The Comparative Study between Korean and Indian Students regarding Relationship among Self-leadership Types, Performance and Class Attendance Attitudes

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ABSTRACT

A number of organizations have had big interests in studies concerning leadership and not only academia but also psychological areas do also. Until now, leadership has been accentuated by managers or team leaders especially. Recently, however, the concept of self-leadership directing one's own activities through self-control or self-management is being focused on in practices and in academia.

This study is to investigate the influence between self-leadership strategies as predictors and learning performance in IT classes as dependents variables mediated by attitude of attendance focused on the social science students in two universities (Korea(116 samples) and India(36 samples)). And this research tried to compare difference between two university students. As a result of empirical analysis, Korean learners making an effort by themselves show a tendency to think constructively. Namely, even though the level of difficulty may be high, by positive self-talk, respondents usually make an effort to get high academic performance. In case of Indian respondents, students who are in behavior-oriented show higher academic performance. Research results can give us direction of task-taking attitudes in firms or learning attitudes in teaching organizations and implications to human resource managers who are in charge of improving learning performance or productivity.

Key Words : Self-leadership, Behavior-Focused Strategy, Constructive Thought Strategy, Leadership, Natural-Reward Strategy

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요 약

최근 셀프리더십과 관련된 연구들은 주로 경영학, 심리학, 상담학 등의 다양한 분야에서 많은 관심을 보이는 연구 분야다. 오랜 기간 동안 리더십은 조직 내 경영진이나 팀리더 등의 조직책임자들에게 강조되는 개념이었다. 그러나 최근에는 개인의 자유의지를 스스로 통제 혹은 관리하여 자신의 행동을 바람직한 방향으로 이끌고자 하는 셀프리더십(self- leadership)관련 연구에 학계, 산업계의 관심이 모아지고 있다.

본 연구는 정보기술(information technology) 및 엔지니어링 과목을 수강한 학부재학생들의 셀프리더십 전략(독립변수)이 수강태도에 영향을 미치는지, 수강태도가 매개변인의 역할을 하여 학업성과(종속변수)에 어떤 영향을 미치는 지를 연구하였다. 한국(116명)과 인도학생(36명)을 대상으로 국가 간 차이를 비교 연구하였다. 분석결과 한국학생들의 경우 건설적사고유형의 학생일수록 자기노력을 많이 하며, 결과적으로 학업성과에 긍정적 영향을 미쳤다. 인도학생들의 경우는 행위중심유형의 학생일수록 학업성과가 높은 것으로 나타났다.

연구 결과는 조직 구성원 혹은 학생들의 셀프리더십을 고양함으로써 과업에 임하는 태도나 수업에 임하는 바람직한 태도를 제시하여 학업성과를 촉진할 수 있는 방안수립에 시사점을 줄 수 있을 것이다. 나아가 글로벌 환경의 기업 생산성 제고를 위한 셀프리더십 프로그램 마련에 도움을 줄 것이다.

주제어 : 리더십, 셀프리더십, 자연보상전략, 행위중심전략, 건설적 사고전략

1. Introduction

Many organizations have required leadership being defined as the leading power of top managers, executive officers, or team leaders. Recently, self-leadership as individual leadership influencing personal outcomes is focused on in academia and industrial fields actively [15][17]. Until now, in not only industries but also in academia, lots of research has been conducted concerning leadership in organizations. According to styles of leaderships, organizational cultures and nature, this may be different and productivity is also depended on these [12]. Thus, research about leadership and self-leadership are being performed in managerial area as well as industrial psychology, etc.

Researchers assumed that self-leadership strategies might influence the academic performance of learners who are in social sciences. Generally, they feel difficulty to take part in classes of engineering-based courses. This research was based on the previous studies that, in accordance with self-leadership strategies, a person makes a different action for accomplishment of difficult tasks with appropriate self-control and self-management [4][13][17].

In this research, the subjects were students who have participated in engineering-based courses (database, e-business system development, computer security and management statistics.

This research progressed over two semesters (two phases). In the first phase, academic performance (100-score) as dependent variables and self-leadership strategies as predictors were the factors of the regression model. In the second phase, the research model was changed into that class attitudes as mediated variables were added between self-leadership and performance. And respondents were added also.

