Judgments under emotioncy’s influence
A case of linguistic bias

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Following a number of studies on discovering the controlling dormant forces in linguistic biases, this study attempts to introduce the concept of emotioncy as a driving force in explicating the causes of prejudice manifested through biases in speech. To this end, two scales for measuring individuals’ bias and their emotioncy levels were devised and validated through Rasch measurement. A total number of 341 participants were asked to take the scales. Afterward, structural equation modeling (SEM) was employed to investigate the probable relationships among sub-constructs of the scales. The results indicated that as individuals’ emotioncy level increases, the bias level decreases. In other words, involvement slides people toward being less judgmental and thus less biased in language, while exvolvement leads people toward using more abstract words, and therefore more biased language. In the end, implications of the findings were discussed in the realm of judgment and decision making.

Keywords: emotioncy, bias, judgment, avolvement, exvolvement, involvement, decision making

1. Introduction

The past several decades of research have unveiled the contribution of language to social cognition (Collins & Clément 2012; Seih, Beier, & Pennebaker 2016; Semin & Fiedler 1989), and a wealth of studies has been conducted to explore different facets of psychological states of speakers through language (Seih et al. 2016). One of these psychological factors which has garnered attention over years is bias in one’s speech (Brown & Fish 1983a; Collins & Clément 2012; Semin & Fiedler 1988, 1991). In this regard, researchers have attempted to pinpoint the underlying factors causing biases and stereotypes (Keltner & Lerner 2010; Saito, Yuki, Seki, Kagawa, & Okanoya 2016; Ugazio, Lamm, & Singer 2012). A common thread that
runs through the works of these researchers is the decisive roles of world knowledge, schemata, prior contact, and emotions in molding one’s judgments (e.g., Corrigan et al. 2001; Corrigan & Watson 2002; Kelley 1972; Keltner & Lerner 2010; Saito et al. 2016; Ugazio et al. 2012). However, sensory perceptual experiences and the way senses can contribute to bias have been neglected in the literature. That is why, it seems that the newly developed concept of emotioncy (emotion+frequency of senses) proposed by Pishghadam, Tabatabaeyan, and Navari (2013) may account for the underlying factors holding sway in judgments and linguistic biases.

Emotioncy, as an umbrella term uniting sense, cognition, and emotion, was defined as the sense-induced emotions which can relativize one’s cognition (Pishghadam, Tabatabaeyan, et al. 2013). Pishghadam, Jajarmi, and Shayesteh (2016) are of the view that individuals’ sensory experiences provide them with emotions that can shape their worldviews. Therefore, reality changes within and across individuals according to the sensory experiences each receives. Thus, there are different versions of reality (hyper/hypo) while looking through the lenses of individuals with differing emotioncy levels. Building upon this definition, Pishghadam (2015) divided individuals into three groups of avolved (null emotioncy), evolved (auditory, visual, and kinesthetic emotioncies), and involved (inner and arch emotioncies). In short, emotioncy, as a concept embracing emotion, sense, cognition, world knowledge, prior contact, and schemata which is believed to affect our decisions and judgments can be a fruitful joint to invest in while explicating linguistic biases.

Regarding the abundance of literature confirming the role of emotions in making judgments and the way it is manifested through language in the form of biases (e.g., Keltner & Lerner 2010), the role of prior contact as the most promising strategy in reducing prejudiced attitudes (Corrigan & Penn 1999), and the perpetual battle between cognition and emotion when it comes to passing judgments (Moll, de Oliveira-Souza, & Zahn 2008), it is the authors’ belief that emotioncy with a focus on integrating all of these factors, can explain dormant factors bringing about bias in speech. Actually, in this study, our objective is to investigate the probable relationships between individuals’ emotioncy level (avolved/ex-volved/involved) and the bias level manifested in their speech. Therefore, through a quantitative work, we attempted to find empirical support to see whether being avolved, evolved, or involved in a situation makes a difference in the amount of bias one exhibits through language.
2. Theoretical framework

2.1 Language and bias

The role of language in investigating social processes and psychological behavior has been the focus of several studies (Collins & Clément 2012; Seih et al. 2016; Semin & Fiedler 1989). As “a vessel or container for holding and conveying cognition” (Collins & Clément 2012: 379), language is considered a reliable tool to fathom individual psyche and the social processes involved (Seih et al. 2016). A topic of controversy in this regard is the reciprocal relationship between language and prejudice. Apart from the explicit use of prejudice which is denounced by social norms, implicit expressions of prejudice guised as linguistic biases have become a trend (Collins & Clément 2012).

