



The Truth about Lies: Signs, Beliefs and Attitudes

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ABSTRACT:

A diligent search revealed that to this date, there are scarcely any studies that have been conducted in the Philippines concerning deceptive behavior or lying. 110 undergraduate students from a private college in Metro Manila volunteered to take part in this study. A 19-item researcher-made instrument using a 6-point Likert scale was administered on the respondents. The instrument measured the respondents' level of agreement with respect to items about (1) ease of telling whether a person is lying with respect to social relationship; (2) signs of lying as established by previous research; (3) reasons for lying; (4) effects of being lied to on one's trust and (5) knowing the truth. The following are the statistically significant findings: (1) The female respondents believe with greater intensity that it is easier to tell whether a person is lying when the individual is an acquaintance or family member; (2) those without romantic involvement believe with more certainty that it is easier to tell whether a person is lying when the individual is a stranger; (3) the female respondents believe more strongly that a person is lying "when the person is being vague or gives few details", "if before answering my question the person repeats the question", "if the person speaks in sentence fragments", "when the person is unable to give clear details", "when the person fixes his/her hair while answering my question" and "when the person touches his/her lips while answering my question"; (4) female respondents believe to a higher degree that "a person lies to protect his self-image"; (5) the respondents with romantic involvement believe with greater intensity that "a person lies to protect his self-image" and "a person lies to get what he wants"; (6) both the female respondents and respondents with romantic involvement disagree more strongly to the statement "people who lie to me don't affect my trust because I lie too."

Keywords: lying, signs of lying, reasons for lying, college students

INTRODUCTION

Any act, no matter how tiny or how nice, that persuades someone to think something that is untrue is considered deception. Lying is a typical way to deceive someone by saying something that is known to be false. Even those who believe in honesty occasionally deceive others, despite the fact that most people are honest in general. According to studies, the typical person lies multiple times every day. While some of those lies are significant, the majority are small, white lies said to get out of awkward situations or to protect the feelings of others. At every stage of social life—from parenthood and romance to national governance—trust is the cornerstone. It is constantly undermined by deceit. Since human endeavor depends on a common understanding of reality, most individuals automatically assume that others are telling the truth in their interactions and communications. This is because truth is so important, there exist strong societal penalties for lying in most societies¹.

Many individuals prefer not to constantly hear the terrible facts. If a person gets asked how a girl looks, it's likely that she wants to hear that she looks amazing. One is compelled to consider the amount of personal investment they have made in the relationship. If it's a coworker, someone might decide not to take the chance of a fight. When people justify "nonwhite" lies as necessary and acceptable, a problem occurs. Relationships are often destroyed when someone is caught lying. Lying has repercussions. When someone discovers that someone has lied, it permanently alters their relationship. While marital lies may be resolved through counseling, an employer is unlikely to extend forgiveness when lied to².

Although lying seems to be a widespread occurrence in daily life, there is not much research on the topic, even if it may be important to understand a variety of pathological behaviors and related deception. In one study, a cross-sectional sample of 138 participants' questionnaire responses were analyzed to determine whether the acceptance of lying would be a sign of other personality traits. The total scores for the acceptability of lying were shown to be somewhat correlated with both Machiavellianism and the functional impairment that results from lying at home, at work, and in social situations. Test results showed no significant correlation with self-esteem, problematic internet use, or religious practice or religion³.

The causes of many lies are multifaceted. There are situations when it's done to spare the liar from punishment or to spare someone else. A person may lie to get out of an embarrassing position, to prevent embarrassment, or just to make other people think better of them. Although it's not admirable, it's easy to understand why this kind of deception happens. It is difficult to understand why certain people lie so much, when they usually have no apparent motive and are easily refuted. According to researchers, there are several causes for certain people's compulsive lying⁴.

One is that the individual telling the untruth might not even realize it is a lie. Repetitive liars occasionally experience so much strain that their recall becomes faulty. By saying

something that will make things work, they attempt to release some of the pressure. That individual wants to believe what was just stated. The person who is lying could desire the lie to be true so much that it takes on the form of the individual's actual truth. Those who lie frequently usually want to be in charge. They fabricate a lie to fit the story they want to tell when the reality of a situation conflicts with such control. These individuals could also be concerned that if the truth makes them appear unlikable, they won't be respected. Rather, they tell a falsehood to make themselves seem nice, but they are blind to the fact that, most of the time, what they are saying is untrue⁴.

By manipulating a situation, lying enables someone to have apparent control over it. It is a protective mechanism that supposedly keeps individuals from opening up to someone and revealing who they really are. A person runs the risk of being rejected, criticized, or disappointed in other people if he opens up. And this can be intolerable for someone who is really insecure. There's a feeling that there's a reason why someone is rejected when they lie. In contrast, when someone opens up and gets turned down, they feel as though they are inherently unlikable, which has a detrimental effect on their self-esteem⁵.

