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Contents

Student Essay	1
Important Dates	1
Meet Edwin B. Twitmyer	2
Psychobabbles	2
2012 Psi Chi Inductees	2
Faculty Cognitions	3
Münsterberg Illusion	4
DP's Scavenger Hunt	4
Sudoku Magic Puzzle	4

*"The art of being wise
is the art of knowing
what to overlook."*

William James

Important Dates

- ◆ Fall registration begins: 4-10-2012
- ◆ 5th Psi Chi induction: 4-12-2012
- ◆ WPUPC: 4-21-2012
- ◆ Spring finals: 4-24-2012
- ◆ Graduation: 5-5-2012
- ◆ Fall semester begins: 8-27-2012

Dream Theory Eric Levine

Have you ever awoken with a story lingering in your brain and the more that time passes, the fuzzier that story becomes? You try to recall details but they are faded and seem out of place.

You've undoubtedly had dreams that you awoke and thought "*that was so weird.*" That we can create worlds of unparalleled fantasy fascinates me and why we create the images and events we do baffles me. Why would I dream about a person I haven't seen in years? Are dreams simply random or is there a purpose to these strange events? Well, turns out it is a mixture of both; sort of like a wizard standing over a pot creating a dream by swirling around the people, plots, emotions, and hopes we keep in our brain's vast memory bank.

If you've taken any psychology class, you know that our brain is constantly trying to make sense of the world, even filling in gaps to perception or knowledge about the world. Our brains are so good at this that we are usually unaware of when it is happening. We make sense of things so we can keep our mind operating smoothly without feeling like we're stumbling over every detail. Well this phenomenon also happens when we're asleep.

During sleep our brains remain **very** active. We go through two stages, REM (rapid-eye movement) and NREM (non-rem) sleep. NREM is the first cycle we experience and it comprises four stages. Each stage can last anywhere from 5-15 minutes and once this is fully completed we enter REM sleep which can last from 10 to 60 minutes. We go through about 4-5 cycles during a typical sleep. So we dream 4-5 times a night but only tend to remember the last, most recent, dream.

When we sleep, blood supply to the brain nearly doubles, and the visual areas of our brain such as the thalamus, amygdala, and brainstem remain very active. The frontal lobe, the area that regulates our emotion, is still running rampant which gives us the feeling that our dreams "really happened." At the

same time, other parts of the brain dealing with rational thought, attention, and critical judgment are all quiet. This is why dreams can so often be pretty bizarre but not seem so at the time we dream them. I mean, how realistic is it that we get to scale Mount Everest with Abraham Lincoln while being chased by 10 foot tall aliens shaped like sandals?!

Dreams are difficult to study in the lab. But that hasn't stopped people from trying, and there are two major theories about dreaming. Dr. Illana Simons wrote an article for "*Psychology Today*" in which she discussed the Evolutionary Theory that dreams provide opportunities to deal with situations too harmful to act out in real life. Dreams of being chased by somebody, sinking in a pit of quicksand, public nudity, etc. are all dream to practice your fight-or-flight instinct.

The second theory was originally proposed by Francis Crick (called the Defragmenting Theory). He claimed that dreams are our mind's way of sifting through the day's information and discarding what isn't needed. Our brains take in information even if we're not consciously aware of it, and at some point it has to decide where to put it all. So during REM sleep we store useful information and discard what is unimportant. It is during this stage at which these pathways of random information get crossed with other information that becomes our dreams.

I find it quite fascinating that our dreams change so dramatically from one night to the next, and there is always a level of uncertainty as to what can happen. It's like being treated to a new Blockbuster movie every night in which you are the star! The next time you remember a wild dream, I hope you can appreciate how it might have been formed and just how imaginative you really are.

“The only person who is educated is the one who has learned how to learn and change.”

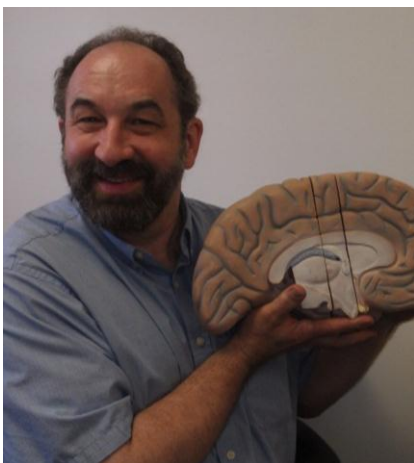
Carl Rogers

2012 Psi Chi Inductees!

- ◆ Maegan Lewis
- ◆ Gina Mercuri
- ◆ Amanda Mesina
- ◆ Dr. Samantha Monda
- ◆ Michael Sobolosky
- ◆ Jamie Witsch

“Behavioral psychology is the science of pulling habits out of rats.”

