

IOWA STATE UNIVERSITY

Agricultural Education and Studies

Factors Influencing Choice of Major in the College of Agriculture and Life Sciences at Iowa State University

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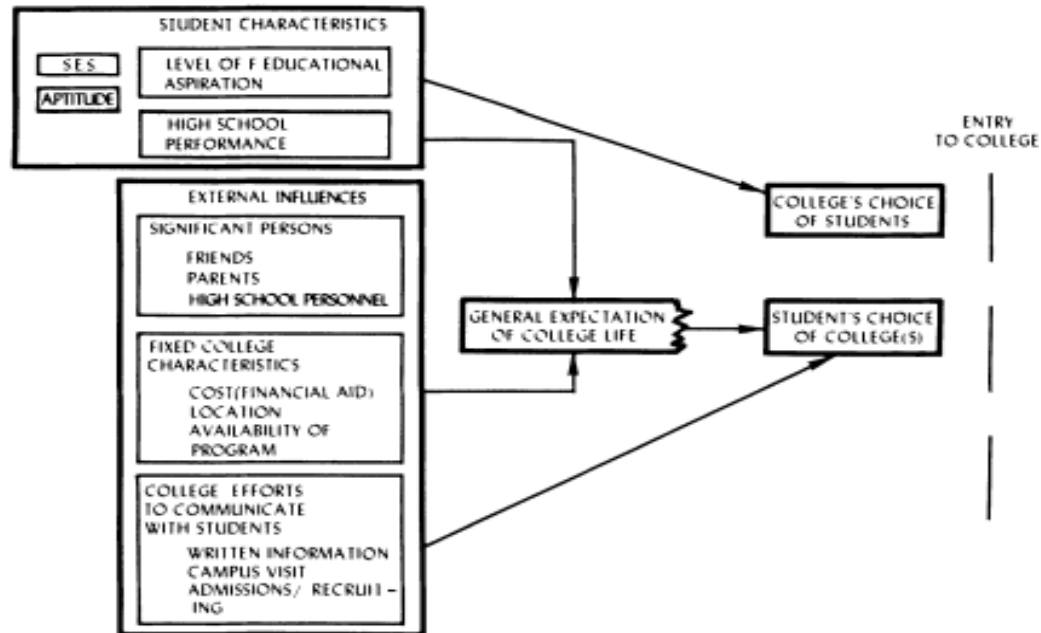
Purpose

- To determine what factors influenced first year students at Iowa State University (ISU) to choose a major within the College of Agriculture and Life Sciences (CALS).

