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Drawing on social approval as a linguistic strategy: A discourse semantic analysis of judgement evaluation in suspected online romance scammer dating profiles

Online romance fraud is a crime carried out largely using language, as the victim and scammer typically do not meet in person in their entire interaction. As a language-enabled crime, a linguistic analysis of scam communication can shed light on how language is used to attract victims and influence their thoughts and actions. This study examined the first stage in the online scam strategy, that is, the putting up of a dating profile (user biography) on online dating service websites. The analysis employs the judgement evaluation framework of appraisal theory to examine the extent to which scammer profiles differ from a set of general user profiles in terms of their use of social approval as a linguistic strategy to attract a more compliant victim type. Findings from the study can help in raising public awareness about how linguistic resources are employed in luring potential victims in scammer dating profiles.

Key words: online romance fraud, user profiles, computer mediated communication, judgement evaluation, societal endorsement; linguistic analysis

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The emergence of online dating platforms allowing people to seek romance and relationships through the internet is a double-edged sword. Although online dating services provide a good avenue for many people to find their life partners, these dating websites and applications have also inevitably become locations with large gatherings of individuals targeted by romance scammers searching for potential victims (Kopp et al., 2016). Online romance fraud is essentially a cybercrime conducted largely through language, where in almost all cases, an in-person meeting never takes place between the scammer and the victim. It is executed by the scammer, first by attracting the attention of and initiating contact with potential victims and then maintaining an online romantic relationship with them over a period of time, and eventually defrauding the victims of their money (Budd & Anderson, 2011; Cross & Layt, 2022).

Research on the online romance scam has been conducted across disciplinary boundaries, usually at the intersection between psychology and language. These studies have made invaluable contributions that have brought deeper understanding about the structure of the online romance scam, victim characteristics, and scammer strategies. Whitty (2015) and Buchanan and Whitty (2014) in particular have deconstructed the stages of the online romance scam into a description of scammer persuasive techniques, which are setting up an ideal profile (personal biography), grooming, foot-in-the-door, crisis, and re-victimization. To initiate a relationship, setting up a personal biography to attract a potential victim via the user profile function in dating service portals is an important first step in the scam strategy. However, it is also noted that scammers are increasingly using social media websites that allow a more informal initial contact with potential victims (Buchanan & Whitty, 2014). Taking advantage of the anonymity of the online platform, scammers shore up their user profiles with attractive stolen photos and fake information (Lo et al., 2013; Rege, 2009; Whitty, 2013). Further, Buchanan and Whitty (2014) and Whitty (2018), through extensive surveys of online dating service users and romance fraud victims in online support groups, hypothesized a victim profile that included, among others, the tendency to idealize romantic relationships. Subsequent work done by Suarez-Tangil et al. (2019) and Lee et al. (2022) investigating the linguistic aspect of scammer dating biographies using different methodologies revealed that scammer-authored biographies tend to depict a particular victim type as targets. Additionally, scammers employ linguistic elements that not only evoke love and affection but also foreground commitment and hope (Lee et al., 2022). Tan and Yoong (2017) who investigated a scammer online lover persona by analyzing a scammer's and a victim's e-mail messages to each other found that the scammer attempted to build a credible identity in self-presentation through a variety of linguistic strategies. Among others, the scammer presented himself as someone with a high moral character, deploying words associated with religion and religiosity. Talk that indicates trust in divine fate that serves to obscure the scammer's agency in engineering the meeting and relationship was also highlighted. Likewise, Kopp et al. (2015) found that self-

-descriptions of "male" scam dating profiles tend to emphasize religiosity with expressions such as "trust in God." Words associated with strong emotions are also used to invoke sympathy, loyalty, and respect. More importantly, the researchers point out that scammers carefully craft their love story in the form of a coherently created background, personality, and life circumstances that could be used to support their request for money at a later stage. For example, if dangerous sports are cited as a hobby, an accident during sporting activity could be used as an excuse to request money. Further, scammers continue to disclose details of themselves to the victim as they interact, constructing a love story that fits with the victim's expectations, and this love story functions as a script that drives the victim to act out the story.

