

# SLEEP QUALITY AND ACADEMIC PERFORMANCE: IMPLICATIONS FOR STUDENTS AND ATHLETES

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# ACADEMICS

- ▶ A majority of counseling centers now ask former clients if their counseling experience helped them remain enrolled in their institutions and/or whether it helped with their academic performance
  - ▶ 62% of students indicated that counseling helped them remain in school and 61% stated that counseling helped better their academic performance (ACCA, 2013).

# ACADEMICS

► Within the last 12 months, students reported the **following factors affecting their individual academic performance**, defined as: received a lower grade on an exam, or an important project; received a lower grade in the course; received an incomplete or dropped the course; or experienced a significant disruption in thesis, dissertation, research, or practicum work; (listed alphabetically):

► Alcohol use	4.2%	Gambling	0.4%
► Allergies	2.6%	Homesickness	3.8%
► <b>Anxiety</b>	<b>19.7%</b>	Injury	2.3%
► Assault (physical)	0.7%	Internet Use/Games	11.7%
► Assault (sexual)	0.9%	Learning Disability	3.3%
► ADHD	5.5%	Extracurricular Activities	8.6%
► Cold/Flu/Sore Throat	15.0%	Pregnancy(yours or partners)	1.0%
► <b>Concern for a Friend/Family</b>	<b>10.4%</b>	<b>Relationship Difficulties</b>	<b>9.7%</b>
► Chronic Health Problem/Illness	3.6%	<b>Roommate Difficulties</b>	<b>5.3%</b>
► Chronic Pain	2.9%	STD/Infection	0.5%
► <b>Death of a Friend/Family</b>	<b>5.7%</b>	Sinus Infection/Ear/	5.0%
► <b>Depression</b>	<b>12.6%</b>	<b>Sleep Difficulties</b>	<b>19.4%</b>
► Discrimination	1.2%	<b>Stress</b>	<b>28.5%</b>
► Drug Use	1.9%	Work	14.7%
► Eating Disorder/Problem	1.3%	Other	2.0%
► Finances	7.3%		

ACHA National College Health Assessment, Spring 2013

# ANXIETY

- ▶ Anxiety is the most predominant presenting concern among college students
- ▶ 46.2% of college counseling directors reported anxiety to be the major concern appearing in their center
  - ▶ Up from 41.6% in 2012 (AUCCCD, 2013)



# DEPRESSION

- ▶ Depression is the second most common presenting concern
- ▶ 39.3% of students presented with depression (up from 36.4% in 2012)



# SOCIAL SUPPORT

- ▶ In a sample of 533 first year college students, those reporting greater social support from friends and family exhibited less academic stress (Rayle & Chung, 2007).
- ▶ Studies have shown that students and people in general with low social support experience more depressive symptoms, anxiety, and other psychological problems compared to students with high social support (Hefner & Eisenberg, 2009).





# SLEEP QUALITY

- ▶ Poor sleep quality has been found to be related to predispositions for the development and/or exacerbation of psychological distress and mental health concerns (Sateia, 2009).
- ▶ College students classified as poor-quality sleepers have reported significantly more psychological health problems like depression and anxiety (Lund et al., 2010; Regestein et al., 2010).
- ▶ Student-athletes, experience the added challenge of balancing time commitments with academic and athletic demands (Carodine, Almond, & Gratto, 2002).



# PARTICIPANTS

- ▶ Participants included students utilizing services at the counseling center (i.e. sports psychology and psychological services)
  - ▶ Some studies included the comparison between athletes and non-athletes
- ▶ In total, 774 students was assessed during a 2-3 year period
  - ▶ Biggest study was 422 students (Mean age= 19.5, Females= 184, males= 238)

Overall Sample (N = 422)		
	<i>n</i>	%
<b>Age, mean (SD)</b>	19.51	(1.30)
<b>Female</b>	184	43.6%
<b>Race: n, (%)</b>		
White	332	78.9%
African American	11	2.6%
Hispanic/Latino	28	6.7%
Asian American	28	6.7%
Multiracial	11	2.6%
Other	3	0.7%
Prefer not to answer	2	0.5%



