EFFECTS OF PERCEIVED PROFESSOR DECEPTION ON STUDENTS'

COMPETENCE, ATTITUDES, AND RAPPORT

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ABSTRACT

Student-teacher relationships are one of the most vital predictors in determining academic performance at a college (Yoon, 2002). Sánchez and colleagues (2011) found the second highest factor for student's perspective of the professors' role in a university is affected by the student-teacher relationship capabilities on the professors' end. A notable importance is what would happen if the professor began to disrupt this relationship between them and the students by lying to them. Lies can actively cause distrust between the professor and students. Schweitzer, Hershey and Bradlow (2004) demonstrated that trust between people could not fully recover from the damage of deception between those individuals. This distrust from deception can negatively affect attitudes. Overall results indicate that students have negative specific attitudes towards deception.

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INTRODUCTION

Student-teacher relationships are one of the most vital predictors in determining academic performance at a college (Yoon, 2002). The interactive nature between students and teachers is what facilitates the relational ties by addressing the roles that are to be expected by the students, as well as the teachers in order to maintain a good relationship. One area that aids in teachers fulfilling their role as an instructor is for the feedback and information that they receive from students (Roche & Marsh, 2000). Sánchez and colleagues (2011) found the second highest factor for student's perspective of the professors' role in a university is affected by the student-teacher relationship. A notable importance is what would happen if the professor began to disrupt this relationship between them and the students by lying to them. Lies can actively cause distrust between the professor and students. Schweitzer, Hershey and Bradlow (2004) demonstrated that trust between people could not fully recover from the damage of deception. This distrust from deception can negatively affect attitudes.

Trust ultimately plays a role in establishing a good relationship and one form of trust that is vital when it comes to a professor's role is a specific type of trust as mentioned by Barber (1983). He states this form of trust is "the expectation of technically competent role performance from those involved with us in social relationships and systems" (p. 9). Trust is an important measure that needs to be examined because deception may impact the trust between the professor and student and may ultimately affect the relationship between the two.

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APA Publication Manual

Defining Deception

A definition that may shed light on what deception is comes from Krauss (1981) that

defines deception as, "an act that is intended to foster in another person a belief or

understanding which the deceiver considers to be false." (p. 3). While this definition may

serve as a good starting point for understanding the basic principle of what deception is, this

singular definition of deception does not fully encompass an understanding of what deception

is. A more comprehensive definition of deception can be defined as "a successful or

unsuccessful deliberate attempt, without forewarning, to create in another a belief which the

communicator considers to be untrue" (Vrij, 2008, p.15). On average people will lie roughly

two times per day (DePaulo, Kashy, Kirkendol, Wyer, and Epstein 1996), however Serota,

Levne, and Boster (2010) found more recently that this distribution is skewed because most

people do not tell this many lies per day. Deception can be communicated through a number

of different ways such as through verbal cues, paraverbal cues, and especially nonverbal cues

(Akehurst, Köhnken, Vrij, & Bull 1996; Hart, Fillmore, & Griffith, 2010; Hart, Hudson,

Filmore, & Griffith, 2006; Vrij, 2008).

Contrary to popular beliefs there are in fact a number of different forms of lies. Lies

can take on a number of different forms ranging from: outright, exaggerations, and subtle lies

(DePaulo et al., 1996). There are a variety of different reasons why individuals may lie and

they are to spare embarrassment, avoid punishment, as act of self-preservation, and possibly

to conceal transgression (Vrij, 2000). Depaulo and colleagues (1996) made the claim that

there are three primary categories of lies: Other-orientated lies, Self-orientated lies, and a

combination of both of them. Other-orientated lies are lies that are designed to protect other

individuals from getting harm. Self-orientated lies are lies that are told in an attempt to aid

and protect the motives of the person telling the lies, or to protect themselves for person gain

(DePaulo et al., 1996).

Detecting Deception

Deceptive behavior has long been studied. Sullivan (2001) reviewed several historical

practices of detecting deception involving relying on divine intervention to save a truthful

person from hanging or drowning. In later years, better scientific methods were created with

the Chinese forcing individuals to hold rice in their mouths until they spit it out; if the rice

was dry, the person was deemed deceitful (Ford, 2006). According to Ford (2006), societies

began to change from burning, drowning, or supernatural means of judgment for perceived

deceptive behavior and moved towards a more legal sense through cross-examination, micro

expressions (brief facial expressions of emotions), and polygraphs

There are many different theoretical perspectives that approach deceitful behavior and

forgetting about their differences they all have a common factor: "The mere act that people

lie will not affect their behaviors, speech content, or physiological responses. However,

sometimes liars may show different responses [from] truth tellers" (Vrij, Granhag, & Mann,

2010, p. 78).

Bond & DePaulo (2006) conducted a meta-analysis of 206 studies that looked at

detecting deception and performing at the same probability as predicted by chance. Bond and

DePaulo (2008) reviewed 142 studies that found, overall, judging the means of accuracy in

detecting lies that found, overall, people were able to accurately detect lies and truths with

similar success (detected lies accurately 54% of the time and detected truth accurately 55%

of the time). These studies would indicate that humans have a fairly poor judgment when it comes to inferring if a person is lying or telling the truth. To put it simply, the ability of certain individuals to correctly detect deception is as accurate as flipping a coin and having a 50% chance of guessing correctly. Bond and DePaulo (2008) concluded that "psychologists have attempted to uncover the traits of individuals who are particularly gifted in divining deceit—traits like the individuals' education, sex, occupation, Machiavellianism, self-monitoring, and locus of control. Although each of these individual differences prove to be illusory" (p. 486). Other studies (Ekman & O'Sullivan, 1991; Mann, Vrij, & Bull, 2004) have looked at how certain types of individuals in different job placement are able to detect deception with better accuracy.

Ekman and O'Sullivan (1991) looked at the issue of accurately detecting deception by focusing on individuals who encounter deception on a more frequent basis than the general population. The researchers looked at groups of people (total of 509 participants) that ranged from working: as judges, police, psychiatrists, federal polygraphists, U.S. Secret Service, special interest groups, and students served as the control group. The participants viewed a video where a women would either be telling the truth or lying about how she felt after watching a film. After looking at the film, "more accurate observers described using nonverbal or nonverbal plus speech clues to arrive at their correct choice" (p. 918). In addition to this study Mann, Vrij, and Bull (2004), recruited 99 police officers to watch video clips of interrogations, where they would see either a known truth or known lie was being told. The results showed that the officers used "significantly more story cues than conduct and vocal cues," to aid in detecting deception (p. 142). Additionally Mann and colleagues (2004) found that "good lie detectors were more inclined to claim that they focused on story

cues…than poor lie detectors" (p. 142). The study inferred that police officers that relied on traditionally taught aspects of detecting deception had lower accuracy scores on detection.

When individuals rely on verbal cues for the detection of deception it may lead to higher accuracy results (Bogaard, Meijer, Vrij, & Merckelbach 2016; Ekman & O'Sullivan 1991; Mann et al. 2004). These studies run contrary to the popular belief that nonverbal cues (i.e., posture and eye gaze) are paid more attention to as an indicator of deception than verbal cues, which is how police officers are trained (Vrij, 2008). General knowledge of deception cues examined by Colwell and colleagues (2006) found that those trained to detect deception "tended to be least accurate in their knowledge of how nonverbal cues relate to deception...no better than chance with respect to vocal characteristics [and] better than chance with respect to the verbal characteristics of a statement" (p. 496). These studies suggested that when emphasis is put on verbal cues of detecting deception, individuals would have greater accuracy at detection rather than people focusing primarily on the nonverbal cues for detecting deception. Another stereotypical factor that is addressed when individuals try to look at non-verbal body indications of deception is to look at body positions that violate social norms. Bond, Omar, Pitre, Lashley, Skaggs, and Kirk (1992) found that people who spoke while displaying nonverbal behaviors that violated social norms were rated as deceptive.

