

## INDONESIANS DO NOT BELIEVE IN LYING: NEW RESULTS OF REPLICATING COLEMAN AND KAY'S STUDY

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RESEARCH PAPER ▪ SUBMITTED: 3/3/2020 ▪ ACCEPTED: 3/6/2020

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**Abstract:** For most people, a lie would be defined solely as a false statement. However, many philosophers argue that a statement does not need to be false to be considered a lie, what is important is that the speaker believes that the statement is false. In a prototype semantic analysis, there are three elements of a *lie*, namely factual falsity, belief, and intention (Coleman and Kay, 1981). As in the case of philosophers' arguments, English, Spanish, Arabic and Hungarian speakers consider belief as the main element of a prototypical lie. By replicating Coleman and Kay's study of Indonesian speakers, the present paper tries to answer the following research questions. (1) Does the Indonesian word *bohong* 'lie' consist of the Coleman & Kay's prototype elements? (2) If it does, what is the order of the elements? (3) Do Indonesians interpret the situation in which a lie occurs similarly to speakers of other languages? And (4) how to interpret the results of this experiment from the philosophical perspective? The results reveal that not all elements suggested by Coleman and Kay (1981) are present in lying according to Indonesians and the factuality of the statement is more important to Indonesians than belief. Thus, Indonesians have a perception of a lie that is different from the definitions suggested by the philosophers.

**Keywords:** lying; pragmatics; philosophy; Indonesian

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### Introduction

In early 2019, an Indonesian political activist, Ratna Sarumpaet, claimed that her bruised face was the result of an assault. This became breaking news after it was discovered that she had undertaken a plastic surgery. She was fired from her position as one of the members of the campaign team for an Indonesian presidential candidate and was put in prison for allegedly spreading fake news. Indonesians consider her a liar since what she was saying did not match the facts.

People in the street will probably define lies solely as false statements. However, most philosophers disregard objective falsity as a defining factor of lie. They argue that subjective falsity, the belief that the statement is false, is necessary to consider a statement a lie. Taking the previous example, for philosophers, Ratna was lying because she believed she had not experienced an assault but she claimed that she had.

Coleman and Kay (1981) proposed a prototype semantic analysis of the English word *lie*. They argue that there are three elements defining a prototypical lie. The elements are the following:

- (a) P is false,
  - (b) S believes P to be false,
  - (c) In uttering P, S intends to deceive A.
- where the speaker (S) asserts some proposition (P) to an addressee (A).

In short, the prototypical lie is characterized by falsehood which is deliberate and intended to deceive. The results show that English speakers consider the second element, false belief, to be the most important element for a prototypical lie.

There have been several replications of this study with different speakers of various languages. Cole (1996) investigated the Arabic word كذبة (in English transliteration *kathaba*) with Makkan Arabic speakers, both Hardin (2010) and Eichelberger (2012) studied the Spanish word *mentira* with Ecuadorians and Madrid Spaniards, respectively. Despite cultural and social factors which make the interpretation of lying different from English speakers' interpretation, Arabic and Spanish speakers also consider belief as the most important element of a "stronger" lie. A quite different result of the replication of Coleman and Kay's research was found by Vajtai (2013). He conducted the research with Hungarian speakers and found that intention is the main element of lying. However, his conclusion seems to be questionable. He argued that a story with an element of falsehood and intention was perceived by his respondents to have only the former element, leading to a lower score for this story. After reanalyzing the results of his experiment, it can be established that belief is supposed to be the main element of lying for Hungarians. These results seem to support the philosophers' definition of lying.

Now, a question arises whether these results can be generalized across languages and cultures. How would speakers of other languages and cultures such as Indonesian interpret lying? Would they consider belief as an important element to describe a prototypical lie? Would their interpretation be similar to the speakers of languages presented in the literature? The present paper intends to answer these questions by providing the results of an adopted replication of Coleman and Kay's (1981), Hardin's (2010) and Eichelberger's (2012) experiments.