Lying can become a symptom of some other underlying medical issue. The following are instances when this may be the case. (1) Cognitive Deficits. Cognitive deficits are one of the most well-established connections between lying and health issues. Accurate fact recall can be impacted by diseases like Alzheimer's disease and other types of dementia. As a result, people who suffer from these diseases could start lying to make up for lost memories. (2) Drug addiction and misuse. Lying is frequently associated with addiction and drug misuse. Addicts may use lies to cover up their drug or alcohol abuse, financial difficulties, or level of reliance. They use this dishonest behavior as a bulwark against their habit. (3) Mental Health Conditions. A pattern of dishonest behavior is one of the characteristics of some mental health problems, including antisocial personality disorder (ASPD) and borderline personality disorder (BPD). These diseases might cause a person to lie frequently and manipulate other people in order to further their own agendas. (4) Chronic Illness and Pain. People with chronic illnesses may downplay their discomfort, exaggerate their symptoms, or even make up stories about their health in an attempt to get sympathy or avoid taking on particular tasks. This phenomenon is known as "pain-related deception." (5) Disorders of Sleep. Insomnia and sleep apnea are two examples of sleep disorders that can cause memory loss. As a result, people who suffer from sleep disorders may inadvertently make up tales or give false information⁶.

99 participants in one study were asked to either lie or tell the truth about their attitudes. The study found that lying was associated with increased medial frontal negativities (MFN) and repressed late positive components (LPCs), suggesting that lying required more robust cognitive control mechanisms and reaction conflicts than being truthful. Pre-response positivities (PRP) showed smaller amplitudes for lies that suggested intentional monitoring was used in conjunction with the lies regarding attitudes. Lying

about positively valued items is more cognitively demanding than lying about negatively valued items, as evidenced by the fact that MFN amplitudes increased and LPC amplitudes fell when lies were made about them⁷.

When attempting to determine whether someone is a pathological liar, experts look for four primary behaviors: (1) Being overly deceptive. There are more pathological liars than not. They fabricate tales that are convincing enough for people to buy into them. They then support the first lies with other lies. They sometimes tell absurd lies that are simple to refute. For instance, they can pretend to have won an award or declare the deaths of surviving family members. (2) Lying without justification. A common tactic used by people to avoid awkward situations is to make up tiny lies, such as claiming they were late due to traffic instead of owning up to having overslept. However, pathological liars lack a discernible motivation. (3) Persistence. Usually, pathological lying takes years to manifest. It frequently starts in adolescence and lasts forever, affecting every aspect of life. Perhaps the most memorable thing about them is how dishonest they were. (4) Lying is not a sign of any other mental health conditions. Anxiety or depression are two other mental illnesses that may be present in a pathological liar. But their dishonesty isn't the result of it. Lying in a pathological way is a disorder, not a sign of another issue⁸.

People are regarded as imperfect liars and are frequently thought to be naive in identifying dishonesty. A study in the Philippines explored workplace deception (WD) detection skills of academic staff members were evaluated in an organizational communication study employing context, verbal, vocal, non-verbal, and facial micro-expressions (FME). After being exposed to the treatment, it was found that there was a significant difference in their knowledge of WD. It also looked into how they processed cues cognitively and psychologically while identifying WD, and how this knowledge affected how they communicated within the organization. This was accomplished using a non-equivalent Control Group pretest-posttest quasi-experimental approach. The findings show that before and following their exposure to Facial Micro-Expression Training (FMET), both the control and treatment groups had much more knowledge when utilizing FME. Although the treatment group's knowledge of WD detection did not significantly change after FMET, it did grow from having little to moderate awareness following Online Deception Detection Training (OODT)⁹.

Studies have established the following possible warning signs that could point to dishonesty: (1) Being vague; offering few details; (2) repeating questions before answering them; (3) speaking in sentence fragments; (4) failing to provide specific details when a story is challenged and (5) grooming behaviors such as playing with hair or pressing fingers to lips¹⁰.

In view of the foregoing, this study sought to address the following research questions:

1. What is the level to which the respondents agree that they can tell whether someone is lying if the person is
 - 1.1. An acquaintance;
 - 1.2. A friend;
 - 1.3. A family member;
 - 1.4. A stranger?
2. Are there significant differences in the responses to research question number 1 when the respondents are grouped according to
 - 2.1 Sex:
 - 2.2 Presence of romantic involvement?
3. What is the level to which the respondents agree that the following are signs that a person is lying
 - 3.1 When the person is being vague or gives few details
 - 3.2 When before answering my question the person repeats the question
 - 3.3 When the person speaks in sentence fragments
 - 3.4 When the person is unable to give clear details
 - 3.5 When the person fixes his/her hair while answering my question
 - 3.6 When the person touches his/her lips while answering my question?
4. Are there significant differences in the responses to research question number 3 when the respondents are grouped according to
 - 4.1 Sex:
 - 4.2 Presence or absence of romantic involvement?
5. What is the level to which the respondents agree with the following reasons for lying
 - 3.1 So as not to hurt another person's feelings;
 - 3.2 To protect one's self-image;
 - 3.3 To get what one wants;
 - 3.4 To escape the consequences of one's actions?
6. Are there significant differences in the responses to research question number 5 when the respondents are grouped according to
 - 4.1 Sex:
 - 4.2 Presence or absence of romantic involvement?
7. What is the level to which the respondents agree with the following effects of being lied to
 - 4.1 "If I catch a person lying to me for the first time, I will no longer trust that person";
 - 4.2 "My trust is unaffected by a lie as long as the person admits having lied to me and apologizes";
 - 4.3 "People who lie to me don't affect my trust because I lie too"?
8. Are there significant differences in the responses to research question number 7 when the respondents are grouped according to

8.1 Sex:

8.2 Presence or absence of romantic involvement?

9. What is the level to which the respondents agree to the following reasons of not wanting to know the truth

9.1 “I would rather that a person lie to me than to find out the truth that could hurt me”;

9.2 “I would rather believe that a person is telling me the truth than to discover that they have lied to me”?

