The Effects of Ego Depletion and Deception on Thin-Slicing Accuracy

Jessica C. Lowe
Stephen F. Austin State University, jesslowe3302@gmail.com

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The Effects of Ego Depletion and Deception on Thin-Slicing Accuracy

By

Jessica C. Lowe, Bachelor of Science

Presented to the Faculty of the Graduate School of

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The Effects of Ego Depletion and Deception on Thin-Slicing Accuracy

By

Jessica C. Lowe, Bachelor of Science

APPROVED:

____________________________
Lauren Brewer, Thesis Director

____________________________
Kyle Conlon, Committee Member

____________________________
Catherine Pearte, Committee Member

____________________________
John Pruitt, Committee Member

________________________________
Pauline M. Sampson, Ph.D.
Dean of Research and Graduate Studies
ABSTRACT

This study was designed to examine the effects of ego depletion and deception on thin slicing. Experiment 1 examined whether participants could identify a video that contained a lie at an accuracy rate better-than-chance. Fifty-five percent of participants selected the deception video, which provided support that the videos were distinguishable.

Experiment 2 assessed whether ego depletion and deception could decrease thin-slicing accuracy. The main effect of deception on deception accuracy was significant, such that participants in the deception condition had lower deception accuracy than participants in the no-deception condition. The main effect of depletion and the interaction of depletion and deception on deception accuracy were not significant. The generalizability of the results was impaired by the failure to successfully manipulate ego depletion and the study being underpowered.
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EGO DEPLETION AND DECEPTION ON THIN-SLICING ACCURACY

Each day people make split-second judgments about the people they encounter that can have important ramifications. There are plenty of examples in which these judgments need to be made, such as meeting a potential romantic partner at a bar or asking a stranger for help in a parking lot. These judgments are based only on the information a person gathers during an encounter, but the consequences for making an incorrect judgment can be detrimental. Therefore, it is important to understand how accurate these judgments are and what can affect their accuracy.

The ability to make an accurate judgment about a stranger from limited information is known as thin slicing (Albrechtsen et al., 2009; Ambady, 2010; Ambady & Rosenthal, 1993). Previous research has found that these quick judgments can result in accurate assessments in a variety of scenarios, including assessing teacher effectiveness (Ambady & Rosenthal, 1993), rating personality traits of strangers (e.g., extraversion, conscientiousness; Carney et al., 2007), and predicting psychological adjustment of individuals experiencing a divorce (Mason et al., 2010). Although research has provided support for the accuracy of these judgments, it has been shown that the accuracy of these judgments can be impeded by different tasks (e.g., deliberation, mood; Albrechtsen et al., 2009; Ambady, 2010; Ambady & Gray, 2002). Thin slicing is theorized to be the result of an intuitive process, as intentional deliberation has been shown to interfere with thin-slicing accuracy (Ambady, 2010; Rule et al., 2009).
Ego depletion, a state of exhausted self-control, has been shown to inhibit executive control and intellectual performance (Baumeister et al., 1998; Baumeister et al., 2000; Reinhard et al., 2012; Schmeichel et al., 2003). Because research has provided support that thin slicing may rely on verbal and nonverbal cues to result in accurate judgments, anything that impedes information processing may negatively affect thin-slicing accuracy (DePaulo et al., 2003; Schmeichel et al., 2003; Stillman et al., 2010). This can be especially important in terms of detecting deception, an event that can have serious consequences for safety and legal decisions. The purpose of this study was to test the hypothesis that ego depletion and deception would decrease thin-slicing accuracy. Specifically, it was hypothesized that participants in both the depletion and deception conditions would have lower thin-slicing accuracy than participants in all other conditions.

**Thin Slicing**

Thin slicing, a technique used for impression formation, refers to an individual’s ability to make accurate judgments about a stranger from limited information (Albrechtsen et al., 2009; Ambady, 2010; Ambady & Rosenthal, 1993; Curhan & Pentland, 2007; Wiedmann & Reineking, 2006). Specifically, thin slicing focuses on impressions about strangers under the context of limited exposure to the individual. Because there are many scenarios in which impressions have to be made in a limited amount of time, thin slicing is often used (Curhan & Pentland, 2007; Wiedmann & Reineking, 2006).
Previous research has examined whether “thin slices” of information could yield accurate perceptions. Ambady and Rosenthal (1993) had participants watch silent videos of varying length (e.g., 6 seconds, 15 seconds) of teachers lecturing before rating the teachers’ effectiveness; these scores were able to predict the scores from the teachers’ course evaluations completed by the teachers’ students. The idea that a stranger, who watched a six second video clip, and evaluation scores from a student in those teachers’ courses, could be equivalent was novel when initially published (Ambady & Rosenthal, 1993). This study provided support that judgments of strangers, based on limited knowledge (“thin slices”), could be accurate (Ambady & Rosenthal, 1993).

Previous research has shown that thin slicing is the result of an intuitive process, rather than deliberation (Ambady, 2010; Rule et al., 2009). Participants were able to make accurate judgments of female sexual orientation (either lesbian or straight) of the pictured targets based on faces and facial features (Rule et al., 2009). This was examined over three experiments, using an image of a full face, an image cropped to show only the eyes, and the face cropped to exclude their hair or face shape. Studies 1 and 2 supported Ambady and Rosenthal’s (1993) findings on thin slicing, in which participants limited to a brief amount of time to make a decision had higher accuracy in judgments of the female targets’ sexuality than chance. Study 3 focused on whether thin slicing using an intuitive process had higher accuracy than deliberation. For the intuitive condition, participants were instructed to make quick judgments, relying on their first impressions. For the deliberation condition, participants were instructed that contemplation would improve
their accuracy and were discouraged from going with their “gut instinct.” Participants in the intuitive condition had higher accuracy when judging multiple female targets’ sexuality than participants in the deliberation condition. The results from this study suggest that thin slicing is based on an intuitive process and can be more accurate than deliberation (Rule et al., 2009).

Because thin slicing relies on short exposure time, previous research has examined the relationship between exposure time and accuracy; however, the results have been mixed. A previous meta-analysis did not find a significant difference in accuracy when comparing different exposure times (30-seconds up to 5 minutes; Ambady & Rosenthal, 1992). Similarly, the same trend was found among three studies that found exposure time did not significantly improve accuracy (Ambady & Rosenthal, 1993). In contrast, longer exposure time was found to increase accuracy in a study examining consensus and accuracy about personality judgments (Blackman & Funder, 1997). Specifically, the researchers found significantly higher accuracy in the longest condition (25-30 minutes) compared to the shortest condition (5-10 minutes; Blackman & Funder, 1997). It is worth noting that many thin slicing studies utilize different methods (e.g., audio only, silent videos). This makes it difficult to determine upper and lower limits for accurate thin slices, as it may differ depending on the method used.

Recent research has suggested another factor may influence the relationship between exposure time and accuracy. A previous study examined accuracy at five different exposure times (5s, 20s, 45s, 60s, and 300s) and slice location (beginning,
middle, and end; Carney et al., 2007). The researchers found a positive relationship between accuracy and exposure time depending on the construct being examined. Some constructs (e.g., negative affect, extraversion) performed well at 5-seconds although other constructs (e.g., positive affect, extraversion) required higher exposure time to achieve a similar level of accuracy. In general, accuracy was found to increase as exposure time increased, up until a certain point. A difference in accuracy was not found between 60-seconds and 300-seconds; however, 60-seconds was found to provide more accurate judgments overall than shorter slices. The results support previous literature that has found accurate thin slices at 5-seconds but suggest that some judgments may not reach optimal accuracy until approximately 60-seconds. The results indicate that accuracy for thin slices may rely on exposure time, the method used, and the judgment being made, with the optimal exposure time being between 5-60 seconds (Carney et al., 2007).

The intuitiveness of thin slicing was corroborated by another study examining the effect of deliberation and distraction on judgment accuracy of strangers (Ambady, 2010). Participants were randomly assigned to one of four conditions to watch video clips of college teachers. For the control condition, participants only watched the videos and provided ratings, whereas in the distraction condition the participants were instructed to count backwards aloud from 1000 in increments of 9 during the video. The other two conditions had the participants wait one minute before providing their ratings; however, one condition was just the time delay whereas participants in the deliberation condition were asked to list possible reasons for their judgments. The researchers found accuracy
was not influenced by distraction; however, accuracy was negatively affected by deliberation. When participants were asked to list their reasons for their judgments, an act requiring deliberation, the accuracy of their judgments decreased compared to participants in the other three conditions. These results provided further support that thin slicing results from an intuitive process that can be impeded by deliberation (Ambady, 2010).