This research was to investigate the causal relationship between self-leadership strategies and learning attitudes, learning attitudes and learning performance. The major goal of research is to find out which self-leadership strategies and attitudes affect high performance in information technologies and statistics of management. Results of the research can be help to establish self-leadership strategies for which learning attitudes may be proper to improve academic achievement. Moreover, these can give us support for developing good methodologies toward academic performance.

Moreover, the ultimate purpose of research is to escalate into organizational area. Recently, lots of firms pursuing global business commonly have much interest in improving productivity of employees from abroad. Therefore, we firstly chose Indian case to compare with Korean students to investigate differences between the two.

2. Theoretical Background

2.1 Self-leadership strategies

Self-leadership can be defined as self-management competence driving thought and activities in the right direction. Self-leadership strategies are usually grouped into three categories of behavior-focused strategies, natural reward strategies, constructive thought strategies [10][13][17].

Self-leadership influences self-dependence, self-pride, self-satisfaction for the given tasks or performing those, self-efficacy, creative and innovative thinking, etc [13][17]. Especially, self-efficacy is defined as expectation and belief that individuals are able to make an action properly in specific context. Therefore, researchers assumed that class participation attitudes as presentation of self-efficacy will be influenced by self-leadership strategies.

Hypothesis 1(H1): Self-leadership strategies influence establishing future vision positively.

Hypothesis 2(H2): Self-leadership strategies influence self-efforts positively.

Hypothesis 3(H3): Self-leadership strategies influence preparation of class positively.

2.1.1 Natural Reward Strategy

Natural reward strategies are intended to make situations that a person is rewarded and motivated by an enjoyable aspect of specific task or behavior [10, 13]. In other words, natural reward strategies include two primary strategies. First, throughout the performing of tasks, the task itself will be the natural reward by the additional of pleasant and enjoyable moments. Second, a person has no interest in unpleasant tasks and expects inherent reward for the tasks. This is a mechanism for motivating a person inherently with linking self-determination and competence [3]. So, natural reward strategies can give an influence in establishing individual attitudes for class.

Hypothesis 1-1(H1-1): Natural reward strategies influence establishing future vision positively.

Hypothesis 2-1(H2-1): Natural reward strategies influence self-efforts positively.

Hypothesis 3-1(H3-1): Natural reward strategies influence preparation of class positively.

2.1.2 Behavior Focused Strategy

One of the self-management strategies, one who focuses on the behavior-oriented strategy willingly carries out their duties, even if it is not a pleasant task. Namely, it is a strategy that promotes a level of self-awareness to manage own behaviors right way [10]. In behavior focused strategy, the elements such as self-observation, self-goal setting, self-reward, self-punishment and self-cueing.

Self-observation is a behavior that increases self-awareness level concerning time and reason absorbing specific activities [7][8][10][11]. Self-reward means that one can do their best for self-goal settings and goal accomplishment. Self-punishment and self-feedback are an effort to rearrange unwanted activities or failure to right direction and try to introspect [7][8][10][11]. So, behavior-oriented strategies can positively give an influence in establishing individual attitudes for class.

Hypothesis 1-2(H1-2): Behavior-oriented strategies influence establishing future vision positively.

Hypothesis 2-2(H2-2): Behavior-oriented strategies influence self-efforts positively.

Hypothesis 3-2(H3-2): Behavior-oriented strategies influence preparation of class positively.

2.1.3 Constructive Thought Strategy

Constructive thought is a strategy driving habit of positive and right thought that affects outcomes positively [10][14][16]. Constructive thought translates an irrational way or negative assumption of belief into self-talk or spiritual mind-set [1][5][10][16]. Also, it translates destructive and non-positive self-talk into more positive internal conversation [18]. Consequently, this means that the personal who thinks about specific tasks positively and constructively can get higher outcomes.

Hypothesis 1-3(H1-3): Constructive thinking strategies influence establishing future vision positively.

Hypothesis 2-3(H2-3): Constructive thinking strategies influence self-efforts positively.

Hypothesis 3-3(H3-3): Constructive thinking strategies influence preparation of class positively.