10. Are there significant differences in the responses to research question number 9 when the respondents are grouped according to

10.1 Sex:

10.2 Presence or absence of romantic involvement?

METHODOLOGY

110 undergraduate students from a private college in Metro Manila volunteered to take part in this study. Their mean age was 18.9 years and their residences included Antipolo City, Cainta, Rizal, Marikina City, Pasay City, Quezon City, San Mateo, Rizal, Rodriguez, Rizal and Taytay, Rizal. 38 were DepEd (government school) graduates while 72 were graduates of private schools. Their college degree programs were BSBA Operations Management, Bachelor of Science in Information Technology, BSBA Major in HRM, BS Tourism Management, BSBA Marketing Management and Bachelor of Science major in Operations Management. For purposes of this study, a person with romantic involvement is defined as someone who has a stable romantic relationship. A 19-item researcher-made instrument using a 6-point Likert scale was administered on the respondents. The instrument measured the respondents’ level of agreement with respect to items about (1) ease of telling whether a person is lying with respect to social relationship; (2) signs of lying as established by previous research¹⁰; (3) reasons for lying; (4) effects of being lied to on one’s trust and (5) knowing the truth.

RESULTS

The following tables present the data gathered and the statistical treatments utilized.

Table 1: Scale of Interpretation of Item Weighted Means

Weighted mean range	Verbal interpretation
1.000 – 1.833	Strongly disagree
1.834 – 2.666	Moderately disagree
2.667 – 3.499	Slightly disagree
3.500 – 4.332	Slightly agree
4.333 – 5.165	Moderately agree
5.166 – 6.000	Strongly agree

Table 2: Ease of detecting lies based on social relationship: Comparison between the item weighted means of male and female responses

	Male N=59 Item weighted mean	Female N=52 Item weighted mean
1. It is easier to tell if the person is lying to me if the person is an acquaintance	4.340 Moderately agree	4.882 Moderately agree
2. It is easier to tell if the person is lying to me if the person is a friend	4.932 Moderately agree	5.216 Strongly agree
3. It is easier to tell if the person is lying to me if the person is a family member	4.729 Moderately agree	5.392 Strongly agree
4. It is easier to tell if the person is lying to me if the person is a stranger	3.797 Slightly agree	3.373 Slightly disagree

Table 3: Ease of detecting lies based on social relationship: Welch's t-test comparison of responses between male and female respondents

Statement	Male N=59		Female N=51	
	Mean	SD	Mean	SD
1. It is easier to tell if the person is lying to me if the person is an acquaintance	4.39	1.36	4.88	0.86
	SEM	0.18	SEM	0.12
	t = 2.2915			
	df = 99			
	standard error of difference = 0.215			
	The two-tailed P value equals 0.0241			
	By conventional criteria, this difference is considered to be statistically significant.			
2. It is easier to tell if the person is lying to me if the person is a friend	Mean	4.93	Mean	5.22
	SD	1.20	SD	0.99
	SEM	0.16	SEM	0.14
	t = 1.3586			
	df = 107			
	standard error of difference = 0.209			

	The two-tailed P value equals 0.1771 By conventional criteria, this difference is considered to be not statistically significant.			
3. It is easier to tell if the person is lying to me if the person is a family member	Mean	4.73	Mean	5.39
	SD	1.32	SD	0.87
	SEM	0.17	SEM	0.12
	t = 3.1385			
	df = 101			
	standard error of difference = 0.211			
	The two-tailed P value equals 0.0022 By conventional criteria, this difference is considered to be very statistically significant.			
4. It is easier to tell if the person is lying to me if the person is a stranger	Mean	3.80	Mean	3.37
	SD	1.57	SD	1.26
	SEM	0.20	SEM	0.18
	t = 1.5664			
	df = 107			
	standard error of difference = 0.271			
	The two-tailed P value equals 0.1202 By conventional criteria, this difference is considered to be not statistically significant.			

Table 4: Ease of detecting lies based on social relationship: Comparison of responses between the item weighted means of those with and without romantic involvement

	Without romantic involvement N=66 Item weighted mean	With romantic involvement N=44 Item weighted mean
1. It is easier to tell if the person is lying to me if the person is an acquaintance	4.712 Moderately agree	4.477 Moderately agree
2. It is easier to tell if the person is lying to me if the person is a friend	5.046 Moderately agree	5.091 Moderately agree
3. It is easier to tell if the person is lying to me if the person is a family member	4.894 Moderately agree	5.250 Strongly agree

4. It is easier to tell if the person is lying to me if the person is a stranger	3.894	3.160
	Slightly agree	Slightly disagree

Table 5: Ease of detecting lies based on social relationship: Welch's t-test comparison of responses between respondents with and without romantic involvement

