

# **Motivation, The College Environment, Effort, and Student Gains: A Path Model**

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# Student Achievements

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- Student achievements in college are based upon many factors, including intellectual ability, academic preparedness, fit with the environment, engagement, and perceived satisfaction with the college.

# Motivation

- It is well-known that motivation is an important variable in learning and education. (Bandura, Deci & Ryan, Harachiewicz, et al)
- Achievement orientation mediates the relationship between environmental cues and intrinsic motivation.

# Perceptions of the Environment

- Student's perception of fit with the college is critical to student success. (Tinto, Braxton, Hurtado, et al)
- Students' perception of their college environment may affect involvement and persistence by shaping the student's sense of belonging and the quality of effort put forth in collegiate activities.

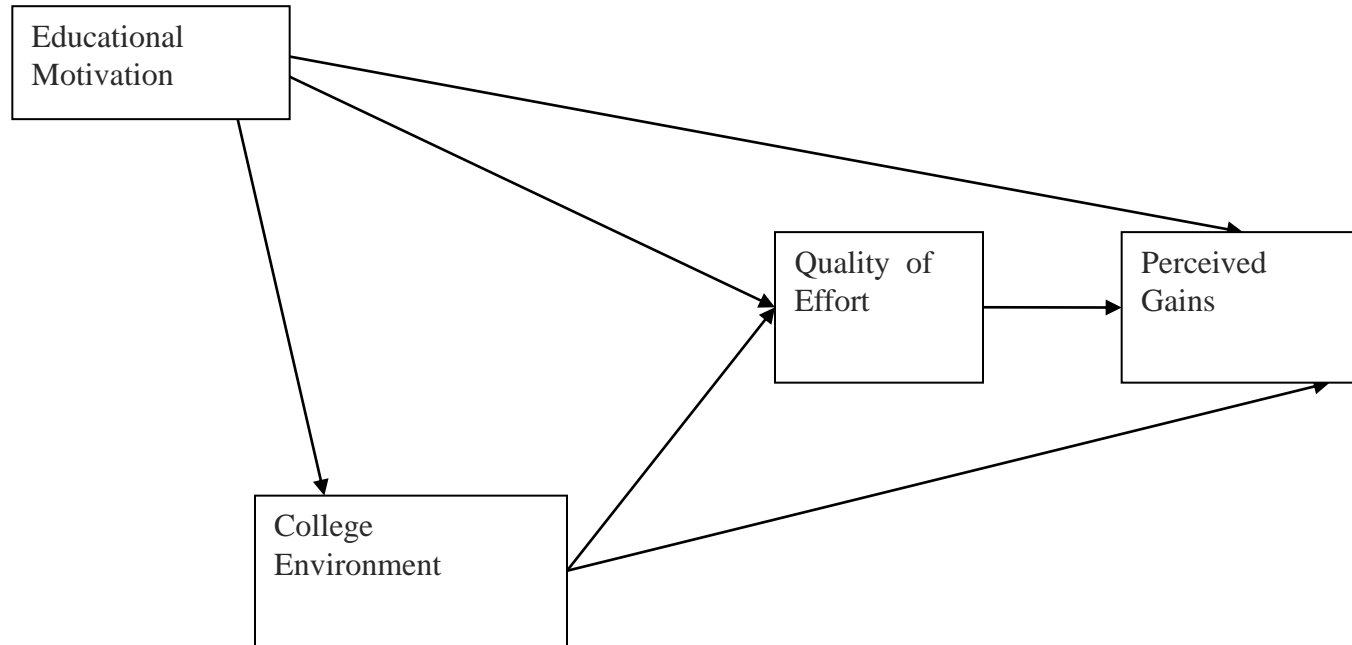
# Involvement, Effort

- Student engagement and quality of effort are generally considered to be good predictors of learning and personal development. (Pace, Astin, et al)
- “Students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development.” (Shulman, 2002)

# Research Questions

- Do educational motivations held at first year matriculation affect academic and psychosocial gains reported during the first year of college?
- Do perceptions of the college environment have an influence on the relationship between motivation and gains? and
- Does the quality of effort put forth by students have an influence on the relationship between motivation and gains?

# Model Specification



# The Data

- CIRP and CSEQ survey responses
- One hundred and seventy-four mutual cases
- The sample reasonably represented the first year population at the university.
- Data examined for normality. No outliers found. Skewness and Kurtosis estimates reasonable.



# Factor Abstraction and Validation

## Motivations-CIRP:

- “Proactive” – Influence Political Structure, Take part in community action, etc;
- “Practical”— Be very well off financially, Raise a family, etc;
- “Artistic”—Create artistic work, Write original works, etc.
- Fairly good internal consistency

# Factor Abstraction and Validation

## Perceived Gains :

- “Skill Foundation”—Broad general education, Thinking analytically, etc;
- “Art & Humanities”—Knowledge about world, Enjoyment of art, music, drama, etc;
- “Communications & Personality”—Functioning as a team member, Getting along with others, etc;
- “Sci & Tech”—Understanding new technology, Consequences of science and tech, etc.

