

PSYCHOLOGY II

Section Moderator: Dr. Lonnie Yandell
Room: Beaman Student Life Center – B
Time: 7:00 – 8:45 PM

7:00 – 7:15

“The History and Controversy of Autism”

M. Hannah Benneyworth & Jessica L. Heacock
Faculty Advisor: William Bailey, PhD

The term autism was first used in 1911 to describe a subset of symptoms initially included in the diagnoses of schizophrenia. Autism is frequently characterized by social isolation, lack of eye contact, and abnormal speech communication patterns. Since then the disorder has been studied and defined by researchers such as Leo Kanner and Hans Asperger. Several theories have been formulated about causes of autism and how to treat it. Everything from electric shock, LSD, behavior therapy, chelation therapy, and dietary restrictions have been used to treat its symptoms. The definition of autism has undergone revision in the DSM and recently (over the last few years) has experienced a notable increase in diagnoses and related symptoms.

There is still much mystery surrounding autism. Recently, controversy has erupted over its cause, treatment, and possible reasons for the drastically increased diagnoses of autism. Some parents are so desperate to explain their children’s disabilities and find a cure, as well as something to blame, that they have come to believe in a conspiracy involving the medical and drug industries. With so much confusion and desperation for answers the current state of autism is quite tumultuous. This presentation explores the history of autism from its origins in ancient folktales to various current explanations and treatments offered by everyone from prestigious researchers to heartbroken mothers.

7:15 – 7:30

“History of the Insanity Defense”

Brianne Bolden & Maureen Shelton
Faculty Advisor: Dr. William Bailey

Since its beginnings in 1843 with the M’Naughten trial and subsequent ruling, the history of the insanity defense has constantly come under fire for being either too broad or too narrow. Although virtually unaltered until 1954 with the advent of the Durham Standard, the M’Naughten Rule was continually criticized for a hundred years. Within ten years of its implementation, the Durham Standard was overthrown in favor of the test designed by the American Law Institute under its Model Penal Code. The concept of “guilty but mentally ill” was issued to be an intermediary between the verdict of “not guilty by reason of insanity” and “guilty.” In 1981, John Hinckley’s acquittal for his assault on President Reagan, led to the institution of the Insanity Defense Reform Act. The current presentation will discuss various legislation, laws, court cases, and controversies related to the insanity defense.

7:30 – 7:45

“Individual Differences in Operation Spans Impacting McGurk Effect Responses”

Michael A. Bailey, Ashley Page, Catherine Hendrick
Faculty Advisor: Dr. Lonnie Yandell

Listening to and understanding what those around us are saying is a seemingly effortless process that we do on a regular basis. Processing speech is actually very complicated. Previous studies have shown that visual (seeing a speaker's lips) and auditory (hearing the speech) cues are equally important in speech comprehension. With this complicated process of integrating stimuli arise many individual differences in how people process speech. The present study examines the implications of sex and attention span as individual differences that may impact the processing of speech. Forty undergraduate introductory psychology students were recruited to take an operation span assessment to estimate their attention spans and then were exposed to trials of the McGurk Effect stimuli under heavy attentional load. We expect that those with high attention spans will be able to more successfully integrate the visual and auditory elements than those with low attention spans and therefore be less effected by the McGurk stimuli. We also expect, due to brain imaging studies acknowledging differences in brain structure in males and females, that females will be more influenced by the visual elements of speech than will males.

7:45 – 8:00

“The Effects of Auditory versus Visual Processing on Explicit Memory”

Kelli Boone, Kenneth Gorman, Lindsey Thompson, & Jamie Vickstrom
Faculty Advisor: Dr. Lonnie Yandell

Previous research has noted that visual imagery is a common technique in the memorization process. However, visualization does not always necessarily occur during tasks such as reading. Comprehension methods other than visualization may be employed. These methods have been researched emphasizing implicit memory, but little research has been noted with the implementation of explicit memory. This study examines the differences between explicitly memorizing information using auditory processing and visual processing. The purpose of this study is to determine whether or not imagery of semantic content of a sentence has a significant effect on explicit memory. Sixty Belmont University students from an introductory to psychology course will be randomly assigned to one of the two groups. Participants will listen to twenty sentences read aloud and correspondingly rate each sentence on either pronunciation or content. Afterwards, participants will answer key questions based on the previously read sentences, which will measure recall. It is expected that participants in the visual processing group will answer the key sentence questions with more accuracy than participants in the auditory processing group.