Thin slicing, using an intuitive process, may have resulted due to adaptive benefits, such as being able to identify threats (Haselton & Funder, 2006; Stillman et al., 2010). Previous research has examined whether participants could identify individuals with an inclination towards violence by having the participants view 87 photos for two seconds each (Stillman et al., 2010). The 87 photos were selected from a sex offender database, with approximately half of the photos selected being offenders who had committed a violent crime. The other half of the photos were offenders who had committed a nonviolent crime. Participants were asked to rate each target on how likely the target was to be violent. The researchers found that participants were able accurately distinguish violent offenders from nonviolent offenders. The researchers also found support that may suggest that participants relied on facial cues (e.g., heavy brow, age) to make their quick judgments (Stillman et al., 2010).

Thin slicing has been shown to produce accurate judgments despite limited exposure time, which may have important implications for processes such as threat assessment or deception detection (Ambady, 2010; Ambady & Rosenthal, 1993; Rule et
al., 2009; Stillman et al., 2010). Resulting from an intuitive process, thin slicing may rely on the processing of verbal and nonverbal cues for making accurate judgments (Ambady, 2010; Rule et al., 2009; Stillman et al., 2010). Any process that interferes with information processing via intuitive processing (e.g., deliberation) has been shown to negatively affect accuracy; however, research on other processes that may affect thin-slicing accuracy is limited (Ambady, 2010; Ambady & Rosenthal, 1993; Carney et al., 2007; Rule et al., 2009; Stillman et al., 2010).

**Ego Depletion**

Ego depletion refers to the idea that acts involving self-control result in a state of exhausted self-control strength (Baumeister et al., 1998; Baumeister et al., 2000; Baumeister et al., 2007). The basic premise was that exerted self-control on one task hinders one’s performance on a following task (Baumeister et al., 1998; Baumeister et al., 2007). A previous study conducted four different experiments to test this idea, with each experiment relying on a different task requiring self-control (e.g., eating radishes over chocolate, suppressing emotion) to deplete participants (Baumeister et al., 1998). Each depletion task resulted in worse performances and lower persistence by participants on secondary tasks (Baumeister et al., 1998).

The foundation for the majority of the ego depletion literature has been based on the proposed limited resource model (Baumeister et al., 1998). Although the model has not gone unchallenged, it is by far the most prevalent model in the literature (Dang, 2018; Friese et al., 2019; Hagger et al., 2010). The limited resource model or “strength” model
has been described as being comprised of two key components (Baumeister et al., 1998; Baumeister et al., 2007). The first component is that all acts of self-control rely on the same internal resource. The second component is that this self-control resource is limited (Baumeister et al., 1998; Baumeister et al., 2007). Exercising self-control partially consumes this resource, resulting in ego depletion; however, the decrease is not viewed as permanent. Different mediators, such as positive affect (Tice et al., 2007) and rises in blood glucose (Gaillot et al., 2007), have demonstrated recovery from ego depletion.

Ego depletion has been shown to affect risk-taking (Heilman et al., 2010), aggression (Denson et al., 2012), and criminal behavior (Baron, 2003), among others. Schmeichel and colleagues (2003) conducted three experiments to examine whether ego depletion affected participants’ ability to engage in intelligent thinking. Across all three experiments, participants who had previously depleted their self-control strength performed worse on intellectual performance in comparison to the participants who had not depleted their self-control strength. It seemed that ego depletion only seemed to impact the tasks involving higher order cognitive processing that involved executive control (e.g., reading comprehension, logical reasoning), but ego depletion did not show an effect on basic information processing tasks (e.g., vocabulary test, non-sense syllable recall task; Schmeichel et al., 2003). Ego depletion has been originally theorized as only affecting deliberate, effortful processes; however, additional research has found that ego depletion may also affect intuitive processes (Reinhard et al., 2012, Schmeichel et al., 2003) Although research has shown ego depletion can affect performances on secondary
tasks, there is limited research on whether ego depletion affects people’s ability to make inferences about other people, including detecting deception (Baumeister et al., 1998; Vohs et al., 2008).

**Deception**

Deception, defined as an intentional attempt to mislead others, has drawn the interest of researchers for decades due to its prevalence in people’s daily lives (DePaulo et al., 2003; Levine, 2014). Specific attention has been paid to detecting deception and whether people can detect deception accurately (Albrechtsen et al., 2009; Reinhard et al., 2012). Previous research has found a positive relationship between accurate lie detectors and interpreting verbal and non-verbal behavior (Ekman & O’Sullivan, 1991). Despite this, research has shown that many people are not much better than chance (i.e., average 50% accuracy) when it comes to detecting deception (DePaulo & Pfeifer, 1986; Ekman & O’Sullivan, 1991; O’Sullivan & Ekman, 2004). These results include individuals whose jobs involve detecting deception, who are generally only slightly higher than chance (e.g., federal polygraphers accuracy at 55.67%, DePaulo & Pfeifer, 1986; Ekman & O’Sullivan, 1991). This discrepancy may be able to be explained by “rule of thumb” processing (i.e., cognitive heuristics) that may result in inaccurate judgments or the use of the wrong cues to determine deception (Levine et al., 1999; Vrij, 2004). Because research has hypothesized that deception detection may rely on information processing, which is the result of one of two processes (i.e., intuitive processing or deliberate processing), research has examined whether one process is more efficient for detecting deception
Comparing intuitive processing (i.e., thin slicing) and deliberation, Albrechtsen and colleagues (2009) had participants view recorded videos of inmates stating either true or false confessions. In Experiment 1, participants in the thin slicing condition only viewed the videos for 15 seconds, in comparison to those in the deliberation condition who viewed the videos in their entirety. Experiment 2 had participants in both conditions watch the full versions of the videos. In the thin slicing condition, participants had to complete a letter presentation task (i.e., remembering letters that appeared on screen) while watching the videos. In the deliberation condition, participants were asked to list the reasons for their judgments. In both experiments, participants in the thin slicing conditions had higher accuracy detecting deception than those in the deliberation conditions, despite the shorter video length (Experiment 1) and the distraction task (Experiment 2). The results suggested that intuitive thin slicing can provide more accurate judgments of strangers than deliberation, including detecting deception (Albrechtsen et al., 2009).

Ego depletion has been shown to affect the ability to detect deception. Previous research has found ego depletion participants had scores lower on deception accuracy than non-depleted participants (Reinhard et al., 2012). Across two experiments, the researchers examined the effects of ego depletion on deception accuracy, using an adapted version of the ‘A’ and ‘N’ ego depletion task. Half of the German participants in each experiment were instructed to transcribe a text, omitting the letters ‘E’ and ‘N’ (two
of the most common letters in the German language); half of the participants were given no instructions for omitting any letters. Following the ego depletion manipulation, participants were then tasked with detecting deceit while watching videos of people recounting their most recent internship. It is worth noting that participants were aware of the purpose of the deception condition and were provided motivation via additional compensation depending on their accuracy level. Results from this study found that participants in the depletion condition had lower accuracy on detecting deception than participants in the non-depletion condition. The results support the idea that ego depletion decreases one’s ability to detect deception, potentially through the use of visual cues (Reinhard et al., 2012).

Despite the estimated prevalence of deception and the implications, the ability to detect deception is still not fully understood (DePaulo et al., 2003). Although processes like thin slicing can produce quick, accurate judgments, research has also shown that deception detection can be hindered by the state of ego depletion (Albrechtsen et al., 2009; DePaulo et al., 2003; Stillman et al., 2010). How ego depletion and the presence of deception may interact and the effects they have on thin-slicing accuracy is not well understood.

