress and Satisfaction:

Do Teachers in a Secondary and a Tertiary Institution Differ?

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Abstract

Survey data from 15 lecturers in a tertiary education institution and 39 teachers in a secondary school in Hong Kong were analyzed to investigate their work motivation and its relationship with job-related stress and satisfaction. The relationship between job-related stress and job satisfaction was negative. However, both levels of stress and job satisfaction were high. In terms of work motivation, for both groups, achievement and affiliation orientations were high but power orientation was not. These results indicate that the job nature of teaching itself may have a driving force that makes teachers strive for professional development that is stressful yet satisfying and fulfilling. Analysis of variance found that the two groups (lecturers vs. teachers) did not differ in work-related psychological outcomes (job stress and satisfaction), nor did they differ in their power orientation. For both groups, the achievement and affiliation orientations were higher than power orientation whereas between-group comparisons found that achievement and affiliation orientations were significantly higher for lecturers in the tertiary institution. The relatively high stress level of both the lecturers and teachers warrants attention. Further work should focus on effort to reduce teacher stress and increase job satisfaction.

Motivation has been found to be a major determinant of behavior in both work and study (see Maehr & Midgley, 1991; Lussier, 1996; McInerney, Roche, McInerney, & Marsh, 1997; McInerney, Yeung, & McInerney, 2001). Recent studies on school motivation have increasingly emphasized theorizing on the basis of goal theory (e.g., Ames, 1992; Blumenfeld, 1992; Pintrich, Marx, & Boyle, 1993; Wentzel, 1991; DeBacker & Nelson, 2000). In a similar vein, whereas goal orientations in students are expected to be important driving forces towards academic involvement (e.g., Ames, 1992; Dweck, 1986; Maehr, 1984; Maehr & Midgley, 1991), goals in the workplace may also be expected to be important driving forces towards job involvement and subsequently task performance. The present investigation explored the goal orientations of the lecturing staff of the Division of Continuing Professional Education of the Hong Kong Institute of Education and teachers of a high school in Hong Kong. We examined the pattern of relationships among goal orientations, job satisfaction and job-related stress and compared the teachers' self-ratings on these measures.

Goal Orientations

Two types of motivation have been the focus of research based on goal theory. They are mastery and performance goals (e.g., Ames, 1992; Dweck, 1986; Maehr & Midgley, 1991; Nicholls, 1989). These goals have been traditionally known respectively as intrinsic and extrinsic motivation. In the school, when engaged in academic tasks, a student may adopt either a mastery or a performance goal, or both. Students who are inclined towards a mastery goal are persistent in acquiring skills to master a learning task. This is reflected in the students' persistence and resilience and their use of effective learning strategies that involve cognitive engagement and a willingness to seek effective strategies to solve problems when faced with a difficult task. Hence students with a mastery goal attach intrinsic values to learning because they derive personal satisfaction in attaining competence.

In contrast, students with a performance goal orientation would attempt to demonstrate their ability or to hide their ability. These students tend to compare with others. This motivational inclination is often related to expectations of extrinsic rewards such as praise from others and a gain in power and status. Students with such a goal orientation may have negative feelings when their performance falls short of their expectations because any sign of incompetence could be a threat to their self-worth (Ames, 1992; Covington, 1992; Nicholls, 1989).

Another important goal orientation that has received less attention is the social goal orientation described by McInerney et al., 1997 (also see McInerney, Yeung, & McInerney, 2001). Students come to school with an inclination to socialize with their schoolmates. Some students show strong social concerns and have good wishes for their schoolmates. Some others long for care from others. To students with a strong social goal orientation, their interaction with other people in the school setting will probably be an important factor that contributes to their psychological well being.

Motivation in the workplace may be studied using the same framework based on goal theory. The theory is also consistent with studies on needs for achievement in as early as the 1950s (e.g., Atkinson, 1958). In reviewing the needs for achievements, for example, Lussier (1996) describes three achievement motives that may contribute to behavior and other outcomes-achievement, power and affiliation. These motives are in line with the mastery, performance, and social goal orientations described in the goal theory literature. To measure the motives in human motivation in the workplace, Lussier (1996) adopted McClelland's (1961) instrument using 15 survey items to probe into respondents' needs for achievement in the three respective dimensions. Hence, working staff with a high score in a

certain goal orientation would be expected to display certain performance and behavior distinct from those displayed by those with a different goal orientation.