3. Self-leadership and Performance

Many previous researches suggested that self-leadership of members can influence performances of organization [15][17]. In general, to

Members in a group have to set their goals for accomplishing organizational goals. And they should do their best to manage themselves to achieve personal goals. Thus, recently, lots of studies concerning the self-leadership, the free will that motivate and control of themselves to attain goals
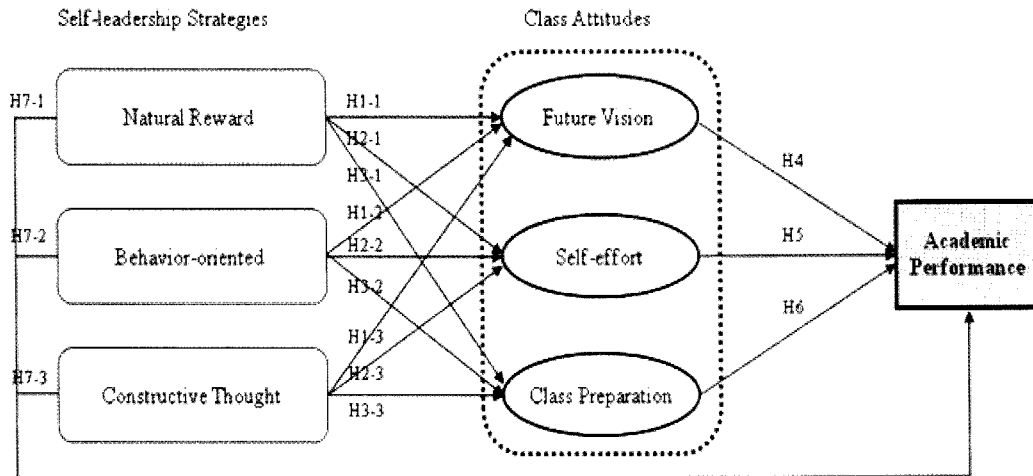
[Figure 1] Research Model

maximize productivity and task outcome is critical interest of the majority of organizations, especially firms. Commonly, firms have a few issues such as decline of productivity, dissatisfaction of tasks, and high turnover rate, etc. Firms make an effort to solve these issues [2]. For these problems, Hackman (1986) had suggested that the self-managed work group is important concept [6]. Therefore, researchers try to investigate whether self-leadership strategies and participation attitudes for class can be variables affecting academic performance positively or not.

Hypothesis 4(H4): Definitive future vision influences academic performance positively.

Hypothesis 5(H5): Self-effort influences academic performance positively.

Hypothesis 6(H6): Preparation of class influences academic performance positively.

affects the performance, have been progressed actively. Therefore, self-leadership means self-management capabilities that control thought and activities by himself to right direction [9].

Hypothesis 7(H7): Self-leadership strategies influence academic performance positively.

Hypothesis 7-1(H7-1): Natural reward strategies influence academic performance positively.

Hypothesis 7-2(H7-2): Behavior-oriented strategies influence academic performance positively.

Hypothesis 7-3(H7-3): Constructive thinking strategies influence academic performance positively.

Our processes for evaluating the convergence level of digital media are as followings.[Figure 1] depicts the procedure.

4. Research Methods

4.1 Research Model

The research model on the basis of hypotheses was suggested in Figure 1. Predictors were three self-leadership strategies (natural reward, behavior-focused and constructive thought strategy). Class participation attitudes were future vision, self-effort, and class preparation as mediation variables. Academic performance that averaged score of four lectures related to information technology (database, computer security, e-Business system development and management statistics). In India, respondents were 36 students of a class in university.

4.2 Research Methodology

To test these hypotheses, research was conducted through the questionnaire survey and selected with respondents who take IT system development, database, computer security and statistics for management courses in Korea. In India, 36 students from three classes had been chosen as respondents.

4.3 Measures

To identify self-leadership strategies, questionnaires consist of 30 items by referring to previous literatures. Almost all of the items were based on Manz (1985)'s research suggestion and modified for improving understandability of respondents [9]. The response of each questionnaire as checked on the Likert five-point scale from strongly disagree (=1) to strongly agree (=5). Also, for measuring class attitudes, modified three items of indicators of lecture evaluation were used.