**Current Study**

The purpose of the current study was to examine the effects of ego depletion and deception on thin-slicing accuracy. Thin slice judgments are an important component of deception detection and may have important implications for real world situations;
however, few studies have examined how the common state of ego depletion may affect thin-slicing accuracy when deception is present. Ego depletion has been shown to affect a variety of processes, including information processing (Schmeichel et al., 2003). If thin slicing relies on assessing verbal and nonverbal cues, ego depletion may negatively affect the accuracy of thin slice judgments, thus impeding the ability to detect deception.

The current study attempted to fill this gap in the literature by analyzing how ego depletion and deception affected thin-slicing accuracy using a 2 (depletion vs. non-depletion) x 2 (deception vs. no deception) design. More specifically, it was hypothesized that depleted participants in the deception condition would have lower thin-slicing accuracy than participants in all other conditions.

**Experiment 1**

The purpose of this study was to determine whether participants could accurately tell, with better-than-chance accuracy, when an individual was lying. An additional purpose was to provide evidence that the two videos created for this study were distinguishable from each other so that they could be used in future studies. It was hypothesized that participants would select the deception video as the video containing the target lying at an accuracy rate higher than chance.

**Method**

**Participants**

Fifty participants were recruited from Stephen F. Austin State University using SONA, an online recruitment system. The exclusion criterion was anyone under 18 years
of age. Eleven participants did not complete the study; therefore, their data were excluded from the analysis. Six participants who indicated that they knew the target were excluded from the analysis, due to concerns about familiarity affecting their responses. As a result, the responses for 33 participants (29 female; $M_{\text{age}} = 19.27$) were used for analysis. For ethnicity, 69.7% of the participants identified as not Hispanic or Latino. The racial demographics were: 72.7% White, 12.1% Black, 6.1% American Indian/Alaska Native, 6.1% more than one race, and 3.0% Asian.

**Measures**

**Stimulus Material**

A Black female volunteer was recruited to be the target in both videos. Based on a previous study, the target provided an account of her most recent job for the no deception video and a bogus account for the deception video (Reinhard et al., 2012). The videos were created using a pre-written, fill-in-the-blank script to ensure the content and length would be equivalent. The script prompted information about six specific details about the target’s job: job title, name of the company or organization for which the target worked, hours worked per week, wages, job responsibilities, and the importance of the target’s role in the company or organization. The target memorized both scripts and was instructed to pretend she was in a job interview when reciting each script. Both videos were approaching 60-seconds, which has been suggested to be the optimal exposure time (Carney et al., 2007). The no-deception video was approximately 50 seconds long; the deception video was approximately 55 seconds long. The target provided full consent to
be recorded and for the videos to be used in research. Additionally, the target completed several scales that are not relevant to this study (e.g., Ten Item Personality Inventory; Gosling et al., 2003).

**Follow-up Questions**

After watching both videos, which were counterbalanced in presentation, participants were presented with several follow-up questions. The first question asked participants to indicate whether they recognized the individual in the video, with the multiple choice options being the following: yes, maybe/unsure, no. Anyone who indicated they did know the individual or were unsure were excluded from the analysis due to concerns about familiarity and knowledge of the target’s work experience affecting their responses. The second question asked participants to indicate which video they believed contained the lie, with the two answer options being the two jobs discussed in the videos (i.e., retail associate, stocker). The third question asked participants to indicate their confidence level about whether they selected the video that contained the lie using a 5-point Likert-type scale, with the anchors being 1 (*not at all confident*) to 5 (*extremely confident*). The fourth question was an open-ended question asking participants to indicate the “tell” or how they knew the individual in the video was lying. Responses from this question were not analyzed. Participants also completed a brief demographic questionnaire.
Procedure

This study used a two-group within-subjects design to examine whether participants could identify when a stranger was lying with greater-than-chance accuracy. Participants were recruited from undergraduate psychology classes using an online recruitment system (i.e., SONA) and announcements in introductory psychology classes. After signing up for the study, participants were redirected to a Qualtrics survey in order to participate. After completing an informed consent (Appendix A), participants were asked to watch two videos (Appendix B), the order of which was presented randomly. One video was of the target providing an accurate account of her most recent job. One video was of the target providing a bogus account of her most recent job. Participants were then asked to complete the follow-up questions (Appendix C) about which video contained the lie, their confidence in their selection, and how they knew the target was lying. After completing a brief demographics survey (Appendix D), participants were debriefed (Appendix E) and compensated with partial course credit.

Results & Discussion

Fifty-five percent of participants accurately selected the deception video as the video in which the target was lying. Because this percentage was greater than chance (i.e., 50%), this result provided evidence that participants were able to correctly distinguish between the two videos. Additionally, participants’ confidence that they selected the video that contained the lie was significantly higher when participants correctly chose the deception video (\(M = 2.83, SD = 1.34\)) than for participants who
chose the incorrect no-deception video \((M = 2.00, SD = .845)\), \(t(29.07) = -2.17, p = .038; d = .74\).

This study focused on whether participants could accurately detect when the target in the video was lying. Building off of this study, Experiment 2 aimed to examine what could impair one’s ability to make an accurate judgment about lying. For Experiment 2, the two videos from Experiment 1 were utilized for a deception manipulation to examine whether ego depletion and deception negatively affected thin-slicing accuracy.

**Experiment 2**

**Method**

**Participants**

One hundred and twenty-three participants were recruited from undergraduate courses at Stephen F. Austin State University (SFASU) for partial course credit/extra credit via an online recruitment system (SONA) and announcements in undergraduate classes. Participants were told that the study was examining people’s impressions of strangers. The true purpose of the study was revealed to participants during the debriefing, followed by an opportunity to re-consent to the study or opt out. Exclusion criteria were anyone under the age of 18 years or anyone who participated in Experiment 1 due to exposure to the videos for the deception manipulation.

Data collection was on-going during the coronavirus (COVID-19) pandemic, which impaired participant recruitment. Out of the 123 participants who signed up, 21
participants did not complete the study or had missing data and were excluded from the analysis. Seven participants indicated that they knew the target in the video and were excluded due to concerns about recognition affecting their responses. A duplicate participant was identified with the same computer address, resulting in both responses being excluded. Two participants opted to not have their data included when completing the second informed consent at the end of the study. As a result of these exclusions, only 91 participants were included in the analysis.

Participants were 91 undergraduate students (71 female; $M_{\text{age}} = 20.00$ years). The demographics were 67% White, 23.1% Black, 3.3% more than one race, 3.3% unknown or not reported, 1.1% American Indian/Alaska Native, 1.1% Asian, and 1.1% Native Hawaiian or other Pacific Islander. 76.9% indicated that they were not Hispanic or Latino.

Measures

Depletion Manipulation

All participants completed an adapted version of the commonly used attention-control essay task, which has been demonstrated to be an effective manipulation for ego depletion (Dang, 2018). The original version involved having participants write about what they did the previous day; however, the task has been previously adapted to cover different topics (Banker et al., 2017; Garrison et al., 2019; Halali et al., 2013; Mead et al., 2009; Pochertsova et al., 2009; Schmeichel, 2007; Schmeichel & Vohs, 2009). To complete this adapted version of the task, all participants were asked to write a short
essay for six minutes about their dream job as though it was actually their job. The screen automatically advanced after six minutes, which was the procedure used in past studies (Mead et al., 2009; Schmeichel 2007). The prompt included additional instructions about details they had to include in their essay. The details were listed as the following: job title, name of the company or organization worked for, hours worked per week, wages, job responsibilities, and the importance of their role in the company or organization. In order to manipulate depletion, participants in the depletion condition were instructed to write details about their dream job as if their dream job was their current job without using words that contained the letters ‘A’ or ‘N.’ Participants in the non-depletion condition were instructed to write as if they had their dream job without using words that contained the letters ‘X’ or ‘Z.’ Based on the instructions, participants had to replace the entire word instead of omitting just the specified letters. Participants were provided an example using the word ‘exterminator,’ with a viable replacement being ‘bug killer.’ The depletion condition task was designed to required more self-control than the non-depletion condition due to the frequency of ‘A’ and ‘N’ in the English language, in comparison to ‘X’ and ‘Z.’ Because the ‘A’ and ‘N’ condition was designed to require more self-control, participants in that condition would theoretically end up in a state of depletion, at least relative to those in the non-depleted condition. The effect of this manipulation has been demonstrated in previous studies (Banker et al., 2017;
Instruction Checks for Depletion

Participants were asked two multiple-choice questions following the essay instructions but before they were allowed to continue to write their essay. The two multiple-choice questions asked participants to identify which of the following instructions were the ones they received for the essay task. The first question asked participants about the topic for the essay they had been asked to write. The second question asked participants to select the instructions for the essay (e.g., not use any words containing the letters ‘A’ or ‘N’). Each question had four multiple choice options, with one answer choice being the instructions for the depletion condition (‘A’ and ‘N’ condition), one choice being the instructions for the non-depletion condition (‘X’ and ‘Z’ condition), and two completely made up options. If either question was answered incorrectly, participants were redirected to a screen to review the instructions. After reviewing the instructions for the essay task, participants were asked the two multiple choice questions again before being allowed to continue to the essay portion.