Douglas Busch



“Every picture in the Rorschach test looks like a slice of the brain to me.”

David Wheeler

Edwin B. Twitmyer: Giving credit where it is due

Everybody’s heard of Pavlov’s dogs and their role in classical conditioning. An unconditioned stimulus (food) elicits the unconditioned response (salivation). And repeated pairings of food with a neutral stimulus (bell) will eventually produce a conditioned response: Dogs drooling at the sound of a bell. This has been called *Pavlovian Conditioning*. But what you may not know is that Pavlov was NOT the person to first discover it.

Edwin Twitmyer is the person who deserves credit, but due to bad timing, his contributions were overlooked.

Dr. Twitmyer ultimately became director of the Psychological Laboratory

and Clinic at University of Pennsylvania, but he had actually discovered classical conditioning in grad-school while doing his doctoral research on the patellar tendon reflex.

He observed that when a bell rang but the hammer failed to hit the patellar tendon, subjects still presented a knee-jerk response. Tragically, his findings went largely unnoticed because his APA conference presentation was scheduled so late in the program.

Enter Ivan Pavlov, Nobel Prize recipient for research on digestion, his now classic findings found an audience, and the rest, as you know, is history.

Psychobabbles with Dr. David Wheeler

Interview by Aubrey Graham

Dr. Wheeler has been a full time psychologist in the department since 1989! He has a bachelor’s degree in biology and a Ph.D. in psychology from the University of Washington. He teaches a variety of psychology courses including Applied Psychology, Industrial Psychology, Physiological Psychology, and Psychology of Adjustment.

Ψ How would you describe yourself in three words?

DW: *“Hmm, I’ve only got three words? Three words...”* (Long pause.)

Ψ Come on Dr. Wheeler, three words! (Really long pause.)

DW: *Hm. Innovative, Fun, and Peaceful.*

Ψ What is the strangest thing you’ve ever eaten on purpose?

DW: *“I’ve eaten lots of strange things not on purpose. I tend to always pick the strangest thing on the menu. Let’s see: Ostrich, alligator, frogs... Abalone! It’s unusual, not strange, but it was abalone that I caught myself, cooked in a nice lemon sauce over a campfire.”*

Ψ Is it true that you started playing underwater hockey because you accidentally fell into a pool wearing a Penguins t-shirt with a hockey puck in your pocket and just wanted everyone to think that you did it on purpose?

DW: *“No. I did it to impress girls.”*

Ψ About how many massages have you given in your life?

DW: *“Oh my gosh, probably thousands.”*

Ψ How many have you received?

DW: *“Probably hundreds.”*

Ψ Is it better to be the tortoise or the hare?

DW: *“The hare; you don’t get killed by cars as much.”*

Ψ Who is your all-time favorite psychologist?

DW: *“Daniel Kahneman and Abraham Tversky because of their research on decision making.”*

Ψ If you woke up tomorrow with super powers, would you be a super hero or a super villain? What would be your super name?

DW: *“Well it’s absolutely super hero. And it has to be StickMan, going with the underwater hockey stuff. I would be a super underwater hockey player.”*

Ψ Why do you wear such crazy shoes?

DW: *“Because the first person I massaged was in theatre and she told me, ‘If I was you, I’d wear crazy shoes because that’s all people see when you’re massaging them.’ And so I do.”*

Ψ Thanks Dr. Wheeler!

Faculty Cognitions: *Why I Study Night Sky Watchers*

Dr. Kelly

Several years ago, while teaching in that quiet little puritanical town called Las Vegas, I was engaged in a conversation with a small group of students. One student mentioned that she was going to watch the upcoming Leonids meteor shower. As it turned out, the young lady who started this conversation was fond of the night sky and had gone so far as to engage in astrotourism (travelling away from one's home for stargazing). She asked me if there was any research investigating why people watch the night-sky. I had no answer at the time. Intrigued, I decided to look into this.

In addition to answering her question, I thought there might be the



ancillary benefit of finding fodder for one or two research projects. At the time, I found no psychology research on stargazing, which amazed me. I had thought everything psychological had been researched. I did, however, find that anthropologists had been studying the value of astronomy to cultures for many years. At least 6,000 years ago ancient cultures used astronomy for spiritual inspiration, insight, and as a calendar (Brecher & Feirtag, 1979).