Vrij (2008) indicated that there are 5 possible explanations as to why nonverbal cues for detecting deception are given more priority over verbal cues. Firstly, people are more used to looking at nonverbal cues because it is the more promulgated theory of what to look for when detecting deception. Secondly, when individuals try to anticipate possible deception from another person they automatically go back to factors that are inaccurate at detecting

deception (nonverbal cues). Thirdly, attempting to look at both verbal and nonverbal cues puts too much work on an individual's brain when trying to detect deception and they will normally choose one of the options, normally it being the nonverbal cues. Fourthly, nonverbal cues have been presented more in literature more often than verbal cues. Finally, Vrij suggested that it is harder for the suspect who is being analyzed for deception to control his or her nonverbal behaviors when talking to someone and may be likely to slip up and reveal information.

Attitudes Toward Deception

Most people more than likely do not like being lied to or perceived that they are being lied to. Lying to people has the ultimate potential to disrupt a relationship and interpersonal trust may be permanently damaged because of deception (Schweitzer, Hershey, & Bradlow, 2004). People's perceptions of lies are often considered morally wrong; people generally hold negative attitudes towards others who lie (Curtis, 2015; Curtis & Hart, 2015; Curtis, Huang, & Nicks, 2018). Due to attitudes predicting future behaviors (Bentler & Speckart, 1979), people who hold negative attitudes toward others who lie may act differently toward those individuals.

Attitudes towards deception have been examined in different occupational settings. Curtis (2015) looked at the attitudes of nursing students who discovered their patients were deceiving them and most of them indicated that they would hold negative views of the patient. He found that nursing students actually hold a number of different attitudes and it may be attributed to the fact that people perceive being lied to as unpleasant.

Curtis (2013) also found that therapists hold negative attitudes towards clients who lied to them in a therapeutic setting. Attitude's of doctoral physical therapy students towards deception was also researched by Curtis, Huang, and Nicks (2018). The researchers found that when the students attended a workshop about deception from patients, the students had a decrease in negative attitudes towards deception. This indicated that knowledge about why people deceive healthcare professionals might help future professionals change their attitudes towards patients who deceive them.

Jehn and Scott (2007) looked at attitudes of customers towards perceived employee deceit and found that customers in an airline industry held negative attitudes towards employees who deceived them about beliefs, emotions, and intentions. Within the study the definition used for deceit of beliefs is when someone lies regarding something despite the person knowing it to be false. Their findings indicated that depending on an individual's perception of deceit and the characteristics around the deceit itself, the customers perception towards the airline company can be positive, negative or somewhere in between. This is to suggest that perception is entirely subjective and is dependent on each individual person when it comes to deception.

An example of this relating to the study is when a professor lies to a student in a situation where they give the wrong information despite knowing the information they are giving is untrue. For deceit of emotion this refers to someone hiding or covering up his or her true feelings. A professor may make a different facial expression when conveying false information to minimize the negative feelings that the students may perceive from their lie despite the facial expression being used as a façade. Lastly a deceit of intention is when a person states they will go and do something for another person, only to not do what they

informed the person they were going to do. An example may be if a professor agrees to check

on a grade for a student and then intentionally does not report back to the student.

COMPETENCE

Within Self-Determination Theory (SDT), competence is assumed to be one of three fundamental psychological needs, so the feelings or perceptions of competence with respect to an activity or domain is theorized to be important both because it facilitates people's goal attainment and also provides them with a sense of need satisfaction from engaging in an activity at which they feel effective (Williams & Deci, 1996). Therefore, perceived competence has been assessed in various studies and used, along with perceived autonomy (i.e., an autonomous regulatory style) to predict maintained behavior change, effective performance, and internalization of ambient values (Williams & Deci, 1996). Interestingly enough, William and Deci's (1996) study showed that college students' perceived competence of their instructor increased when the professor taught with an autonomy-supported style of teaching.

Within the professional field of academia it becoming incumbent that professionals are competent in their professional materials. There are many factors that help demonstrate that a professor has developed the skills to be competent and they can range from the growth of their intellectual abilities, interpersonal skills, and even environmental factors have the ability to affect competency development. Intellectual capabilities ensures students feel secure in the fact that their professor has adequate and up to date knowledge about the subject matter at hand and will present it in a way that makes clear sense to the students. The interpersonal skills allow for the professor to develop good working relationships with the students so that there can be an open dialogue of communication for clarification of any

information passed down to the students. Lastly the environmental factors contribute to the professors being able to adapt their abilities to better conform to the changing of information and practices over time to better accommodate students' needs in the areas of study (Deemer, Thomas, & Hill, 2011). All of these factors are import for a professor to be competent, however competence from the vantage of the student occurs when they feel effective in their behaviors. In this sense competence from the student happens when they are able to master tasks given to them within educational settings.

Competence in the area of SDT is one of the three needs that positively predicted instructor course ratings. Individuals in power such as professors need to strive to engage students in the area of competence for the students to feel that they can be effective within educational settings. Students' whose needs in the area of competence that are met by professors retain the "spark" to engage in the classroom and maintain intrinsic motivations (Filak & Sheldon, 2003). When professors engage in autonomy-related support regarding their students, the students have stronger competencies in their own work (Filak & Sheldon, 2008). A student's sense of perceived competence if their professor does not care about their learning can negatively affect student's motivation to learn the material (Trenshaw, Revelo, Earl, & Herman, 2016). These studies indicated that if a professor is deceiving a student, they would have lower competence.

RAPPORT

Rapport can loosely be defined as, "an overall feeling between two people encompassing a mutual, trusting, and prosocial bond" (Frisby & Martin, 2010, p. 147). Benson, Cohen, and Buskist (2005) established that in order for students to feel as if they have established rapport with a professor, the professor has to be perceived by the students to be approachable, accessible, interesting, fair, and elicit feelings of mutual trust, care, and respect. They also concluded that the development of student-instructor rapport is also associated with a handful of positive student and course outcomes such as: the perceptions and enjoyment of the course, affective learning, motivation, cognitive learning, and pro-academic behaviors such as studying, attendance, and attentiveness (Benson et al., 2005).

Before the class meets for the first time instructors have the potential to begin building rapport with students if they choose it. Legg and Wilson (2009) demonstrated that rapport between the students and the instructors can begin with an introductory welcoming email sent out before class begins. This email was sent to some of the incoming students as a guide on how they can effectively communicate with the instructor. They saw that individuals who were sent the email were less withdrawn from the course as opposed to those that did not get the email. Studies also show that rapport is aided when a professor engages in verbal and non-verbal behaviors that convey a sense of interest, concern, caring and encouragement to the student (Wilson, Ryan, & Pugh, 2010).

One factor that helps determine if the building of rapport will be successful or be diminished is whether or not the instructor in a face-to-face course interacts with their

students within a month of the class beginning (Starcher, 2011). Starcher asked students if they believed that one-on-one meetings were worth it to them and discovered that students felt more comfortable speaking and asking questions in and out of class because they trusted the professor more. In a similar study, Malouff and Hall (2012) looked at testing the effects of meeting with students privately at the beginning of the semester. They found that most of the student's thought evaluations helped establish rapport with the instructor and provided helpful information to the students. These self-reporting studies helped give insight to the fact that interpersonal abilities on the professors end will help assist the perception of rapport amongst students.