The organization of the paper is as follows. After this introductory Section 1, in Section 2, first, I discuss definitions of lying mainly from the point of view of philosophers and linguists, then I briefly overview the literature on cross-cultural interpretations of lying. In Section 3, I provide the research questions and the hypotheses for the experiment with Indonesian speakers. In Section 4, the methodology of the experiment is discussed; I explain the questionnaire as used by Coleman and Kay (1981) and the changes that were made in order for it to be culturally appropriate for Indonesian people, then I introduce the Indonesian respondents for the research. Unlike Hardin (2010) and Eichelberger (2012), I used the same amount of stories in the questionnaire as was used in the original research. In Section 5, I provide the results of the experiment and also include tables reflecting the results and a statistical analysis for the prototype. In Section 6, I discuss the results and their underlying reasons. The discussion uses the approach of pragmatics as in Hardin's (2010) and Eichelberger's (2012) studies. Finally, in Section 7, I summarise the conclusions.

## Definitions of lie and interpretations of lying

As is generally known by both linguists and philosophers, Grice's (1975) theory of cooperative conversation contains a category of Quality with the first submaxim, namely 'Do not say what you believe to be false.' Many approaches in defining and describing deception and lie are based on the violation of this submaxim (Fallis, 2012; Dynel, 2018). Definitions of lying typically include some combinations of: (1) stating something which is false, (2) stating something that the speaker believes to be false, (3) having the intention of deceiving the hearer, or (4) believing that the hearer will be deceived by the speaker's utterance (see Mahon 2015). Regarding the intention in lying, there are two main groups of authors; (1) deceptionists and (2) non-deceptionists.

Deceptionist authors integrate intention in their definitions of lying. Mahon (2008) and Lackey (2013) are among the supporters for this argument. Mahon (2008) argues that a person lies when she makes a statement that she believes to be false with the intention that the hearer believes it to be true, or the intention that the hearer believes that the speaker believes it to be true, or with both intentions. Meanwhile, Lackey (2013) proposes that the speaker lies to the hearer if and only if the speaker states a statement which she believes to be false and intends to be deceptive to the hearer.

For non-deceptionists, intention is not necessary to define a lie. This is supported by philosophers such as Sorensen (2007), Carson (2010), and Fallis (2012). Sorensen (2007) argues that a speaker lies to a hearer if and only if she asserts a statement that she does not believe. In the meantime, Carson challenged the deceptionists' view by arguing that a person is lying when she makes a false statement which she believes to be false and she warrants the truth of the statement. The problem with this definition is that any probably-false or lack of belief statement will be considered a lie. For example, a stranger comes to me and asks about the closing time of the city library, and although I am not sure when the library closes exactly, I still tell her that '*The library closes at 10PM.*' For Carson, this statement can be regarded as a lie since I do not commit myself to the truth of what I said. Uncertainty about a statement might be interpreted differently according to various cultures. For example, in Ecuador, a person still gives directions to someone although she is not familiar with the destination. Even though this act is interpreted as lying, Ecuadorians believe this an act of *mentira piadosa* 'white lie' since the person does not want to be unhelpful or to give a bad impression to others while English speakers might see it as a blatant or bald-faced lie (Hardin, 2010). Thus, intention is required to be included as one of the elements of lying to differentiate the act of lying from other acts of believed-false statement such as irony, sarcasm or humor.

Belief is also an important element in Fallis' (2012) definition. According to him, one is lying if and only if she makes a statement that she believes to be false and she intends to violate the norm of conversation against communicating something false by communicating that statement. Although both deceptionists and non-deceptionists have a different approach in defining a lie, they seem to have something in common regarding the element of belief in their definition.

As mentioned above, Coleman and Kay (1981) proposed three elements in their prototypical semantic analysis of the word *lie*, namely (1) factual falsity, (2) belief, and (3) intention. A true statement intended to deceive is not a full fledged prototypical lie since it does not

contain the first element i.e. the factual falsity. However, it is still regarded as a lie to a lesser degree since the other elements i.e. belief and intention, are present.