State Levels of Self-Control

The brief version of the State Self-Control Capacity Scale (SSCCS-B) is a 10-item scale that measures current self-control capacity (Ciarocco et al., 2012). Although the original scale was assessed on a 7-point Likert-type scale, due to a programming error, this scale was measured on an 8-point Likert-type scale, with the anchors being 0 (not true) to 7 (very true). The scale was used to provide evidence that the depletion
manipulation successfully manipulated ego depletion. Two example items were “I feel like my willpower is gone” and “I can’t absorb any more information.” Two items were regularly coded; eight items were reverse coded. All items were averaged together, with higher scores indicating better self-control in that moment. The scale items were then asked a second time, following the deception assessment, in order to examine whether detecting deception was a depleting task. A difference score was created by subtracting the mean score from the first time participants took this scale from the second time participants took this scale, so that negative numbers would mean less self-control the second time.

Follow-up Questions for Depletion

This three-item questionnaire was used as follow-up questions to check the depletion manipulation and to maintain the cover story. The first question asked for the level of difficulty of the task on a 5-point Likert-type scale. The anchors were 1 (not difficult) to 5 (extremely difficult). The second question asked for a rating of subjective effort, with the anchors being 1 (no effort) to 5 (maximum effort). The third question asked how well the participant believed they followed the instructions. The anchors were 1 (poor) to 5 (above average).

Mood

The Brief Mood Introspection Scale (BMIS; Mayer & Gaschke, 1988) is a 16-item self-report measure that was used to provide evidence that the depletion manipulation successfully manipulated self-control, and not mood. The BMIS is a
4-point Likert-type scale with the anchors 1 (definitely do not feel) to 4 (definitely feel). Participants were asked to rate each adjective in relation to their current mood, with an example being “lively.” The following questions were reverse coded: drowsy, fed up, gloomy, grouchy, jittery, nervous, sad, and tired. The responses to the items were averaged together with higher scores indicating more pleasant mood. An additional question asking participants to rate their overall mood was added, with the anchors being -10 (very unpleasant) to 10 (very pleasant), which was the question primarily used for analysis.

**Deception Manipulation**

The two pre-scripted videos using a female target that were created for Experiment 1 were used for this study. The target provided full consent to be recorded and for the videos to be used in the study. One video was about the target’s actual most recent job (retail associate; no deception condition). The other video was about the target’s account of a bogus job (stocker; deception condition; Reinhard et al., 2012). Participants were randomly assigned to watch one of the two videos for the manipulation.

**Target Identifier Question**

This was a multiple choice question that asked participants to indicate whether they recognized the individual in the videos. Answer choice options included yes, maybe/unsure, and no. Any participants who indicated they knew the target or were unsure were excluded from the analysis to eliminate potential confounds. This was due to the primary dependent variable assessing participants’ accuracy about a stranger.
Deception Assessment

Six questions were used to assess the accuracy of the participants’ judgments about whether the target was being truthful in the video. These questions asked participants to rate how truthful they thought the target in the video was about each detail of the job the target discussed. Participants were asked about the following: target’s job title, the company or organization for which the target worked, hours worked per week, wages, job responsibilities, and the importance of the target’s role in the company or organization. Participants responded using a 6-point Likert-type scale with the anchors ranging from 0 (definitely lying) to 5 (definitely telling the truth). Scores for participants in the deception condition were reverse coded, so that higher scores would indicate higher deception accuracy. The six questions were averaged together to create an overall evaluation of deception score for analysis, with higher scores indicating higher deception accuracy.

Follow-up Questions

Two multiple choice questions were asked following the deception assessment. The first question asked participants to indicate how confident they were in their responses about whether the person in the video was lying. This question was assessed on a 5-point Likert-type scale, with the anchors being 1 (not at all confident) to 5 (extremely confident). The second question was a multiple choice question that asked participants to indicate when they knew the person in the video was lying, with seven different options.
The first six options corresponded to the six details specified in each video, which were the following: target’s job title, the company or organization for which the target worked, hours worked per week, wages, job responsibilities, and the importance of the target’s role in the company or organization. The seventh option stated that they did not think the individual in the video was lying.

**Trait Levels of Self-Control**

The Brief Self-Control Scale (BSCS; Tangney et al., 2004) is a 13-item scale that measures self-control as the trait level. The BSCS uses a 5-point Likert-type scale with the anchors being 1 (*not at all*) to 5 (*very much*). An example of a regularly coded item is “I am good at resisting temptation.” Nine items are reversed coded, with an example being “I have a hard time breaking bad habits.” All scores were averaged together, with higher scores indicating better general self-control.

**Demographics**

A demographic questionnaire was asked, containing 18 questions. All questions except two questions (age and major) were multiple choice questions. Participants were asked to report their biological sex, gender, age, ethnicity, race, classification, major, GPA, and income. Participants were asked two questions about their work history via a yes/no question, asking whether they were currently working and whether they had ever had a job. Six questions were asked on a 5-point Likert-type scale, with the anchors being 1 (*never*) to 5 (*very often*). These six questions included how often they lie about their job, how often they think other people lie about their jobs, how often they lie in general,
how often women lie in general, how often men lie in general, and how often they think people lie in general. The final question asked participants how good they were at detecting lying. This question was asked on a 5-point Likert-type scale, with the anchors being 1 (extremely bad) to 5 (extremely good).

**Procedure**

This study used a 2 (depletion vs. non-depletion) x 2 (deception vs. no deception) between-subjects design with thin-slicing accuracy as the dependent variable. Participants were recruited from undergraduate courses using course announcements and SONA, an online research participation management platform. SONA redirected participants to the online study posted on Qualtrics, an online data-collection platform.

After completing the informed consent (Appendix F), participants were randomly assigned to either the depletion or no-depletion condition. Participants were asked to write a brief essay about their dream job, as though it was their real job (Appendix G). In the depletion condition, it was specified in the instructions that words with the letters ‘A’ and ‘N’ must be omitted; in the non-depletion condition, it was specified in the instructions that words with the letters ‘X’ and ‘Z’ must be omitted (Appendix G). Participants were provided an example, using the word ‘exterminator,’ which contained both the letters ‘N’ (depletion condition) and ‘X’ (non-depletion condition). For both conditions, a viable replacement for exterminator was ‘bug killer.’ Because of the prevalence of A’s and N’s relative to X’s and Z’s, participants in the depletion condition needed to
exert self-control to find words that do not contain A’s or N’s.

In order to ensure that participants understood the instructions for the essay task, the participants were asked two multiple-choice instruction questions (Appendix H). If either question was answered incorrectly, participants were redirected to the instructions for the essay task and asked to take the two instruction questions a second time before being allowed to continue. Participants then completed the essay task for six minutes. Following the essay task, participants answered three brief questionnaires (SSCCS-B; follow-up questions for depletion; BMIS; Appendices I, J, and K, respectively). Then, participants were informed for the next part of the study that they would need to enable audio and video before proceeding. Participants were then randomly assigned to watch one of two brief pre-scripted videos (Appendix B). Participants in the no-deception condition viewed a video in which the target person was honest about her most recent job. Participants in the deception condition viewed a video in which the target person lied about her most recent job. These no-deception and deception videos were 50 seconds and 55 seconds, respectively.