Another factor that is taken into effect when looking at how rapport is built up between the students and instructors is the role of the instructor when it comes to his/her presence within the class. Professors will more often than not engage in communication with their students in the forms of such as lecturing, email, etc. These classical modalities of communication are not lost yet, but new ways of communicating are being looked at in a study and the results are improvements for students' success (Greenfield, 2011). Greenfield (2011) had the idea that turning a lecture into a podcast might increase positive aspects of the student's thoughts about the course. Her ability of integrating modern technology into her course increased student satisfaction. The podcasts were given to students who did not do well in the first part of the course and for those struggling students, significant improvements on the students end started to emerge.

Experiences in the classroom when dealing with rapport not only affect the relationship within the classroom, it has the potential ability to affect outside of the classroom, long-term. Giles (2011) demonstrated that the student-instructor rapport had the

abilities to not only affect the student's course experience, but also the chances to alter the route of their academic career. Giles's study hinted towards the importance of emotional presence within the classroom as to a possible reason why students may change academic routes. Depending on how the instructor is able to build a relationship with the students has the possibility to impact future aspects. At all education levels, there is a positive link between student-teacher rapport and student outcomes. Some of these outcomes can include higher motivation, task success, student satisfaction, and higher evaluations. It is important to know that there is a predictive relationship between rapport and positive student relationship (Lammers, 2012). However, there is not simple method to determine if rapport is or has been established. Lammers and Gillaspy (2012) concluded, after creating a brief rapport scale, that there was a positive correlation in courses between rapport and perceived learning as well as rapport and instructor evaluation.

STUDY ONE

Deception has been explored within aspects of teaching (Reinhard, Dickhäuser, Marksteiner, & Sporer, 2011). Reinhard and colleagues studied the teacher's ability to detect deception of students who were accused of being academically dishonest. They found that because teachers had more of a truth-based perspective on deception they were not as effective as detecting deception. They concluded that established teachers, student teachers, and teaching assistants are not more accurate than others to decipher whether or not the student was being deceptive or not. There is no known literature that has examined deception from the vantage of the podium, specifically teacher or professor deception. Thus, this study is designed to explore the effects of professors who are perceived to be deceptive in the classroom. Specifically, the study investigated how perceived dishonesty of professors affects the students' rapport, perceived competence, and attitudes. This study might be helpful to professors to understand the impact that deception may or may not have on their students.

Research Questions and Hypotheses

Question 1. Does the student's perceived competence change when the professor is labeled as being deceitful rather than not being deceitful?

Hypothesis 1. It is predicted that students' who watch the video that shows the professor labeled as deceiving will have less perceived competence that than those who watch the non-deceiving professor video.

Question 2. Will students hold more negative attitudes towards professors who are perceived as being deceptive?

Hypothesis 2. It is predicted that students will hold more negative attitudes about deception if they are informed that the professor is actively deceiving them by being labeled as deceiving.

Question 3. Does the perception of deception affect the student's rapport with their professor?

Hypothesis 3. It is predicted that the rapport with the professor will be adversely affected if the students perceive the professor to be deceitful

METHODS

Participants

The study recruited a sample size of 202 participants with ages ranging from 18 to 50 years old ($M = 19.84$, $SD = 3.17$). The participants were gathered from Angelo State University through Sona System, a website that allows students the ability to participate in studies for extra credit or required credits per class requirements.

A frequency analysis was conducted on the demographic indicating for gender that there were 140 women (69%), 51 men (25.1%), and 12 missing (5.9%). The racial makeup of the participants in the sample included Caucasian/European American (42.4%), Hispanic/Latina/Latino (39.4%), African American/Black (9.9%), Asian/Asian American/Pacific Islander (6.4%), Bi-Racial (3.4%), Multiracial (2.5%), other (2.5%), and Native American/Alaskan Native (2%). Years in school was conducted using a frequency analysis indicated that there were 107 freshman (52.7%), 47 sophomores (23.2%), 25 juniors (12.3%), and 23 seniors (11.3%).

Measures and Materials

This study utilized 4 forms of measurements, which consisted of the: Demographics Questionnaire, Perceived Competence Scale, Students Attitude Toward Professor's Deception Measure (SATPD), and the Student-Instructor Rapport Scale – 9 (SIRS-9). The study also utilized two video conditions, both 2 min in length. The first condition was a video of an instructor that teaches masters level courses at Angelo State University talk about schizophrenia, he was telling the truth in both conditions. Figure 1 shows at the bottom of the screen in the first video condition was a message that states, "This professor is telling the

truth" whereas in the condition two video it had a message at the bottom that states, "This professors is deceiving you".

Figure 1. Video Conditions for Study 1

Truthful video with truthful label   Truthful video with deceptive label

Demographic Questionnaire. Participants were asked to complete the Demographic Questionnaire (Appendix A). The questionnaire asked participants to provide information about age, gender, race, and years in college.

Perceived Competence Scale. The Perceived Competence Scale (PCS; Appendix B) is a short, four-item questionnaire, and one of the most valid of the instruments designed to assess constructs for the Self-Determination Theory (Williams & Deci, 1996). Internal consistency reliability for the PCS was relatively high ($\alpha = .90$).

Students' Attitude Toward Professor Deception (SATPD). The SATPD (Appendix C) is an adaptation from the Other's Deceptive Attitude Measure, Cronbach alpha of .84, which was an adaptation from the Therapists' Attitudes Toward Deception Scale (TATDS). The TATDS had a good Cronbach alpha as .83 (Curtis, 2015). The SATPD contains a 23-item inventory, the first 12 attitude items are evaluating specific attitudes and the last 11 items assess attitudes toward professors. The first 12 items ask participants to rate attitudes toward viewing the instructor and the last 11 items asked participants to compare

professors who lie to those who do not lie on several attributes (e.g., lazy, knowledgeable, likeable, etc). Reliability for the SATPD was strong (α = .91).

Student-Instructor Rapport Scale – 9 (SIRS-9). The Student-Instructor Rapport Scale – 9 (Appendix D) is a 9-item student-instructor rapport scale that is useful in predicting student outcomes in courses (Lammers & Gillaspy, 2012). The scale was based off of reviews of rapport scales in a number of different settings (teacher-child, instructor-student, therapist-client, married couple, and employer-employee). Reliability for the SIRS-9 was strong (α = .94).

Design and Procedure

Approval from the Institutional Review Board was obtained before conducting the study. After IRB approval the students were recruited using the SONA-System technology, a website that allows students to voluntary participate in studies for extra credit. The students clicked a link that takes them to a secure research site named Psychdata (Locke & Keiser-Clark, 2012). Upon opening the link, the students were presented with the informed consent page that outlines the nature, purpose of the project, potential risks, discomforts, benefits students may come across, and ending with the explanation of confidentiality.

After the informed consent, if they went on to complete the study, participants were randomly assigned into one of two conditions, truth video or deceptive video. After watching the video in the condition that they were randomly assigned to, the participants answer a one-question manipulation check that asked how much do you believe this professor is deceiving you on a Likert-type rating scale (1 = Not at all deceptive; 7 = Completely deceptive), as well as completing the four measures. After completing the last measure they were taken to a debriefing form that gave them information as to more specifically what the researcher was

investigating, contact information for more information regarding the study, and the contact

of the IRB director for any grievances the participants may have had

RESULTS

The data were analyzed for missing information and duplicates. Upon looking all duplicate cases and those who had missing information, 14 responses were eliminated.