Only few authors describe factual or objective falsity as a necessary element for a lie. For example, Turri & Turri (2015) conclude that the common meaning of 'lie' requires objective falsity. Thus, when a speaker asserts a dishonest statement turning out to be true, the statement cannot be considered a lie. In that case, the speaker only thinks she is lying. In another experiment, Chen et al. (2013) use two subject groups, American and Chinese, to provide a cross-cultural validity of their definition of lie. They also find that Chinese speakers display more tolerance for untruthful sentences compared to Americans. In addition, Chen et al. (2013) also propose a definition of lying in which (1) a lie needs an untrue assertion, and (2) degrees of lie-likeness depends on the intention, benefit to self and/or harm to others, or benefit to others. For them, lying should better be understood as a scalar notion than an absolute category. Also, the addition of the element of benefit is significant in the definition of a lie. Another research on cross cultural study on deception is conducted by Leal et al. (2018). They interviewed three different groups of participants about the participants' visit to a nearby restaurant. Some participants were asked to be truthful, while the others were encouraged to provide deceptive information. The results show that there are cultural cues differentiating Chinese, Arab and English participants. Chinese and Arab participants reported fewer details and the verbal cues of deception emerge less frequently in these groups, compared to the results from the experiment with English participants. They claim that the results are due to the fact that Chinese and Arab speakers belong to high-context cultures while the English speakers to low-context cultures. The notion of high- and low-context cultures was introduced by Edward T. Hall (1976). According to Hall (1976), in high-context cultures, intention or meaning is conveyed through implicit contexts, such as gestures, social customs, or tone of voice whereas in low-context cultures, meaning is performed through explicit verbal messages. In other words, high-context cultures focus more on how the message is delivered but for low-context cultures what (content) is more important. Cultures in Indonesia have also been regarded high-context ones. When having a conversation, Indonesians are expected to know and understand the contexts of the conversations, because specific features such as gender and tenses are not grammaticalized in Indonesian language.

### **Research questions and hypotheses**

The research questions for the experiment reported here on were as follows:

- (1) Does the definition of the Indonesian word *bohong* 'lie' involve the three prototypical elements suggested by Coleman and Kay (1981)?
- (2) If the Indonesian word *bohong* 'lie' involves the three prototypical elements suggested by Coleman and Kay, what would be the order of the elements from the strongest to the weakest?
- (3) Would Indonesians interpret a situation in which a lie occurs similarly to speakers of other languages?
- (4) How to interpret the results of the experiment with Indonesians from the philosophical perspective?

On the basis of cultural and geographical differences, I hypothesized that Indonesians would have interpreted situations in which lying occurs differently. In Indonesian cultures, lying is generally understood as a statement not based on what actually happens in the real world.

Thus, factual falsity might become the determining factor when Indonesians interpret whether one is lying or not

## Method

The method of the experiment with Indonesian people followed the one created by Coleman and Kay (1981) with a questionnaire consisting of eight original stories. The eight stories are based on the combinations of the three elements of the prototypical lie proposed by Coleman and Kay (1981), they are [+false], [+belief], and [+intent]. They add utterances lacking one or more elements which might still be considered as lies but to a lesser degree.

In order to determine the degree of lying and of certainty, the respondents were asked to choose two sets of questions, (1) whether the character in the story lied or did not lie or the respondent could not tell, and (2) whether the respondent was very sure or fairly sure or not too sure that others would agree with the choice they had circled. In addition to this, respondents were also given the opportunity to give comments as an explanation of their choice. The comments were put into consideration to support the respondents' choice. However, these comments have not been thoroughly analyzed yet.

The stories for the present study were similar to Coleman and Kay's stories. Unlike Cole's (1996), Hardin's (2010) and Eichelberger's (2012) works, there were no additional stories in the questionnaire. The Coleman and Kay's (1981) stories were translated into Indonesian but in some respect they were modified in order to be linguistically and culturally appropriate within Indonesian cultures. For example, names were changed to Indonesian names. Furthermore, in Story II, chess substituted the original golf ball since the latter was not generally played among Indonesians. In short, the eight stories were basically the same as those used by Coleman and Kay (1981). The presence or non-presence of the elements of factual falsity, belief, and intention are indicated by + and -, respectively in the bracket, but they were not included in the questionnaire given to the respondents. Furthermore, the questions were put randomly in the questionnaire.