<Table 1> Rotated Component Matrix

Country	Item	Factor			Cronbach Alpha	Eigen Value
		NR*	CT*	BF*		
Korean Students	26. I can speak about my favorite topic in study confidently.	.755			.6552	5.279
	21. I know my favorite topics in my study.	.727				
	28. I try to find the method how to work with pleasure.	.632				
	29. I focus more on good things of studying than bad things.		.762		.7840	2.648
	20. I think the pleasure derived in the process of studying is more important than the result.		.742			
	30. I consider the pleasure of working more than the compensation it would give.		.737			
	19. I think advantages of my task more than disadvantages to these.		.607			
	25. I focus more on the process of study rather than the result.		.606			
	15. Before taking up my subject, I always practice in advance.			.776	.6807	2.074
	6. In the process of working, I keep a check of my capability.			.698		
	10. Before starting an important task, I practice it in my mind.			.693		
Indian Students	3. I set goals and work eagerly to accomplish it.	.835			.6682	2.939
	26. I can speak about my favorite topic in study confidently.	.615				
	27. If possible, I would like to study at a time when I feel comfortable.		.653		.8505	3.538
	29. I focus more on good things of studying than bad things.		.658			
	30. I consider the pleasure of working more than the compensation it would give.		.893			
	10. Before starting an important task, I practice it in my mind.			.819	.7106	4.945

| | 11. While studying, I check the schedule of task several times. | | | .828 | | |
| | 13. I like making plan for studying and follow accordingly. | | | .789 | | |

*CT-Constructive Thought, BF-Behavior Focused, NR-Natural Reward

4.4 Feasibility and Reliability

In order to verify reliability and feasibility of measures, factor analysis was conducted by using full data. For extracting factors, the principal component analysis was performed. Varimax methodology was used for rotating factors. <Table 1> shows that 30 items were regrouped into three factors. The first factor group consists of items 26, 21, 28 related to natural reward (NR). The second factor group items (29, 20, 30, 19, 25) measured constructive thought (CT). The third factor group (15, 6, 10) regards behavior focused (BF). However, in case of Indian students, the first factor group included two items (3, 26) related to natural reward (NR). The second factor group items (27, 29, 30) measured constructive thought (CT). The third factor group (10, 11, 13) regards behavior focused (BF). The regrouping results showed difference between two countries. From this results, researcher used 11 and 8 items for statistical analysis for each.

5. Research Results

5.1 Self-leadership and Attitudes for Class

In order to verify these hypotheses to investigate relationship between self-leadership strategies and class attitudes, multiple regression analysis was conducted.

5.1.1 Self-leadership vs Future Vision

For verifying the causal relationship between self-leadership and future vision, researcher set a null hypothesis (H_0: β=0, H_a: all of βs are not zeros.). The explanatory power of this model was 20.6% (R^2=.206). Also, F-statistics, which verify the statistical significance, showed at 9.765 and significant at p=.000. The TOL (tolerance) coefficients ranged from .897 to .912 (above 0.10). The VIF (variance inflation factor) coefficients ranged from 1.085 to 1.115 (under 10.0). Thus, the regression equation, Performance= .313*NR + .064*BF + .227CT, did not show multiple co-linearity. Under the significant level of α=0.001 and α=0.05 respectively, both natural reward (NR) and constructive thought (CT) were positive and significant at p= .001 and p= .011 in clear future vision, respectively. This reveals that two influential variables, NR and CT, positively affect clear future vision, providing support for both hypothesis 1-1 and 1-3. Behavior-focused (BF), however, did not support hypothesis 1-2.

In Indian case, factors such as behavior-focused and natural reward affected that respondents establish their future vision. On the other hand, self-leadership strategies did not give influence to self-effort and class preparation. Therefore, hypothesis 1-1 and 1-2 only were supported.

<Table 2> ANOVA(Self-leadership and Attitudes)

Country	Relationship	Model	SS	d.f.	MS	F
Korean Students	SLP and future vision	regression	27.998	3	9.333	9.765**
		residual	108.002	113	.956	
		sum	136.000	116		
	SLP and self-effort	regression	14.410	3	4.803	5.318**
		residual	102.069	113	.903	
		sum	116.479	116		
	SLP and class preparation	regression	9.714	3	3.238	3.159*
		residual	115.842	113	1.025	
		sum	125.556	116		
India Students	SLP and future vision	regression	10.090	3	3.363	10.317***
		residual	9.128	28	.326	
		sum	19.219	31		
	SLP and self-effort	regression	.856	3	.285	.377
		residual	23.430	31	.756	
		sum	24.286	34		
	SLP and class preparation	regression	1.651	3	.550	1.479
		residual	11.905	32	.372	
		sum	13.556	35		

***p< 0.001,, **p< 0.01, *p< 0.05

5.1.2 Self-leadership vs Self-effort

For the self-effort, multiple regression analysis, showed the explanatory power of regression model as 12.4% (R2=.124). Also, F-statistics showed at 5.318 and significant at p=.002 under significant level 1%.