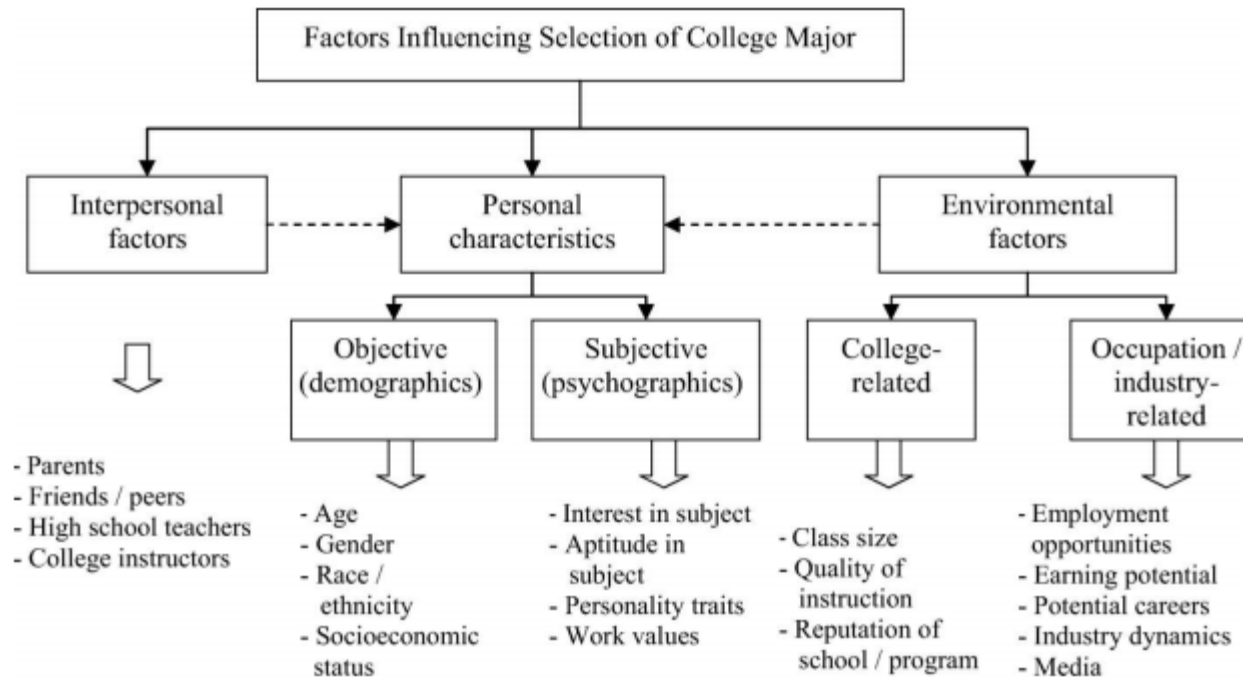
Theoretical Framework

- Champan (1981) Model of College Student Choice
- Hodges and Karpova (2010) Factors Influencing Selection of a College Major

Model of College Student Choice



Factors Influencing Selection of a College Major



Research Design

Qualitative Study

- Two Focus Groups
- Seven Personal Interviews

Subjects

First year students in CALS

- Transfer students
- Direct from high school
- Self-selected

Introductory classes in Ag Ed, Ag and Biosystems Engineering, Animal Science, Agronomy and Ag Business

Demographics

Major	# of participants
Animal Science/Dairy Science	9
Agriculture Business	2
Agriculture and Biosystems Engineering	3
Agronomy	2
Agriculture Education	1
Agriculture Studies	1
Genetics	1

Demographics

Permanent Residence	# of participants
Farm	9
Rural, non-farm	8
City or suburban area	5
Entrance to University	
Direct from high school	13
Transfer	9
Gender	
Female	15
Male	7

Instrumentation

- Semi-structured 1 hour interview process
- Seven open-ended questions
- Pre-interview questionnaire

Data Collection and Analysis

- Interviews held on campus
- Interviews digitally recorded and notes taken
- Transcription software *Temi*
- Data was coded and major themes identified

Findings Question 1: Engagement

What grade level did you seriously begin thinking about attending college?

Grade Level	Number of responses
Always knew I would attend	4
Middle School	3
Freshman Year	4
Sophomore Year	2
Junior Year	4
Senior Year	4

Findings Question 2: Exploration

When you started thinking about colleges, what prompted you to gather information about certain schools and majors?

- Proximity to home
- On-line search for the top animal science schools
- Other people's opinions
- On-line

Participant Quotes

“Preferably somewhere I could have my rabbits, which are important to me. I mean, for someone who went really far from home, I can tell you it’s really nice to have that piece of familiarity as you go through school.”

“I was told when I was really little that ISU is where I would go, so I didn’t really look anywhere else”

Findings: Question 3

What personal factors influenced your decision?

- Love of animals
- Exposure to production agriculture
- Enjoy being outdoors
- Enjoy science
- Personal satisfaction
- Enjoy a challenge

Participant Quote

- “So I really like science, and I really like to learn and push myself, especially at a high level. I found that genetics is a really cool mix of that, of getting to do science and be on the forefront of research and feeling like I can make a difference in the world too.

Findings: Question 4

What interpersonal factors went into your decision to choose your major?