After watching the short video, participants responded to the target identifier question (Appendix L), the deception assessment (Appendix M; primary dependent variable), two follow-up questions (Appendix N), the SSCCS-B (second time; Appendix I), and the BSCS (Appendix O), and other measures not relevant to this study. Participants then filled out a demographics survey (Appendix P) before being debriefed (Appendix Q). Following the debriefing, because of the use of deception in this study,
participants were given an opportunity to re-consent to the study or opt to not have their responses used in final analyses (Appendix R). Regardless of participants’ decisions to re-consent, all participants were awarded partial course credit or extra credit as compensation.

**Results & Discussion**

This study used a 2 (depletion vs. non-depletion) x 2 (deception vs. no deception) between-subjects design. Ego depletion and deception were the independent variables. Thin-slicing accuracy, specifically, accuracy about detecting deception about the details of the job, was the dependent variable. The hypothesis tested was whether ego depletion and deception interacted to have an effect on thin-slicing accuracy. To test this hypothesis, an analysis of variance (ANOVA) was performed.

Due to the historic effect of the pandemic during data collection, the data was split to examine whether the results differed between participants who took the study pre-COVID-19 and participants who took the study post-COVID-19. No significant difference in the results were found, which provided justification in continuing with the analysis with all participants included.

The ego depletion manipulation instruction question was used as an attention question. This question was used to verify that participants understood the instructions of the ‘A’ and ‘N’ task, using only the participants’ most recent response for analysis. A chi-square test was conducted to assess whether participants differed by condition. A significant difference between the depletion condition and answer selection was
observed, $X^2(2) = 91.00, p < .001$, providing support that participants did understand the instructions for their depletion condition.

The SSCCS-B was used to assess the ego depletion manipulation. A between-subjects $t$-test was used to assess whether the depletion manipulation was effective. Forty-six participants in the non-depletion condition ($M = 4.17, SD = 1.44$) were compared to the 45 participants in the depletion condition ($M = 4.05, SD = 1.11$). The results showed no significant difference, $t(89) = .43, p = .667$. These results suggested that ego depletion was not successfully manipulated.

To assess whether the ego depletion manipulation may have unintentionally affected mood, the BMIS was used to examine whether there was a difference in mood between participants in the depletion and non-depletion conditions. Participants in the non-depletion condition ($M = 14.20, SD = 4.92$) did not differ significantly from participants in the depletion condition ($M = 14.80, SD = 3.96$), $t(85.82) = -.646, p = .520$, which suggested that the ego depletion manipulation did not affect mood.

In order to assess whether detecting deception itself was depleting, a difference score was created for the SSCCS-B by subtracting participants’ scores from the first time it was asked (i.e., after completing the essay for either the depletion or non-depletion condition) from the second time it was asked (i.e., after the deception detection), such that negative scores indicated less state self-control the second time. A between-subjects $t$-test was conducted to examine whether SSCCS-B scores differed between the deception ($M = .104, SD = .663$) and no deception ($M = .107, SD = .721$) conditions. The results
failed to show a significant difference, $t(89) = .016, p = .987$. These results provide support that detecting deception is not depleting, which was consistent with previous literature.

A 2x2 ANOVA was used to test the main hypothesis that ego depletion and deception would interact to predict that depleted participants in the deception condition would have significantly lower deception accuracy than all other conditions. The main effect of deception condition on deception accuracy was significant, $F(1, 87) = 89.09, p < .001; \eta_p^2 = .501; d = 1.981$, such that participants in the deception condition had lower deception accuracy ($M = 1.45, SD = .87$) than participants in the no-deception condition ($M = 3.27, SD = .96$). The main effect of depletion condition on overall evaluation of deception scores was not significant, $F(1, 87) = .43, p = .513; \eta_p^2 = .005; d = .009$, which was expected because tests of the manipulation check (described above) showed that depletion was not successfully manipulated. The interaction between the depletion condition and deception condition on deception accuracy was also not significant, $F(1, 87) = .736, p = .393; \eta_p^2 = .008$, again, which was likely due to depletion not being successfully manipulated.

An analysis of covariance (ANCOVA) was conducted with the depletion/no-depletion conditions and the deception/no-deception conditions as the independent variables, deception accuracy as the dependent variable, and the overall mood score as the covariate. The main effect of the deception condition on deception accuracy remained significant ($p < .001$); however, the main effect of
depletion and the interaction remained non-significant ($ps > .402$). This suggested that mood was not affecting deception accuracy.

Because depletion was not manipulated, depletion condition was removed from the model. It is possible that participants’ state levels of self-control were related to deception accuracy. Another analysis of covariance (ANCOVA) was conducted with only the deception/no-deception conditions as the independent variable, deception accuracy as the dependent variable, and initial SS CCS-B scores as the covariate. The effect of the deception condition on deception accuracy remained significant ($p < .001$), which provides evidence that state self-control did not influence deception accuracy.

**General Discussion**

The purpose of Experiment 1 was to provide evidence that the created videos differed from one another. Participants were able to identify the video in which the target was lying at a rate better-than-chance (i.e., 55%), which provided support that the videos were distinguishable. Additionally, it was found that the participant’s self-reported confidence in their selection was related to the accuracy of their deception detection. Specifically, participants indicated higher confidence they had selected the video with the lie when they had chosen the deception video than participants who had chosen the no deception video.

The purpose of Experiment 2 was to test for the predicted interaction between ego depletion and deception on thin-slicing accuracy. Specifically, the hypothesis was whether ego depletion and deception interacted to impede the ability to make accurate,
intuitive judgments about a stranger. Although the presence of deception was shown to decrease deception accuracy, depletion and the interaction between the two failed to impact deception accuracy; however, because depletion failed to be successfully manipulated, the ability to draw inferences about the results is greatly hindered.

One possible alternative explanation commonly considered when a depletion manipulation fails is mood (Baumeister et al., 1998; Halali et al., 2013; Schmeichel & Vohs, 2009). Mood was examined and no difference was found when comparing participants in the depletion condition to participants in the non-depletion condition. Additionally, the primary analysis was ran controlling for overall mood. Controlling for mood did not affect the results, eliminating mood as an alternative explanation. The SSCCS-B was also ruled out, due to the fact that despite not manipulating depletion, controlling for the initial scores on the SSCCS-B did not affect the results.

Implications

The results from Experiment 2 showed that the presence of deception did decrease thin-slicing accuracy, providing support that thin-slicing accuracy can be affected by other factors. This could hold important implications for anyone who works in an industry that involves detecting when people are being deceptive (e.g., police officers). Often times, individuals accused of crimes may attempt to lie in order to evade detection. Understanding that the presence of deception may decrease deception accuracy may impact how professionals are trained and may lead to examining what can increase
Another potential implication could be threat assessment. Many individuals accused of crimes rely on deception to deceive their victims for a variety of reasons (e.g., gaining trust, fraud schemes). If an individuals’ ability to make an accurate judgment is hindered when people are being deceived, this would inform when people are their most vulnerable.

Another potential implication would be for the criminal justice system. The criminal justice system relies on trials by jury. Jury members may experience depletion due to emotion suppression (a commonly used depletion task; Dang, 2018; Muraven & Baumeister, 2000). In combination with potential acts of deception, jurors’ ability to make accurate judgments could be impaired. Additionally, witness statements, interviews, and encounters can have life-altering implications for officers and citizens. For law enforcement, being able to assess a stranger accurately is an important skill. There have been many high-profile cases in which a police officer shot a suspect they erroneously believed to be armed (Chaney & Robertson, 2015; Plant & Peruche, 2005). Understanding what can impede this ability to accurately assess strangers could hold important implications for training, policies, and procedures used to decrease the frequency of these and other types of incorrect judgments.

**Limitations**

This study has several limitations. The first limitation was that data collection was hindered by the coronavirus (COVID-19) pandemic, resulting in the study being
underpowered (based on power analysis calculations). The smaller sample size
limits the generalizability of the results, which is further limited by the
demographics of the sample (mainly White female undergraduate students).

The pandemic may have also impacted the results, potentially by introducing
other variables (e.g., stress) that were not controlled for. It is also possible that coping
with the pandemic was depleting, which could have inhibited the depletion manipulation.
The failure to successfully manipulate ego depletion is another limitation, as it hinders
the ability to interpret the results. This could have occurred for a variety of reasons. One
potential reason was that this study was conducted online, resulting in no control over the
environment in which participants took the study. It is possible that distracting
environments could have impacted participants attention and focus on the attention essay
task. This may have been exacerbated by the pandemic during the second half of data
collection, as many participants likely took the study at home.