Under the significant level of α=0.01, the CT was positive and significant at p= .003 in self-effort. The NR and BF, however, were not significant. The TOL (tolerance) coefficients were above 0.10 and the VIF (variance inflation factor) coefficients under 10.0. Thus, the regression model did not show multiple co-linearity, and hypothesis H2-3 was supported. But in sample of Indian respondents, there was no evidence that self-leadership strategies affect self-effort.

5.1.3 Self-leadership and Class Preparation

In order to investigate the relationship between self-leadership and class preparation, researcher performed multiple regression analysis. The

explanatory power of regression model was 7.7% (R^2=.077). And F-statistics showed at 3.159 under significant level 5% at p=.027.

Under the significant level of α=0.05, the CT was positive and significant at p= .019 in class preparation. The NR and BF, however, were not significant. The TOL (tolerance) coefficients were above 0.10 and the VIF (variance inflation factor) coefficients under 10.0. Thus, the regression model did not show multiple co-linearity, and hypothesis H3-2 was supported. But in sample of Indian respondents, there was no evidence that self-leadership strategies affect class preparation.

<Table 3> Significance of Predictors

Country	Relationship	Model	Unstd. Coeff.		Std. Coeff.	t-value
			B	S	Beta	
Korean Students	self-leadership -> future vision (VSN)	(Const.)	-7.098E-02	.644		-.110
		NR	.446	.126	.313	3.538***
		BF	.109	.150	.064	.732
		CT	.351	.136	.227	2.585*
	self-leadership -> self-effort (ED)	(Const.)	1.143	.626		1.825
		NR	-4.758E-02	.122	-.036	-.389
		BF	.274	.145	.173	1.883
		CT	.407	.132	.284	3.083**
	self-leadership -> class preparation (PP)	(Const.)	1.178	.667		1.766
		NR	5.439E-02	.130	.040	.417
		BF	.368	.155	.223	2.372*
		CT	.151	.141	.102	1.074
India Students	self-leadership -> future vision (VSN)	(Const.)	-.701	.917		-.765
		NR	.737	.170	.570	4.344***
		BF	.355	.176	.297	2.012*
		CT	.145	.142	.151	1.021
	self-leadership -> self-effort (ED)	(Const.)	3.132	1.298		2.414
		NR	.118	.238	.089	.495
		BF	.238	.260	.181	.916
		CT	-.101	.207	-.098	-.491
	self-leadership -> class preparation (PP)	(Const.)	2.931	.893		3.283
		NR	-9.108E-03	.167	-.009	-.055
		BF	.337	.175	.360	1.933
		CT	-1.824E-02	.145	-.024	-.126

***p< 0.001, **p< 0.01, *p< 0.05

5.2 Class Attitude and Learning Performance

For the class attitude, multiple regression analysis, showed the explanatory power of regression model as 15.7% (R^2=.157). Also, F-statistics showed at 7.037 and significant at p=.000 under significant level 0.1%.

Thus, the regression equation, Performance = -2.58*VSN + .358*ED - .029*PP, did not have multiple co-linearity. Under the significant level of α=.01, both future vision and self-effort were significant at p=.004 and .002 respectively. Self-effort influenced performance positively, future vision, however, did negatively. From this result, we can guess that the first, respondents answered that they had the definitive future vision, but learning performance was not good. And second, even though future vision was not clear, learning performance was excellent.