In the workplace, staff who is inclined towards a mastery goal (i.e., high achievement motive) are probably persistent and resilient and are willing to face the challenge of difficult tasks. Because they attach stronger intrinsic values to tasks, they may be expected to derive more satisfaction in attaining competence. In contrast, staff with a performance goal orientation (i.e., a high power motive) would attempt to demonstrate their ability and compare with others and to gain rewards, praise from others, and power and status. Staff with such a goal orientation may have negative feelings when their performance falls short of their expectations. Furthermore, staff with a strong social goal orientation values the interactions with other people in the workplace and satisfaction probably comes from their good relationships with their colleagues.

Teacher Job Stress and Satisfaction

Although the concept 'stress' is difficult to define, it has been widely used as reasons to explain the increase in job motivation and decrease in job satisfaction. Stress can be of positive or negative quality, and Fisher (1994) believed that people who experienced stressful work problems were less efficient. Depression, anxiety, angry and phobic behaviour are symptoms of stress that can be caused by the external environment or cognitive factors of the individual. According to McGrath (1974), stress was defined in terms of tolerance stating that stressful environments were considered outside the normal tolerance limits of one's daily function, and stimulation might be perceived as pain at extreme levels. He further concluded that what seemed to be stressful to one person might be seemed as challenging and exciting to another person.

Teaching was concluded by Morris and Raabe as a stressful career, they believed that 'One major source of stress is overwork, and certain professional, for example, teachers and health service workers, are frequently highlighted as having stressful, heavily work-laden occupations' (2002: 60). It was also noted that 'the university's two basic tasks - research and teaching - are undertaken by the same individuals (Johnston in Cuthbert 1996: 103)'. According to Johnston, research and teaching are complementary in the foundation for academic staff in university but they are also in conflict. It was because time spent on teaching is not directly time spent on research, and these different tasks are both labour-intensive. The institutional goals of high quality research and teaching of tertiary institutions may lead to job-related stress. Thus, university academics have to manage this conflict and allocate time constructively in order to ensure the high quality productivity in both research and teaching. As a result, time management is crucial for university academics. In order to reduce such stress, Johnston suggested 'a stimulating leadership, a supportive, collegial ethos and a great deal of serendipity' (Johnston in Cuthbert 1996) in workplace of university academics. He concluded that it was paramount to provide them with good working conditions, give them clear expectation, support them through bad times and finally celebrate with them during good times to maintain quality of work and reduce stress.

Schonfeld conducted an investigation in 2001 and found that adverse work environment was a contributing factor to teachers' burnout and distress. Teaching profession itself was self-motivating, teachers' internal locus of control would motivate them to refresh themselves in order to upgrade their quality of teaching which in turn caused great stress to teachers. Research results indicated that social support could reduce psychological distress (Cohen & Wills, 1985; Kessler & McLeod, 1985). House and Kahn further advanced their view in 1985 that work-related sources of support were even more important in buffering the impacts of occupational stressors than non-work related support. Bunnk, Janssen, & Vanyperen (1989) suggested that support from supervisors was more vital than colleagues. In school

environment, factors affecting the well-being of teachers often transcend the classroom to whole school. The quality of supervision affected both job satisfaction and motivation of teachers. Therefore, facilitative working environment was significant in reducing job stress and enhancing job satisfaction.

Teachers working in adverse school environment would easily annoyed and disturbed by stressful working conditions. Friedman's research of Israeli teachers in 1991 found that school environment factors played a major role in teacher burnout and Schonfeld further adduced evidence for the view that burnout was depressive symptoms developed in response to unfavorable working conditions. Adverse school conditions would provoke psychological distress and poor morale of teachers and caused high stress of teachers.

Though it was difficult to bring about workplace changes, worker participation should be a required element in stress reduction and was supported by Friedman (1991) that 'the importance of organizational factors in teacher distress'. Therefore, teachers' high job satisfaction could be explained by its job nature, when teachers felt they could master their job. Therefore, the organizational factors of educational institutions might be the source of job-related stress.

Motivation Orientations of Teachers

In 1956, Selye introduced the term 'eustress' which could best describe the positive stress experience one encountered. It was believed that the individual had perceived the stress experience positively as a form of challenge and motivation rather than a discouraging factor.

As concluded by Fisher (1994), people in different work environments might have different work targets. Furthermore, personality, style and personal goals might also vary for different people in different professions. Therefore, it is not surprising to find that stress experience one faced in a particular occupation may be perceived as a challenge in another occupation. As teachers are self-driving and they themselves are the quality controller of their performance besides their supervisors, occupational stress may be perceived as a kind of motivation.