Whether it is the five-stage scam strategy proposed by Whitty (2015) or a constructed love story explicated by Kopp et al. (2015), the important first step in the online romance fraud requires a self-introduction and an expression of wishing to meet a relationship partner. This typically comes in the form of a dating profile set up on online dating service websites. The dating profile or user biography on the online dating website is a self-introductory remark serving as a first invitation to potential partners to make contact. As the dating profile is a piece of written text of self-presentation by the writer, an investigation into known fraudulent profiles using methods of linguistic analysis could shed light on its specific characteristics. In the current study, we sought to examine this piece of text authored by scammers specifically to identify and describe how language is used to attract potential victims who are more susceptible to control. For this purpose, the theoretical concepts of social control and social approval were adopted together with the linguistic framework of judgement evaluation as the system of linguistic resources that enable the exercise of social control in language use.

## **Social Approval as Social Control**

The current study draws on the notion of social approval as a control mechanism. Theories of social control (Hirschi, 1969; Gottfredson & Hirschi, 1990) explain how people who are involved with and are committed to the values held by society are less prone to committing crimes or behaving in ways that are against accepted norms. For example, people who have a job, an income, are married, and have an attachment to their spouses are less likely to be delinquents (Sampson & Laub, 1993). Hence, inculcation of values of commitment to the collective through the family institution, friends, and school is an important means of social control. Such control is achieved when shared societal values and norms are internalized by the individual. This has also been described as "culture" (O'Reilly & Chatman, 1996), where shared norms, values, beliefs, and objects entrenched in a society work to exert control over its members through rewards and sanctions. Related to the influence of society on individuals' identity and actions, social approval theory posits that self-esteem and psychological well-being are influen-

ced by how we feel others perceive us, and social disapproval can lead to anxiety and self-doubt (Cramer, 2003; MacDonald et al., 2003). Most members of society grow up in compliance with society's informal rules, holding on to notions of what is good, right, acceptable, and praiseworthy, and conversely, what is bad and shameful. For example, success in life and physical beauty are desirable, loyalty is an admirable trait, helping friends in need is praiseworthy, and so forth.

In the online romance fraud where the victim feels compelled to act for the benefit of their online partner to the victim's own detriment, one may postulate on how such a fraud can be successfully carried out. An obvious explanation would be that the scammer deceives and lies to the victim, and takes advantage of the victim's loneliness or need for a romantic relationship. As described in Whitty's (2013) scammer persuasive technique model, the scam procedure begins with a fake self-presentation, followed by building a relationship to gain the trust of the victim, and then creating a crisis that warrants a transfer of money. However, it remains unclear how the scammer is able to achieve all of this through strategic use of language, which is the main means of interaction with the victim. In the current study, scammer action was examined through the lens of social control, a powerful means of persuasion that reaches into the values and norms internalized by individuals that can compel them to act in ways that are coherent with the shared values of society. In the initial stage of dating, the self-biography is a tool for online daters to present themselves and invite contact from particular types of individuals. To what extent does the scammer-authored self-biography draw on social approval as a means of persuasion? We examined scammer self-biographies, or dating user profiles, for instances of language use that invoke a social orientation to the description of the self and the desired partner and compared them with those in a set of profiles of general online dating service users.

## **Language and Deception**

Researchers of language and deception have predominantly looked for linguistic features that can be associated with deception in various types of communication and settings. Studies on computerized analysis of language have shown that it may be possible to detect deception through analysis of linguistic cues of both content and function words (Chung & Pennebaker, 2007; Lee et al., 2022). Past research connecting linguistic features to deceptive communication in various communication contexts have revealed interesting findings. Hancock et al. (2005) found that in computer-mediated-communication, individuals who lie tend to use a larger number of words, fewer first-person pronouns, and more sensory words. Deceptive communication also tends to be more expressive, more informal, and contains more typographical errors (in written text; Zhou et al., 2004). Deceivers also tend to use the second-person pronoun "you" more frequently to establish a bond with victims (Modic & Lea, 2013), and more nonfirst person pronouns (e.g., "he," "him," "her"; Toma & Hancock, 2012), but minimi-

ze self-referencing (DePaulo et al., 2003). Further, in a computer-mediated gaming research, deceivers, as opposed to truthtellers, used more decorative words, showed more negative emotion, appeared more anxious, but used more insight words and words expressing certainty (e.g., "always," "never"). Truthtellers, on the other hand, used more expressions of tentativeness (e.g., "perhaps", "guess") and causation (e.g., "because;" Ho & Hancock, 2019). Finally, deceivers also tended to use negative words more frequently, possibly as an unconscious psychological distancing strategy (DePaulo et al., 2003; Hancock et al., 2007).