- I. *Cake story: Mail memakan kue yang Yuli akan hidangkan ke kerabat kerjanya. Yuli bertanya kepada Mail, 'Apa kamu memakan kuenya?' Mail menjawab 'Tidak.' Apakah mail berbohong?*  
Mail has eaten the cake Yuli was intending to serve to company. Yuli asks Mail, 'Did you eat the cake?' Mail says, 'No.' Did Mail lie? (+ + +)
- II. *Chess story: Herman sedang menyaksikan Dicky dan Joni bermain catur. Herman memindahkan pion kuda Dicky ketika dia hendak ke dapur mengambil air minum. Ketika Dicky kembali dan melihat pionnya berpindah, dia bertanya 'Joni, kamu memindahkan pionku ya?' Joni menjawab, 'Bukan saya. Herman yang memindahkannya.' Apakah Joni berbohong?*  
Herman is watching Dicky and Joni playing chess. Herman moves Dicky's pawn when the latter is gone to take a drink. When Dicky returns and sees his pawn moved, he says, 'Joni, did you move my pawn?', Joni replies, 'No, Herman did it.' Did Joni lie? (- - -)
- III. *Video game story: Prasetyo yakin kalau dia harus melewati toko kue untuk sampai ke tempat rental game, tapi ternyata dia salah karena toko kuenya sudah pindah. Ibunya tidak suka kalau Prasetyo bermain game. Ketika Prasetyo hendak keluar*

*rumah ingin ke tempat rental game, ibunya bertanya dia mau kemana. Prasetyo menjawab, 'Saya akan pergi melewati toko kue.' Apakah Prasetyo berbohong?*

Prasetyo believes he has to pass the cookie store to get to the video game kiosk, but he is wrong about this because the cookie store has moved. His mother doesn't approve of video games. As he is going out the door intending to go to the kiosk, his mother asks him where he is going. He says, 'I am going by the candy store.' Did Prasetyo lie? (+ - +)

- IV. Math test story: *Suatu hari Rina akan menghadapi ujian matematika namun dia tidak belajar semalam sebelumnya, jadi dia tidak ingin ke sekolah. Dia berkata kepada ibunya, 'Bu, saya sakit.' Ketika ibunya mengecek suhunya, ternyata Rina memang sakit. Malamnya, dia menderita demam. Apakah Rina berbohong?*

One morning Rina has a math test she hasn't studied for, and so she doesn't want to go to school. She says to her mother, 'Mom, I'm sick.' Her mother takes her temperature, and it turns out to Rina's surprise that she really is sick, later that day developing high fever. Did Rina lie? (- + +)

- V. Dinner story: *Sandi diundang untuk makan malam di rumah atasannya. Setelah acaranya selesai, Sandi berkata kepada atasan dan istrinya, 'Terima kasih, acara makan malamnya sangat menyenangkan.' Menurut Sandi, acaranya tidak begitu menyenangkan, dan dia tidak berusaha meyakinkan kalau dia menikmati acara itu. Dia hanya ingin mengatakan hal yang baik kepada istri atasannya meskipun dia tidak percaya apa yang dikatakannya. Apakah Sandi berbohong?*

Sandi is invited to dinner at his boss's house. After a dismal evening enjoyed by no one, Sandi says to his hostess, 'Thanks, it was a terrific party.' Sandi doesn't believe it was a terrific party, and he really isn't trying to convince anyone he had a good time, but is just concerned to say something nice to his boss's wife, regardless of the fact that he doesn't expect her to believe it. Did Sandi lie? (+ + -)

- VI. Sick ex-boyfriend story: *Jojo dan Maria baru saja mulai berpacaran. Vino adalah mantan Maria. Suatu malam, Jojo bertanya kepada Maria, 'Kamu ketemu Vino minggu ini?' Maria menjawab, 'Vino sudah dua minggu ini sakit tenggorokan.' Memang benar Vino sudah sakit selama dua minggu, meski begitu Maria sempat ketemuan dengan Vino semalam sebelumnya. Apakah Maria berbohong?*

