

# Support for Higher Education in US-Mexico Border Residents

**Darrin L. Rogers**  
**Fred Ernst**  
**Espiridión "Al" Borrego**  
**University of Texas – Pan American**



## Background

- 1/4 of children in U.S. are Hispanic
- By 2030, 1/3 of minors will be Hispanic (U.S. Census Bureau, 2007)
- Hispanics are least likely to earn a college or university degree (Pew Hispanic Center, 2008)
- Support is a strong factor in predicting student success (Gloria et al. 2005; Sciarra & Whitson, 2007)

## (Social) Support

- Several scales exist for social support
- Few for academic support
- Most focus on social & emotional support from family
- Some include friends, SO, etc.  
(Edwards, 2004)
- Little or no assessment of financial, material, practical, paradoxical support
- No attention to support change over time

## GHESS

- Global Higher Education Support Scale
- Goals: global view of support for higher education
  - Multiple sources of support
  - Multiple types of support
  - Multiple time periods

## GHESS Items

- Sources
  - Educators' ideas
  - Researchers' ideas
  - Student focus groups (summer 2006)
  - Other discussions

## GHESS Items

### Sampling Domain - Time periods

- Before you started preparing for college
- While you were preparing
- Since you have started college

## GHESS Items

### Sampling Domain - Types of support

- Traditional social support
  - Financial, practical & material support
  - Paradoxical support
    - "tough love"=Negative Support
    - "camouflaged sabotage"=Antisupport
- 
- Total number of items in item pool:  
    ≈ 200
  - Each item:  
    friends, family, significant other

## Data Collection

- 412 undergraduates in U.S./Mexico border region university

**Age**

---

<b>18-21</b>	<b>48.8 %</b>
22-25	27.9 %
26-29	1.2 %
30-34	5.36 %
35-38	3.6 %
39-53	1.5 %

**Gender**

---

Male	28.4 %
<b>Female</b>	<b>71.1 %</b>

## Ethnicity

<b>Hispanic/Latino</b>	<b>92.7 %</b>
Anglo/Caucasian	5.3 %
Asian American	1.7 %
Native American	1.2 %
Pacific Islander	1.2 %
African American	.7 %
Other	.7 %

## Factor Analyses

- Method: Exploratory Factor Analysis (EFA)
  - Looking for latent factors, not just clusters
- 9 separate analyses

	Family	Friends	Significant Other
Time A "Before..."	F.A. 1	F.A. 2	F.A. 3
Time B "While..."	F.A. 4	F.A. 5	F.A. 6
Time C "Since..."	F.A. 7	F.A. 8	F.A. 9

## Factor Analysis

- Software: CEFA (Browne, Cudeck, Tateneni & Mels)
  - Can appropriately factor analyze Likert data
- Oblique rotation
- Consider factor loadings  $> .5$ 
  - This eliminated multiple loadings

## Factor Analysis

- Solutions
  - 2- and 3-factor solutions were best for interpretation
- Scale reduction to maximize internal consistency (Raubenheimer, 2004)
- “matching” to create consistent scales

## Time A (Before Preparing)

### Antisupport

They said, "You should not go to college".

They told me that going to college would hurt my chances of being successful.

When college study was brought up, They would emphasize the importance of other things, instead.

Talking about college or higher education put members of my family in a bad mood.

### Positive Support

They told me that getting a college education is important

They told success stories about other people

They helped me make positive educational goals beyond high school.

When I talked about my plans to go to college, I felt like They shared my enthusiasm.

They often invited me to tell them about my worries and anxieties about going to college.

## Time B (While Preparing)

### Antisupport

When I told them that I planned to go to college, they acted like I was betraying them.

The closer I got to going to college, the more they seemed to pull away from me, emotionally.

...

### Positive Support

They told me it was good that I wanted to get more education than they had.

I felt like we became closer to each other as I worked toward going to college.

...

### Financial Support

They helped me save or budget to afford college.

They helped me find others who would contribute financially to school expenses.

...



<h2>Time C (Since Starting College)</h2>	
<b>Antisupport</b>	
They talk about all the benefits of leaving school before I get my degree.	
When I make it clear that I am going to stay in college, I feel that they become colder and less caring (or friendly) toward me.	
...	
<b>Positive Support</b>	
They have given me hugs, kisses, handshakes, smiles, etc., to let me know that they support me going to college.	
They have listened to me talk about my difficulties in college.	
...	
<b>Negative Support</b>	
They have made it clear that our relationship will be damaged if I do not succeed in college.	
They said they will make things bad for me if I quit school or get low grades.	
...	