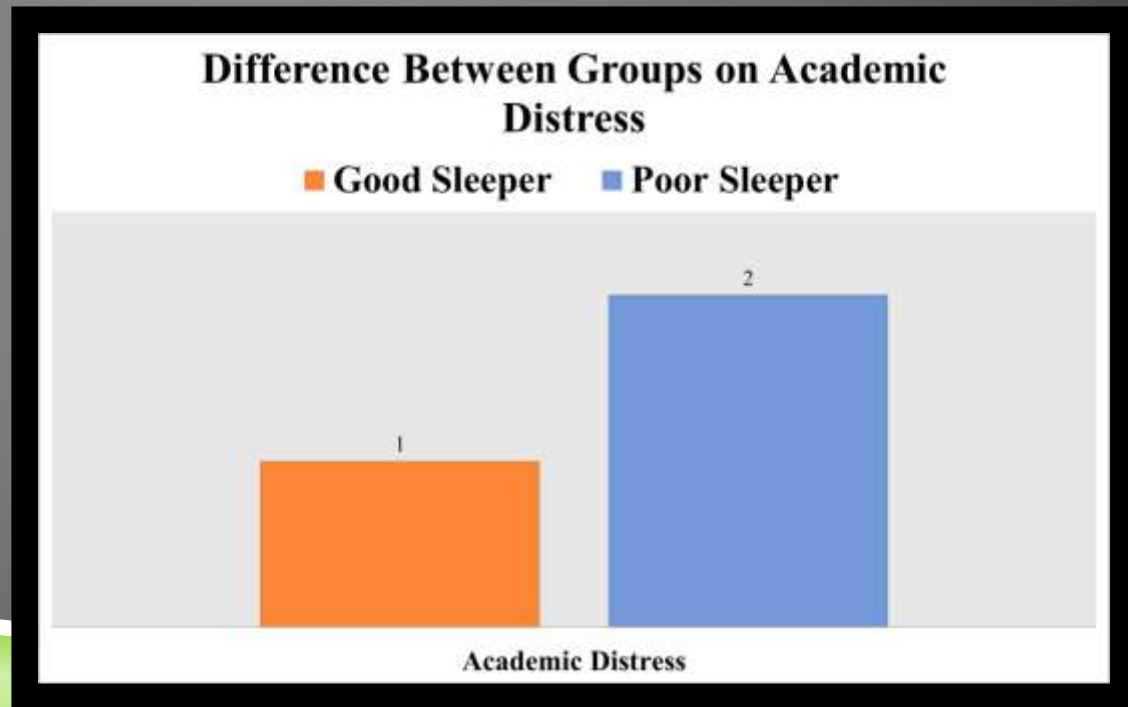
# METHODS

- ▶ Participants completed online questionnaires assessing the following:
  - ▶ Demographic Information
  - ▶ Academic Distress-subscale from Counseling Center Assessment of Psychological Symptoms (CCAPS) 62
  - ▶ Sleep Quality- Pittsburg Sleep Quality Index (5 or greater on the global sleep quality score (GSQ) was clinically indicative of increasingly poor sleep)
  - ▶ Social Support: “I get the emotional help and support I need from my social network (e.g., friends & acquaintances)” (SDS, 2012)



# RESULTS

- ▶ Sleep quality correlates with reported academic distress ( $p < .01$ )
- ▶ Most of the sleep components were also correlated with academic distress (sleep latency, duration, sleep disturbances, daytime dysfunction)
- ▶ Findings were consistent such that poor sleep was associated with poorer perceived academic performance