<Table 4> ANOVA
(Self-leadership, Attitude, and Performance)

Country	Relationship	Model	SS	d.f.	MS	F
Korean Students	Class Attitude and Learning Performance	regression	1458.399	3	486.133	7.037***
		residual	7806.524	113	69.084	
		sum	9264.923	116		
	Self-leadership and Learning Performance	regression	183.465	3	61.155	.770
		residual	9289.891	117	79.401	
		sum	9473.355	120		
Indian Students	Class Attitude and Learning Performance	regression	398.518	3	132.839	.719
		residual	5171.391	28	184.693	
		sum	5569.909	31		
	Self-leadership and Learning Performance	regression	1009.373	3	336.458	1.879
		residual	5729.837	32	179.057	
		sum	6739.210	35		

***p<0.001

The TOL (tolerance) coefficients ranged from .589 to .940 (above .10). Moreover, the VIF (variance inflation factor) coefficients ranged from 1.064 to 1.698(under 10.0). Thus, H5 was supported, H4 and H6, however, were not supported. In case of Indian students, there was no relationship between class attitudes and learning performance.

<Table 5> Significance of Predictors

Country	Relationship	Model	Unstd. Coeff.		Std. Coeff.	t-value
			B	S	Beta	
Korean Students	Class Attitude -> Learning Performance	(Const.)	80.639	3.198		25.218
		VSN	-2.133	.735	-.258	-2.901**
		ED	3.196	.985	.358	3.243**
		PP	-.246	.967	-.029	-.255
	Self-leadership -> Learning Performance	(Const.)	88.388	5.784		15.281
		NR	-.879	1.083	-.078	-.812
		BF	.809	1.358	.057	.596
		CT	-1.340	1.228	-.104	-1.091
Indian Students	Class Attitude -> Learning Performance	(Const.)	49.372	19.470		2.536
		VSN	-3.724	3.251	-.219	-1.146
		ED	2.736	3.064	.175	.893
		PP	1.913	4.341	.088	.441
	Self-leadership -> Learning Performance	(Const.)	84.703	19.585		4.325
		NR	-4.233	3.662	-.191	-1.156
		BF	-7.601	3.829	-.364	-1.985*
		CT	3.997	3.174	.232	1.260

**p<0.01, *p<0.05

5.3 Self-leadership and Learning Performance

To investigate the relationship between self-leadership strategies and performance, variables were assigned self-leadership strategies to predictors and personal performance to dependent variable. Results by multiple regression analysis showed that multiple regression model was not significant statistically. Thus, self-leadership did not influence academic performance at a significant level(α=1, 5%). Therefore, self-leadership did not support the hypothesis 7-1, 7-2, and 7-2. But in case of India, BF showed negative relationship with learning performance.

5.4 Hypotheses Testing and Discussion

Through this research, in case of Korean students, first, it was found that self-leadership strategies affecting clear future vision were natural reward and constructive thought. Namely, learners felt pleasure from study and motivated respondents

were apt to make their future vision clear. Also, respondents who had positive and constructive thought set their own future vision clearly.

Second, students with constructive thought usually make an effort to improve their performance. This shows that respondents with positive thinking did consistent self-efforts for high performance.

Third, results show that behavior-focused strategy influences preparation for class. Although work is hard or unpleasant, the man who focuses on the behavior-focused strategy willingly enjoys his work if necessary. Therefore he prepares for class well. In the relationship between performance and class attitudes, self-effort influences academic performance positively. On the other hand, clarity of future vision influences performance negatively. In this result, lots of reasons can be guessed. First, although respondents answered that they set future vision clearly, their level of performance was not good. Second, their academic performance was excellent; however, their future vision was not clear.
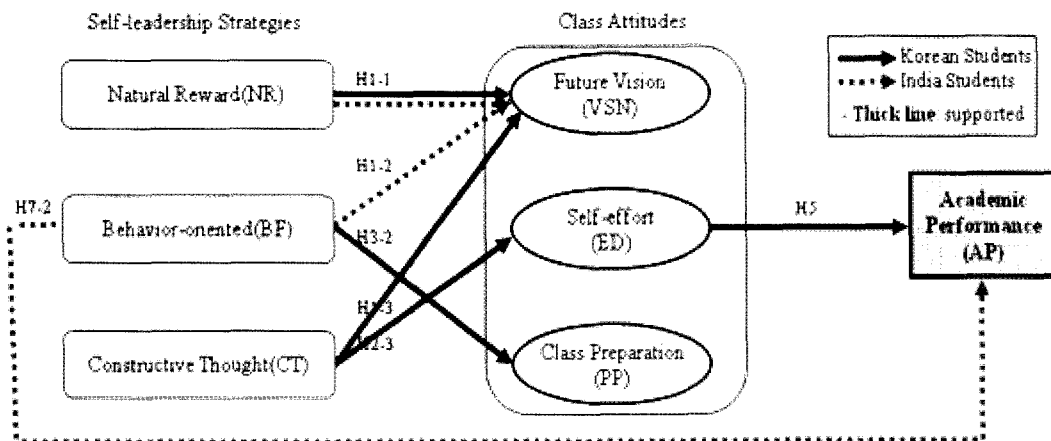
In case of Indian students, natural reward and behavior-focused strategies have causal relationship with future vision. But class attitudes did not affect learning performance. Differently with Korean samples, behavior-focused strategy of self-leadership only directly gave influence to learning performance. The negative influence, however, might be understood that students who marked highly in behavior-focused items received low scores.