Need theorists believe that people are motivated by their needs. Manifest needs theory advocated by McClelland classifies needs into three dimensions, they are achievement, power and affiliation needs. Affiliation needs refer to social and related needs, whereas power and achievement needs are related to growth, self-esteem and self-actualization. He further explains that people with high achievement needs tend to be characterized by taking up personal responsibility, goal oriented by setting moderate, realistic and attainable goals, seeking challenges and excellence, and they are also willing to work hard. People of high need for achievement always think about means to do better jobs and accomplish tasks, and they perform well in challenging situations. However, these are also stressors inherited in teaching profession. People with high affiliation needs will seek close relationships with others and the sense of belongings of groups, and they enjoy social activities. Lussier concludes that 'People with a high need for affiliation think about friends and relationships. They tend to enjoy developing, helping and teaching others..... People with high need for affiliation seek jobs as teachers' (1996: 180). Education is basically a people business and teaching itself is challenging and demanding, thus teachers choose to be in a this profession will have both high achievement and affiliation needs, and they derive satisfaction from the people they work with.

People with high need of power were characterized by wanting to control and influence others, they enjoyed competition and confrontation. All these might be seen as violating to

the basic values of school education which educate students to share and live with others harmoniously within the school environment. Therefore, all these might contributed to low need of power in the teaching profession. Lussier also found that 'People with high need for power tend to have a low need for affiliation' (1996: 180), this findings was consistent with the results found in both the teachers in the tertiary and secondary education institutions of this study.

Aims and Objectives of the Present Study

The aim of this investigation was to examine the goal orientations of the teachers in a tertiary education setting and in a secondary school. We examined the relationships of work motivation with job stress and satisfaction. The study involved a survey probing the perceptions of lecturers in a teacher education institution and teachers in a secondary school.

Specifically, we hypothesized that:

1. teaching-related stress was negatively correlated with teacher satisfaction,
2. teachers in both educational settings experienced high levels of both job-related stress and job satisfaction,
3. teachers in both educational settings had higher levels of achievement and affiliation orientations than power orientations, and
4. lecturers in the teacher education institution had stronger achievement and affiliation orientations than teachers in the secondary school.

Method

The Participants

The participants of this study were 15 academics from The Hong Kong Institute of Education and 39 teachers from a secondary school in Hong Kong. About 70% were females.

The Instrument

The questionnaire covered two major areas of concern: (a) goal orientations in work (i.e., achievement, affiliation and power) consisting of 12 items used by Lussier (1996) and Steers and Braunstein (1976) on a 5-point scale (1 = Strongly disagree; 5 = Strongly agree), forming three measures, and (b) job-related perceptions (i.e., stress and satisfaction) consisting of eight items. The items pertaining to each scale are listed in Appendix where respective reliabilities are reported.

Statistical Analysis

In preliminary analysis, we first examined the internal consistency of each scale. Multivariate analysis of variance (ANOVA) was then conducted to examine the scale means of the dependent variables (achievement, power, affiliation stress and satisfaction) between two groups (lecturer vs. teacher). To compare within-subjects scores on the motivation variables, repeated-measure ANOVA was conducted and Helmert contrasts were used to compare the means of the three dependent variables within-group (achievement, stress and satisfaction). Furthermore, Pearson's correlations were calculated to examine the relationships among the variables. The analysis was conducted using SPSS version 10.

Results

Preliminary analysis found that the internal consistency of each scale was good (a s = .69, .59, .55, .63, and .82 respectively for achievement, power, affiliation, stress and satisfaction). The low to medium correlations among scales indicated that the scales were distinct from each other (see Table 3). Subsequent analyses were based on the scale mean of each scale by averaging the scores of items pertaining to that scale. These five dependent variables were then compared between two groups (lecturer and teacher).

Analysis of variance (ANOVA)

The mean and standard deviation of each variable are shown in Table 1. An inspection of the mean scores of the three orientations found that the achievement orientation score was highest among all three orientations for both the lecturers and teachers (Ms = 4.13 and 3.78 respectively, average M = 3.96 out of a 5-point scale) whereas the affiliation orientation score was relatively lower but still considerably high (Ms = 4.04 and 3.67 respectively, average M>3.5 on a 5-point scale). The scores in power orientation were the lowest among the three orientation variables (Ms = 2.90 and 3.09 respectively, average M =3.03, which was midway between 1 and 5 on a 5-point scale).