Since linguistic biases are considered firm stances hinting to speakers’ biased beliefs and as suitable tools to reveal individuals’ cognition (Sutton 2010), a number of theories, including linguistic category model (LCM), attempted to explain them through the lens of linguistic abstraction (Semin & Fiedler 1988, 1991). LCM is a four-level category which is used to describe interpersonal behavior and communication. It comprises descriptive action verbs (DAVs), interpretive action verbs (IAVs), state verbs (SVs), and adjectives (ADJs). As we move from DAVs to ADJs, the level of abstractness increases and the properties described are assumed to be more enduring, more disputable, and more informative about the subject. Accordingly, they are less informative about the situation and less verifiable (Semin & Fiedler 1988). Individuals grow more distant from reality and succumb to biases as their representations move toward the use of adjectives (Semin & Fiedler 1991). Adjectives can reveal biases and the way individuals may label each other (Beukeboom 2014).

The hypothesis that social labeling affects the way one perceives himself/herself and forms self-images in accordance with the way his/her behavior is described was tested in a number of studies (e.g., Aronson & Mettee 1968; Kraut 1973; McArthur, Kiesler, & Cook 1969). For instance, individuals labeled charitable in one study were more likely to give donations in a latter situation compared to those labeled non-charitable (Kraut 1973). The findings support the idea that the way an object is labeled influences judgments and evaluations (Pratkanis 2007).

Moreover, concerning the use of abstract language in speech, it was found that individuals use concrete terms when they are describing their own behavior in comparison to when they are reporting someone else’s behavior (Semin & Fiedler 1989). Evidence supporting this claim can be found in the case of actor-observer bias, wherein actors were reported to use fewer adjectives when describing themselves and employ more concrete terms when explaining the self-related
events (Semin & Fiedler 1989, 1991). In the same line, Libby, Shaeffer, and Eibach (2009) maintained that people in the first person perspective tend to use more concrete language while those in the third person perspective lean toward more abstract terms.

The ubiquity of judgment biases (Saito et al. 2016) has made researchers determine their causes and origins. Brown and Fish (1983a) hold that causal schemas in our minds make us talk in a special way, hence are responsible for our speech biases. Others highlighted the role of world knowledge in explaining causal relationships (Ferstl, Garnham, & Manouilidou 2011; Rudolph & Försterling 1997). Corrigan & Penn (1999) believed having prior contact and being in touch with or in a similar situation as those of people suffering from mental illnesses reduce stigmatized judgments about them as a result of having more emotional responses and perceiving less social distance. Still another group turned to emotional domains in explaining moral judgments (Greene & Haidt 2002). Moreover, Moll et al. (2008) contended that cognitive and emotional scenarios vie with each other in the production of moral judgments. Emphasizing the role of emotion-induced empathetic responses in molding one’s judgments, Van Boven and Loewenstein (2005) posited that individuals use themselves as touchstones to evaluate others’ behaviors. Therefore, those having more similarities to the ones involved in a situation feel more empathy and are less biased in passing judgments (Feshbach & Roe 1968; Hodges, Kiel, Kramer, Veach, & Villaneuva 2010). Furthermore, empathy gaps occur when individuals in cold emotional states attempt to make predictions about those in aroused or hot emotional states (Loewenstein 1996, 2005). This finding jives with Trope and Liberman’s (2003, 2010) construal-level theory’s claim that people tend to use more abstract language to describe whatever they feel psychologically detached from, whereas they cling to concrete language when they feel shorter psychological distance. Van Boven, Kane, McGraw, and Dale (2010) also believe emotions can decrease psychological distance, and that individuals feel psychologically closer to the person entangled when their own emotions are intensified.

As already mentioned, emotioncy seems to be of considerable relevance to the abovementioned literature. Emphasizing personal sensory experiences and emotions, with schema and world knowledge occupying the intermediary positions, emotioncy attempts to amalgamate the potential causes for the emergence of linguistic biases in speech. In what follows, the basics of emotioncy theory are outlined and reviewed.
2.2 Emotioncy

Roots of emotioncy can be traced back to the central claims of embodied cognition research program when the sensorimotor capacities, body, and environment were introduced as decisive factors in molding one’s cognition. As Thelen, Schöner, Scheier, and Smith (2001) put it:

> To say that cognition is embodied means that it arises from bodily interactions with the world. From this point of view, cognition depends on the kinds of experiences that come from having a body with particular perceptual and motor capabilities that are inseparably linked and that together form the matrix within which reasoning, memory, emotion, language, and all other aspects of mental life are meshed.