Research Questions and Hypotheses

Question 1. Does the student's perceived competence change when the professor is labeled as being deceitful rather than not being deceitful?

Hypothesis 1. An independent samples t-test was conducted and found no statistically significant differences between the truth ($M = 20.1$, $SD = 4.1$) or lie ($M = 20.7$, $SD = 4.9$) conditions for perceived competence, $t(198) = -.95$, $p = .34$. $d = .13$. Thus, professor deception did not affect students' perceived competence.

Question 2. Will students hold more negative attitudes towards professors who are perceived as being deceptive?

Hypothesis 2. The first 12 attitudinal items were summed. An independent samples t-test was conducted on these attitudinal items between conditions, revealing a statistically significant difference, $t(186) = 3.22$, $p = <.001$; $d = .47$. Participants held more negative attitudes towards the lie video ($M = 48.99$, $SD = 10.16$) compared to the truth video $M = 53.56$, $SD = 9.14$). One sample t-tests were done on each of the remaining 11 attitudes to determine if there was a statistically significant difference from a 4 anchor score (Bonferroni correction $= .005$). Out of the last 11 attitude items 10 were negative and one, was neutral (pathological). These results demonstrated that students have negative attitudes towards deception, but not when comparing professors to other professors.

Question 3. Does the perception of deception affect the student's rapport with their professor?

Hypothesis 3. An independent samples t-test was conducted and found no statistically significant results within the truth ($M = 30.69$, $SD = 7.26$) or lie ($M = 31.58$, $SD = 7.85$) conditions $t(193) = -.82$, $p = .41$. These findings suggest that professor deception does not affect rapport

DISCUSSION

The present study explored perceptions of students on professors who are perceived to be deceptive. The findings indicate that students held negative attitudes toward specific attitude items and on most of the general attitude items. The findings also indicated that deception does not affect rapport or perceived competence.

The findings with negative attitudes align with past research that explored attitudes toward clients and patients who lie, as well as negative specific attitudes towards deception (Curtis, 2013; Curtis, 2015; Curtis & Hart 2015; Curtis, Huang, & Nicks, 2018). LaPiere (1934) showed that attitudes may not always predict behavior. However, others have found that attitudes can predict behavior (Bentler & Speckart, 1979; Fishbein & Ajzen, 1974) and future studies similar to this might add to existing literature.

Within the definition of rapport (Frisby & Martin, 2010) trust is part of the aspect of building rapport and it seems counterintuitive if a person lies to another and they still seem to trust the person. These findings may have turned out this way because the students did not know the professor in the first place and there was not an establishment of rapport to begin with. Future studies to explore when rapport is built would help determine if deception affects trust.

These findings were also surprising when it came to perceived competence within the realm of self-determination theory. Within the self-determination theory according to Williams and Deci (1996) it would seem vital that if the knowledge presented to the student were perceived to be dishonest, it would hinder their ability to understand the information and allow for them to be able to do the work or understand the knowledge effectively. A

possible reason for these findings may suggest that in order to be more motivated in class, the students do not necessarily rely on whether or not a professor has lied to them. Another possible reason for these findings is the videos themselves since in both videos they were telling the truth with just a change in the label. It is possible that some of the students knew some of the content that was being talked about and it may have skewed the findings as well the fact that because the professor didn't actually lie it could have affected the findings as well.

One of the limitations of this study included the manipulation check that was done. The researcher asked participants, "How much do you believe this professor is being deceptive" on a 1 to 7 Likert scale, instead a more categorical manipulation check that asks, "Do you believe this professor is being deceptive" and requiring a yes or no answer might reduce ambiguity. Another limitation that was present in this study is that because there was only one type of video presented in this study, there were no variations like the use of cognitive labels, a violation of social norms (Bond et al., 1992), or not labeling both videos, which might have affected the outcomes.

This study has the potential to inform professors that it may be possible that students' perceived competence and rapport may not be affected if the professor appears to be deceiving them. This comes contrary to Lucas and Murry (2002) that found one of the chief complaints that students have was not being able to establish rapport with their instructors. Though this study explored student's attitudes towards professors who are believed to be deceptive and found that attitudes are affected, a future study may be done to explore further findings. Re-creating this study and modifying it by allowing for different videos to be shown utilizing research that indicates social norm violations may influence the findings

(Bond et al. 1992) as well as add cognitive labels for more variance may produce significant

results.

STUDY TWO

Within the first study there were only two conditions that consisted of the same video of a professor telling the truth with different labels at the bottom of each of them. Within study one, the manipulation check that was used was a continuous variable option, compared to a dichotomous variable which will be used in the present study. The purpose of study 2 was to add a video that gave the perception of deception as well as another one that was actually deceptive, as offer an additional two conditions that offered the cognitive labels.

One aspect that plays a role in whether or not individuals are able to detect deception is body language (Bond et al., 1992). In their experiment they looked at whether certain body positions are more likely to create the perception of deception. Bond and colleague's study was used as the basis for one of the video conditions to see if it affected perceived deception. The first video condition had the same professor from study one presenting the truth about schizophrenia, without a truth label at the bottom, while simultaneously engaging in a body position that violates social norms in conjunction with Bond and colleagues (1992). The second condition had a video of the same deceiving the participants by giving them false information of what schizophrenia is. There were also 2 cognitive label conditions in the form of vignettes that will ask the participants to, "think about a professor being honest" and "think about a professor being deceptive". The cognitive labels allow for students to think about a professor rather than to just see a professor that they might not know.

Research Questions and Hypotheses

Question 1. Is the students' perceived competence rated lower when the professor is perceived to be deceptive by having his hand raised and when the professor is actually

presenting misinformation, as well as does thinking about a professor being honest or truthful affect perceived competence?

Hypothesis 1. It was predicted that students who watch the videos that shows the professor with his hand raised and the video of the professor actually presenting misinformation will be perceived to have less competence. It was also predicted that students who thought a professor was being deceptive would be rated as less competent than thinking about a professor being honest.

Question 2. Does the student's attitude change when the professor is perceived to be deceptive by having his hand raised and when the professor is actually presenting misinformation as well as does thinking about a professor being honest or truthful affect attitudes?

Hypothesis 2. It was predicted that students who watch the videos that shows the professor with his hand raised and when the professor is actually presenting misinformation will hold negative specific and global attitudes. It was also predicted that students who thought a professor was being deceptive would have more negative attitudes than thinking about a professor being honest.

Question 3. Does the perception of deception change student's rapport when the professor is perceived to be deceptive by having his hand raised and when the professor is actually presenting misinformation as well as does thinking about a professor being honest or truthful affect rapport?

Hypothesis 3. It was predicted that students who watch the video that shows the professor with his hand raised and the video when the professor is actually presenting misinformation will be adversely affected when it comes to rapport. It was also predicted that

students who thought a professor was being deceptive would be adversely affected than

thinking about a professor being hone

METHODS

Participants

The study recruited a sample of 219 participants with ages ranging from 18 to 49 years old ($M = 20$, $SD = 3.55$). The participants were recruited from Angelo State University through Sona System, a website that allows students the ability to participate in studies for extra credit or required credits per class requirements.