Consequently, to maximize the academic performance, it is necessary for organizations to help learners develop proper self-leadership and emphasize good attitudes for class participation. <Table 6> shows results of hypotheses testing. As the respondents orienting constructive thought strategy did self-effort honestly, they could get high level of performance. However, there was no direct influence between self-leadership strategies and performance. Accordingly, it is necessary to find out mediation variables between these two variables and should emphasize to learners the importance of these variables for getting desirable performance.

<Table 6> Results of Hypotheses Testing

Country	Hypothesis	Relationship	Result
Korean Students	H1-1	NR -> VSN	Supported
	H1-2	BF -> VSN	Not supported
	H1-3	CT -> VSN	Supported
	H2-1	NR -> ED	Not supported
	H2-2	BF -> ED	Not supported
	H2-3	CT -> ED	Supported
	H3-1	NR -> PP	Not supported
	H3-2	BF -> PP	Supported
	H3-3	CT -> PP	Not supported
	H4	VSN -> AP	Not supported
	H5	ED -> AP	Supported
	H6	PP -> AP	Not supported
	H7(H7-1,2,3)	SLP -> AP	Not supported
India Students	H1-1	NR -> VSN	Supported
	H1-2	BF -> VSN	Supported
	H1-3	CT -> VSN	Not supported
	H2-1	NR -> ED	Not supported
	H2-2	BF -> ED	Not supported
	H2-3	CT -> ED	Not supported
	H3-1	NR -> PP	Not supported
	H3-2	BF -> PP	Not supported
	H3-3	CT -> PP	Not supported
	H4	VSN -> AP	Not supported
	H5	ED -> AP	Not supported
	H6	PP -> AP	Not supported
	H7(H7-1,3)	SLP(NR,CT)->AP	Not supported
	H7-2	BF -> AP	Supported

[Figure 2] Research Results

6. Conclusion and Limitation

This research was to investigate the causal relationship between self-leadership strategies and learning attitudes, learning attitudes and learning performance. The purpose of research is to find out which self-leadership strategies and attitudes affect high performance in information technology and statistics of management. Results of the research can help to establish self-leadership strategies for which learning attitudes may improve academic achievement. Moreover, these can give us implications for trying to develop better methodologies for academic performance. Almost all of the subjects were university students in social sciences taking courses such as system design and development, database implementation, or management statistics in the digital business department. In general, they feel difficulty during a semester in these courses.

As a result of empirical analysis, first, the respondents who are in natural reward or constructive thought strategy influenced definitive future vision of class attitudes. Second, learners making an effort by themselves show a tendency to think constructively. Namely, even though the level of difficulty may be high, by positive self-talk, respondents usually make an effort to get high academic performance. Third, the behavior-oriented students are apt to prepare their class sincerely.

Concerning the causal relationships between class attitudes and academic performance, first, the future vision influences academic performance negatively. This result shows the contrary that the definitive future vision influences performance positively. More detailed tools to evaluate the future vision such as profession or ultimate goal of life should be developed and studied at the next phase. Second, during a semester, thorough self-effort affects the academic performance. Therefore the importance of self-effort should be emphasized to learners. On the basis of the research result, we can get crucial clues to develop self-leadership enhancement program for early or middle 20's with low self-efficacy

This research has the following limitations. First, respondents were sampled from a department in a university in Korea and India each. Therefore, the research used limited and narrow samples for empirical study that are in social science areas only. Second, future vision, class preparation, and self-effort as measures to evaluate class attitude were suggested with only one item in a

questionnaire. It is necessary that more detailed question items be developed for the next research phase. Third, for comparative research, this study had chosen Indian students as respondents. But volume of samples was not enough (36 samples) and almost of all respondents marked high score (4 or 5-point). Therefore, there was no statistical significance. For reasonable research results for Indian students, more samples will be needed for next research step.

