The Relationship Between Achievement Goal Orientation and Academic Burnout for University Students: The Mediating Effect of the Learning Flow

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Abstract: The purpose of this study is to find the relation between achievement goal orientation, academic burnout and learning flow and look into a method of alleviating university student's academic burnout. To achieve that this study divided the conceptual structure of achievement goal orientation into approach and avoidance types in terms orientation attitude and analyzed the mediating effect of learning flow on the relation between achievement goal orientation and academic burnout. The study subjects were male and female students in four universities including G university located in Gyeongsangbuk-do. Their data were analyzed. The main result is summarized as follows: academic burnout was alleviated by the mediating effect of learning flow. Given the result, if it is possible to change university student's achievement goal orientation to approach based one at counseling field, it is considered that students are able to experience learning flow and alleviate academic burnout. In the future, it will be necessary to investigate various factors influencing achievement goal orientation and academic burnout and study mediating variables systematically.

Key words: University students, achievement goal orientation, academic burnout, learning flow, remote mastery close mastery, approach

INTRODUCTION

The purpose of this study is to find the relation between achievement goal orientation, academic burnout and learning flow of university students and investigate the mediating effect of learning flow on the relation between their achievement goal orientation and academic burnout. Therefore, it is expected to help out the in depth underst anding of the relation between their achievement goal orientation and academic burnout and to provide a fundamental material useful for developing a program for counseling intervention to alleviate their academic burnout.

MATERIALS AND METHODS

Study subjects and data collection: The study subjects were male and female students in four universities including G university located in Gyeongsangbuk-do. A questionnaire survey had been conducted from March 1 to April 1, 2016. The questionnaire participants were heard of this study purpose and attention matters. A total of 500 copies of questionnaire were distributed. Of them, 400 copies were collected. Of the collected copies, 27 copies with insincere answers and no answers were excluded. Finally, 333 copies were used for analysis.

Measurement tools

Achievement goal orientation scale: For measurement, this study used the modified [2×2×2] achievement goal orientation by Lee (2009) which was developed in the way of changing and improving orientation distance-orientation content-orientation attitude for achievement goal orientation of [2×2×2] 8 factors structure by Jong-Ug and Byeong-Gi (2007), this study focused on performance goal orientation.

It is a 6-point Likert scale in which 1 point mean's definitely no' and 6 points 'definitely yes'. Six questions were assigned to each one of eight goal orientation factors. This study categorized achievement goal orientation attitude into approach and avoidance. In this case, the reliability coefficient (Cronbach's α) of approach was 0.893 and that of avoidance was 0.887. More specifically, remote performance approach (active social success) had 0.804, remote performance avoidance (passive social success) 0.652, remote skillfulness approach (active human growth) 0.803, remote skillfulness avoidance (passive human growth) 0.798, proximity performance approach (active better achievement than others) 0.654, proximity performance avoidance (passive better achievement than others) 0.684, proximity

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skillfulness approach (active task underst anding) 0.840 and proximity skillfulness avoidance (passive task underst anding) 0.757.

Academic burnout scale: Lee *et al.* (2009) developed the scale for Korean adolescents in the way of translating and changing Maslach Burnout Inventory-Students Survey (MBI-SS) developed by Schaufeli *et al.* (2002) on the basis of MBI-GS of Maslach and Jackson (1986). This study modified and applied the scale by Jo and Lee (2010) in consideration of learning environments of university. The sub factors of the scale have five questions of emotional exhaustion (e.g., I emotionally feel exhausted because of study), four questions of cynicism (e.g., I have felt less interested in study since the entrance into school) and six questions of efficacy (e.g., I am able to solve a problem arising in study effectively). Each question is based on the 7-point Likert scale in which 1 point means 'very unlikely' and 7 points mean 'very likely'. The higher the points, the more academic burnout. In this case, in terms of reliability coefficient (Cronbach's α), emotional exhaustion has 0.867, cynicism 0.868 and incompetence 0.794.

Learning flow scale: In this study, the operational definition of learning flow is 'a very pleasant condition where 'a learner's attention goes towards only goal and is freely used in learning circumstance and thereby a learner is able to solve a task in the perfect consistency of behavior and consciousne's (Hee-Jeong, 2015). Therefore, the most representative 'cognitive flow' and 'affective flow' were set as observed variables (Hye-Jin, 2012).