These studies reveal some linguistic structures associated with deception at the individual level, often connected with psychological states affecting language use, and conversely, language use reflecting psychological states. Apart from these studies, other studies have revealed findings that implicate a social orientation in the use of language in deception. These have to do with drawing on societal expectations and values in legitimizing the deceptive communication.

Studies examining deception in self-presentation in the online dating context have found that deception tends to take the form of bending the truth rather than outright lying (Toma & Hancock, 2012; Toma et al., 2008; Weisbuch et al., 2009). For example, male daters may exaggerate their height and female daters may report their weight as lower than what it is, or individuals may enhance the appearance of their skin in a photograph. These actions point to online dating service users' awareness of what is regarded as desirable in the eyes of society, particularly to members of the opposite sex. Further, research on mobile dating in the phase before daters meet each other found that approximately 7% of messages were deceptive, and almost two-thirds of deceptive communication was about self-presentation and availability (Markowitz & Hancock, 2018).

Similarly, studies on romance fraud have pointed to scammers presenting themselves as having socially desirable traits such as being physically attractive, financially secure, morally upright, and having a respectable occupation and a good educational background (Buchanan & Whitty, 2014; Kopp et al., 2015, 2016; Tan & Yoong, 2017; Whitty, 2013). The appeal of authenticity has also been identified as crucial in attracting potential victims (Friedman & Tucker, 1990). To appear more authentic, a common strategy is to mention a third party in the interaction with the victims, such as making reference to a family member, a work-related person, people in positions of authority, and other relevant individuals (Nhan et al., 2009; Rege, 2009; Sorell & Whitty, 2019; Whitty & Buchanan, 2012). Involving other parties in the interaction gives the communication a stronger sense of legitimacy (Button et al., 2014).

These findings are noteworthy as they involve a strategy that invokes social approval as grounds of persuasion. In presenting oneself as a desirable partner, qualities and social positions that are highly respected and valued in society are often drawn on (Nhan et al., 2009). The use of the name of God in the communication, too, signifies morality that is held in high regard by society (Lee et al., 2022; Tan & Yoong, 2017). On the mention of significant others or third-party

individuals in the communication, a secure social circle is created to support the position of the speaker as a socially accepted person with some social standing. Creating respectability in the eyes of society is thus a common strategy used by deceivers to gain legitimacy in their communication. In searching for romance and relationship partners, conforming to shared societal values is an important consideration for most individuals. Hence, linguistic strategies catering to the potential victim's need for social assurance and congruence with societal values would be a likely feature in romance scam communication.

## A Linguistic Framework for Expression of Social Values

A useful framework for the linguistic analysis of evaluation from the lens of social approval and social sanction is the judgement subsystem in appraisal theory. Appraisal theory as a theory of evaluative language in systemic functional linguistics describes the linguistic resources that enable speakers and writers to express stance, emotion, and identity in communication (Martin, 2000; Martin, 2004; Martin & White, 2005). It describes the work of language connected to establishing relationships and identities, in contrast to depicting experience or transacting information. At the core of appraisal is the expression of attitude, which comprises three distinct dimensions, namely, affect, judgement, and appreciation. These three dimensions make up what is understood as attitude, achieved through the deployment of specific linguistic resources. Language that construes emotions (e.g., "yearn," "fearful") and aesthetic valuation (e.g., "profound," "exciting," "dull") is defined within the linguistic subsystems of affect and appreciation, respectively. The judgement subsystem, which is the focus of the current study, has to do with the construal of overarching social values embedded in society, that is, what should or should not be, and what should or should not be done. In this sense, what is commonly regarded as normal, socially accepted, and moral are aspects of the judgement dimension of linguistic expression. It is about evaluating oneself and others in terms of the norms of society, where society is defined as any human collective, including institutions, social circles, and groupings (Halliday & Matthiessen, 2013).