8:00 – 8:15

"Solo Versus Group Problem Solving"

Luke Lancaster, Sarah Jaworski, Alyssa Henning, Lacey Bowles
Faculty Advisor: Dr. Lonnie Yandell

During the course of a college education, one often feared activity is the group assignment. This is typically designed with the intent of helping students get “real world” experience in dealing with people. How effective is group work at solving problems? We tested this using a spatial problem task, the “Towers of Hanoi,” to see whether groups of three people were more effective at the task than an individual person. Each individual will be randomly assigned to either the solo or group conditions and then given the instructions of the task. The goal is to get a stack of discs from the leftmost peg to the rightmost peg, using all three pegs on the task. The only limitation is that they cannot place a larger disk on top of a smaller disk. The participants in the solo condition will simply complete the task as quickly as possible while the participants in the group condition will take turns and be allowed to discuss their choices with each other. We expect to see better results (less time and fewer moves) in the group condition

compared to the solo condition. This may be due to the participants being able to see the problem from more than their own perspective, thus providing them with a well-rounded and better overall scope of the problem at hand.

8:15 – 8:30

“Measuring Environmentalism Attitudes: Relationships with Individualism, Materialism, and Environmental Attitudes”

Heather L. Cairl

Faculty Adviser: Dr. Lonnie Yandell

This study is designed to explore the validity of a scale previously developed to measure environmentalism attitudes (Cairl, 2008). This scale differs from other similar scales by asking participants “is there an environmental problem?” instead of asking, “how do we fix the problem?” It is meant to distinguish between four different kinds of environmentalism arranged on a spectrum of increasingly radical views—anti-environmentalism, light green environmentalism, bright green environmentalism and dark green environmentalism.

To investigate the validity of this scale, four other measures are used to look for expected relationships between these four types of environmentalism and three other values/attitudes: individualism vs. collectivism (Triandis 1995), materialism (Richins & Dawson, 1992), and environmental attitudes, including ecocentrism, anthropocentrism, apathy and the NEP (Thompson & Barton, 1994; Dunlap, Van Liere, Mertig, & Jones, 2000).

Approximately 72 participants will complete a compilation of 5 surveys. More radical types of environmentalism are expected to be positively related to collectivism, ecocentrism, and the NEP, and negatively related to materialism, individualism, and anthropocentrism. Anti-environmentalism and less radical types of environmentalism are expected to be positively related to individualism, materialism, and anthropocentrism, and negatively related to collectivism, ecocentrism, and the NEP.

8:30 – 8:45

“Change Blindness and Facial Perception”

Anna Claire Bowen, Marti Johnson, and Ben McGlothlin

Faculty Advisor: Dr. Lonnie Yandell

When attending to an object or scene people assume they will easily and instantly notice changes. However, when an original and modified object or scene is separated by brief flicker, a prominent failure of perception is provoked (Rensink, O'Regan, & Clark, 1997). This phenomenon is referred to as change blindness, and is defined as the inability to detect a change in an object or a scene (Matlin, 2009). People perceive others of their own sexual preference and the same race more effectively than those opposite to their sexual preference and not of their race. Therefore, it is expected that in a change blindness procedure using pictures of faces 1) participants will perceive a change in opposite sex faces quicker and more accurately than in same sex faces and 2) participants will perceive a change in their same race faces quicker and more accurately than in faces not of their race. Twenty undergraduate students ranging in age from 18 to 23 years enrolled in an Introductory Psychology course will be shown a total of 20 sets of pictures. A set of pictures will consist of one original picture and one picture that may have slight facial characteristic changes. The participants' reaction time and accurateness of distinguishing any change in the sets of pictures will be measured. A comparison of mean reaction times is expected to show that the participant will detect changes when pictures match the participants' ethnicity and preferred sex faster than when they do not.