Although the depletion manipulation selected has been used in previous research
(Garrison et al., 2019; Halali et al., 2013; Mead et al., 2009; Schmeichel, 2007;
Schmeichel & Vohs, 2009), there are other studies that have not had this manipulation
work (O’Keefe, 2017). It is possible that the manipulation may not be as effective as
other manipulations due to the essay task requiring a variety of skills (e.g., creativity),
which may interfere with the effectiveness of the manipulation. It was also possible that
the manipulation did work for some participants, but not for participants whose skills
(e.g., attention) were impaired by outside factors (e.g., with attention deficit hyperactivity
disorder or depression). Another possibility was that the participants did not follow the instructions, despite the fact that the attention checks indicated that the participants understood the instructions. Because the actual essays were not assessed, this makes it difficult to say whether the instructions were actually followed. Additionally, the depletion task may not have been as difficult or draining as originally intended in order to result in a state of ego depletion (O’Keefe, 2017).

For the SSCCS-B, there was a programming error that resulted in the original 7-point Likert type scale being asked on an 8-point Likert-type scale. Although it is unlikely that this change in the range of the scale significantly impacted the responses on the scale, no additional testing was done to verify the validity and reliability of the scale using an 8-point Likert-type scale.

Another limitation was validity and reliability of the videos used in both Experiment 1 and Experiment 2, which were created for the purpose of these experiments. The results from both studies provided support that the videos were distinguishable, supporting it may be an effective manipulation; however, it may also be considered a limitation. Additionally, the target used in the videos was a Black female. It is possible that gender and race stereotypes could have played a role, as the videos were not matched based on the participant’s own sex or race.

**Future Directions**

Future studies may consider replicating this study with a larger sample size to address the issues of this study being underpowered. A different depletion manipulation
may also be considered in order to examine whether ego depletion affects thin-
slicing accuracy. In addition to a different depletion manipulation, future research
may consider expanding the deception manipulation used. This manipulation used
in this study used pre-scripted videos about job history via an online study.
Considering the potential implications, future research could expand to different
types of scenarios (e.g., witness statements, admissions/denials of guilt) to assess
whether accuracy differs depends on the scenario. In addition, an in-person study
using a confederate for a scenario-based manipulation may yield differences in
accuracy than what is observed in online studies. Additionally, future research
may expand to assess other types of judgments (e.g., personality).

Although the implications are limited, this study did provide some evidence that
deception may affect thin-slicing accuracy and may have also helped lay the framework
for future research to further explore the relationships among thin slicing, ego depletion,
and deception. Thin slicing may provide accurate judgments, but it is not immune to the
effects of other processes. Improving human understanding of the underlying
mechanisms of thin slicing and its relationships with ego depletion and deception may
yield important information about when people’s ability to make accurate thin-slice
judgments is impaired.
REFERENCES


APPENDIX A
Informed Consent Form (Experiment 1)

Research Description:
This study is examining how people identify lies. You will be asked to watch two brief videos before being asked to answer a series of questions and a short demographics survey.

The amount of time required for your participation will be approximately 15-30 minutes and, you will receive 1 SONA R-point for your time.

Risks and Benefits
There are no known risks with this research. There are no benefits for the participants other than helping to move science forward in understanding the human experience.

Voluntary Participation
Your participation is entirely voluntary, and you may choose not to participate in this study or withdraw your consent at any time. You will not be penalized in any way should you choose not to participate or withdraw. You may skip any question that makes you uncomfortable or any question you do not wish to answer. You will be compensated for your time, even if you do not complete the study. Alternatives for earning course credits are available from your course instructor.

Alternative Therapies
Sometimes there are alternatives to participating in research. Certain studies, such as those that involve a therapy or intervention, are examples of when alternatives might be available. Because this study does not involve an intervention or treatment of any kind, no alternatives are offered.

Privacy and Confidentiality
We will do everything we can to protect your privacy. The investigators will have access to the raw data collected. All records will be kept private in secured files, in accordance with the standards at SFASU, federal regulations, and the American Psychological Association. Your name will not be attached to the answers you provide. Any form of report that is published or presented will not include any information that would make it possible to identify a participant. This number will not be tied to any type of identifiable information about you. In addition, please remember that the researchers are not interested in any individual person’s responses, but rather how people in general respond to the measures.
Contacts and Questions:
If you have any questions or concerns regarding this study or feel that you have been harmed in any way by your participation in this research, please contact Jessica Lowe at lowejc@jacks.sfasu.edu and/or Dr. Lauren Brewer at brewerle@sfasu.edu.

If you have questions or concerns regarding this study and would like to speak with someone other than the researchers, you may contact The Office of Research and Sponsored Programs at (936) 468-6606.

Statement of Consent
The procedures of this study have been explained to me and my questions have been addressed. The information that I provide is confidential and will be used for research purposes only. I am 18 years of age and I understand that my participation is voluntary and that I may withdraw anytime without penalty. I have read the information in this consent form and I agree to be in the study.

- Agree
- Disagree
APPENDIX B
Deception Manipulation

Completed script for no deception condition

The last job I had was working as a retail associate for Carter’s. I worked an average of 20 hours a week and was paid $8.00 an hour. My job responsibilities including hanging and folding clothing items, scanning and bagging items, collecting payments, directing customers through the store, informing customers about store updates, and cleaning. I was also responsible for sorting and labeling clothing items to help make sure all inventory stayed organized. My job was very important to the company because I was the one interacting with the customers. If an item rang up wrong or there was an issue with a coupon, I was the one who helped the customer. A customer’s experience checking out can affect how they viewed their overall experience at Carter’s.

Link for video: https://www.youtube.com/watch?v=cJItpTCK3yU

Created script for deception condition

The last job I had was working as a stocker for Kroger. I worked an average of 40 hours a week and was paid $7.25 an hour. My job responsibilities including loading and unloading the products from the trucks, moving merchandise to different areas, stocking shelves, creating produce displays, helping customers find products, and cleaning. I was also responsible for doing inventory to see what products we needed and to make sure no products were disappearing. My job was crucial to the company because I kept the shelves stocked and did inventory so that customers could find the products they were looking for. I was responsible for displaying products and for how the store looked, which affects a customer’s experience when shopping at Kroger.

Link for video: https://www.youtube.com/watch?v=3Ol61rcLWKI
APPENDIX C
Follow-Up Questions

Q1: Did you recognize the individual in the video?
- Yes
- Maybe/unsure
- No

Q2: In one of the videos you watched, the person in the video lied about their past job. Please indicate which video you believe has the lie, based on the job described in the video.
- Retail Associate
- Stocker

Q3: Please indicate how confident you are that the video you selected was the video that included the lie.
- Not all at confident
- Slightly confident
- Somewhat confident
- Fairly confident
- Extremely confident

Q4: What was the “tell” or what led you to believe that the person in the video you selected was lying?
[Essay box]
APPENDIX D
Demographics (Experiment 1)

Please provide the following information.

1) Gender:
   • Man
   • Woman
   • Transman
   • Transwoman
   • Other
   • Prefer not to answer

2) Age (in years):_______

3) I would describe my ethnicity as:
   • Hispanic or Latino
   • Not Hispanic or Latino

4) I would describe my race as:
   • American Indian/Alaska Native
   • Asian
   • Native Hawaiian or Other Pacific Islander
   • Black
   • White
   • More than one race
   • Unknown or Not reported
APPENDIX E
Debriefing (Experiment 1)

Thank you for participating in the study entitled, "Catching a Liar,” conducted by Jessica Lowe and Dr. Lauren Brewer in the Department of Psychology at SFASU. This study was designed to examine whether participants could distinguish between when an individual is lying and when they are telling the truth.

After consenting to this study, you were asked to watch two brief videos about an individual discussing their most recent job. One video consisted of an accurate account of the individual’s most recent job. The other video consisted of an account of a bogus job. We would like to note that the target in the video was asked to lie for this study and does not intentionally lie regularly. After watching the videos, all of you were asked to answer a series of questions afterwards and complete a demographics survey.