The linguistic resources that construe judgement are grouped into five categories, namely, normality, capacity, tenacity, veracity, and propriety (Martin & White, 2005). Normality refers to what is regarded as personal value and behavior norms in compliance with implicit rules and culturally established regulations of society. Thus, any reference to persons within one's social environment, for example, the mention of significant others in one's life (e.g., family and friends), could trigger a sense of normality and acceptance within some social circles. It is also expressed through the construal of intrinsic qualities that are held in high regard or, conversely, in the eyes of society. Capacity in judgement evaluation has to do with the capability of an individual valued by members of society. Presenting one-self as having a respectable occupation or as in possession of some special ability

and expertise is the expression of capacity in presenting one's identity. Tenacity has to do with the quality of whether one is reliable or unreliable. In the context of romance and relationships, being faithful, committed, and persevering in the face of adversities are relevant characteristics of tenacity. Next is the notion of veracity, which construes honesty and truthfulness as an important moral standard. The last category is propriety, which involves the evaluation of the personal ethics (values and behavior) of an individual in relation to what society upholds as proper and praiseworthy behavior. It covers notions of politeness and fairness.

Among the three dimensions of attitude, while affect and appreciation contribute to important aspects of the presentation of one's personal identity, judgement as a notion of values entrenched in societal norms extends beyond the personal to the collective, and consequently, the engagement of social control. Judgement shifts evaluation from an individual perspective to that seen through the eyes of society, hence, social sanction and social esteem (Martin & White, 2005) are made salient. In linguistic deception in the context of romance fraud, the judgement dimension is particularly relevant for three reasons. First, social norms represented in all the categories of judgement are transgressed, hence, it is conceivable that scammers would attempt to conceal their dishonest communication by claiming the opposite of their actions. Second, an identity that is congruent with values that society holds in high regard would have a better chance of attracting potential partners, as it caters to the basic human need for social approval. Third, and most importantly, the potential victim targeted by the romance scammer should be someone who is susceptible to control. Social regulation is a powerful means of control, such as when compelling people to do what is "right" or "expected" in social conformity (Janowitz, 1975) and to preserve their self-esteem (Cramer, 2003; MacDonald et al., 2003). This is useful when scammers rely on the well-known "helping a friend in need" and "committed relationship" narratives to achieve compliance in their victims. Hence, people who identify strongly with social values either themselves or for their desired partners would be an ideal target.

Judgement evaluation as a linguistic act is executed through the use of linguistic expressions. Table 1 shows some examples of linguistic resources illustrating the judgement dimension of evaluation (Martin & White, 2005).

Judgement evaluation as a linguistic framework relates directly to the notion of social approval. Social approval as a social-psychological concept can be expressed or drawn on through linguistic means using resources in the judgement evaluation system. Hence, social approval may be appropriated by social actors through the use of linguistic resources in the judgement system to commit acts of persuasion.

In the current study, we sought to analyze suspected online romance scammer dating profiles (henceforth SS profiles) for linguistic expressions in relation to the construal of social values in the texts. For this purpose, the judgement subsystem in the appraisal theory of evaluation was employed in the text analysis. For

Table 1. Linguistic Resources for Construing Judgement Evaluation					
Judgement categories Sample linguistic expressions (Ngo & Unsworth, 2015, following Martin & White 2005, p. 53)					
Normality	lucky, fashion, every day, unlucky, unfashionable, dated				
Capacity	skilled, strong, together, clumsy, weak uncoordinated				
Tenacity	brave, reliable, dependable, cowardly, unreliable, undependable				
Veracity	honest, truthful, authentic, deceitful, dishonest, fake				
Propriety	good, caring, fair, bad, mean, unfair				

comparison, the patterns of judgement categories found in the SS profiles were compared with those in a set of general dating profiles (henceforth, G profiles) to determine whether there were any significant differences between the two sets of data. In this way, we sought to address the question of whether SS profiles rely more on language invoking social values to attract response from potential partners compared to general dating profiles.

#### Method

The current study employed both qualitative and quantitative approaches to text analysis by interpreting and categorizing language in a text and subsequently quantifying the content in order to compare occurrences of semantic structures between the two sets of texts. Linguistic resources that construe the five categories of judgement evaluation were identified and interpreted through close reading of sentences for representative words and deriving meanings from the context in which the words occurred. This process allowed for an in-depth investigation of textual data and an understanding of the context in which the language is produced and interpreted (Kvale & Brinkmann, 2009). By categorizing the semantic structures of the texts, patterns of how authors construe meaning through language and negotiate social norms and expectations can be better understood (Charmaz, 2014).