(p. 1)

Stemming from embodied cognition research program and inspired by Greenspan's (1992) developmental individual-difference relationship-based (DIR) model with heightened emphasis on affective domains, emotioncy as an umbrella term integrating sense, emotion, and cognition was introduced (as cited in Pishghadam & Abbasnejad 2016). For emotioncy, sense is the apparatus through which man interacts with the outside world. It holds that emotions stirred by the frequency of sensory experiences ultimately form one’s cognition. It is defined as emotions evoked by senses which can relativize one’s cognition (Pishghadam, Tabatabaeyan, et al. 2013). It ranges from avolvement (null emotioncy), to evolvement (auditory, visual, and kinesthetic emotioncies) to involvement (inner and arch emotioncies) (Pishghadam 2015). Table 1 illustrates the definitions for each type.


<table>
<thead>
<tr>
<th>Type</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null emotioncy</td>
<td>When an individual has not heard about, seen, or experienced an object or a concept.</td>
</tr>
<tr>
<td>Auditory emotioncy</td>
<td>When an individual has merely heard about a word/concept.</td>
</tr>
<tr>
<td>Visual emotioncy</td>
<td>When an individual has both heard about and seen the item.</td>
</tr>
<tr>
<td>Kinesthetic emotioncy</td>
<td>When an individual has touched, worked, or played with the real object.</td>
</tr>
<tr>
<td>Inner emotioncy</td>
<td>When an individual has directly experienced the word/concept.</td>
</tr>
<tr>
<td>Arch emotioncy</td>
<td>When an individual has done research to get additional information.</td>
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</tbody>
</table>
As Figure 1 shows, individuals may move forward or backward along the continuum and change their level of emotioncy at different time intervals through the process of *trans-emotioncy*. That is, ones who are completely evolved in a certain situation, concept, or word may become involved at some other time and vice versa (Pishghadam 2016b).

![Diagram of emotioncy levels](image)

**Figure 1.** Emotioncy levels (Adapted from “Emotioncy in Language Education: From Exvolvement to Involvement”, By R. Pishghadam, 2015, October, Paper presented at the 2nd Conference of Interdisciplinary Approaches to Language Teaching, Literature, and Translation Studies. Iran, Mashhad.)

In the realm of education, Pishghadam and Shayesteh (2016) propounded that words or concepts for which students have higher levels of emotioncy are acquired sooner than the ones for which they have lower emotioncy levels. Pishghadam, Adamson, and Shayesteh (2013) added another layer by proposing that contrary to Piaget’s (1926) *schema theory*, which underlined the significance of prior knowledge for interpreting the world, it is the prior emotions evoked by the senses that can pave the way for better perception of the world. Pishghadam, Jajarmi, et al. (2016) later introduced *sensory relativism*, suggesting that reality is formed based on our sensory experiences. They claimed, “reality is relative, changing within and across individuals” (p. 2). Therefore, people coming from diverse cultural capitals may be entangled in a situation and, as a result, have emotions for it or they may
have less emotional experience with regard to that notion. The findings corroborate with Whorf’s (1956) *linguistic relativity* that individuals will not have the same perception of a physical entity because their linguistic backgrounds may differ. Pishghadam, Adamson, et al. (2013) illustrated this notion through an example. Due to the Islamic ambience of Iran, an Iranian girl may never experience the notion of *bar* or *wine* in her real life; therefore, she will probably have more difficulty learning such words in a second language compared to the words with which she has had the experience of involvement. Furthermore, the girl will form hypo/hyper realities far from the existing reality.