Jojo and Maria have recently started going out together. Vino is Maria's ex-boyfriend. One evening Jojo asks Maria, 'Have you seen Vino this week?' Maria answers, 'Vino has been sick with mononucleosis for the past two weeks.' Vino has in fact been sick with mononucleosis for the past two weeks, but it is also the case that Maria met Vino the night before. Did Maria lie? (- - +)

- VII. Surgery story: *Dua pasien sedang menunggu untuk dimasukkan ke ruang operasi. Dokter menunjuk salah satunya dan berkata, 'Andi ini akan operasi usus buntu atau amandel?' Suster Citra baru saja membaca data pasien meski dia cemas untuk tetap memiliki pekerjaannya dan keliru memberi tahu dokter dan berkata, 'Operasi usus buntu,' padahal sebenarnya Andi dijadwalkan untuk operasi amandel. Apakah Suster Citra berbohong?*

Two patients are waiting to be wheeled into the operating room. The doctor points to one and says, 'Is Andi here the patient for the appendectomy or the tonsillectomy surgery?' Nurse Citra has just read the charts. Although she is anxious to keep her job, she has nevertheless confused about the charts in her mind and replies, 'The appendectomy,' when in fact poor Andi is the one scheduled for tonsillectomy. Did Nurse Citra lie? (+ - -)

- VIII. Football match story: *Rey baru saja membeli tiket nonton bola dan dia sangat senang akan hal itu. Dia pun menunjukkan ke bosnya, bosnya berkata, 'Dengar*

*Rey, kalau kamu tidak datang kerja, kamu harus punya alasan yang kuat.' Rey berkata, 'Siap, bos.' Pada hari pertandingan bola, Rey menelpon bosnya dan berkata, 'Saya tidak bisa masuk kerja, bos, karena saya sakit.' Ironisnya, Rey tidak dapat menonton pertandingan bola tersebut karena menderita sakit perut yang ternyata adalah gejala keracunan. Jadi, Rey benar-benar sakit ketika dia menelpon bosnya. Apakah Rey berbohong?*

Rey has got tickets for the football match and is very proud of them. He shows them to his boss, who says, 'Listen, Rey, any day you don't come to work, you better have a better excuse than watching a football match.' Rey says, 'OK boss.' On the day of the game, Rey calls in and says, 'I can't come to work today, Boss, because I'm sick.' Ironically, Rey doesn't get to go to the game because the slight stomach ache he felt on arising turns out to be poisoning. So Rey was really sick when he said he was. Did Rey lie? (- + -)

The questionnaire was circulated online and reached 120 respondents. All respondents were native Indonesian speakers who came from different parts of Indonesia. Some respondents commented on their selection for each story. Story I was designed to be an obvious lie while Story II was clearly not a lie. In accordance with Coleman and Kay's (1981) methodology, respondents who gave the wrong answer in these particular stories were not included in the analysis. 18 respondents were excluded as a result. None of these eighteen respondents provided comments for their choice of Story I. Consequently, it can be assumed that they might have not read the stories. Furthermore, only 5 out of 18 respondents provided comments to Story II. However, their comments were irrelevant to their choice. That is why they were discarded from the analysis. Thus, only 102 responses were taken into consideration.

The analysis was based on 7-scoring scale suggested by Coleman and Kay's (1981). The score was obtained from the combination of the two choices of the respondents. For example, if the respondent was very sure that the character in the story was lying, then the score would be 7 which is the highest lie score. If the respondent was fairly sure that the character was lying, the score would be 6, and so on. The same scoring was also used for the response saying that the character was not lying. If the respondent could not say if the character was lying or not, the score would be 4 regardless the (un)certainly of their choice. The table below shows the complete scoring scale.

**Table 1** The scoring scale as proposed by Coleman and Kay's (1981)

lie	very sure	7
lie	fairly sure	6
lie	not too sure	5
can't say		4
not a lie	not too sure	3
not a lie	fairly sure	2
not a lie	very sure	1

## Results

The scores from 102 respondents were added up and then divided by 102 to obtain the average score for each story. Table 2 shows the degree to which Indonesian participants considered each of Coleman & Kay's stories to contain a lie, with 7 being the perfect

prototypical lie score. The scores in bold (with mean score ranging from 3.01 to 4.59) in the table mean that the respondents could not determine with certainty whether the stories contain either stronger or weaker lie.