Multivariate analysis of variance (MANOVA) results showed significant differences in achievement and affiliation orientations between the two groups (lecturers and teachers), $F(1,53) = 5.92$ and 4.77, $MSE = .22$ and .32 respectively, $p<.05$). This indicates that the lecturers had a stronger urge in the achievement and affiliation orientations than the teachers. However, even though the teachers were not as strong in the achievement and affiliation orientations, these goal orientations were still high (Ms = 3.78 and 3.67 respectively, average M> 3.5 on a 5-point scale). This indicates that both the lecturers and teachers had great needs for a sense of achievement and affiliation, although the needs of the lecturer tended to be even greater. For stress and job satisfaction, no significant difference was found between groups (see Table 1).

Repeated-measures ANOVA was applied to compare the levels of the three motivation variables (i.e., achievement, affiliation and power). The results showed statistically significant differences, $F(2, 108) = 44.92$, $MSE = 0.25$, $p<.001$. Helmert contrasts found that achievement orientation scores were significantly higher than the average of affiliation and power orientation scores, $F(2,108) = 61.54$, $MSE = 0.25$, $p< .001$ whereas affiliation was significantly higher than power scores, $F(2,108) = 39.12$, $MSE = 0.25$, $p< .001$. This indicates that power orientation was the lowest among the three goal orientations. The results of the Helmert contrasts are shown in Table 2.

For the two outcome variables (stress and satisfaction), although no significant differences were found between the lecturers and teachers, both mean scores were higher than the midpoint of 3 on a 5-point scale (Ms = 3.55 and 3.58 respectively).

Pearson's Correlation

In order to explore the relationship among the three orientations and two outcome variables, we examined the correlations among these variables. The results are presented in Table 3 for the total sample (N = 54). The focus of concern is the relationship between job satisfaction and the three goal orientations and particularly the relationship between job satisfaction and work-related stress. The correlation coefficients between each of the three goal orientations (achievement, power and affiliation) and satisfaction were all positive (rs = .29, .44 and .14 respectively). This result shows positive associations between work motivation and job satisfaction in teaching, particularly for achievement and power

orientations which were significantly correlated with job satisfaction. However, the correlation between satisfaction and stress was significantly negatively. This indicates that higher stress experienced in teaching may have negative association with the teachers' job satisfaction level.

Discussion and Conclusion

The fact that the Achievement orientation score was the highest among all three orientations for both the lecturers and secondary school teachers showed that both groups of teachers tended to have a strong urge for achievement. They were willing to improve themselves, have a strong desire for personal development and find great enjoyment when faced with challenges in the job. The high scores in achievement needs, and hence a high level of mastery goal orientation reflect a high level of intrinsic motivation that is highly valued but often lacking in the workplace.

According to Lussier (1996), there was evidence that high achievement need was closely associated with high performance. Yet unfortunately, McClelland (1961) also found that of the whole population of the USA, only 10% seemed to have a dominant need for achievement. Thus, the high scores in achievement in both the academic staff members in tertiary education and secondary school teachers were pleasing. However, the results might also imply a need to caution that it would be hard, if not impossible, for this intrinsic motivation to rise further, or even to be maintained.

Both groups displayed particularly low scores in Power orientation. This indicated that neither the tertiary nor the secondary school teaching staff had a strong urge for power in the workplace. The results suggested that the lecturers and teachers did not seem to have a strong urge for extrinsic motivation that was often related to expectations of extrinsic rewards, praise from other people, or a gain in power and status. In contrast, both groups displayed a relatively high mean score for Affiliation, indicating that both groups had strong needs for affiliation with the people in their workplace and the two groups did not differ from each other.

Kimbrough & Burkett suggested that 'Education is a people business' (1990: 181), and lecturers and teachers might therefore value human relationship much more than any other profession. The results of the study implied that the lecturers and teachers tended to value a harmonious working environment with a healthy interpersonal relationship among colleagues rather than a competitive power-struggling environment that supported the above argument.

The result of a low score in Power and a high score in Affiliation was consistent with traditional motivation studies which anticipated that people with high affiliation motive thought about their friends and colleagues (see Lussier, 1996; McClelland, 1961), tended to enjoy developing good relationships, and were keen to offer help to others. Hence, they would avoid competition with their workmates or creating conflicting situations through a power struggle.

The focus of interest was the relationship between job satisfaction and the three goal orientations, and particularly the relationship between job satisfaction and work-related stress. The results found that the three factors of goal orientation were positively correlated with Satisfaction. The positive correlation coefficients between the three work-related goal orientations and Satisfaction seemed to indicate that for both groups of teaching staff (tertiary and secondary), orientations toward work were positively related to their levels of job satisfaction.