Statement	Without Romantic Involvement <i>N</i> =66		With Romantic Involvement <i>N</i> =44	
	1. It is easier to tell if the person is lying to me if the person is an acquaintance	Mean	4.71	Mean
SD		1.15	SD	1.23
SEM		0.14	SEM	0.19
t = 1.0080				
df = 87				
standard error of difference = 0.233				
The two-tailed P value equals 0.3162 By conventional criteria, this difference is considered to be not statistically significant.				
2. It is easier to tell if the person is lying to me if the person is a friend		Mean	5.05	Mean
	SD	1.13	SD	1.10
	SEM	0.14	SEM	0.17
	t = 0.2105			
	df = 94			
	standard error of difference = 0.216			
	The two-tailed P value equals 0.8337 By conventional criteria, this difference is considered to be not statistically significant.			
	3. It is easier to tell if the person is lying to me if the person is a family member	Mean	4.89	Mean
SD		1.28	SD	0.99
SEM		0.16	SEM	0.15
t = 1.6406				
df = 105				
standard error of difference = 0.217				
The two-tailed P value equals 0.1039 By conventional criteria, this difference is considered to be not statistically significant.				
4. It is easier to tell if the person is lying to me if the person is a stranger		Mean	3.89	Mean
	SD	1.31	SD	1.54
	SEM	0.16	SEM	0.23

	t = 2.5978
	df = 82
	standard error of difference = 0.283
	The two-tailed P value equals 0.0111 By conventional criteria, this difference is considered to be statistically significant .

Table 6: Item-weighted means of responses to type of social relationship and lying by all respondents combined

	All respondents N=110 Total Item weighted mean	Rank
1. It is easier to tell if the person is lying to me if the person is an acquaintance	4.618 Moderately agree	3
2. It is easier to tell if the person is lying to me if the person is a friend	5.064 Moderately agree	1
3. It is easier to tell if the person is lying to me if the person is a family member	5.036 Moderately agree	2
4. It is easier to tell if the person is lying to me if the person is a stranger	3.600 Slightly agree	4

Table 7: Beliefs about signs of lying: Comparison between the item weighted means of male and female responses

	Male N=59 Item weighted mean	Female N=52 Item weighted mean
5. A person is lying to me when the person is being vague or gives few details	4.288 Slightly agree	4.882 Moderately agree
6. A person is lying to me if before answering my question the person repeats the question	3.831 Slightly agree	4.569 Moderately agree
7. A person is lying to me if the person speaks in	4.288	4.686

sentence fragments	Slightly agree	Moderately agree
8. A person is lying to me when the person is unable to give clear details	4.898	5.471
	Moderately agree	Strongly agree
9. A person is lying to me when the person fixes his/her hair while answering my question	3.424	3.863
	Slightly disagree	Slightly agree
10. A person is lying to me when the person touches his/her lips while answering my question	3.305	3.824
	Slightly disagree	Slightly agree

Table 8: Beliefs about signs of lying: Welch’s t-test comparison of responses between male and female respondents

Statement	Male N=59		Female N=51	
	Mean	SD	Mean	SD
5. A person is lying to me when the person is being vague or gives few details	4.29	1.23	4.88	0.93
	SEM	0.16	SEM	0.13
	t = 2.8748			
	df = 106			
	standard error of difference = 0.207			
	The two-tailed P value equals 0.0049			
	By conventional criteria, this difference is considered to be very statistically significant.			
6. A person is lying to me if before answering my question the person repeats the question	3.83	1.26	4.57	1.20
	SEM	0.16	SEM	0.17
	t = 3.1357			
	df = 106			
	standard error of difference = 0.235			
	The two-tailed P value equals 0.0022			
	By conventional criteria, this difference is considered to be very statistically significant.			
7. A person is lying to me if the person speaks in sentence fragments	4.29	1.05	4.69	1.01
	SEM	0.14	SEM	0.14
	t = 2.0232			
	df = 106			
	standard error of difference = 0.197			

	The two-tailed P value equals 0.0456 By conventional criteria, this difference is considered to be statistically significant.			
8. A person is lying to me when the person is unable to give clear details	Mean	4.90	Mean	5.47
	SD	1.03	SD	0.67
	SEM	0.13	SEM	0.09
	t = 3.4929			
	df = 101			
	standard error of difference = 0.164			
	The two-tailed P value equals 0.0007 By conventional criteria, this difference is considered to be extremely statistically significant.			
9. A person is lying to me when the person fixes his/her hair while answering my question	Mean	3.42	Mean	3.86
	SD	1.29	SD	1.22
	SEM	0.17	SEM	0.17
	t = 1.8355			
	df = 107			
	standard error of difference = 0.239			
	The two-tailed P value equals 0.0692 By conventional criteria, this difference is considered to be not quite statistically significant.			
10. A person is lying to me when the person touches his/her lips while answering my question	Mean	3.31	Mean	3.82
	SD	1.29	SD	1.29
	SEM	0.17	SEM	0.18
	t = 2.1006			
	df = 105			
	standard error of difference = 0.247			
	The two-tailed P value equals 0.0381 By conventional criteria, this difference is considered to be statistically significant.			

Table 9: Beliefs about signs of lying: Comparison of responses between the item weighted means of those with and without romantic involvement

	Without romantic involvement N= 66 Item weighted mean	With romantic involvement N=44 Item weighted mean
5. A person is lying to me when the person is being vague or gives few details	4.515 Moderately agree	4.636 Moderately agree
6. A person is lying to me if before answering my question the person repeats the question	4.121 Slightly agree	4.250 Slightly agree
7. A person is lying to me if the person speaks in sentence fragments	4.410 Moderately agree	4.570 Moderately agree
8. A person is lying to me when the person is unable to give clear details	5.046 Moderately agree	5.341 Strongly agree
9. A person is lying to me when the person fixes his/her hair while answering my question	3.652 Slightly agree	3.591 Slightly agree
10. A person is lying to me when the person touches his/her lips while answering my question	3.561 Slightly agree	3.523 Slightly agree

Table 10: Beliefs about signs of lying: Welch's t-test comparison of responses between respondents with and without romantic involvement