Apart from using the categorization scheme to describe linguistic phenomena in texts, the appraisal system categorizations also lend themselves to quantitative analyses (Bednarek, 2008). Once the data were categorized, frequency counts were compared between the SS and the G profiles.

A list of linguistic expressions commonly used to construe judgement was compiled from three sources: (a) the word list provided by Martin and White (2005, p. 53) in exemplifying the five judgement categories, (b) a search for synonyms of words in Martin and White's list that evoked similar meanings, from the Cambridge (2015) and Thesaurus (2019) online dictionaries (see Appendix 1), and (c) a search of past research of judgement evaluation to obtain words that are not in the list compiled from the other two sources (see Appendix 2). This compiled word list was used as the base line for word search in the data and

subsequent coding of the linguistic resources assisted by the *Atlas.ti* software. To compare the frequencies of occurrence of linguistic structures between the SS and G profiles, the Log-likelihood ratio statistic was used (Rayson, 2008; Rayson & Garside, 2000).

## **Data: Suspected Scammer Profiles and Profiles of General Users of Dating Websites**

The data for analysis comprised 120 user dating profiles, otherwise known as biographies of users registered on dating websites. A total of 60 profiles identified as suspicious were gathered from a scam survivor support group, www. scamdigger.com. Thirty profiles indicated as male and 30 indicated as female were collected. Profiles were purposefully selected, taking care to avoid collecting duplicates. The scamdigger.com website is affiliated with the dating service portal datingnmore.com and is set up to screen out possible fraudulent profiles (Edwards et al., 2018; Suarez-Tangil et al., 2019). Scamdigger.com publishes a list of names of suspected scammers and the suspected fraudulent profiles, identified through several parameters such as detecting use of stolen pictures and checking for repeated similar emails from different profile owners. Emails received from profile owners are also checked for giveaway content such as asking for money, and the disparity between the geographical area stated on the profiles and the IP addresses of the emails received from the profile owners. This website is dedicated to providing support, information, and SS profiles to assist victims of scams and to raise awareness among dating service users. Researchers who have used samples of SS profiles from scamdigger.com in their work include Edwards et al. (2018), Jong (2019), and Suarez-Tangil et al. (2019).

For comparison, 60 profiles were collected from a popular dating website <a href="https://www.okcupid.com">www.okcupid.com</a>. We refer to the comparison set as the G profile corpus. These were downloaded from the dating website from the most recent ones and going backwards until the required number of male and female profiles were obtained. Although gender was not focused on as a variable in the current study, an equal number of male and female profiles were collected to balance out any unknown effects it may have on the data.

Both the SS and the G profile sets were collected only if the narrative part of the profiles exceeded 80 words. OkCupid was used due to its popularity in the field. Since 2004, OkCupid has consistently been ranked among the top ten dating sites (Orchard, 2019). Furthermore, the website is publicly accessible and allows unrestricted member registration, which means it does not restrict users based on age, race, religion, or sexual orientation.

There are limitations to the representativeness of the specially built corpora in the current study. Random sampling was not used, and therefore, the lack of representativeness of the samples is a limitation of the study. Although the sampling of the profiles took gender into account, other demographic categories such as user-declared age, occupation, and geographical location were not included in the sampling. Gender, the sole demographic category used as selection criterion, was included as romance-seeking profiles are primarily written to target romance partners of a particular gender. Hence, language use aimed at different genders may demonstrate differences. This is different from assuming the text is produced by writers of a certain gender, as the declared gender is mostly fake in the case of a scammer. How texts are written to target different genders or any other demographics is beyond the scope of the current study, as it would require investigation in a different direction. Further, considering that demographic information declared in suspected scammers' profiles is unlikely to be true, matching the profiles in the two corpora would not achieve the intended purpose. Future studies should ensure a more balanced representation in the general user data to include sampling from more dating websites, and factors such as gender, age, occupation and geographical location in the general corpus.

As a description of the data, the age range based on the stated age in the profiles of the two corpora are presented in Table 2.