Lee (2009) modified and improved the learning flow scale for 6th grade elementary students in learning circumstance developed by Im-Bok (2007) in order to apply it to high school students. With the hlep of experts, this study modified the learning flow scale by Lee (2009) to apply it to university students. It is a 5-point Likert scale with 35 questions. The higher points, the more learning flow.

Procedure: SPSS 19.0 was used for data analysis. To find the mediating effect of learning flow on the relation between academic burnout, approach based achievement goal orientation and avoidance based achievement goal orientation, this study conducted hierarchical regression analysis.

RESULTS

The mediating effect of learning flow between academic burnout and approach based achievement
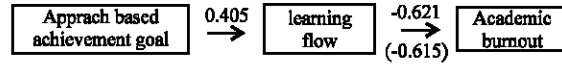

Fig. 1: Complete mediation model of learning flow in the relation between approache based achievement goal orientation and academic burnout

Table 1: The mediating effect of learning flow between academic burnout and approach based achievement goal orientation

Step 1-4	B	SE	β	t-values	R^2
Independence→mediation	0.35400	0.044	0.405	8.048***	0.164
Independence→dependence	-0.2670	0.053	-0.265	-4.994***	0.070
Mediation→dependence	-0.7170	0.050	-0.621	-14.421***	0.386
Independence,	-0.0160	0.048	-0.016	-0.340000	0.386
mediation→dependence	-0.7090	0.054	-0.615	-13.033***	

between university student's academic burnout and their approach based achievement goal orientation was investigated. The result is prese nted in Table 1.

First, approach based achievement goal orientation significantly and negatively influenced learning flow and thus met the condition of the Step 1 in the three-step analysis on the mediating effect (β = 0.405, p<0.001). Secondly, in the Step 2, approach based achievement goal orientation significantly and negatively influenced academic burnout (β = -0.265, p<0.001). Thirdly, in the Step 3, learning flow significantly and negatively influenced academic burnout (β = -0.621, p<0.001). Lastly in the Step 4, approach based achievement goal orientation didn't significantly influence academic burnout, but learning flow significantly and negatively influenced it (β = -0.615, p<0.001). In 4 Steps, approach based achievement goal orientation didn't significantly influence academic learning and therefore learning flow had complete mediation.

For the statistical analysis on the mediating effect, Sobel test was conducted. As a result, the mediating effect of learning flow was statistically significant (Z = -7.016, p<0.001). The complete mediation model is presented in Fig. 1.

The mediating effect of learning flow between academic burnout and avoidance based achievement goal orientation: As described earlier, the mediating effect analysis revealed that learning flpow had complete mediation in the relation between approach based achievement goal orientation and academic burnout. The mediating effect of learning flow on the relation between avoidance based achievement goal orientation and academic burnout was analyzed. The result is presented in Table 2.

In the Step 1 of the 3 Step analysis on the mediating effect, avoidance based achievement goal orientation significantly and negatively influenced learning flow (β = -0.377, p<0.001). In the Step 2,

Table 2: The mediating effect of learning flow between academic burnout and avoidance based achievement goal orientation

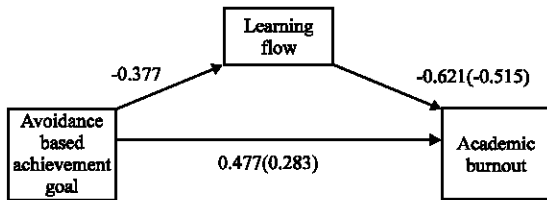| Step 1-4	B	SE	β	t-values	R^2
Independence¬mediation	-0.324	0.044	-0.377	-7.408[***]	0.142
Independence¬dependence	0.472	0.048	0.477	9.865[***]	0.227
Mediation¬dependence	-0.717	0.050	-0.621	-14.421[***]	0.386
Independence,	0.280	0.043	0.283	6.437[***]	0.454
mediation¬dependence	-0.594	0.051	-515	-11.721[***]	

[***]$p<0.001$

Fig. 2: Partial mediation model of learning flow in the relation between avoidance based achievement goal orientation and academic burnout

avoidance based achievement goal orientation significantly and positively influenced academic burnout (β = 0.477, p<0.001). In the Step 3, learning flow significantly and negatively influenced academic burnout (β = -0.621, p<0.001). In the Step 4, avoidance based achievement goal orientation significantly and positively influenced academic burnout (β = 0.283, p<0.001) and learning flow significantly and negatively influenced academic burnout (β = -0.515, p<0.001). In this case, avoidance based achievement goal orientation for academic burnout reduced more in the Step 4 than in the Step 2 (β = 0.477>β = 0.283) and thus, learning flow had partial mediation in the relation between university student's avoidance based achievement goal orientation and academic burnout.