Statement	Without Romantic Involvement N=66		With Romantic Involvement N=44	
	Mean	SD	Mean	SD
5. A person is lying to me when the person is being vague or gives few details	4.52	1.14	4.64	1.14
	SEM	0.14	SEM	0.17
	t = 0.5454			
	df = 92			
	standard error of difference = 0.222			

	The two-tailed P value equals 0.5868 By conventional criteria, this difference is considered to be not statistically significant.			
6. A person is lying to me if before answering my question the person repeats the question	Mean	4.12	Mean	4.25
	SD	1.22	SD	1.38
	SEM	0.15	SEM	0.21
	t = 0.5010			
	df = 84			
	standard error of difference = 0.257			
	The two-tailed P value equals 0.6177 By conventional criteria, this difference is considered to be not statistically significant.			
7. A person is lying to me if the person speaks in sentence fragments	Mean	4.41	Mean	4.57
	SD	1.05	SD	1.04
	SEM	0.13	SEM	0.16
	t = 0.7809			
	df = 92			
	standard error of difference = 0.204			
	The two-tailed P value equals 0.4369 By conventional criteria, this difference is considered to be not statistically significant.			
8. A person is lying to me when the person is unable to give clear details	Mean	5.05	Mean	5.34
	SD	1.01	SD	0.75
	SEM	0.12	SEM	0.11
	t = 1.7591			
	df = 106			
	standard error of difference = 0.168			
	The two-tailed P value equals 0.0815 By conventional criteria, this difference is considered to be not quite statistically significant.			
9. A person is lying to me when the person fixes his/her hair while answering my question	Mean	3.65	Mean	3.59
	SD	1.18	SD	1.40
	SEM	0.15	SEM	0.21
	t = 0.2360			
	df = 81			
	standard error of difference = 0.257			
	The two-tailed P value equals 0.8140 By conventional criteria, this difference is considered to be not statistically significant.			

10. A person is lying to me when the person touches his/her lips while answering my question	Mean	3.56	Mean	3.52
	SD	1.27	SD	1.39
	SEM	0.16	SEM	0.21
	t = 0.1451			
	df = 86			
	standard error of difference = 0.261			
	The two-tailed P value equals 0.8850 By conventional criteria, this difference is considered to be not statistically significant.			

Table 11: Item-weighted means of responses to signs of lying by all respondents combined

	All respondents N= 110 Total Item weighted mean	Rank
5. A person is lying to me when the person is being vague or gives few details	4.564 Moderately agree	2
6. A person is lying to me if before answering my question the person repeats the question	4.173 Slightly agree	4
7. A person is lying to me if the person speaks in sentence fragments	4.473 Moderately agree	3
8. A person is lying to me when the person is unable to give clear details	5.164 Moderately agree	1
9. A person is lying to me when the person fixes his/her hair while answering my question	3.627 Slightly agree	5
10. A person is lying to me when the person touches his/her lips while answering my question	3.546 Slightly agree	6

Table 12: Beliefs about reasons for lying: Comparison between the item weighted means of male and female responses

	Male N=59 Item weighted mean	Female N=52 Item weighted mean
11. A person lies so as not to hurt another person's feelings.	4.390 Moderately agree	4.490 Moderately agree
12. A person lies to protect his self-image.	4.966 Moderately agree	5.392 Strongly agree
13. A person lies to get what he wants.	5.017 Moderately agree	5.314 Strongly agree
14. A person lies to escape the consequences of his/her actions.	5.187 Strongly agree	5.490 Strongly agree

Table 13: Beliefs about reasons for lying: Welch's t-test comparison of responses between male and female respondents

Statement	Male N=59		Female N=51	
	Mean	SD	Mean	SD
11. A person lies so as not to hurt another person's feelings.	4.39	1.34	4.49	1.51
	SEM	0.17	SEM	0.21
	t = 0.3655			
	df = 100			
	standard error of difference = 0.275			
	The two-tailed P value equals 0.7155			
	By conventional criteria, this difference is considered to be not statistically significant.			
12. A person lies to protect his self-image.	4.97	0.98	5.39	1.08
	SEM	0.13	SEM	0.15
	t = 2.1532			
	df = 102			
	standard error of difference = 0.198			

	The two-tailed P value equals 0.0337 By conventional criteria, this difference is considered to be statistically significant.			
13. A person lies to get what he wants.	Mean	5.02	Mean	5.31
	SD	1.06	SD	0.99
	SEM	0.14	SEM	0.14
	t = 1.5185			
	df = 107			
	standard error of difference = 0.195			
	The two-tailed P value equals 0.1318 By conventional criteria, this difference is considered to be not statistically significant.			
14. A person lies to escape the consequences of his/her actions.	Mean	5.19	Mean	5.49
	SD	1.17	SD	1.05
	SEM	0.15	SEM	0.15
	t = 1.4393			
	df = 107			
	standard error of difference = 0.211			
	The two-tailed P value equals 0.1530 By conventional criteria, this difference is considered to be not statistically significant.			