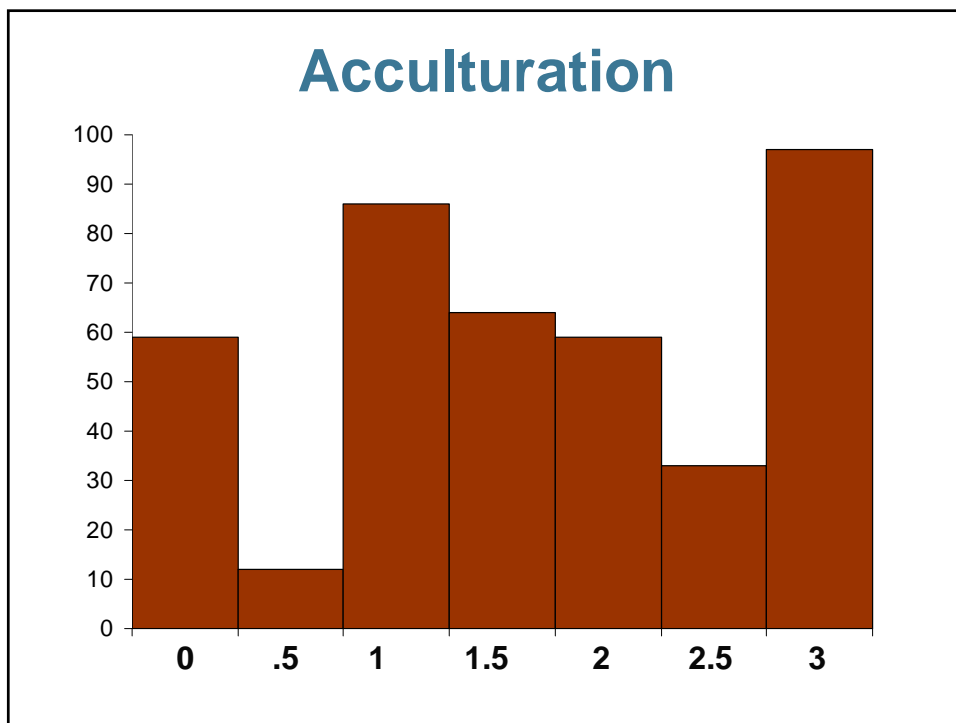
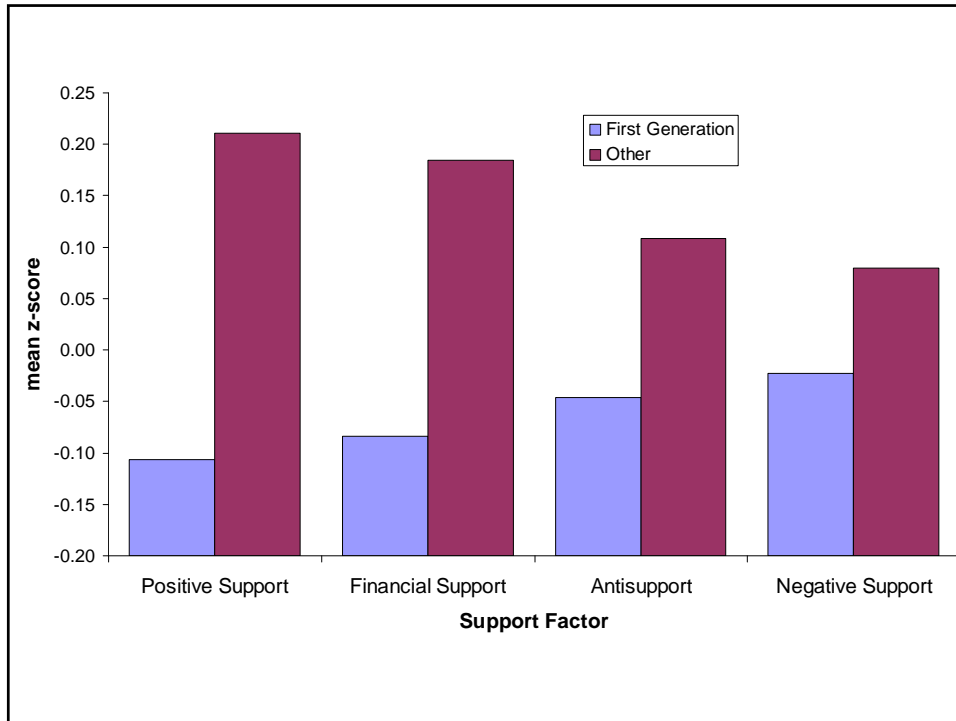
		Family	Friends	Significant Other		
<b>Positive Support</b>	Time A	n=5 a=.89	n=5 a=.87	n=5 a=.90	<b>.92</b>	
	Time B	n=5 a=.89	n=5 a=.89	n=5 a=.92	<b>.91</b>	<b>.96</b>
	Time C	n=4 a=.84	n=4 a=.87	n=4 a=.92	<b>.91</b>	
			<b>.94</b>	<b>a=.93</b>	<b>a=.94</b>	
<b>Anti-support</b>	Time A	n=4 a=.87	n=4 a=.82	n=4 a=.87	<b>.93</b>	
	Time B	n=5 a=.88	n=5 a=.87	n=5 a=.89	<b>.93</b>	<b>.98</b>
	Time C	n=5 a=.89	n=5 a=.85	n=5 a=.86	<b>.95</b>	
			<b>.94</b>	<b>a=.94</b>	<b>a=.93</b>	
<b>Financial Support</b>	Time B	n=4 a=.88	n=4 a=.82	n=4 a=.84	<b>.88</b>	
<b>Negative Support</b>	Time C	n=4 a=.81	n=4 a=.76	n=4 a=.70	<b>.88</b>	

## Factor Intercorrelations

	Type of Support			
	Positive	Anti	Negative	Financial
Positive	1			
Anti	.09	1		
Negative	.31	.55	1	
Financial	.67	.17	.26	1

## Patterns in Support

- Very low endorsement of antisupport
  - Nevertheless, strong factor in analyses
- 65% are 1<sup>st</sup> generation college/university students
- Interesting pattern of support between 1<sup>st</sup> generation & other students



## **Work, Acculturation & Support**

- No association between acculturation & working hours
- No meaningfully large association between acculturation and support factors

## **Validation of GHESS**

- Significant and meaningfully large correlations, in predicted patterns, between factors of the GHESS and...
  - Existing measures of social support
  - Academic support
  - Emotional intimacy
  - Measures of stress & situational distress
  - Self-esteem
  - Self-efficacy (General & Academic)

## Conclusion

- The GHESS appears both reliable & valid for measuring a global mix of support factors for college/university students
- Future research will focus on:
  - Expanding the participant groups
  - Refining the measure
  - Predicting academic outcomes