A frequency analysis was conducted on the demographic indicating for gender that there were 147 women (73.9%) and 52 men (26.1%). The racial makeup of the participants in the sample included Caucasian/European American (51.6%), Hispanic/Latina/Latino (34.7%), African American/Black (10%), Asian/Asian American/Pacific Islander (3.2%), Native American/Alaskan Native (2.7%), Bi-Racial (.5%), Multiracial (.5%), and other (.5%). Years in school was conducted using a frequency analysis indicated that there were 80 freshman (36.5%), 69 sophomores (31.5%), 43 juniors (19.6%), and 25 seniors (11.4%).

Measures and Materials

This study utilized 4 forms of measurements, which consist of the: Demographics Questionnaire, Perceived Competence Scale ($\alpha = .94$), Students Attitude Toward Professor's Deception Measure (SATPD) ($\alpha = .92$), and the Student-Instructor Rapport Scale – 9 (SIRS-9) ($\alpha = .96$). Study 2 used the exact same measures that were used in study one with changes in the manipulation check as well as new video conditions and cognitive label conditions. Study 2 utilized two video conditions and two vignette conditions. The first video condition, (Fig. 2), 1 min 38 sec in length, utilized the same professor from the first study telling the truth about schizophrenia with his hand raised in an awkward position that violates social

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norms according to Bond and colleagues (1992). The second video condition, 1 min 45 sec in length, is the same professor actively deceiving students by deliberately giving false information about schizophrenia with a label at the bottom that states, "This professor is deceiving you". Condition 3 is a vignette that states, "Think about a professor being honest and condition 4 is a vignette that states, "Think about a professor being deceptive".

Figure 2. Video Conditions for Study 2

Truthful video with hand raised   Deceitful video with deceptive label

Design and Procedure.

The current study used the same procedures as study 1. Participants were randomly assigned into one of four conditions: truth video with hand raised condition, deceptive video with deceptive label condition, truth vignette condition, and deceptive vignette condition. After watching the videos or the vignette conditions the participants were asked to complete 2 manipulation checks. The first manipulation check asked, "Do you believe this professor was being deceptive" and had either a yes/no option. The second manipulation check asked, "How much do you believe this professor was being deceptive" on a Likert-type rating scale (1 = Not very deceptive; 7 = Very deceptive). After these manipulation checks the participants completed the rest of the measures. After completing the last measure they were

taken to a debriefing form that gave them information as to more specifically what the

researcher was investigating, contact information for more information regarding the study,

and the contact of the IRB director for any grievances the participants may have had.

RESULTS

Upon collecting all of the data, the data were reviewed to see which cases needed to be removed, if any. Upon looking all duplicate cases, those who filled out the survey more than once, 20 were eliminated from the analysis.

Research Questions and Hypotheses

Question 1. Does the student's perceived competence change when the professor is perceived to be deceptive by having his hand raised and is labeled as being deceitful as well as does thinking about a professor being honest or truthful effect perceived competence?

Hypothesis 1. It was predicted that students who watch the video that shows the professor with his hand raised and the video with the deceitful label will be perceived to have less competence that than those who watch the non-deceiving professor video. It was also predicted that students who thought a professor was being deceptive would be perceived as less competent than thinking about a professor being honest. An independent samples t-test was conducted (Table 1) and found no statistically significant difference between the truth with hand raised video ($M = 18.9$, $SD = 5.1$) or the lie with label video ($M = 18.6$, $SD = 5.5$) conditions $t(106) = .27$, $p = .789$. Nor was there a statistically significant difference between the think about a professor being honest ($M = 21.3$, $SD = 5.33$) and thinking about a professor being deceptive ($M = 19.5$, $SD = 5.3$) conditions $t(97) = 1.65$, $p = .102$ for perceived competence. The data suggest that perceived competence was not significantly affected when a professor was perceived to be lying to them.

The participants who marked that they did believe there was deception were analyzed further. An independent sample t-test was conducted on students who believed there was

deception on perceived competence and found significant differences in think about a professor being honest ($M = 21.6$, $SD = 5.2$) and think about a professor being deceptive ($M = 16.7$, $SD = 4.9$) conditions $t(57) = 3.6$, $p = .001$, $d = .98$.

A One-Way ANCOVA was conducted to determine a statistically significant difference between the video conditions from study one and two on the perceived competence scale after controlling for believability, $F(3,302) = 4.9$, $p = .002$. Pairwise comparisons revealed significant differences between video 1 and 4 ($p = .03$) $d = .31$, 2 and 3 ($p = .003$) $d = .39$, as well as 2 and 4 ($p = .001$) $d = .43$.

Table 1.

Means, Standard deviations, and Numbers for Perceived Competence Scale

Video Conditions	M	SD	N
1 – Truthful video with truthful label	20.11	4.12	92
2 – Truthful video with deceptive label	20.85	4.84	107
3 – Truthful video with hand raised	18.85	5.29	56
4 – Deceitful video with deceptive label	18.57	5.53	52

Question 2. Does the student's attitudes change when the professor is perceived to be deceptive by having his hand raised and is labeled as being deceitful as well as does thinking about a professor being honest or truthful affect attitudes?

Hypothesis 2. It was predicted that students who watch the videos that show the professor with his hand raised and the video with the deceitful label will hold negative attitudes. It was also predicted that students who thought a professor was being deceptive would have more negative attitudes than thinking about a professor being honest. The first 12 attitudinal items were summed. An independent samples t-test was conducted on these attitudinal items between conditions, revealing no statistically significant differences on attitudes with the truth hand raised video ($M = 50.44$, $SD = 9.64$) compared to lie with label ($M = 48.9$ and $SD = 11.2$) condition $t(101) = .709$, $p = .48$. There was a statistically significant difference between the think about a professor being honest ($M = 60.9$, $SD = 13.9$) and thinking deceptive ($M = 54.8$, $SD = 15.25$) conditions $t(94) = 2.03$, $p = .04$, $d = .41$. One sample t-tests were done on each of the 11 global attitudes for all conditions to determine if there was a statistically significant difference from a 4 anchor score (Bonferroni correction = .005). Out of the last 11 attitude items 10 were negative and one, was neutral (pathological). $p = .09$. These results demonstrated that students have negative attitudes in the video conditions and vignette conditions towards deception.

Analyses were conducted on participants who marked that they did believe there was deception. When controlling for believability there was a statistically significant difference found within both of the truth and deceitful vignette conditions for attitudes. An independent sample t-test was conducted on students who believed there was deception for specific attitudes and found significant differences between conditions $t(56) = 3.9$, $p < .001$, $d = 1.1$. The thinking about professors being honest condition had more positive attitudes ($M = 61.3$, $SD = 13.7$) compared to the think about a professor being deceptive ($M = 46.68$, $SD = 13.5$).

A One-Way ANCOVA was conducted to determine a statistically significant difference between the videos conditions from study one and two on the attitude specific scale after controlling for believability, $F(3,285) = 4.2$, $p = .007$. Pairwise comparisons revealed significant differences between video 1 and 2 ($p = .002$) $d = .47$, 1 and 3 ($p = .04$) $d = .33$, as well as 1 and 4 ($p = .005$) $d = .44$.

Table 2.

Means, Standard deviations, and Numbers for Attitude Specific Scale

Video Conditions	*M*	*SD*	N
1 – Truthful video with truthful label	53.56	9.14	87
2 – Truthful video with deceptive label	48.97	10.2	100
3 – Truthful video with hand raised	50.44	9.63	52
4 – Deceitful video with deceptive label	48.98	11.24	51

Question 3. Does the perception of deception change student's rapport when the professor is perceived to be deceptive by having his hand raised and is labeled as being deceitful as well as does thinking about a professor being honest or truthful affect rapport?