One point which needs more clarification is the distinction between familiarity and emotioncy. While familiarity deals with cognitive structures and schemata (Piaget, 1926), emotioncy underscores the role of emotions, focuses on the integration of sense, emotion, and cognition (Pishghadam, Baghaei, & Seyednozadi 2017). In an interview by Pishghadam, Jajarmi, et al. (2016), individuals’ ideas were asked toward the concept of *phlebotomy*. Interestingly, people more evolved in the concept (the ones who had never done phlebotomy, but might have heard about it, seen, or been in touch with people who had done it), were found to use more hedges, more associations, and demonstrate distal emotions. On the contrary, the ones who were more involved (had gone through the experience themselves), used fewer hedges, more analogy, and exhibited proximal emotions toward the concept. They then concluded that since emotions resulted from sensory experiences can impose structure on cognition, evolved individuals’ form of reality does not necessary overlap with it. Instead, they form hypo/hyper realities which are mere shadows of what really exists. Whereas involved individuals’ perception of reality seems to be closer to reality. Authors are of the view that, as a concept tapping on emotion, cognition, and sense simultaneously, emotioncy helps explaining the underlying reasons for individuals’ judgments. In fact, it is our hypothesis that underlying basics of emotioncy can be a successful joint to invest in while interpreting individuals’ biased speech. Our prediction is that there is a significant relationship between individuals’ emotioncy level and the way bias is manifested in speech. In order to furnish support for the validity of the hypothesis, this study seeks to find answer to the following research question through the help of the taxonomy presented in LCM (Semin & Fiedler 1988) to measure the level of abstractness and thus, bias in speech.

- Is there any significant relationship between individuals’ avolvement/ evolvement/ involvement and the amount of bias reflected in their speech?
3. Methodology

3.1 Participants

A group of 341 participants (153 males, 188 females) filled in the scales. They took part in the study on an unpaid voluntary basis and were selected through convenience sampling. They were Iranians ranging from 18 to 42 years old, with a mean age of 26.5. As for their education level, 32 were diplomas, 81 undergraduates, and the majority (n = 228) had received higher education (Masters/Ph.D.) in different majors. Their job positions varied from non-workers to freelance workers to government employees. The purpose of the study was explained to them through a booklet they received along with the scales illustrating how they should be completed.

3.2 Instruments

3.2.1 Bias scale

The framework of our study was supplied by the application of LCM used in the interpersonal domain as mentioned in the literature (Semin & Fiedler 1988). Having a clear cut list of properties for this classification and using the table of terms developed by Semin and Fiedler (1988), we proceeded in the following manner.

Ten pictures were selected illustrating common situations one might encounter. For each picture, the behavior of the person portrayed was questioned, and then options were offered in compliance with the psycholinguistic category model proposed by Semin and Fiedler (1988). Each of the proposed answers had the potential to be a true reflection of the portrayed situation. That is, the sentences included a DAV, an IAV, an SV, and an ADJ, respectively. It was revealed that these structures are universal and consistent across languages and cultures (Brown & Fish 1983b; Ferstl et al. 2011; Hartshorne, Sudo, & Uruwashi 2013; Rudolph & Försterling 1997) since there are cognitive universals about how people shape their reasoning in interpersonal domain (Brown & Fish 1983b). Hence, the scale was prepared in respondents’ mother tongue (Persian) to avoid comprehension problems. For instance, one of the pictures depicted a man smoking. The respondent’s opinion of the man was asked (what do you think of the man?). The options were: (a) he smokes a cigarette (DAV), (b) he hurts himself by smoking (IAV), (c) he likes smoking (SV), (d) he is depressed (ADJ) (see Appendix A).

To confirm the validity of the bias scale, Rasch was employed by employing WINSTEPS software (Linacre 2009). The outcome showed that except for two items (5 and 7), the scale fitted the model with an item separation index of 4.3 (item reliability = .82), and a person separation index of 6.13 (person reliability = .88).
These two items and their counterpart emotioncy items were therefore removed from further analyses. The stimulus situations were as follows: a man smoking, a father spanking his child, a man sending a text message while driving, a man talking on the phone in a cinema, a couple quarrelling (defected item, deleted), a girl cheating on an exam, a man shouting at a woman (defected item, deleted), a father scolding his son, a driver shouting at other drivers, and an exam paper marked F.