**Table 2** The lie-values Indonesian participants assigned to the stories

Story	Elements	Indonesian
I. Cake	(+ + +)	6.89
II. Chess	(- - -)	1.24
III. Video game	(+ - +)	5.05
IV. Math test	(- + +)	<b>3.27</b>
V. Dinner	(+ + -)	5.25
VI. Sick ex-boyfriend	(- - +)	<b>3.22</b>
VII. Surgery	(+ - -)	<b>4.59</b>
VIII. Football match	(- + -)	1.63

Story IV and VI are almost in the middle of lie-values, meaning that Indonesians are not certain whether the character was lying or not. Neither of these stories have the element of falsehood, but have the element of intention. Meanwhile, although the lie value of the story VII is also in bold, the score is so high that it is arguably possible to put it in the stronger lie continuum.

Table 3 shows stories ranked in ascending order where the one containing least prototypical example of a lie is on the left and the most prototypical example of a lie is on the right.

**Table 3** Order of mean scale scores (from non-lie to lie)

Least prototypical ←—————→ Most prototypical  
 II (- - -) VIII (- + -) VI (- - +) IV (- + +) VII (+ - -) III (+ - +) V (+ + -) I (+ + +)

Coleman and Kay (1981) claim that a story with fewer elements will be the least prototypical lie. However, in the table above, story VII with only one element, the element of falsehood, appears to be closer to the most prototypical lie compared to story IV with two elements but no element of falsehood. Furthermore, the stories with the element of falsehood are close to the most prototypical one with significant mean scale scores compared to stories without this element. Meanwhile, the story with the element of belief only is in the lower continuum in comparison to stories with the element of falsehood or intention.

## Discussion

In the present research, all 102 respondents agreed and believed that in Story I the character lied that he had not eaten the cookie. The mean score (6.89) suggests that the lie contained in this story is the most prototypical one for Indonesians. There were respondents

who argued that it is not necessary to categorize the character's assertion as a lie in that situation. However, many respondents emphasized that the character did lie because he denied the fact that he had eaten the cake. In other words, the respondents pointed to the factual falsity of the situation. As for Story II, it is described that character A is telling the truth to character B that character C is cheating during a chess game. Many Indonesians agreed that it was a spontaneous and truthful response of A, and that fair play should be prioritized in a game. With the mean lie score of 1.63, the lie in Story II is the least prototypical one. The possible reason the score is not exactly 1 is because some respondents believe that A's comment interfered the game and he did not take the initiative to put the pawn back right after C had done it.

Story III in the present study received higher mean score (5.05) compared to previous studies of other languages where this story ends up either in the middle or lower continuum. In the story, the character made a false statement about his going to his mother's and intended to deceive her using this false statement. However he did not realize that he was actually mistaken about his belief. Many Indonesian respondents disregarded this misbelief. Two reasons why the respondents considered that the character was lying were that he was hiding the main goal or the true intention of going out, and the fact that the character was hiding his fondness of video games from his mother. Let us see two Indonesian respondents' comments.

*Karena dia bilang akan ke toko kue, bukan melewati toko kue. Disini kelihatan jelas sekali jika Prasetyo berbohong.*

Because he said that he would go to the cookie store, not pass by it. It is clear that he lied. (Respondent 56)

*Niat dan tujuan berlawanan dengan ucapan.*

His intention and goal are contradictory to his sentences. (Respondents 96)

Another possible reason why of Story III received higher score is due to the benefit the lie causes as Chen et al. (2013) proposes in their definition of lie. In this story, the character is trying to gain benefit by lying. Lying does not have to bring benefit only to the liar, it can also be done to benefit other people, such as in cases of white lies, as illustrated by Story V. In addition to white lies, this story also contains a false belief where the guest stated that the party was terrific even though it was not true in his opinion and he did not believe that his statement was true. According to the comments that the respondents provided, many Indonesians agree that a lie can be used as a tool for politeness and not to make others disappointed. Some respondents even suggested that this lie can be avoided by just thanking the hosts. Let us consider two comments of such kind.