Predicting the movements of heavenly bodies was important to early cultures and the consequences for screwing it up could be severe. For example, two Chinese astronomers in 2130 B.C.E. were supposedly executed for incorrect predictions of an eclipse (Zim & Baker, 1975). What would make someone so fanatical about precisely predicting an eclipse? Why had individuals looked to the shiny

dots in the sky for answers? Was it simply because the movements of the sky give so much more information such as when to plant crops? Maybe people believed higher powers resided there. I had to look deeper.

I am a psychologist, though, not an anthropologist. So, I attacked this by trying to understand individuals who deeply enjoy the night sky, such as my astrotourist student. How many of them are out there? What characteristics do they share? How did they develop a love of stargazing?

The first problem was to lay some groundwork. So, I developed a survey to assess individuals' attitudes toward the night sky. After I asked a sample of students to respond to this survey, I found the items interrelated, that is, they were statistically clumping together as though measuring the same construct. I wanted to put a name to this construct to make it distinct. So, I called it noctcaelador (Kelly, 2003) from Latin: nocturnus: night; caelum: sky, adorare: adore; which together suggest an adoration of the night sky.

I decided that if I'm going to measure this thing I need a better scale. So, I created the Noctcaelador Inventory (NI; Kelly, 2004). After checking that the NI was measuring what it was supposed to (positive attitudes toward night sky watching) by showing that amateur astronomers score higher on it than college students (Batey & Kelly, 2005), I went to work.

My colleagues and I found that among a sample of college students, 96% indicated they had at some time in their lives intentionally watched the night sky (Kelly, Kelly, & Batey, 2006). Of that sample, 17% reported a continued pattern of purposefully viewing the night sky at least once a night (weather permitting, I assume). About 20% of students reported engaging in astrotourism, owning telescopes and other night sky watching equipment, and recent attendance at planetariums or observatories. This is consistent with

Holbrook (2009) who found that night sky watching ranked third as an evening activity (following reading and watching television).

I have attempted to correlate the NI with a host of other scales to try to get a better handle on who these night sky watchers are. Results suggest two general groups of traits espoused by night sky watchers: 1) the tendency to take an intellectual, rational approach to problems (Kelly & Kelly, 2008) and 2) a tendency to engage in unconventional thinking, such as being creative, fantasy prone, and holding almost magical beliefs (e.g., Kelly, 2006).

What does all this mean? I'll let you know when/if I figure it out. For now, it's interesting to see these patterns of correlates with night sky watching arise from a serendipitous conversation with students!

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Hugo Münsterberg

One of the first applied psychologists (late 1800's) who was very outspoken about his pro views regarding German policies as well as other issues related to the impending world war. He was a Harvard professor and died suddenly at the lecture podium.

The famous optical illusion pictured below was named for him (Café Wall Illusion or Münsterberg Illusion). Although the rows of rectangles appear uneven they are perfectly straight!



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DP's Scavenger Hunt

PRIZE: A 4lb container of jellybeans (more than 40 flavors)!



TASKS: Submit evidence to Psi Chi electronically: PsiChi@mail.rmu.edu.

The 1st complete submission wins! BONUS SECRET AWARD if submitted before Finals week!

1. Have a picture of yourself taken with: **Dr. Samantha Monda** (116

Lafayette Ctr.) and **Donna Reilly** (sr. secretary, 335 Patrick Henry).

2. Provide with the photos a fun fact, quote, or true statement from or about **Dr. Monda** as well as **Donna Reilly** (to prove that you also interacted with them).

RULES: Any submissions that fail to follow the rules listed below will be disqualified.

- Both people should be doing a peace sign with their left hand.

- Evidence of "Photo-shopping" will result in disqualification.
- You may need to make an appointment with the individual (do not expect that they will drop everything for a photo-shoot).
- Your submission must be **complete** when you email it to Psi Chi (i.e., both photos and the accompanying factual statements/quotes).
- You must be able to collect your prize from Dr. Paul in person (his office is 110 Lafayette Center).

Sudoku Magic

This puzzle follows the same rules as a standard Sudoku:

- Each row should contain the numbers 1 through 9.
- Each column should contain the numbers 1 through 9.
- Each 3x3 block of 9 squares should contain the numbers 1 through 9.

Extra Rules for Sudoku Magic:

- The two major diagonals should contain the numbers 1 through 9.
- In each 3x3 block, cells that are lightly shaded contain values equal to or lower than the number of shaded cells.

Medium Difficulty

		6			9			
		1			8			
3					1			5
						4		7
				6				8
					5	6	3	
	3			5			6	2
	6		1			7		