- Parents
- 4-H and FFA
- Events held on campus
- Other family
- Other youth organizations
- Friends
- Farming

Participant Quote

“I guess for me, like growing up on a farm, I knew I wanted to be in the agricultural sector, but I also had a dad that was trained as a civil engineer before he started farming. So problem solving and challenging yourself was always something that was really valued within my family, So I really wanted to find a major that focused a lot around that problem-solving aspect and something that would really challenge me as well.

Findings Question 5

What are the environmental factors related to the college that affected your major choice?

- Reputation
- People
- Cost
- Location
- Beauty of campus
- Extracurricular activities
- Facilities

Participant Quote

“I think just the atmosphere, the outdoors and how beautiful it [campus] is. It doesn't seem like you're going to school. Its really nice here and my visit to the agronomy department solidified kind of how like this is a program for me.”

Findings: Question 6

What career/industry factors went into your decision to choose your major?

- Career fair
- Vet School
- Placement rates
- Internships
- High demand for agriculture jobs in Iowa
- Job flexibility

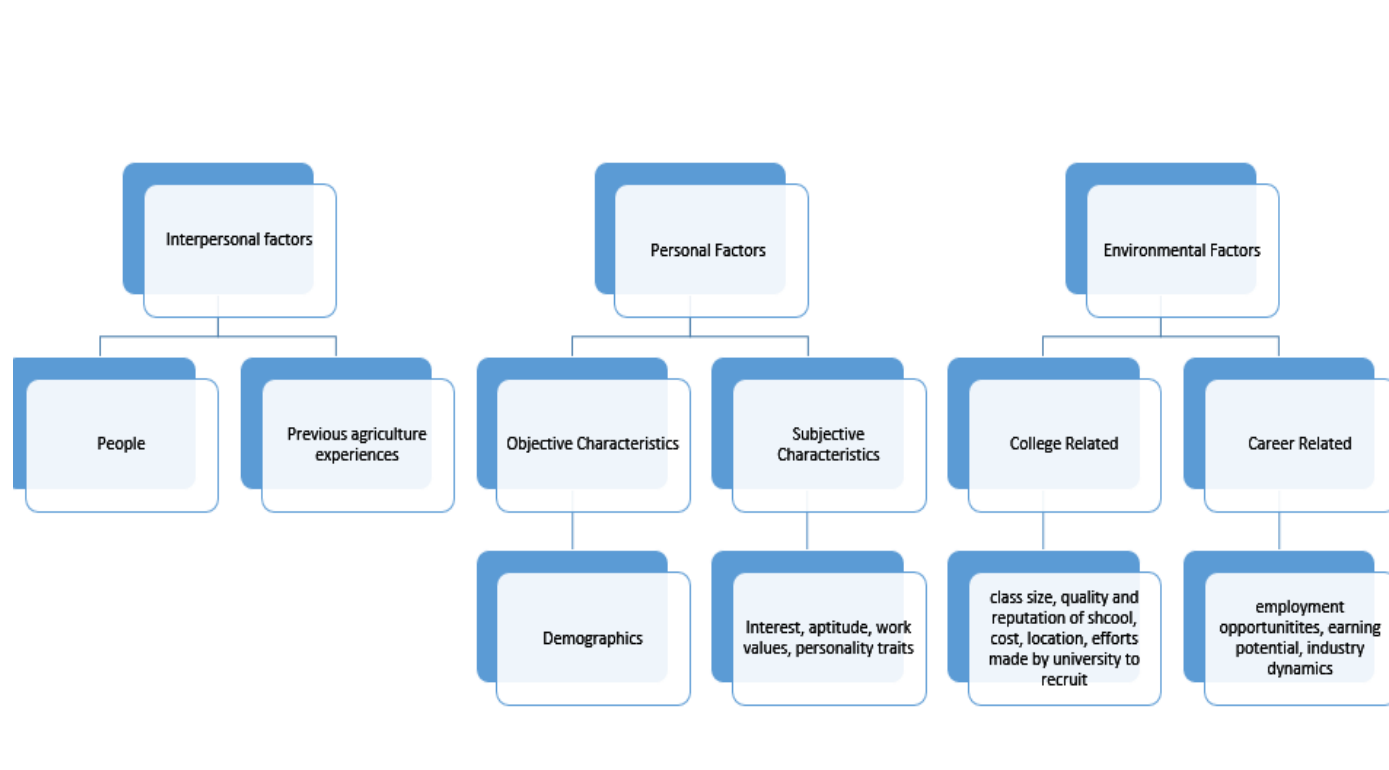
Participant Quote

“Diversity and for me it was flexibility in the job and knowing what with my major I could move in a lot of different career paths.”