Table 14: Beliefs about reasons for lying: Comparison of responses between the item weighted means of those with and without romantic involvement

	Without romantic involvement N= 66	With romantic involvement N=44
	Item weighted mean	Item weighted mean
11. A person lies so as not to hurt another person's feelings.	4.500	4.341
	Moderately agree	Moderately agree
12. A person lies to protect his self-image.	4.970	5.455
	Moderately agree	Strongly agree

13. A person lies to get what he wants.	4.970	5.432
	Moderately agree	Strongly agree
14. A person lies to escape the consequences of his/her actions.	5.273	5.410
	Strongly agree	Strongly agree

Table 15: Beliefs about reasons for lying: Welch’s t-test comparison of responses between respondents with and without romantic involvement

Statement	Without Romantic Involvement <i>N</i> =66		With Romantic Involvement <i>N</i> =44	
11. A person lies so as not to hurt another person's feelings.	Mean	4.50	Mean	4.34
	SD	1.38	SD	1.48
	SEM	0.17	SEM	0.22
	t = 0.5673			
	df = 88			
	standard error of difference = 0.280			
	The two-tailed P value equals 0.5720 By conventional criteria, this difference is considered to be not statistically significant.			
	12. A person lies to protect his self-image.	Mean	4.97	Mean
SD		1.01	SD	1.04
SEM		0.12	SEM	0.16
t = 2.4193				
df = 89				
standard error of difference = 0.200				
The two-tailed P value equals 0.0176 By conventional criteria, this difference is considered to be statistically significant .				
13. A person lies to get what he wants.		Mean	4.97	Mean
	SD	1.05	SD	0.95
	SEM	0.13	SEM	0.14
	t = 2.3936			
	df = 98			
	standard error of difference = 0.193			
	The two-tailed P value equals 0.0186 By conventional criteria, this difference is considered to be statistically significant .			

14. A person lies to escape the consequences of his/her actions.	Mean	5.27	Mean	5.41
	SD	1.21	SD	0.97
	SEM	0.15	SEM	0.15
	t = 0.6527			
	df = 104			
	standard error of difference = 0.209			
	The two-tailed P value equals 0.5154 By conventional criteria, this difference is considered to be not statistically significant.			

Table 16: Item-weighted means of responses to reasons for lying by all respondents combined

	All respondents N= 110 Total Item weighted mean	Rank
11. A person lies so as not to hurt another person's feelings.	4.436 Moderately agree	4
12. A person lies to protect his self-image.	5.164 Moderately agree	2
13. A person lies to get what he wants.	5.155 Moderately agree	3
14. A person lies to escape the consequences of his/her actions.	5.327 Strongly agree	1

Table 17: Effect of being lied to on one's trust: Comparison between the item weighted means of male and female responses

	Male N=59 Item weighted mean	Female N=52 Item weighted mean
15. If I catch a person lying to me for the first time, I will no longer trust that person	4.424 Moderately agree	4.765 Moderately agree
16. My trust is unaffected by a lie as long as the person admits having lied to me and apologizes	4.017 Slightly agree	3.667 Slightly agree
17. People who lie to me don't affect my trust because I lie too.	3.288 Slightly disagree	2.550 Slightly disagree

Table 18: Effect of being lied to on one's trust: Welch's t-test comparison of responses between male and female respondents

Statement	Male N=59		Female N=51	
	Mean	SD	Mean	SD
15. If I catch a person lying to me for the first time, I will no longer trust that person	4.42	1.22	4.76	1.21
	SEM	0.16	SEM	0.17
	t = 1.4681			
	df = 105			
	standard error of difference = 0.232			
	The two-tailed P value equals 0.1451			
	By conventional criteria, this difference is considered to be not statistically significant.			
16. My trust is unaffected by a lie as long as the person admits having lied to me and apologizes	4.02	1.44	3.67	1.52
	SEM	0.19	SEM	0.21
	t = 1.2339			
	df = 103			
	standard error of difference = 0.284			
	The two-tailed P value equals 0.2200			
	By conventional criteria, this difference is considered to be not statistically significant.			
17. People who lie to me don't affect my trust because I lie too.	3.29	1.57	2.55	1.40
	SEM	0.20	SEM	0.20

	t = 2.6099
	df = 107
	standard error of difference = 0.283
	The two-tailed P value equals 0.0104 By conventional criteria, this difference is considered to be statistically significant .

Table 19: Effect of being lied to on one's trust: Comparison of responses between the item weighted means of those with and without romantic involvement

	Without romantic involvement N= 66	With romantic involvement N=44
	Item weighted mean	Item weighted mean
15. If I catch a person lying to me for the first time, I will no longer trust that person	4.500 Moderately agree	4.705 Moderately agree
16. My trust is unaffected by a lie as long as the person admits having lied to me and apologizes	3.894 Slightly agree	3.796 Slightly agree
17. People who lie to me don't affect my trust because I lie too.	3.258 Slightly disagree	2.477 Moderately disagree

Table 20: Effect of being lied to on one's trust: Welch's t-test comparison of responses between respondents with and without romantic involvement

Statement	Without Romantic Involvement N=66		With Romantic Involvement N=44	
	15. If I catch a person lying to me for the first time, I will no longer trust that person	Mean	4.50	Mean
	SD	1.15	SD	1.32
	SEM	0.14	SEM	0.20
	t = 0.8358			
	df = 83			
	standard error of difference = 0.245			

	The two-tailed P value equals 0.4056 By conventional criteria, this difference is considered to be not statistically significant.			
16. My trust is unaffected by a lie as long as the person admits having lied to me and apologizes	Mean	3.89	Mean	3.80
	SD	1.45	SD	1.55
	SEM	0.18	SEM	0.23
	t = 0.3353			
	df = 87			
	standard error of difference = 0.294			
	The two-tailed P value equals 0.7382 By conventional criteria, this difference is considered to be not statistically significant.			
17. People who lie to me don't affect my trust because I lie too.	Mean	3.26	Mean	2.48
	SD	1.44	SD	1.56
	SEM	0.18	SEM	0.24
	t = 2.6475			
	df = 86			
	standard error of difference = 0.295			
	The two-tailed P value equals 0.0096 By conventional criteria, this difference is considered to be very statistically significant.			