Hypothesis 3. It was predicted that students who watch the video that shows the professor with his hand raised and the video with the deceitful label will be adversely affected when it comes to rapport. It was also predicted that students who thought a professor was being deceptive would be adversely affected more than thinking about a professor being

honest. An independent samples *t*-test was conducted and found no statistically significant differences within the truth hand raised video (*M* = 27.27, *SD* = 8.1) or the deceitful video (*M* = 26.23, *SD* = 7.1) conditions *t*(106) = .704, *p* = .48. Nor was there a statistically significant difference between the think about a professor being honest (*M* = 36.4, *SD* = 6.26) and thinking deceptive (*M* = 33.25, *SD* = 9.55) conditions *t*(94) = 1.91, *p* = .06.

Analyses were conducted on participants who marked that they did believe there was deception. When controlling for believability there was a statistically significant difference found within both of the truth and deceitful vignette conditions for rapport. An independent sample *t*-test was conducted on students who believed there was deception for rapport and found significant differences between conditions *t*(56) = 6.2, *p* < .001, *d* = 1.6. The think about a professor being honest condition had more positive rapport (*M* = 36.5, *SD* = 5.5) than think about a professor being deceptive (*M* = 25.5, *SD* = 7.8) condition.

A One-Way ANCOVA was conducted to determine a statistically significant difference between the videos conditions from study one and two on the rapport scale after controlling for believability, F(3,297) = 8.73, p < 001. Pairwise comparisons revealed significant differences between video 1 and 3 (p = .005) *d* = .44, 1 and 4 (p = .001) *d* = .62, 2 and 3 (p < .001) *d* = .53, as well as 2 and 4 (p < .001) *d* = .71.

Table. 3

Means, Standard deviations, and Numbers for Rapport Scale

Video Conditions	M	SD	N
1 – Truthful video with truthful label	53.56	9.14	87
2 – Truthful video with deceptive label	48.97	10.2	100
3 – Truthful video with hand raised	50.44	9.63	52
4 – Deceitful video with deceptive label	48.98	11.24	51

DISCUSSION

The present study explored perceptions of students on professors who are perceived to be deceptive. The findings indicate that students held negative attitudes towards deception when it comes to thinking about a professor being deceptive. The findings also demonstrate that students did not have negative perceived competence or rapport with the professors when it came to the videos or vignettes, until it was looked at to see if the students believed they were being deceived. When controlled for believability it was demonstrated that there were significant differences in the area of perceived competence, rapport, and the specific attitudes towards professors when presented with the vignette conditions. These findings suggest that significance is dependent on if the students actually believe a professor is deceiving them.

When looking at the differences between the video conditions from study one and study two the findings demonstrated that there were significant differences in rapport, perceived competence, and specific attitudes in each scale. A significant finding out of all of these comparisons was that video one and four were significant in all three of the scales. Video one being the truth label video from study one and video 4 being the deceitful video with deceptive label from study two.

Some of the findings, such as the negative specific attitudes towards deception is in congruence with past research (Curtis, 2013; Curtis, 2015; Curtis & Hart 2015). With regards to the findings within the vignette conditions, a possible reason for these findings is that cognitive labels come into play. When a student is asked to think of a professor being honest/deceptive they might automatically go to a past experience of a professor that fits their cognitive label and go based off of that emotionally connected thought to that person and this

 is one of the possibilities for those findings. Study two added two additional video conditions: one that elicited perceptions of deception by violating social norms and one video with the professor actually providing misinformation. This study added further evidence that violating social norms is perceived to be deceptive when a professor is providing misinformation and being labeled as deceptive. The use of cognitive labels in the form of vignettes offered a different perspective than the videos by seeing if the label that we associate with people affects our perceptions of them.

Conclusion

From the studies it was demonstrated that students did have negative specific attitudes when it came to perceived professor deception. These findings are congruent with past research done by Curtis (2013; 2015) and Curtis and Hart (2015). One of the more surprising findings was the even within both study one and two when the participants watched the video with the deceitful label and the video with deceitful content, the students did not rate these videos to show statistical significance for the testing measures. One of the possible limitations for this finding is that within the very definition of deception as stated by Vrij (2008) "a successful or unsuccessful deliberate attempt, without forewarning, to create in another a belief which the communicator considers to be untrue" (p.15) was that by labeling both of those videos at the bottom and stating that the professor is deceiving you, the researcher gave forewarning to the participants indicating deception. This aspect may have have created problems, which is why the researcher controlled for believability.

Within the area of perceived competence there is a bevy of literature that gender, age, and the atmosphere that is created by the professors can affect perceived competence (Birch

& Ladd, 1997; Haermmerlie & Highfill, 1991; Kaschak, 1978; Kierstead, D'Agostino, & Dill, 1988) especially that it favors men over women the majority of the time. This was not the case however when Wilson, Beyer, and Monteiro (2014) compared old and young males/females to each other and found that men were rated negatively as being an effective teacher. One of the factors that can be looked at in future studies is by testing with old and young males/females to see if this research is still prevalent when dealing with the areas of deception to see if it affects outcomes.

From a teaching standpoint these studies have the possibility to inform future professors that students do not have positive attitudes towards being lied to. It may also be important that what a student thinks about a professor may have more significance if they believe the professor to be deceptive. Allowing professors to understand that if students think that they are a deceptive it can affect their perceived competence and rapport with the students and it may affect potential student teacher relationships (Yoon, 2002). These findings can potentially inform professors it may be possible that student's competence and rapport may not be affected if the professor is believed to be deceiving. The findings also indicate that students do have negative attitudes towards professors who lie. Future studies may investigate younger and more experienced student populations to examine the effects that perceived deception may hav

REFERENCES

Akehurst, L., Kohnken, G., Vrij, A., & Bull, R. (1996). Lay persons' and police officers'
beliefs regarding deceptive behavior. *Applied Cognitive Psychology*, *10*, 461-471.
doi: 10.1002/(SICI)1099-0720(199612)10:6<461: AID-ACP413>3.0.CO;2-2.

Barber, B. (1983). *The logic and limit of trust*. New Brunswick, NJ: Rutgers University
Press.

Benson, A. T., Cohen, L. A., & Buskist, W. (2005). Rapport: Its relation to student attitudes
and behaviors toward teachers and classes. *Teaching of Psychology*, *32*, 237-239.

Bentler, P. M., & Speckart, G. (1979). Models of attitude–behavior relations. *Psychological
Review*, *86*, 452–464. doi:10.1037/0033-295X.86.5.452.

Birch, S. H., & Ladd, G. W. (1997) The teacher-child relationship and children's early school
adjustment. *Journal of School Psychology*, *35*, 61-79.

Bogaard, G., Meijer, E. H., Vrij, A., & Merckelbach, H. (2016). Strong, but wrong: Lay
people's and police officers' beliefs about verbal and nonverbal cues to deception.
PLoS ONE, *11*(6), 1-19. doi:10.1371/journal.pone.0156615.

Bond, C. F., & DePaulo, B. M. (2006). Accuracy of deception judgments. *Personality and
Social Psychology Review*, *10*(3), 214–234.

Bond, C. F., & DePaulo, B. M. (2008). Individual differences in judging deception: accuracy
and bias. *Psychological Bulletin, 134*(4)*,* 477.