*Pernyataan Sandi merupakan kebohongan pada dirinya sendiri, namun attitude Sandi bisa dikatakan bentuk kesopanan atas undangan yang diterimanya kepada tuan rumah.*

Sandi's statement is a lie to himself, but his attitude can be considered as a polite one to his hosts. (Respondent 5)

*Berbohong untuk tidak membuat orang lain merasa kecewa. Ada baiknya jikalau Sandi berkata, "Terimakasih atas jamuan makan malamnya" tanpa harus berbohong.*

A lie to avoid disappointment to others. It is better for Sandi to just say, "Thank you for the dinner invitation" without having to lie. (Respondent 22)

The element of belief does not seem to affect the score of the stories. Story III [-belief] and Story V [+belief] receive quite high score, that is 5.05 and 5.25, respectively, regardless

of the absence or presence of this element. It can be argued that this high score is due to the presence of the element of falsehood. Furthermore, based on these results and comments, Indonesians perceive that anything that is not based on reality or real feeling will be considered a lie. This result shows that any story containing [+false] will be considered a strong lie by Indonesians.

To support the previous argument, let us have a look at Story VII. In Story VII, the nurse mistakenly informing the doctor about the patient's chart. American, Arab and Hungarian respondents perceived this as a mistake and a lie to a lesser degree (lie mean value ranging from 1.94 to 2.97). Many Indonesians also believed that the nurse made a mistake as evidenced by the comments they provided. Regardless, Indonesians still thought the nurse lied in the situation as hinted by the higher mean value (4.59). Some respondents provided comments that the nurse made a statement which was not based on real facts and that she pretended to know even though she did not. This act is considered a lying act by Indonesians. Another reason that might affect the respondents' judgement is the serious effect created by the nurse's mistake. One example of the comment is as follows.

*Itu adalah kebohongan, karena dia berpura-pura tahu jawabannya padahal dia tidak tahu. Dan akibat dari kebohongannya sangat fatal.*

It is a lie, because she pretended she knew the answer but she did not. This lie has a fatal effect to others. (Respondent 41)

The fact that the nurse made a statement she pretended to know in order to keep her job (benefiting self) and that it may cause serious consequences (harming others) might be the reason for the higher score of this story even though it has only one element, that is factual falsity. In conclusion, [+false] is possibly the most important element of the prototypical lie for Indonesians. This result is surprisingly different from the previous replicated studies and is also contrary to most philosophers' definition on lying.

In stories where the character does not utter a false statement, Indonesians do not consider that character lying. Story IV and VIII were constructed without the element of falsehood. Story IV receives a lower mean score (3.27) compared to the results from the other studies (ranging from 4.67-5.95). In this story, the daughter claims that she is sick even though she believes she is not. Her intention was to deceive her mother so that she did not have to go to school. Many Indonesian respondents disregard the belief the character has. They also seem to make a judgement about the whole story, not only at the time of utterance.

*Dilihat dari hasil akhir, Rina jujur antara perkataan dengan kenyataan. Tapi dilihat dari proses, dia berbohong. Tinggal dari sisi mana ingin menilai, jika secara keseluruhan maka Rina setengah berbohong.*

If we see the result, Rina's utterance aligns to the reality. But if we consider the process, she is considered to be lying. So, it depends on which point of view we adopt. Overall, she was half lying. (Respondent 76)

Many comments from Indonesian respondents referred to her intention and not to her belief. Based on this and the previous stories, it can be assumed that the second element, belief of a prototypical lie, might not exist in the perception of lying by Indonesians or it plays no crucial role. This argument is strengthened by the result of Story VIII. The mean score from Indonesian respondents is the lowest among all (1.63) resulting in agreement that the character does not lie to his boss. The comments suggest that many respondents

understood that the person called his boss not because he wanted to watch the football game. So, it was generally understood that he had no intention of deceiving his boss when he made a statement that he believed to be false. One respondent commented as follows.