# Factor Abstraction and Validation

Perceived College Environment :

- “Practical Skills Supportive”—  
Emphasis on Vocational and Practical courses;
- “Art & Humanities Supportive”—  
Emphasis on Diversity and Aesthetics;
- “Skill Foundation Supportive”—  
Emphasis on Scholarship and Analysis

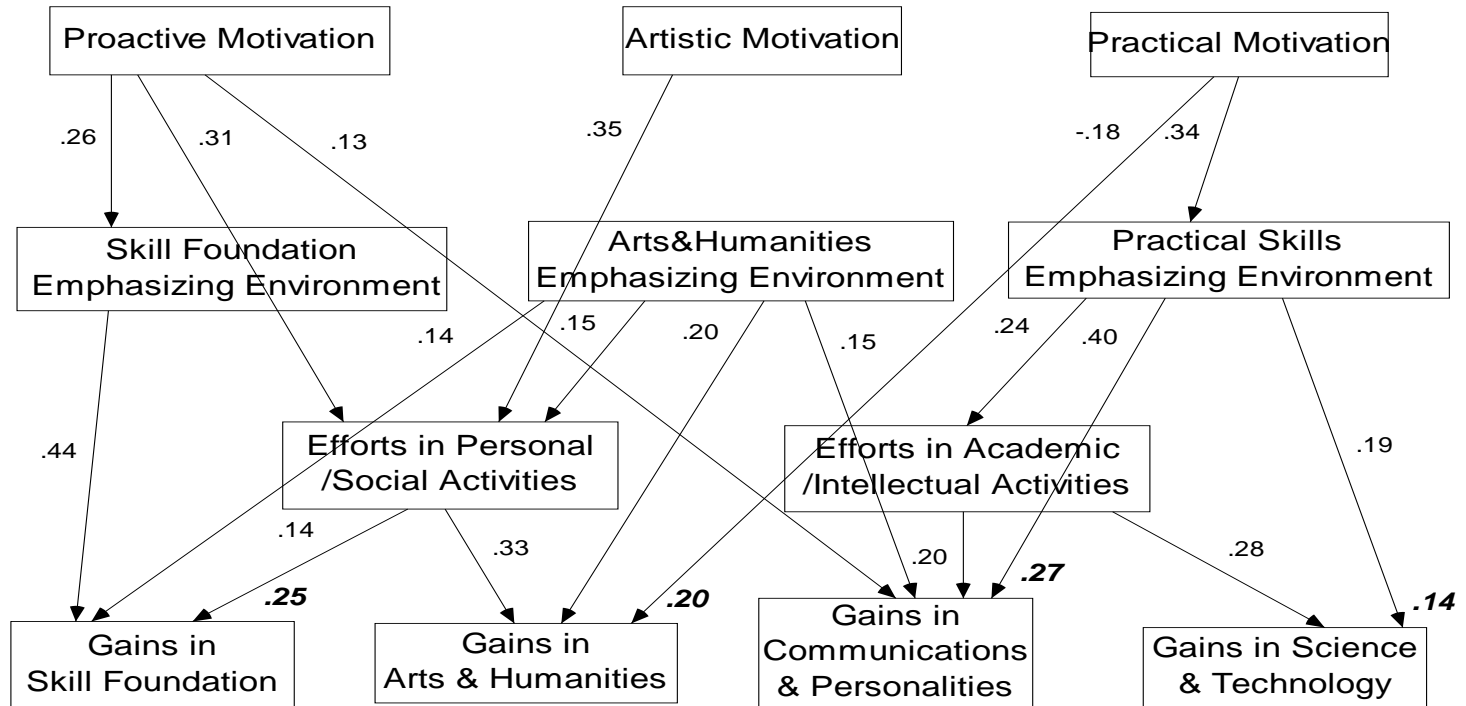
# Factor Abstraction and Validation

## Quality Efforts :

- “Personal/Social”—Art, Music, Theater Scale, Personal Experiences Scale, etc;
- “Academic/Intellectual”—Computer and IT Scale, Science & Quantitative Exp. Scale, Library Scale, etc.

# Results

Factors Leading to Students' Perceived Gains  
 Standardized estimates  
 Chi-Square = 49.391 (DF = 48), p = .417  
 Tucker-Lewis Index = .990  
 Root Mean Square Error of Approximation = .013



# Results

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- Students' educational motivations had indirect rather than direct effect on students' end-of-freshmen-year gains.
- students' motivation lead students to identify more strongly with certain campus environment and put more efforts in certain activities, and make gains more in areas that would contribute to fulfilling their goals.

# Scenarios I

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- Students who scored higher in “Proactive Motivation” more inclined to identify with the institution’s emphasis on building skill foundation, put more effort into personal and social activities, and reported they had gained foundational (general education) skills, knowledge in Arts & Humanities subjects, and better communication skills and personalities.

# Scenarios II

- Students with higher “Practical Motivations” perceived their college environment to be emphasizing vocational preparation, practical courses, and information literacy skills. They reported putting forth more efforts on academic and intellectual activities and believed they gained more knowledge in science and technology subjects, and better communications skills and personalities.



# Scenarios III

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- Students who wanted to make achievement in art related areas, however didn't report an emphasis on arts and humanities in their campus environment. They did, however, put more efforts in personal and social activities and made gains in skill foundation and arts and humanities subjects.

# Implications

- Consistent with the literature on intrinsic motivation and goal orientation. Our results confirm that students who want to do well in college are willing to put forth effort and engage in activities that lead to success.

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- Findings confirm the value in advising programs created by college officials that seek to help students become oriented with the college environment quickly so that students' attention can focus on collegiate activities that will lead to successful gains.

# Limitations

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- One institution
- Limited sample size
- Qualitative data would be helpful
- Quality, Time of Survey Administration
- Other controlling variables in the model
- More longitudinal data



- Questions?

- Thank you!