We are hypothesizing that participants will be able to accurately distinguish between the video containing details of a bogus job versus the video containing details of the individual’s real job. We are hypothesizing that participants accuracy on identifying the bogus job will be higher than chance.

As a reward for your participation, you will receive 1 R-point.

As a reminder, your participation in this study is confidential, and your name is not attached to any answers you provided.

If you experienced negative affect as a result of participating in this study, you may contact SFASU Counseling Services, located on the 3rd floor of the Rusk Building, or contact their office at (936) 468-2401 or counseling@sfasu.edu.

If you have any questions or concerns regarding this study or about your rights as a research participant, please contact Jessica Lowe at lowejc@jacks.sfasu.edu and/or Dr. Lauren Brewer at brewerle@sfasu.edu.

We respectfully ask that you not communicate to other students about the nature of this study or the predicted results until the completion of the project.

Thank you for your participation!

If you have any questions, comments, or concerns, feel free to contact the researchers or the Office of Research and Sponsored Programs at (936) 468-6606.
APPENDIX F
Informed Consent (Experiment 2)

Research Description: This study is examining people’s impressions about strangers. For the first part of the study, you will be asked to write a short essay about a dream job before answering a series of questions. For the second part, you will be asked to watch a short video. Afterwards, you will be asked to answer a series of questions and a short demographics survey.

The amount of time required for your participation will be approximately 45 minutes. You will either receive 2 SONA R-point for your time or extra credit/partial course credit depending on your professor.

Risks and Benefits There are no known risks with this research. There are no benefits for the participants other than helping to move science forward in understanding the human experience.

Voluntary Participation Your participation is entirely voluntary, and you may choose not to participate in this study or withdraw your consent at any time. You will not be penalized in any way should you choose not to participate or withdraw. You may skip any question that makes you uncomfortable or any question you do not wish to answer. You will be compensated for your time, even if you do not complete the study. Alternatives for earning course credits are available from your course instructor.

Alternative Therapies Sometimes there are alternatives to participating in research. Certain studies, such as those that involve a therapy or intervention, are examples of when alternatives might be available. Because this study does not involve an intervention or treatment of any kind, no alternatives are offered.

Privacy and Confidentiality We will do everything we can to protect your privacy. The investigators will have access to the raw data collected. All records will be kept private in secured files, in accordance with the standards at SFASU, federal regulations, and the American Psychological Association. Your name will not be attached to the answers you provide. Any form of report that is published or presented will not include any information that would make it possible to identify a participant. This number will not be tied to any type of identifiable information about you. In addition, please remember that the researchers are not interested in any individual person’s responses, but rather how people in general respond to the measures.

Contacts and Questions: If you have any questions or concerns regarding this study or
feel that you have been harmed in any way by your participation in this research, please contact Jessica Lowe at lowejc@jacks.sfasu.edu and/or Dr. Lauren Brewer at brewerle@sfasu.edu. If you have questions or concerns regarding this study and would like to speak with someone other than the researchers, you may contact The Office of Research and Sponsored Programs at (936) 468-6606.

**Statement of Consent**
The procedures of this study have been explained to me and my questions have been addressed. The information that I provide is confidential and will be used for research purposes only. I am 18 years of age and I understand that my participation is voluntary and that I may withdraw anytime without penalty. I have read the information in this consent form and I agree to be in the study.

- Agree
- Disagree
APPENDIX G
Depletion/Non-Depletion Essay Instructions

Instructions for the depletion condition:

Please write a brief essay about details of your dream job. We would like you to write about your dream job as if it is your current job. To make it more challenging, we would like you to write without using words that contain the letters ‘A’ or ‘N.’ For example, instead of stating your job title is ‘exterminator,’ you could say your job title is ‘bug killer.’ This is because the word ‘exterminator’ contains the letter ‘N’ but ‘bug killer’ doesn’t contain the letters ‘A’ or ‘N.’

Details you must include are the following: job title, name of the company or organization worked for, hours worked per week, wages, job responsibilities, and the importance of their role in the company or organization.

Instructions for the non-depletion condition:

Please write a brief essay about details of your dream job. We would like you to write about your dream job as if it is your current job. To make it more challenging, we would like you to write without using words that contain the letters ‘X’ or ‘Z.’ For example, instead of stating your job title is ‘exterminator,’ you could say your job title is ‘bug killer.’ This is because the word ‘exterminator’ contains the letter ‘X’ but ‘bug killer’ doesn’t contain the letters ‘X’ or ‘Z.’

Details you must include are the following: job title, name of the company or organization worked for, hours worked per week, wages, job responsibilities, and the importance of their role in the company or organization.
APPENDIX H
Depletion Manipulation Instruction Check Questions

Q1: What are the instructions for the topic of the essay?
• To write about a topic you are passionate about
• To write about your current job
• To write a short essay about what you did yesterday
• To write about your dream job as if it is your real job

Q2: What are the instructions for the essay you have been asked to write?
• Not use any words containing the letters ‘A’ or ‘N’
• Not use any personal pronouns (e.g., ‘I’ or ‘his/her’)
• Not use any words containing the letters ‘X’ or ‘Z’
• Not use any words longer than two syllables
APPENDIX I

State Self-Control Capacity Scale (Brief Version)

INSTRUCTIONS: Please respond to the statements below, describing how you feel right now (not usually). We are interested in your feelings at this moment. Please move the slider to (one number) under each item using the following scale:

1 = not true
2 = somewhat not true
3 = a little not true
4 = neutral
5 = a little true
6 = somewhat true
7 = very true

1. I need something pleasant to make me feel better.
   
   not true 0 1 2 3 4 5 6 7 very true

2. I feel drained.
   
   not true 0 1 2 3 4 5 6 7 very true

3. If I were tempted by something right now, it would be very difficult to resist.
   
   not true 0 1 2 3 4 5 6 7 very true

4. I would want to quit any difficult task I was given.
   
   not true 0 1 2 3 4 5 6 7 very true

5. I feel calm and rational.
   
   not true 0 1 2 3 4 5 6 7 very true

6. I can’t absorb any more information.
   
   not true 0 1 2 3 4 5 6 7 very true
7. I feel lazy.

   not true  0  1  2  3  4  5  6  7  very true

8. I feel sharp and focused.

   not true  0  1  2  3  4  5  6  7  very true

9. I want to give up.

   not true  0  1  2  3  4  5  6  7  very true

10. I feel like my willpower is gone.

    not true  0  1  2  3  4  5  6  7  very true
APPENDIX J
Follow-Up Questions for Depletion Manipulation

Q1: How difficult would you rate the previous task?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not Difficult</td>
</tr>
<tr>
<td>2</td>
<td>Minimally Difficult</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat Difficult</td>
</tr>
<tr>
<td>4</td>
<td>Moderately Difficult</td>
</tr>
<tr>
<td>5</td>
<td>Extremely Difficult</td>
</tr>
</tbody>
</table>

Q2: How would you rate the amount of effort you put into the task?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Effort</td>
</tr>
<tr>
<td>2</td>
<td>Minimum Effort</td>
</tr>
<tr>
<td>3</td>
<td>Some Effort</td>
</tr>
<tr>
<td>4</td>
<td>Moderate Effort</td>
</tr>
<tr>
<td>5</td>
<td>Full Effort</td>
</tr>
</tbody>
</table>

Q3: How well do you think you did in following the instructions?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor Average</td>
</tr>
<tr>
<td>2</td>
<td>Slightly Below Average</td>
</tr>
<tr>
<td>3</td>
<td>Average</td>
</tr>
<tr>
<td>4</td>
<td>Slightly Above Average</td>
</tr>
<tr>
<td>5</td>
<td>Above Average</td>
</tr>
</tbody>
</table>
## APPENDIX K

**Brief Mood Introspection Scale**

Instructions: Please select which of the following indicates how well each adjective or phrase describes your present mood.