Further research to overcome research limitations and improve reliability and generality of results has to expand sample scope to not only social science but also engineering, art and natural science area, etc. Also, there may be meaningful research results if the next research investigates difference among local universities. Additionally, research will be preceded to investigate learners in universities as well as employees in firms to find out causal relationships between working attitudes and personal performance.

References

[1] Burns, D.D. (1980), Feeling Good: The New Mood Therapy, William Morrow, New York, NY.

[2] Cummings, T., and Malloy, E. S., (1977), Improving Productivity and the Quality of Work Life. New York

[3] Deci, E. and Ryan, R. (1985), "The support of autonomy and control of behavior", Journal of Personality and Social Psychology, Vol. 53, pp. 1024-37.

[4] Dolbier, C. L., Soderstrom, M., and Steinhardt, M. A. (2001), "The Relationships between Self-leadership and Enhanced Psychological Health and Work Outcomes", Journal of Psychology, 135(5), 469-475.

[5] Ellis, A. (1977), The Basic Clinical Theory of Rational-Emotive Therapy,
Springer-Verlag, New York, NY.

[6] Hackman, J. R. (1986), "The psychology of self-management in organizations." In M. S. Pollack and R. O. Perloff (Eds.). Psychology and Work: Productivity Change and Employment, 85-136. Washington, DC: American Psychological Association.

[7] Mahoney, M.J. and Arnkoff, D.B. (1978), "Cognitive and self-control therapies", in Garfield, S.L. and Borgin, A.E. (Eds), Handbook of Psychotherapy and Therapy Change, Wiley, New York, NY, pp. 689-722.

[8] Mahoney, M.J. and Arnkoff, D.B. (1979), "Self-management: theory, research, and application", in Brady, J.P. and Pomerleau, D. (Eds), Behavioral Medicine: Theory and Practice, Williams and Williams, Baltimore, MD, pp. 75-96.

[9] Manz, C. C. (1985), "Self-Leadership: Toward an expanded theory of self-influence process in organizations, Academy of Management Review, 11, 585-600.

[10] Manz, C.C. and Neck, C.P. (2004), Mastering Self-Leadership: Empowering Yourself for Personal Excellence, 3rd ed., Pearson Prentice-Hall, Upper Saddle River, NJ.

[11] Manz, C.C. and Sims, H.P. Jr (1980), "Self-management as a substitute for leadership: a social learning perspective", Academy of Management Review, Vol. 5, pp. 361-7.

[12] Manz, C. C. and Sims Jr., H. P. (1987), Leading Workers to Lead Themselves: The External Leadership of Self-Managing Work Teams, Administrative Science Quarterly, 32, 106-128.

[13] Manz, C.C. and Sims, H.P. Jr (2001), New Superleadership: Leading Others to Lead

Themselves, Berrett-Koehler, San Francisco, CA.

[14] Neck, C. P. and Houghton, J. D. (2006), "Two decades o self-leadership theory and research", Journal of Managerial Psychology, Vol.21, No.4, 270-295.

[15] Neck, C. P., Stewart, G. L., and Manz, C. C.(1995), "Thought Self-leadership as Framework for Enhancing the Performance of Performance Appraisers, Journal of Applied Behavioral Science, Vol. 13, No. 3, 278-302.

[16] Neck, C.P. and Manz, C.C. (1992), "Thought self-leadership: the impact of self-talk and mental imagery on performance", Journal of Organizational Behavior, Vol. 12, pp. 681-99.

[17] Prussia, G. E., Anderson, J. S. and Manz, C. C. (1998), "Self-leadership and performance outcomes; the moderating influence of self-efficacy", Journal of Organizational Behavior, Vol. 19, No. 5, 523-538.

[18] Seligman, M.E.P. (1991), Learned Optimism, Alfred Knopf, New York, NY.

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