# RESULTS

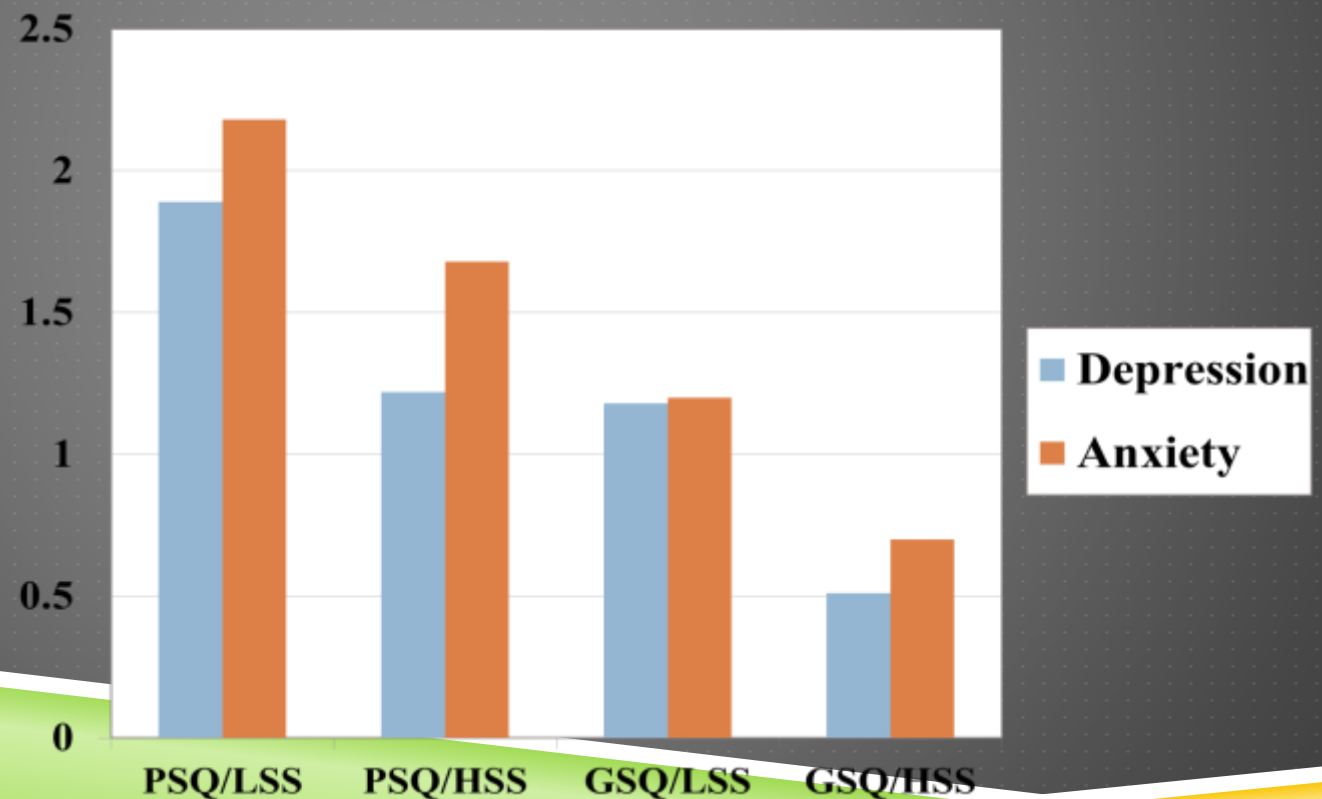
- ▶ The combination of poor sleep quality and high social support was associated with high levels of academic distress than when good sleep occurred in combination with high social support ( $p=.010$ )

	Low Social Support	High Social Support
Poor Sleep Quality	<i>High Academic Distress</i>	<i>High Academic Distress</i>
Good Sleep Quality	<i>Medium Academic Distress</i>	<i>Low Academic Distress</i>