<table>
<thead>
<tr>
<th>Emotion</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lively</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Drowsy</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Happy</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Grouchy</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Sad</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Peppy</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Tired</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td><strong>Nervous</strong></td>
<td>Definitely Do Not Feel</td>
<td>Do Not Feel</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Mood</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------</td>
<td>---</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Caring</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Calm</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Content</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Loving</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Gloomy</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Fed up</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Jittery</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
<tr>
<td>Active</td>
<td>Definitely Do Not Feel</td>
<td>2</td>
<td>Slightly Feel</td>
<td>Definitely Feel</td>
</tr>
</tbody>
</table>

**Overall, my mood is....**

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Very Unpleasant

Very pleasant
APPENDIX L
Target Identifier Question

Did you recognize the individual in the video?

- Yes
- Maybe/unsure
- No
APPENDIX M
Deception Assessment (Dependent Variable)

INSTRUCTIONS: Please respond to the statements below, indicating whether you think the person in the video was telling the truth or lying about the information about their past job.

Q1: How truthful do you think the person in the video was about what their job title was?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth

Q2: How truthful do you think the person in the video was about what company they worked for?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth

Q3: How truthful do you think the person in the video was about what the number of hours they worked?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth

Q4: How truthful do you think the person in the video was about what they earned (i.e., wages)?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth

Q5: How truthful do you think the person in the video was about what their job responsibilities were?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth

Q6: How truthful do you think the person was about the importance of their job?
Definitely lying 0 1 2 3 4 5 Definitely telling the truth
APPENDIX N
Deception Follow-Up Questions

Q1: How confident are you in your responses about whether the person in the video was lying?
   - Extremely confident
   - Fairly confident
   - Somewhat confident
   - Slightly confident
   - Not at all confident

Q2: When did you know the person was lying?
   - When they talked about their job title
   - When they talked about where they worked
   - When they talked about how many hours they worked
   - When they talked about their wage
   - When they talked about their job responsibilities
   - When they talked about how important their job was
   - I don’t think the person in the video was lying
### APPENDIX O

**Brief Trait Self-Control Scale**

For each of the following statements, please indicate how much each of the following statements reflects how you typically are.

1. I am good at resisting temptation
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

2. I have a hard time breaking bad habits
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

3. I am lazy
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

4. I say inappropriate things
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

5. I do certain things that are bad for me, if they are fun
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

6. I refuse things that are bad for me
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

7. I wish I had more self-discipline
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much

8. People would say that I have iron self-discipline
   - 1 Not at all
   - 2 Not much
   - 3 Somewhat
   - 4 Mostly
   - 5 Very Much
9. Pleasure and fun sometimes keep me from getting work done
   1  2  3  4  5
   Not at all  Not much  Somewhat  Mostly  Very Much

10. I have trouble concentrating
    1  2  3  4  5
    Not at all  Not much  Somewhat  Mostly  Very Much

11. I am able to work effectively toward long-term goals
     1  2  3  4  5
     Not at all  Not much  Somewhat  Mostly  Very Much

12. Sometimes I can't stop myself from doing something, even if I know it is wrong
     1  2  3  4  5
     Not at all  Not much  Somewhat  Mostly  Very Much

13. I often act without thinking through all the alternatives
     1  2  3  4  5
     Not at all  Not much  Somewhat  Mostly  Very Much
APPENDIX P
Demographics Questionnaire

Please provide the following information.

1. Biological Sex
   - Male
   - Female

2. Gender:
   - Man
   - Woman
   - Transman
   - Transwoman
   - Other
   - Prefer not to answer

3. Age (in years):_______

4. I would describe my ethnicity as:
   - Hispanic or Latino
   - Not Hispanic or Latino

5. I would describe my race as:
   - American Indian/Alaska Native
   - Asian
   - Native Hawaiian or Other Pacific Islander
   - Black
   - White
   - More than one race
   - Unknown or Not reported

6. Classification:
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate student
7. Major: ____________

8. GPA
   - Under 1.5
   - 1.5-1.9
   - 2.0-2.4
   - 2.5-2.9
   - 3.0-3.4
   - 3.5-4.0

9. Income:
   - Under $20,000
   - $20,000 - $24,999
   - $25,000 - $29,999
   - $30,000 - $34,999
   - $35,000 - $39,999
   - $40,000 - $44,999
   - $45,000 - $49,999
   - $50,000 and above

10. Are you currently working?
    Yes   No

11. Have you ever had a job?
    Yes   No

12. Have often do you lie about your job?
    
    1  2  3  4  5
    Never Rarely Sometimes Often Very often

13. How often do you think people lie about their jobs?
    
    1  2  3  4  5
    Never Rarely Sometimes Often Very often

14. How often do you lie in general?
    
    1  2  3  4  5
    Never Rarely Sometimes Often Very often

15. How often do women lie in general?
    
    1  2  3  4  5
    Never Rarely Sometimes Often Very often
16. How often do men lie in general?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very often</td>
</tr>
</tbody>
</table>

17. How often do you think people lie in general?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very often</td>
</tr>
</tbody>
</table>

18. How good are you at detecting deception?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extremely bad</td>
<td>Somewhat good</td>
<td>Neither good nor bad</td>
<td>Somewhat good</td>
<td>Extremely good</td>
</tr>
</tbody>
</table>
APPENDIX Q
Debriefing (Experiment 2)

Thank you for participating in the study entitled, "Impressions about People," conducted by Jessica Lowe and Dr. Lauren Brewer in the Department of Psychology at SFASU. This study was designed to examine the relationship between self-regulation, deception, and thin slicing.

We would like to discuss the purpose of this study. Sometimes, in research, researchers avoid telling participants the true purpose of a study because it can affect how people respond to questions and tasks. You were told this study was looking at people’s impressions about strangers. The true purpose of this study was looking at how accurate people’s perceptions are of strangers. We were examining how deception and depleted self-control strength (i.e., ego depletion) affects thin slicing accuracy (i.e., how accurate one’s judgment is about a stranger based on limited information).

After consenting to this study, you were asked to write a short essay about your dream job as though it was your real job. Some of you were asked to not use words containing the letters ‘A’ or ‘N;’ others were asked to not use words containing the letters ‘X’ or ‘Z.’ Your responses will not actually be used for future studies. Rather, one condition was designed to deplete self-control strength while the other was not.

Following the essay, you answered a series of questions and multiple scales. Next, some of you were presented with a video of an individual telling the truth about their last job. Some of you watched a video with an individual lying about their last job. All of you were asked to answer a series of questions afterwards and complete a demographics survey.

We are hypothesizing that depending on the instructions you received for the essay task, some of you have reduced self-control. Depending on the instructions for the essay and video you watch, we are hypothesizing that participants in the reduced self-control condition and deception condition will have lower thin slicing accuracy.

As a reward for your participation, you will either receive 2 SONA R-point for your time or extra credit/partial course credit depending on your professor.

As a reminder, your participation in this study is confidential, and your name is not attached to any answers you provided.

If you experienced negative affect as a result of participating in this study, you may
contact SFASU Counseling Services, located on the 3rd floor of the Rusk Building, or contact their office at (936) 468-2401 or counseling@sfasu.edu.

If you have any questions or concerns regarding this study or about your rights as a research participant, please contact Jessica Lowe at lowejc@jacks.sfasu.edu and/or Dr. Lauren Brewer at brewerle@sfasu.edu.

We respectfully ask that you not communicate to other students about the nature of this study or the predicted results until the completion of the project.

Thank you for your participation!

If you have any questions, comments, or concerns, feel free to contact the researchers or the Office of Research and Sponsored Programs at (936) 468-6606.
APPENDIX R

2nd Informed Consent (Experiment 2)

We appreciate your participation and would like to apologize for misleading you about the true purpose of this study. Now that you are aware of what this study is actually looking at (i.e., how accurate people’s judgments are about strangers), we would like ask for you to re-consent so that we may use your responses for the analysis. If you would not like your responses to be used, you may withdraw your consent to the study.

- I agree to allow the researchers to use my responses
- I do not agree to the researchers using my responses
VITA

Jessica Lowe received her Bachelor of Science degree in psychology from Jacksonville State University in April 2017. After spending a year working as a family service counselor and as a resident assistant at an assisted living facility, she entered the Graduate School at Stephen F. Austin State University and received the degree of Master of Arts in psychology in May of 2020.

Permanent Address: 129 D St SW
Jacksonville, Al 36265

APA (7th edition)

This thesis was typed by Jessica C. Lowe