Table 21: Preference about knowing the truth: Comparison between the item weighted means of male and female responses

	Male N=59 Item weighted mean	Female N=52 Item weighted mean
18. I would rather that a person lie to me than to find out the truth that could hurt me.	2.424 Moderately disagree	2.569 Moderately disagree
19. I would rather believe that a person is telling me the truth than to discover that they have lied to me.	4.237 Slightly agree	3.768 Slightly agree

Table 22: Preference about knowing the truth: Welch's t-test comparison of responses between male and female respondents

Statement	Male N=59		Female N=51	
18. I would rather that a person lie to me than to	Mean	2.42	Mean	2.57
	SD	1.54	SD	1.77

find out the truth that could hurt me.	SEM	0.20	SEM	0.25
	t = 0.4541			
	df = 100			
	standard error of difference = 0.319			
	The two-tailed P value equals 0.6507 By conventional criteria, this difference is considered to be not statistically significant.			
19. I would rather believe that a person is telling me the truth than to discover that they have lied to me.	Mean	4.24	Mean	3.76
	SD	1.78	SD	2.08
	SEM	0.23	SEM	0.29
	t = 1.2669			
	df = 99			
	standard error of difference = 0.373			
	The two-tailed P value equals 0.2081 By conventional criteria, this difference is considered to be not statistically significant.			

Table 23: Preference about knowing the truth: Comparison of responses between the item weighted means of those with and without romantic involvement

	Without romantic involvement N= 66	With romantic involvement N=44
	Item weighted mean	Item weighted mean
18. I would rather that a person lie to me than to find out the truth that could hurt me.	2.546	2.410
	Moderately disagree	Moderately disagree
19. I would rather believe that a person is telling me the truth than to discover that they have lied to me.	4.318	3.568
	Slightly agree	Slightly agree

Table 24: Preference about knowing the truth: Welch’s t-test comparison of responses between respondents with and without romantic involvement

Statement	Without Romantic Involvement N=66		With Romantic Involvement N=44	
18. I would rather that a person lie to me than to find out the truth that could hurt me.	Mean	2.55	Mean	2.41
	SD	1.62	SD	1.70
	SEM	0.20	SEM	0.26
	t = 0.4197			
	df = 89			
	standard error of difference = 0.325			
	The two-tailed P value equals 0.6757 By conventional criteria, this difference is considered to be not statistically significant.			
19. I would rather believe that a person is telling me the truth than to discover that they have lied to me.	Mean	4.32	Mean	3.57
	SD	1.81	SD	2.05
	SEM	0.22	SEM	0.31
	t = 1.9693			
	df = 84			
	standard error of difference = 0.381			
	The two-tailed P value equals 0.0522 By conventional criteria, this difference is considered to be not quite statistically significant.			

DISCUSSION

Table 2 presents the item weighted means of male and female responses with respect to ease of detecting lies based on social relationship. For items 1, 2 and 3, females obtained higher item weighted means. Table 3 shows the Welch’s t-test computations between male and female responses on the ease of detecting lies based on social relationship. Significant differences were found between male and female responses when the person is an acquaintance (item 1) and a family member (item 3). In both items, females obtained higher means.

Table 4 presents the item weighted means of responses by respondents with and without romantic involvement with respect to ease of detecting lies based on social relationship. For items 1, 2 and 3, females obtained higher item weighted means. Those without romantic involvement obtained higher item weighted means when the person is an acquaintance (item 1) and when the person is a stranger (item 4). However, responses with romantic involvement obtained higher item weighted means when the

person is a friend (item 2) and when the person is a family member (item 3). Table 5 shows the Welch's t-test computations between the responses of respondents with and without romantic involvement on the ease of detecting lies based on social relationship. A significant difference was found between respondents with and without romantic involvement when the person is a stranger (item 4).

Table 6 presents the item weighted means of the responses on the ease of detecting lies based on social relationship when all the respondents are combined. When the item weighted means are ranked, friend ranks first, followed by family member, next is acquaintance and stranger ranks last.

Table 7 shows the item weighted means of responses by male and female respondents with respect to beliefs about the signs of lying. In all items (5, 6, 7, 8, 9 and 10), females obtained higher item weighted means than males. Table 8 presents the Welch's t-test computations between the responses of male and female respondents concerning beliefs about the signs of lying. Significant differences were found in all items (5, 6, 7, 8, 9 and 10). And in all of them, females obtained higher means.

Table 9 shows the item weighted means of responses by respondents with and without romantic involvement with respect to beliefs about the signs of lying. In items 5, 6, 7 and 8, those with romantic involvement obtained higher item weighted means, while respondents without romantic involvement obtained higher item weighted means in items 9 and 10. Table 10 presents the Welch's t-test computations between the responses of respondents with and without romantic involvement concerning beliefs about the signs of lying. No significant differences were found in all items (5, 6, 7, 8, 9 and 10).