# DEPRESSION/ANXIETY

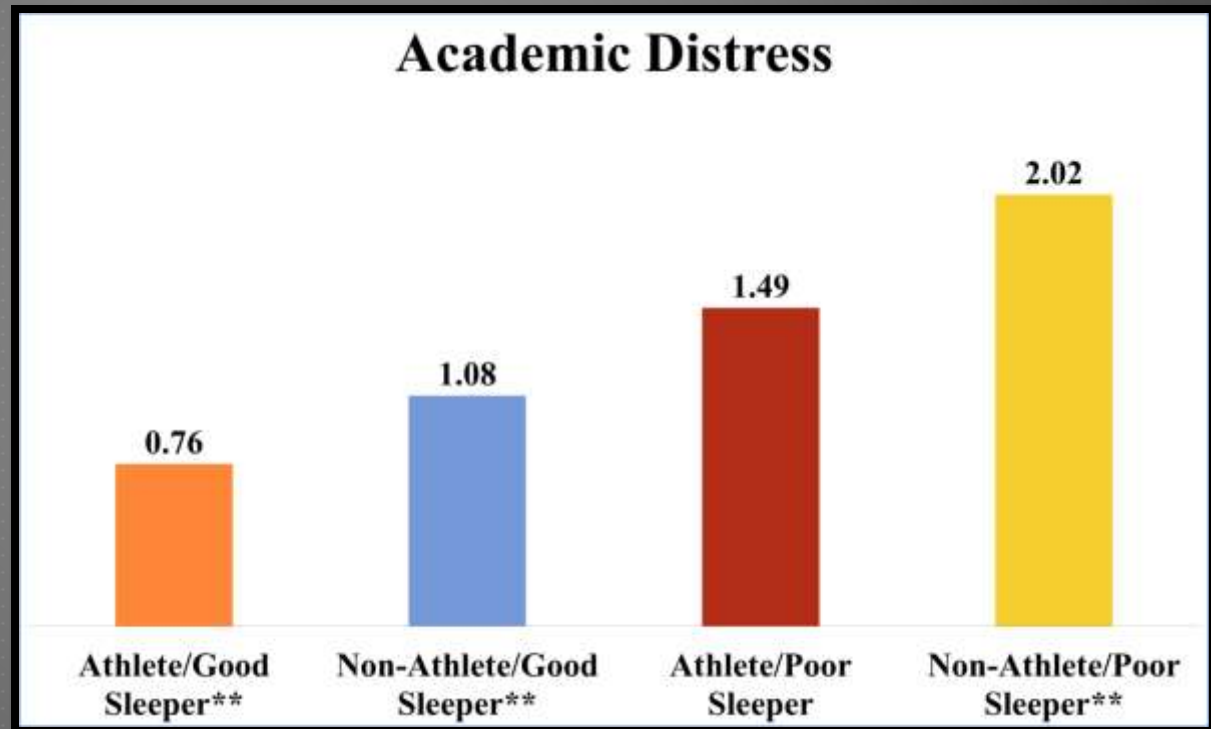
- Poor sleep quality and low social support was associated with the highest levels of depression and anxiety compared to groups with one or none of these risk factor ( $p < .001$ )

Sleep Quality/ Social Support on Depression & Anxiety



# ATHLETES

- ▶ Non-athletes reported higher academic distress than athletes
  - ▶ Non-athletes who were poor sleepers perceived themselves to be the most distressed academically





# CONCLUSION

- ▶ Sleep quality does in fact impact students perceived academic performance
- ▶ Across the board, poor sleep quality and high social support was associated with high levels of academic distress
- ▶ Poor sleep quality and low social support was associated with the highest levels of depression and anxiety (same for athletes and non-athletes)
- ▶ Athletes reported less academic distress than non-athletes
  - ▶ Added benefits of participating in a sport?

# RECOMMENDATIONS

- ▶ Ask students more about their sleep habits
  - ▶ Make the connection between lack of sleep and academic progress/mental health outcomes
- ▶ Discuss helpful tips
  - ▶ Physical exercise
  - ▶ Sleep hygiene
  - ▶ Mindfulness and relaxation techniques
    - ▶ Deep breathing
    - ▶ Relaxation podcasts
    - ▶ <http://www.madinamerica.com/?s=sleep&submit=Search>



# RECOMMENDATIONS

- ▶ Smartphone sleep apps

- ▶ Sleep cycle (iOS/iphone app)
- ▶ Sleepbot (android)
- ▶ Sleep as Android

- ▶ Improve Social Support

- ▶ About 24.1% of the students seen at UCPS acknowledged having an absence of positive family support and/or friendship support during the academic year
- ▶ Participate in clubs/campus organizations
- ▶ Create a safe space for relationship building and dialogues around diversity



# RECOMMENDATIONS

- ▶ Seek services at UCPS
  - ▶ 62% of students indicated that counseling helped them remain in school and 61% stated that counseling helped better their academic performance (ACCA, 2013).
  - ▶ Clinically we know that counseling can help students manage a host of issues, including anxiety, depression, and relationship concerns.
  - ▶ <http://www.madinamerica.com/?s=sleep&submit=Search>



# RECOMMENDATIONS

## FUTURE DIRECTIONS: RELATIONSHIP ISSUES

- ▶ 35.33% of directors reported students seeking counseling for relationship problems (unchanged from 2012) (AUCCCD, 2013).
- ▶ About 24.1% of the students seen at UCPS acknowledged having an absence of positive family support and/or friendship support during the academic year
- ▶ The End