3.2.2 Emotioncy scale
A 10-item emotioncy scale (see Appendix B) was conducted for the illustrated pictures in the bias scale based on the metric proposed by Pishghadam (2016a). The metric comprises three parts: The sense dimension scoring respondents from 0 to 5 based on null, auditory, visual, kinesthetic, inner, and arch emotioncies respectively, the emotion dimension rating participants’ emotions toward each situation on a five-point Likert scale from extremely negative to extremely positive, and frequency, which measures participants’ exposure to the situation in question. Participants marked their amount of exposure on a five-point scale from extremely low to extremely high; then their total emotioncy score was calculated as follows: Emotioncy = sense (emotion + frequency). To confirm the uni-dimensionality of the frequency section of the emotioncy scale, Rasch measurement was applied. The results revealed all the items fitted the model with an item separation index of 6.23 (item reliability = .81), and a person separation index of 4.13 (person reliability = .92). Thus, the emotion section of the emotioncy scale was found to be uni-dimensional. The outcomes showed that the item separation index was 4.98 with an item reliability of .92, and the person separation index was 6.13 with a person reliability of .83. It is also worthy to note that, this scale was also written in respondents’ mother tongue (Persian) to ensure its comprehensibility. In order to get more familiar with how the emotioncy scale works, take a look at the following example. A person filled out the scales as follows: I have been in the same situation and smoked (sense score: 4), I feel extremely positive about it (emotion score: 5), and I have smoked a lot (frequency score: 5). His total emotioncy score would be calculated as follows: 4 (5+5) = 40 (see Figure 2).
Figure 2. A metric for measuring emotioncy (Adapted from “Emotioncy, Extroversion and Anxiety in Willingness to Communicate in English” By R. Pishghadam, 2016a, May, Paper presented at the 5th International Conference on Language, Education and Innovation. England, London.)

3.3 Procedure

After the two scales were devised, they were piloted with 10 participants to ensure their comprehensibility and lack of ambiguity. Then, the rest of the participants were contacted by their email addresses where they could download the two scales plus a short instruction file on how to complete them. The purpose of the study and its procedure were thoroughly explained to them in order to ensure full comprehension. In order to avoid bias, participants were required to answer the bias scale first and the emotioncy scale second. Also, the respondents’ willingness to participate was checked beforehand, and they indicated their readiness to cooperate by providing the researchers with their email addresses. They were required to complete both of the scales and send them back via email. An average time of 15 to 20 minutes was estimated for the answering of both of the scales.

To analyze the data, ANOVA, t-test, correlational analyses, and structural equation modeling (SEM) were employed. First, several statistical analyses were run to control the extraneous variables: The ANOVA results showed that there were no significant differences among different levels of education with respect to emotioncy ($F = .31, p > .05$) and bias ($F = .42, p > .05$), the t-test results also revealed that there was no significant difference between males and females with respect to emotioncy ($t = .42, p > .05$) and bias ($t = .46, p > .05$), and the correlational analyses exhibited that age had no significant relationship with emotioncy ($r = .08, p > .05$) and bias ($r = .10, p > .05$). It clearly demonstrated that the level of education, gender, and age played no significant roles in emotioncy and bias.
Then, Pearson product-moment correlation and SEM were employed to assess the relationships among variables.

4. Results

4.1 Descriptive Statistics and Correlations

Table 2 shows the results of descriptive statistics and correlations among different variables in this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avolvement</td>
<td>.24 (.21)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Exvolvement</td>
<td>6.5 (1.2)</td>
<td>-.15'</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Involvement</td>
<td>3.2 (.9)</td>
<td>-.11</td>
<td>-.92''</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotioncy</td>
<td>21.1 (1.3)</td>
<td>-.21''</td>
<td>-.41''</td>
<td>.67''</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Bias</td>
<td>2.4 (4.9)</td>
<td>-.10</td>
<td>.66''</td>
<td>-.54''</td>
<td>-.39''</td>
<td>1</td>
</tr>
</tbody>
</table>

* $p < .05$
** $p < .01$

As Table 2 shows, emotioncy is negatively related to bias ($r = -.39, p < .05$), indicating that individuals more emotionalized in a situation are less likely to use SVs and ADJs, but more willing to use DAVs and IAVs. Remember that, in the psycholinguistic category model developed by Semin & Fiedler (1988), the bias rate increases as we move from DAVs toward adjectives. Increased emotioncy, then, leads to decreased judgment in speech. Other significant relationships are the negative correlation between bias and involvement ($r = -.54, p < .01$) and the positive correlation between bias and exvolvement ($r = .66, p < .01$). The results suggest that individuals’ increased involvement leads to a decrease in their use of SVs and ADJs, whereas more exvolvement leads to exhibiting more use of SVs and ADJs as meaningful representatives of bias in speech. The relationship between bias and avolvement was non-significant ($r = -.10$).