There was a negative correlation found between Job Satisfaction and Job-related Stress. It was understandable that job satisfaction was based on the employee's attitude which was rather personal and subjective, thus people even in the same job might perceive their working environment quite differently (Luissar, 1996). Jacobsson, Pousette and Thylefors conducted a study in 2001 and the results strongly supported the idea that perceived work demands was the single dominating predictor envisaged stress reactions among teachers. Student misbehaviour disturbing teaching, lack of a good working alliance with the students and goals ambiguity decreasing their feeling of mastery were indicators of stress reactions of teachers. However, it was still worthwhile to explore possible methods of coping with stress in academic staff. According to Fisher, 'Overload and administrative load have been identified as major problems for staff' (1994: 87). He then concluded that there were two types of coping strategies for work stress environments, one was problem-focused and the other was emotion-focused. Problem focused coping strategy tried to source the stress-related difficulty and was a practical approach to tackle occupational stress such as role switching and reduction of administrative work. Pennebaker (1989) believed that emotion-focused coping skill - social support from friends and professional counselor was also important to decrease job-related stress of academic staff. In reality, selecting a balance between teaching and research and operating within their own specialties might be a constructive and effective method to lessen pressure and struggle of teaching and research of academic staff in tertiary institution.

Jaconsson, Pousette and Thylefors (2001) also suggested that teachers' openness to new things, willingness to seek challenges and goal clarity were means of reducing stress. Therefore, goal setting and cooperataion of shared responsibility were ways of stress management. Prinicpals' effort in creating a supportive school climate with functional coordination, clear goals and generous feedbacks were all contributing to better stress management of teachers. They further concluded that teachers' accumulated experience enhanced their feeling of mastery which would result in less stress reactions.

Schonfeld (2001) concluded that creating an environment which could stimulate teachers' learning orientation and continuous professional development would further promote feelings of mastery most effectively. Working environment which could provide more positive feedback and clarify goals would moderate the perceived demands as well as increase teachers' work control would enhance teachers' feelings of mastery of the work more effectively". All these contributed to effective stress management in the teaching profession.

Appendix

Items Used in the Present Study

Achievement goals alpha= .69

1. I try very hard to improve on my past performance at work.
2. I enjoy a difficult challenge.
3. I want to know how I am progressing as I complete tasks.
4. I enjoy setting and achieving realistic goals.
5. I enjoy the satisfaction of completing a difficult task.

Power goals alpha= .59

1. I enjoy competition and winning.
2. I enjoy being in charge.
3. I enjoy influencing other people to get my way.
4. I often work to gain more control over the events around me.

Affiliation goals alpha= .55

1. I want to work by others.
2. I tend to build close relationship with co-workers.
3. I enjoy working with others more than working alone.

Job stress alpha= .63

1. I often think of my work even when I am at home.
2. I never have time to look after other matters because I am too busy with my work.
3. I feel frustrated because it seems that my work will never end.
4. I find my work easy and without pressure at all.

Job satisfaction alpha= .82

1. I have a sense of satisfaction in my work.
2. It is difficult to feel satisfied working here.
3. The nature of my job brings me a lot of satisfaction.
4. I absolutely don't have satisfaction in my work.

Table1. Means (M) and Standard Deviations (SD) of Scores for Lecturers and Teachers

Lecturers Teachers Total F MSE h 2

n=15 n=39 N=54 (1,53)df

Achievement M 4.13 3.78 3.88 5.92* 0.22 .10

SD (0.48) (0.47) (0.49)

Power M 2.90 3.09 3.03 0.93 0.40 .02

SD (0.75) (0.59) (0.63)

Affiliation M 4.04 3.67 3.77 4.77* 0.32 .08

SD (0.52) (0.59) (0.59)

Stress M 3.65 3.51 3.55 0.45 0.46 .00

SD (0.67) (0.68) (0.67)

Satisfaction M 3.57 3.59 3.58 0.01 0.56 .00

SD (0.90) (0.69) (0.74)

Note: * p < .05

Table2. Results of Within-subject ANOVA with Helmert Contrasts

Achievement Affiliation Power N F MSE η2 Helmert contrasts

Ach vs. Aff vs.

Aff+Power Power

M 3.88 3.77 3.03 54 44.92** 0.25 .46 61.54** 39.12**

SD (0.49) (0.59) (0.63)

Note: **p < .001.

Table 3. Correlations among Achievement, Power, Affiliation, Stress and Satisfaction of lecturers and teachers (N=54)

Achievement Power Affiliation Stress Satisfaction

Achievement --

Power .40** --

Affiliation .37** -.00 --

Stress .08 -.12 .06 --

Satisfaction .29* .44** .14 -.37** --

Note: * p < .05. ** p < .01.

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