“the placement rates are really high and then looking at the broad range of different jobs that people did.”

Findings: Question 7

I compiled two existing models into one comprehensive model. What is missing?



What is missing from the model?

- Social Factors
- Work-life balance
- Study Abroad
- Curriculum
- Math

Conclusions- Interpersonal

- Being outside
- Working with animals
- Science
- Challenging experiences
- Agriculture involvement

Conclusions- People

- Parents
- Friends
- Other relatives
- Participation in events on campus
- 4-H and FFA involvement

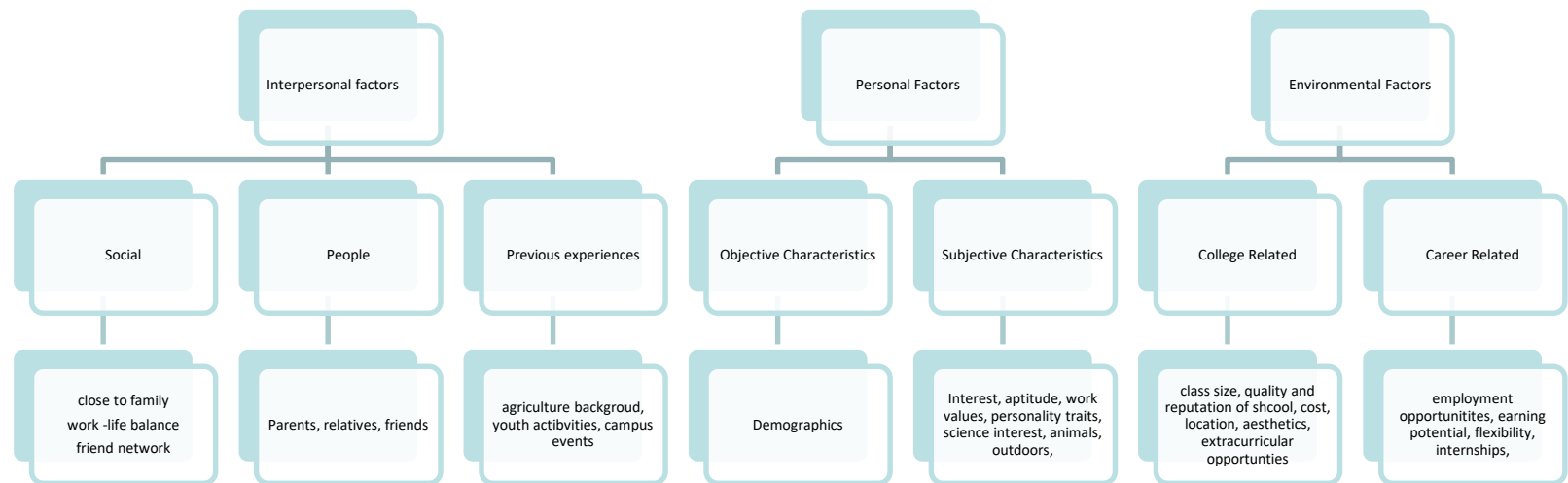
Conclusions – College Factors

- Reputation
- Location
- People
- Aesthetics
- Cost
- Extracurricular opportunities

Conclusions - Career

- Career and industry opportunities
- Job placement rates
- Career fair
- Job flexibility

Revised Model of Major Choice



Implications

- Provide opportunities for high school students to be on campus
- Recruitment materials are not necessarily used
- Highlight career opportunities
- Show off your campus