For the statistical analysis on the mediating effect, Sobel test was conducted. As a result, the mediating effect of learning flow was statistically significant (Z = 6.550, p<0.001). The partial mediation model is presented in Fig. 2.

DISCUSSION

First, this study looked into the relation between study subject's general characteristics and the main variables: achievement goal orientation, learning flow and academic burnout. In this sense, it was necessary to analyze the relation between university student's achievement goal orientation, learning flow and academic burnout. According to this research analysis on the relation, the university students who spent a lot of time studying on daily average and the students who had a high academic record on average took the attitude toward

approach based achievement goal orientation and had high learning flow. In addition, the more the study subjects took the attitude toward approach based achievement goal orientation and the more they had learning inflow, the lower they had academic burnout. The study results indicate that as they take the attitude toward approach based achievement goal orientation, they experience enough learning flow and that as they take the attitude toward avoidance based achievement goal orientation, they experience academic burnout.

Moreover, the more the students spend time studying on daily average, the clearer they have a achievement goal. Therefore, they try to prepare for the future with approach based attitude more than avoidance based attitude and have more experience of learning flow. The students who have a high academic record on average take approach based achievement goal orientation and have enough experience of learning flow whereas the students who have a low academic record experience academic burnout and take avoidance based achievement goal orientation. Secondly, according to the analysis on the effect of achievement goal orientation on academic burnout both approach and avoidance based achievement goal orientation statistically and significantly influenced academic burnout. Given the clear suggestion of the causal relation between the two variables, the more students take the attitude toward approach based achievement goal orientation, the lower they have academic burnout. More specifically, the students who pursue active human growth for development on the basis of their competence improvement or try to underst and their task more actively have lower academic burnout.

The mediating effect of learning flow on the relation between achievement goal orientation and academic burnout was analyzed. As a result, the students who took the attitude toward approach based achievement goal orientation had weaker academic burnout in the mediation of learning flow. It indicates that the more the students have approach based achievement goal orientation and experience learning flow, the weaker they have academic burnout and that when the students who take the attitude toward approach based achievement goal orientation experience learning flow, it is necessary to be careful not to cause academic burnout.

In the case where student's avoidance based achievement goal orientation positively influenced academic burnout, the influence got weaker by the partial mediating effect of learning flow. It indicates that when the students who take the attitude toward avoidance based achievement goal orientation receive the help of learning flow, their academic burnout is alleviated. Therefore, if the opportunity of learning flow experience,

counseling intervention and education are applied to the students who take the attitude toward avoidance based achievement goal orientation, their academic burnout can get weak. Previous studies proved the mediating effect of self-determining motivation on the relation between achievement goal orientation and learning flow and the mediating effect of academic self-efficacy and failure tolerance on the relation between high school student's excess learning requirement and academic burnout.

CONCLUSION

However, there is a lack of research on the mediating effect of learning flow on the relation between eight factors of achievement goal orientation and academic burnout which was analyzed in this study. Given that, this study is meaningful in the point that it provides a fundamental material to alleviate academic burnout by supporting learning flow through counseling intervention depending on types of achievement goal orientation.

LIMITATIONS

Nevertheless, this study has a limitation in the point that the research regions failed to be distributed evenly. Therefore, it will be necessary to collect data in various regions and subjects elementary, middle, high and university students. In addition, since this study uses a self-administered questionnaire, it is possible to get the study results contaminated in such a way of answering questions in the socially required direction on purpose or unconsciously. Therefore, it will be necessary to conduct experimental approaches such as observation of study subjects from the viewpoint of third parties or interviews. Besides, this study analyzed only the mediating effect of learning flow on the relation between achievement goal orientation and academic burnout.

RECOMMENDATION

In the future, it will be necessary to investigate various factors influencing achievement goal orientation and academic burnout and study mediating variables systematically.

ACKNOWLEDGEMENT

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