4.2 The model proposed by SEM

In order to examine the likely relationships among variables of the bias and the emotioncy scales, SEM was employed. As the model (Figure 3) proposes, avolvement (null emotioncy), exvolvement (auditory, visual, and kinesthetic emotioncies), and involvement (inner and arch emotioncies) are introduced as latent
variables of emotioncy which itself consists of two dependent variables of emotion and frequency. The most significant relationship is the negative one between emotioncy and bias ($R^2 = -.21$). In fact, emotioncy accounts for a 4% variance in bias. The contribution of involvement, evolvement, and avolvement as latent variables of emotioncy is also substantial. There is a negative relationship between involvement and bias ($R^2 = -.41$) and a positive relationship between evolvement and bias ($R^2 = .48$); they account for almost 17% and 23% of the variance in bias respectively. There is no relationship between avolvement and bias ($R^2 = -.07$).

In order to ensure fit of the model, goodness of fit indices were employed. The indices used in this study were as follows: The relative chi-square computed through the division of chi-square by the degrees of freedom ($\chi^2/df$), Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). $\chi^2/df$ less than 3, TLI, GFI and CFI above .90, and RMSEA less than .08 is reported to be the acceptance criteria (Browne & Cudeck 1993; Hu & Bentler 1999). As it is seen in Table 3, all of the indices met the acceptance criteria; therefore, the suitability of the model was substantiated.

<table>
<thead>
<tr>
<th>Fit index</th>
<th>($\chi^2/df$)</th>
<th>GFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.66</td>
<td>.90</td>
<td>.92</td>
<td>.91</td>
<td>.05</td>
</tr>
</tbody>
</table>

Figure 3. Model of the Relationship between Emotioncy and Bias
5. Discussion

Considering the prevalence of biases in everyday speech (Saito et al. 2016) and knowing that awareness of biases is one of the best strategies to reduce prejudice (as cited in Collins & Clément 2012), this study attempted to assess the influence of emotionancy on linguistic biases. Thus, two scales were devised and validated through Rasch to measure the respondents’ bias rate and their emotionancy level toward similar situations. Subsequently, SEM was employed to investigate the probable relationships between respondents’ emotionancy levels (avolvement, evolvement, and involvement) and the amount of bias in their speech.

The primary results soon verified the hypothesis of the authors by showing that there is a significant relationship between individuals’ emotionancy level and their speech bias. In fact, the negative correlation between emotionancy scores and bias scores indicated that being more emotionalized in a situation leads to using fewer abstract words, which in turn makes one less judgmental in speech. In fact, when individuals’ emotionancy level increases, they feel more empathetic toward those involved in the situation, and thus they may dedicate more time to reflecting upon that situation and the probability of thinking up concrete instances increases (Van der Pligt 2015). This finding is in line with Semin and Fiedler’s (1988) results, in which those utilizing more DAVs (the most unbiased items in their taxonomy) were capable of differentiating between situational factors at work and dispositional parameters of the character involved. They reported that this quality gradually decreases as one moves toward utilizing more adjectives in speech (the most biased category in their taxonomy).

The outcomes of the study also revealed that while there is a negative correlation between the bias level and involvement, there is a positive relationship between the bias level and evolvement. It seems that the more involved people are in a situation, the less likely they are to resort to abstract biased language. In a similar vein, the more evolved they are with regard to the situation, the more probable their use of biased language becomes. One likely explanation may be that evolved individuals’ version of reality (hyper/hypo reality) is exaggerated and seldom overlaps with reality (Pishghadam, Jajarmi, et al. 2016); therefore, it seems reasonable if they show more bias in their speech. Having distal exaggerated emotions can best account for their cloudy judgments. The findings are in accordance with Kross, Ayduk, and Mischel’s (2005) statement that when individuals narrate something from a self-immersed perspective (similar to our definition of involved) they tend to remember the concrete aspects of their experience, but when reporting from a self-distant perspective (similar to our definition of evolved) they are more likely to utilize abstract language. Another line of explanation may be that when individuals are evolved in a particular situation or in a cold state according
to Van Boven, Loewenstein, Dunning, and Nordgren (2013), the widened emotion gap leads to a broadened empathy gap and paralyzes the individual with keeping him/her away from establishing a sound emotional relationship with the situation, which in turn leads to experiencing more psychological distance (Trope & Liberman 2010; Van Boven et al. 2013). S/he unconsciously moves toward the biased end of the continuum. That is maybe why individuals exhibit more stereotypical habits toward their outgroup members compared to their ingroup members (Semin & Fiedler 1991). In another study by Pishghadam and Abbasnejad (2017) on the relationship between the attribution style of people and their emotion levels, evolved participants ascribed more of their judgments to internal and dispositional factors, whereas involved participants were more insightful by being cautious that external and situational factors might be at work in a situation. A more possible line of explanation is that involved individuals seem to be more mindfully entangling all senses, and are therefore, more susceptible to see a situation from different perspectives. Whereas evolved individuals are thought to be more mindless as a result of dealing with only a limited number of senses, and are therefore, less concerned with various possibilities at work when it comes to interpreting someone’s behavior and passing judgments. Thus, being more involved in a notion prevents us from making absolute judgments about others.