Bond, C. F., Jr., Omar, A., Pitre, U., Lashley, B. R., Skaggs, L. M., & Kirk, C. T. (1992).
Fishy-looking liars: deception judgment from expectancy violation. *Journal of
Personality and Social Psychology*, *63*(6), 969-977

Colwell, L., Miller, H., Miller, R., & Lyons, P. (2006). US police officers' knowledge regarding behaviors indicative of deception: Implications for eradicating erroneous beliefs through training. *Psychology, Crime, & Law, 12*(5), 489-503.

Competence [Def. 1]. (n.d.). *In Merriam Webster Online*. In Merriam-Webster. Retrieved January 28, 2019, from https://www.merriam-webster.com/dictionary/deception.

Curtis, D. A. (2013). *Therapists' beliefs and attitudes towards client deception*. (Order No. 3579625, Texas Woman's University). *ProQuest Dissertations and Theses*, 174. Retrieved from http://ezproxy.twu.edu:2048/docview/1508454518?accountid=7102. (1508454518).

Curtis, D. A. (2015). Patient deception nursing students' beliefs and attitudes. *Nurse Educator*, *40*(5), 254-257. doi:10.1097/NNE.0000000000000157.

Curtis, D. A., & Hart, C. L. (2015). Pinocchio's nose in therapy: therapists' beliefs and attitudes toward client deception. *International Journal for the Advancement of Counselling*, *37*(3), 279-292. doi:10.1007/s10447-015-9243-6.

Curtis, D. A., Huang, H-H., & Nicks, K. L. (2018). Patient deception in health care: physical therapy education, beliefs, and attitudes, *International Journal of Health Sciences Education*, *5*(1).

Deemer, E. D., Thomas, D., & Hill, C, L. (2011). Measuring students perceptions of faculty competence in professional psychology: Development of the Perceived Faculty Competence Inventory. *Training and Education in Professional Psychology, 5*(2), 80-80. Doi:10.1037/a0023554.

Deception [Def. 1]. (n.d.). *In Merriam Webster Online*. In Merriam-Webster. Retrieved

    January 2, 2019, from https://www.merriam-webster.com/dictionary/deception.

DePaulo, B.M., Kashy, D. A., Kirkendol, S. E., Wyer, M. M. & Epstein, J. A. (1996). Lying

    in everyday life. *Journal of Personality and Social Psychology*, 70, 979-995.

Ekman, P. & O'Sullivan, M. (1991). Who can catch a liar? *American Psychologist, 46*(9),

    913-920.

Filak, V. F., & Sheldon, K. M. (2003). Student psychological need satisfaction and college

    instructor-course evaluations. *Educational Psychology, 23*(3), 235-247.

Filak, V. F., & Sheldon, K. M. (2008). Instructor support, student motivation, student need

    satisfaction, and college instructos course evaluations: Testing a sequential path

    model. *Education Psychology 28*(6). 711-724.

Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and

    multiple behavioral criteria. *Psychological Review, 81*, 59-74. doi:10.1037/h0035872.

Ford, E. B. (2006). Lie detection: Historical, neuropsychiatric and legal dimensions.

    International Journal of Law and Psychiatry, 29(3), 159-177.

Frisby, B. N., & Martin, M. M. (2010). Instructor–student and student–student rapport in the

    classroom. *Communication Education*, *59*(2), 146-164.

Giles, D. L. (2011). Relationships always matter: Findings from a phenomenological

    research inquiry. *Australian Journal of Teacher Education*, *36*(6), 80-91.

Greenfield, S. (2011). Podcasting: A new tool for student retention? *Journal of Nursing*

    Education, *50*(2), 112-114. doi:10.3928/01484834-20101230-06.

Haemmerlie, F. M., & Highfill, L. A. (1991). Bias by male engineering undergraduates in

    their evaluation of teaching. *Psychological Reports, 68,* 151-160.

Hart, C. L., Fillmore, D. G., & Griffith, J. D. (2010). Deceptive communication in the

workplace: An examination of beliefs about verbal and paraverbal cues.

(2010).*Individual differences Research*, *8*, 176-183.

Hart, C. L., Hudson, L. P., Fillmore, D. G., & Griffith, J. D. (2006). Managerial beliefs about

the behavioral cues of deception. *Individual Differences Research*, *4*(3), 176-184.

Jehn, K. A., & Scott, E. D. (2007). Perceptions of Deception: Making Sense of Responses to

Employee Deceit. *Journal of Business Ethics, 80*(2), 327-347. doi:10.1007/s10551-

007-9423-3.

Kaschak, E. (1978). Sex bias in student evaluations of college professors. *Psychology of

Women Quarterly, 2,* 235-243.

Kierstead, D., D'Agostino, P., & Dill, H. (1988). Sex role stereotyping of college professors:

Bias in students' ratings of instructors. *Journal of Educational Psychology, 80*(3),

342-344. doi: 10.1037/0022-0663.80.3.342

Krauss, R. M. (1981). Impression formation, impression management, and nonverbal

behaviors. In E. T. Higgins, C. P. Herman & M. Zanna (Eds.), *Social Cognition: The

Ontario Symposium,* Vol. 1. Erlbaum.

Lammers, W. J. (2012). Students-Instructor rapport: Teaching style, communication, and

academic success. Presented at Southwestern Psychological Association, Oklahoma

City, OK.

Lammers, W. J., & Gillaspy, J. A. (2013). Brief measure of student-instructor rapport

predicts students success in online course, *International Journal for the Scholarship

of Teaching and Learning*. *7*(2), Article 16.

LaPiere, R. T. (1934). Attitudes vs. actions. *Social Forces*, 31, 230-237.

Legg, A. M., & Wilson, J. H. (2009). E-Mail from professor enhances student motivation and attitudes. *Teaching of Psychology*, *36*(3), 205–211.

Locke, B., Keiser-Clark, D. (2012). PsychData (Version 1) [Software]. Available from https://www.psychdata.com.

Lucas, C. J., & Murry, J. W. (2002). *New Faculty: A practical guide for academic beginners*. Palgrave: New York.

Malouff, J. M., & Hall, L. (2012). The value of meeting individually with students early in term. *National Institute on the Teach of Psychology*. Lecture conducted from St, Pet Beach, Florida.

Mann, S., Vrij, A., & Bull, R. (2004). Detecting true lies: Police officers' ability to detect supects' lies. *Journal of Applied Psychology*, *32*(2), 195-202.

Reinhard, M.-A., Dickhäuser, O., Marksteiner, T., & Sporer, S. (2011). The case of Pinocchio: teachers' ability to detect deception. *Social Psychology of Education*, *14*(3), 299–318. https://doi-org.easydb.angelo.edu/10.1007/s11218-010-9148-5.

Roche, L. A., & Marsh, H. W. (2000). Multiple dimensions of university teacher self-concept. *Instructional Science, 28*(5-6), 439-468.

Marin Sanchez, M., Martinez-Pecino, R., Troyano Rodriguez, Y., & Teruel Melero, P. (2011). Student perspectives on the university professor role. *Social Behavior and Personality: An International Journal*, *39*, 491-496.

Schweitzer, M.E., Hershey, J.C., & Bradlow, E.T. (2004). Promises and lies: Restoring violated trust. *Organizational Behavior and Human Decision Processes, 101,* 1-19.

Serota, K. B., Levine, T. R., & Boster, F. J. (2010). The prevalence of lying in America: three studies of self-reported lies. *Human Communication Research, 36*(1), 2-25. doi:10.1111/j.1468-2958.2009.01366.x.

Starcher, K. (2011). Intentionally building rapport with students. *College Teaching, 59*(4), 162. doi:10.1080/87567555.2010.516782.