Table 11 shows the item weighted means of the responses on beliefs about the signs of lying when all the respondents are combined. When the item weighted means are ranked, "unable to give clear details" (item 8) ranks first, followed by "being vague or gives few details" (item 5), then by "speaks in sentence fragments" (item 7), next is "before answering the question the person repeats the question" (item 6), followed by "fixes his/her hair" (item 9) and lastly "when the person touches his/her lips" (item 10).

Table 12 shows the item weighted means of male and female responses by respondents with respect to beliefs about the reasons for lying. In all items (11, 12, 13 and 14), the female respondents obtained higher item weighted means. Table 13 presents the Welch's t-test computations between male and female responses with respect to reasons for lying. It is only in item 12 "a person lies to protect his self-image" where a significant difference was found and that the females obtained a higher mean.

Table 14 shows the item weighted means of the responses of respondents with and without romantic involvement concerning beliefs about the reasons for lying. In items 12, 13, and 14 the respondents with romantic involvement obtained higher item weighted means. It was only in item 11 where the respondents without romantic involvement obtained a higher item weighted mean. Table 15 presents the Welch's t-test computations between the responses of the respondents with and without romantic involvement with respect to beliefs about the reasons for lying. It is only in item 12 "a person lies to protect his self-image" and item 13 "a person lies to get what he wants", where significant differences were found and that the respondents with romantic involvement obtained a higher mean.

Table 16 shows the item weighted means of the responses on beliefs about the reasons for lying when all the respondents are combined. "To escape the consequences of his/her actions" (item 14) ranks first followed by "to protect his self-image" (item 12) next by "to get what he wants" (item 13) and last is "so as not to hurt another person's feelings" (item 11).

Table 17 presents the item weighted means of the responses of male and female respondents concerning the effect on one's trust when lied to. The male respondents obtained higher item weighted means for items 16 and 17, while the female respondents obtained a higher item weighted mean for item 15. Table 18 shows the Welch's t-test computations between the responses of the male and female respondents concerning the effect on one's trust when lied to. It is only on the statement "people who lie to me don't affect my trust because I lie too" (item 17) where a significant difference was found.

Table 19 presents the item weighted means of the responses of respondents with and without romantic involvement concerning the effect on one's trust when lied to. Respondents without romantic involvement obtained higher item weighted means in items 16 and 17 while those with romantic involvement got a higher item weighted mean in item 15. Table 20 shows the Welch's t-test computations between the responses of respondents with and without romantic involvement concerning the effect on one's trust when lied to. It is only on the statement "people who lie to me don't affect my trust because I lie too" (item 17) where a significant difference was found.

Table 21 presents the item weighted means of the responses of male and female respondents with respect to knowing the truth. The females obtained a higher item weighted mean in item 18 while the males got a higher item weighted mean in item 19. Table 22 shows the Welch's t-test computations between the responses of male and female respondents with respect to knowing the truth. No significant differences were found in both items 18 and 19.

Table 23 presents the item weighted means of the responses of respondents with and without romantic involvement with respect to knowing the truth. Those without romantic involvement obtained higher item weighted means in both items 18 and 19. Table 24 shows the Welch's t-test computations between the responses of respondents with and without romantic involvement with respect to knowing the truth. No significant differences were found in both items 18 and 19.

Conclusions

For all 110 respondents combined, with respect to ease of telling whether a person is lying with respect to social relationship, a *friend* ranks first, followed by *family member*, next by an *acquaintance* and lastly by a *stranger*.

With regards to the signs of lying, all the respondents believe that *when the person is unable to give clear details* ranks first, followed by *when the person is being vague or gives few details* next is *if the person speaks in sentence fragments* then by *if before answering my question the person repeats the question* followed by *when the person fixes his/her hair while answering my question* and lastly by *when the person touches his/her lips while answering my question*.

Concerning the reasons for lying, the respondents believe that *a person lies to escape the consequences of his/her actions* ranks first followed by *a person lies to protect his self-image* next by *a person lies to get what he wants* and lastly by *a person lies so as not to hurt another person's feelings*.

The statistically significant findings revealed the following: (1) The female respondents believe with greater intensity that it is easier to tell whether a person is lying when the individual is an acquaintance or family member; (2) those without romantic involvement believe with more certainty that it is easier to tell whether a person is lying when the individual is a stranger; (3) the female respondents believe more strongly that a person is lying "when the person is being vague or gives few details", "if before answering my question the person repeats the question", "if the person speaks in sentence fragments", "when the person is unable to give clear details", "when the person fixes his/her hair while answering my question" and "when the person touches his/her lips while answering my question"; (4) female respondents believe to a higher degree that "a person lies to protect his self-image"; (5) the respondents with romantic involvement believe with greater intensity that "a person lies to protect his self-image" and "a person lies to get what he wants"; (6) the female respondents and respondents with romantic involvement disagree more strongly to the statement "people who lie to me don't affect my trust because I lie too."

Recommendations

This study is limited by the sample size and the sampling method utilized. Further research can be conducted using a larger and more diverse sample. This study also only focused on college students. Professionals may also be considered as respondents in future studies. Other possible reasons for lying could be investigated as well.

Ethical Declaration

The researcher declares that there was strict adherence to the ethics of research. Informed consent was obtained, freedom to withdraw at any time from the study was made known to the participants, their identities were anonymized, the overall well-being of the participants was safeguarded and the results were used for research purposes only. The researcher further ensured steps to prevent bias in the interpretation of the data. Lastly, this research was self-funded and there was no conflict of interest in the conduct of the study.

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