Moreover, the non-significant relationship between avolvement and bias is justifiable. Since avolvement means that the person has no idea about or no sensory experience with a situation/concept, it appears logical to have neither emotions nor exposures to the situation. Consequently, it is no surprise that the bias levels were not consistent in avolved individuals.

The results obtained from this study can help us be aware of the existence of such a cognitive bias to reduce prejudice (as cited in Collins & Clément 2012). It is our belief that emotion gaps can cause the bias and make us behave inappropriately (verbally or nonverbally) toward people who are in a different sensory-emotional state. Let us illuminate the issue through an example from the present study. In one question, the respondents were asked to describe the behavior or characteristics of a person who had failed in an examination. The ones who had the experience of failing in an exam rarely described the person as dumb and untalented. They simply expressed their opinions with DAVs or IAVs, marked as the lightest containers of bias in language (Semin & Fiedler 1988). Those who had never been in a similar situation described the person as untalented, or denounced the person as one who hates studying (more use of SVs and ADJs). Therefore, emotion gaps can be considered as a potential source of labeling and bias and the knowledge that not being emotionalized in a situation (being evolved or avolved) leads people toward negative social evaluations can be of high importance to decision makers to avoid making judgmental errors.
6. Conclusion

The current study attempted to draw a link between bias and emotioncy as an unnoticed driving force influencing the way people talk. Building upon the pre-established framework of calculating bias in speech (LCM), it was revealed that the higher the level of emotioncy, the less inclined people are to use abstract language. That is to say, those involved in a situation tend to describe events in a less biased form of language which is concrete descriptions, whereas those evolved in a situation cling to abstract language which indicates bias in speech. However, since findings are preliminary, care should be exercised in generalizing the outcomes. Carrying out similar studies with differing samples or using other hypothetical situations is recommended in order for the results to be generalizable. Furthermore, while this study tried to measure the amount of bias by the help of a pre-established model for evaluating bias in language (LCM), other models can be employed to compare the results. In addition, studies on biases in language are mostly centered on one linguistic aspect (abstraction), while studies on the other aspects of biases are scarce (Beukeboom 2014). It seems logical to test the robustness of findings through other measures for evaluating linguistic biases. Moreover, notwithstanding the cognitive universality of the way people mold their reasoning in interpersonal domain and universality of structures used in LCM (Brown & Fish 1983b; Ferstl et al. 2011; Hartshorne et al. 2013; Rudolph & Försterling 1997), one cannot be oblivious to the restrictions posed on the interpretation of these results from culture specific criteria, such as politeness rules. Therefore, other studies should be carried out to investigate the results in different cultures and with different languages to substantiate the findings of this study. Finally, it would be intriguing to involve a group of evolved individuals in real situations and then compare the bias before and after being involved.

References


Appendix A. Sample of the bias scale

What do you think of the person illustrated in the picture below?

1. He smokes a cigarette.
2. He hurts himself by smoking.
3. He likes smoking.
4. He is depressed.

Appendix B. Sample of the emotioncy scale

<table>
<thead>
<tr>
<th>Picture number 1</th>
<th>I do not know what this situation is.</th>
<th>I have heard that some people have been in this situation.</th>
<th>I have heard and seen some people in this situation.</th>
<th>I have heard, seen, and been in touch with people who have been in this situation.</th>
<th>I have heard, seen, and been in touch with people who have been in this situation. and researched deeply on people who have been in this situation.</th>
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<tbody>
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<tr>
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<td>Positive ●</td>
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<td></td>
<td></td>
<td></td>
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</table>

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<tr>
<th>How I feel about the situation illustrated in the picture</th>
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<th>Extremely low ●</th>
<th>Extremely low ●</th>
<th>Extremely low ●</th>
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</table>

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<th>My exposure to the situation illustrated in the picture</th>
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<th>Extremely low ●</th>
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</table>
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