Trenshaw, K. F., Revelo, R. A., Earl, K. A., & Herman, G. L. (2016). Using self-determination theory principles to promote engineering students' intrinsic motivation to learn. *International Journal of Engineering Education*, *32*(3), 1194-1207.

Sullivan, E. (2001). *The concise book of lying.* New York City: Farrer, Straus, and Giroux.

Vrij, A. (2000). *Detecting lies and deceit: The psychology of lying and its implications for professional practice*. Chichester: John Wiley & Sons.

Vrij, A. (2008) *Detecting lies and deceit: Pitfalls and opportunities*. Chichester: Wiley.

Vrij, A., Granhag, P. A., & Mann, S. (2010). Good liars. *The Journal of Psychiatry & Law, 38,* 77-98.

Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, *70*, 767-779.

Wilson, J. H., Beyer, D., & Monteiro, H. (2014). Professor age affects student ratings: Halo effect for younger teachers. *College Teaching, 62,* 20-24. doi: 10.1080/87567555.2013.825574.

Wilson, J. H., Ryan, R. G., & Pugh, J. L. (2010). Professor student rapport scale predicts student outcomes. *Teaching of Psychology*, *37*, 246-251.

Yoon, J. S. (2002). Teacher characteristics as predictors of teacher-student relationships:

Stress, negative affect, and self-efficacy. *Social Behavior and Personality: An*

International Journal, 30(5), 485-494

APPENDICES

APPENDIX A

Age:_____

Gender: ___Woman ____Man ____Transgender

Race/Ethnicity:

____ 1) African American/Black

____ 2) Caucasian/European American

____ 3) Asian/Asian American/Pacific Islander

____ 4) Native American/Alaskan Native

____ 5) Hispanic/Latina/Latino

____ 6) Bi Racial

____ 7) Multiracial

____ 8) Other: _____

Years in College:

____ 1) Freshman

____ 2) Sophomore

____ 3) Junior

____ 4) Senio

APPENDIX B

1. I feel comfortable in my ability to learn this material.

1   2   3   4   5   6   7
Not at   Somewhat   Very true
all true   true

2. I am capable of learning the material in this course.

1   2   3   4   5   6   7
Not at   Somewhat   Very true
all true   true

3. I am able to achieve my goals in this course.

1   2   3   4   5   6   7
Not at   Somewhat   Very true
all true   true

4. I feel able to meet the challenge of performing well in this course.

1   2   3   4   5   6   7
Not at   Somewhat   Very true
all true   true

APPENDIX C

After having watch the video about the professor how does this affect:

1. Liking the professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

2. Being angry at the professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

3. Seeing the person as a bad professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

4. Thinking negatively about the professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

5. Judging the professor harshly?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

6. Desire to interact with the professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

7. Enthusiasm to interact with the professor?

    1   2   3   4   5   6   7
    Significantly   No   Significantly
    Decrease   Change   Increase

8. Judging the professor as a good professor?

1	2	3	4	5	6	7
Significantly Decrease			No Change			Significantly Increase

9. Speaking poorly of the professor with others?

1	2	3	4	5	6	7
Significantly Decrease			No Change			Significantly Increase

10. Trusting the professor?

1	2	3	4	5	6	7
Significantly Decrease			No Change			Significantly Increase

11. Thinking positively about the professor?

1	2	3	4	5	6	7
Significantly Decrease			No Change			Significantly Increase

12. Viewing the professor as sincere?

1	2	3	4	5	6	7
Significantly Decrease			No Change			Significantly Increase

13-23. Professors who lie compared to professors who do not lie are:

1	2	3	4	5	6	7
Not very Successful						Very Successful

1	2	3	4	5	6	7
Not very Pathological						Very Pathological

1	2	3	4	5	6	7
Not very Weak						Very Weak

1	2	3	4	5	6	7
Not very Compliant						Very Compliant

1   2   3   4   5   6   7

Not very
Pleasant   Very
Pleasant

1   2   3   4   5   6   7

Not very
Lazy   Very
Lazy

1   2   3   4   5   6   7

Not very
Awkward   Very
Awkward

1   2   3   4   5   6   7

Not very
Knowledgeable   Very
Knowledgeable

1   2   3   4   5   6   7

Not very
Intelligent   Very
Intelligent

1   2   3   4   5   6   7

Not very
Likeable   Very
Likeable

1   2   3   4   5   6   7

Not very
Adjusted   Very
Adjusted

APPENDIX D

1. This instructor understands you.

> 1   2   3   4   5

> Not at all   very much so

2. This instructor encourages you.

> 1   2   3   4   5

> Not at all   very much so

3. This instructor cares about you.

> 1   2   3   4   5

> Not at all   very much so

4. This instructor treats you fairly.

> 1   2   3   4   5

> Not at all   very much so

5. This instructor communicates effectively with you.

> 1   2   3   4   5

> Not at all   very much so

6. This instructor respects you.

> 1   2   3   4   5

> Not at all   very much so

7. This instructor has earned your respect.

> 1   2   3   4   5

> Not at all   very much so

8. This instructor is approachable when you have questions or comments.

        1   2   3   4   5

Not at all   very much so

9. In general, you are satisfied with your relationship with this instructor.

        1   2   3   4   5

Not at all   very much so

IRB Approval Letter Study 1

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ANGELO STATE UNIVERSITY

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6/14/2018

Dr. Drew Curtis
Dept. of Psychology,
& Sociology Angelo
State University
San Angelo, TX 76909

Dear Drew:

The proposed addendum submitted by your student, Cody Good, for his previously approved project titled, *"Effects Of Perceived Professor Deception On Swdents"* has been reviewed and APPROVED in accordance with federal regulations 45 CFR 46.

The approved addendum is effective beginning June 14. 20 J 8. Please be aware that the protocol *will expire one year from ils original approval date,* which will be August 21. 2018. If the study will continue beyond that date, you must submit a request for continuation before the current protocol expires.

The approved addendum is for protocol #CUR-082117. Please include this number in the subject line of in all future communications with the IRB regarding the protocol.

Teresa Hack, Ph.D.
Chair, Institutional Review Board

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IRB Approval Letter Study 2

AS:]

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7/24/2018

Dr. Drew Curtis
Dept. of Psychology. Sociology &
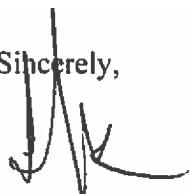Social Work Angelo State
University
San Angelo, TX 76909

Dear Drew:

The proposed project submitted by your student, Cody Good, titled, *"Student Pen:eptions of Professor Deceptivn"* was reviewed by Angelo State University's Institutional Review Board for the Protection of Human Research Subjects in accordance with federal regulations 45 CFR 46. I am pleased to inform you that Cody's protocol has been approved.

This protocol is approved for one year effective July 24, 2018, and it expires one year from this date. If the study will continue beyond one year, you must submit a request for continuation before the current protocol expires. The documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of July 24, 2018.

Please note that any revisions to these approved materials must be approved by the !RB prior to initiation. All unanticipated problems involving risks to subjects or others, and any unexpected adverse events must be reported promptly to this office.

Sihcerely,

The approval number for your protocol is #CUR-072418. Please include this number in the subject line of in all future communications with the lRB regarding the protocol.

Teresa '(Tay) Hack, Ph.D.
Chair, Institutional Review Board

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BIOGRAPHY

Cody Matthew Good is a graduate student in the Counseling Psychology Program. He received his Bachelor of Science in Psychology in 2016 from Angelo State University. He will graduate with a Masters of Science in Counseling Psychology August 2019. He will make Psychology great again someday.