*Kasihannya Rey. Tapi memang dia ga masuk kantor karena sakit, jadi harusnya dia ga bohong dong. Semoga atasannya percaya dia beneran sakit.*

Poor Rey, he did not work because he was indeed sick, so he did not lie. I wish his boss believed that he was really sick. (Respondent 7)

Story IV and VIII have almost similar plotlines where the characters make a false statement they believe to be false, but later the statement turns out to be true. Many Indonesian respondents did not make judgement on the utterers' situation during the time the utterance was made. They, however, considered the end result of the utterance. Although these two stories contain the element of belief, it is also disregarded by the majority of the Indonesian respondents. For Indonesian, a lie is stronger whenever the element of falsehood is present. This strengthens the presumption that [+belief] might not be present as the element of lying as Coleman and Kay (1981) suggested and as many philosophers mention in their definition. To support conclusion, several comments made by Indonesian respondents emphasized the character was lying because the statement was not based on objective facts or reality.

To summarize, Indonesian understanding and perception of lying is different from speakers of the most of the languages investigated so far. The order of the elements assumed by Coleman and Kay (1981) is different for Indonesians. It is most likely the following: factual falsity>intention>(belief). The reason why belief is put in brackets is because this element was not considered and realized by Indonesians as indicated by their comments.

## **Conclusion and suggestion**

Most philosophers argue that lying does not require the statement to be objectively false. A lies to B when A states that *p* to B, while A believes the opposite of *p*, making belief to be the most important element in defining what a lie is. This argument seems to be supported by empirical researchers such as Coleman & Kay (1981) who found out that English speakers will judge a lie to be stronger if it involves a false belief, compared to a lie involving intention to deceive or factual falsity. This perception is also shared by Arab, Spanish and Hungarian speakers.

However, Indonesians seem to have different perception of lying. For them, any statement that is a mismatch between the objective facts or reality will be strongly judged as a lie. The result that a lie is determined by its objective falsity is similar to the result of Brown's (2002) study on Tzeltal people. False statements turning out to be true are not lies for majority of Indonesians. Indonesians also disregard knowledge or belief states like the Mayan Mopan people in Belize (Danziger, 2010). These results seem to be quite contradictory to the philosophical approach on the definition of lie. In addition to subjective falsity, whether a statement results in benefit or harm, as Chen et al. (2013) argued, plays an essential role in the lie judgements.

To answer the research questions, it can be stated that, first, the Indonesian word *bohong* 'lie' seems to not involve the three prototypical elements suggested by Coleman & Kay (1981) suggested. Second, for Indonesians the order of Coleman & Kay's elements in lying is most likely: factual>intention(>belief). Many comments were made to support the element

of factuality and intention, such as *'ini adalah kebohongan karena tidak berdasarkan fakta'* ('this is a lie because it is not based on facts') and *'bohong itu tergantung niatnya'* ('a lie depends on the intention'). According to the order of the elements, when Indonesian people make their judgements between lying and not lying, they observe the presence of the elements, mainly factuality of the statement, in the situation and evaluate the situation according to the above mentioned preference. They also make the judgement of the lie according to whether it has benefits or harms. Third, this result shows that Indonesians have a different interpretation of lying compared to people from other cultures. Finally, this result of Indonesian respondents is contrary to many philosophers' contention that false belief is necessary for an utterance to be a lie.

The main concern of the study was how objective falsity seems to be disregarded by many Western philosophers in their definitions of lying. The result of this experiment and other results reported in the literature and mentioned above attest that lying is perceived and defined differently in different cultures. Thus, to strengthen this argument, further research into other different languages and cultures shall be conducted.

### **Acknowledgements**

I would like to thank my PhD supervisor Enikő Németh T. for her helpful comments and editorial assistance. I also thank my friend Fatmawati (Northeast Normal University, People's Republic of China) who helped me to obtain the data for this paper. Special thanks go to the audience of the *Cognition and Lying 2019* Conference in Brno, whose questions helped me clarify my views.

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