Table 2. Age as Declared in the User Profiles								
Age Range	Number of profiles							
Male - Suspected scammers								
34–39	6							
40–49	13							
50–57	11							
Female- Sus	pected scammers							
22–29	12							
30–37	17							
40	1							
Male – G	General users							
20–29	14							
30–37	16							
Female –	General users							
20–29	26							
30–37	4							

No.	Profile	No. of profiles	Word Count	Source
1	SS profiles (Male)	30	4013	www.scamdigger.con
2	SS profiles (Female)	30	3309	www.scamdigger.com
	Total:	60	7322	
3	G profiles (Male)	30	3677	www.okcupid.com
4	G profiles (Female)	30	3622	www.okcupid.com
	Total:	70	7299	
	Grand Total:	120	14621	

### **Data Analysis**

For analysis of the dating profiles, we used the linguistic framework of judgement evaluation, comprising linguistic resources construing normality, capacity, tenacity, veracity, and propriety as proposed by Martin and White (2005), and assisted by the compiled word list described in the previous section. The list of words was used as the baseline to conduct a word search of the entire texts in the SS and the G profiles. Using the Atlas.ti<sup>1</sup> data analysis software, words in the list were searched using the word search function by keying in the target word one at a time. As a word was found, the meaning of the word was identified by a close reading of the sentence in which the word was embedded. Words that reflected the function of the five categories of judgement evaluation were highlighted and coded using the open coding feature. After the words in the list were exhausted, a manual search was conducted whereby any other words or expressions that were not on the initial list but indicated judgement evaluation were identified and coded as well. These were identified through a close reading of the texts and coded accordingly. The frequency of occurrence for each code representing each judgement category was then generated by the software.

The coding process was carried out by two human coders who were trained in the judgement evaluation framework and provided with a set of guidelines and examples for reference as recommended by Belur et al. (2021) and Syed and Nelson (2015). Any disagreements between the coders were resolved through discussion and consensus (Jensen et al., 2022; Neuendorf, 2009).

Descriptive patterns of the evaluation categories based on normalized frequencies were observed for any differences in the proportion of use of the five categories of words within and across the SS and G profile corpora. Then, a comparison across the two sets of profiles was conducted for each category of evaluation using Rayson's Log-likelihood (Rayson, n.d.) and the effect size calculator (available at <a href="https://ucrel.lancs.ac.uk/llwizard.html">https://ucrel.lancs.ac.uk/llwizard.html</a>).

For the quantitative comparison, while the sampling was conducted at the text level (selection of individual profiles), the unit of measurement was the word unit, as semantic units of judgement are expressed through words and short sequences of words. The sample size of a corpus is thus represented by the total number of words in the corpus. According to Rayson et al. (2004), the Log-likelihood ratio and Chi-squared nonparametric tests in comparing language use between corpora of different sizes are accurate and reliable when the smallest expected value is 13, 11, and 8 at the 5%, 1%, and 0.1% significant levels, respectively. This is an extension to the Cochran rule which specifies 5 as the expected value of the lower limit for test accuracy. In the current study, the smallest expected frequency in the  $2 \times 2$  contingency table (calculated using the formula below) exceeded 13,

<sup>1</sup> *Atlas.ti* is a qualitative data analysis software that helps in searching for content, allowing researchers to code and label content, and assisting in organizing and recalling codes, categories, and quotations, apart from computing frequencies. However, identification and interpretation of the meanings must be carried out by researchers themselves.

indicating the log-likelihood test used is reliable.

Formula for expected value (Rayson, n.d, available at <a href="https://ucrel.lancs.ac.uk/llwizard.html">https://ucrel.lancs.ac.uk/llwizard.html</a>):

$$E_i = \frac{N_i \sum_i O_i}{\sum_i N_i}$$

where N is the number of words (sample size) in each corpus, O is the observed frequency, and E is the expected frequency.

For corpus-based studies, weak statistical power is rarely an issue as most corpora consist of a large number of words, from several thousand to millions of words. On the contrary, corpus statistical analysis may suffer from the problem affecting large samples where the confidence interval becomes very narrow such that a small effect size may result in a highly significant rejection of the  $H_0$  (see Baroni & Evert, 2009; Gabrielatos, 2018; Shmueli et al., 2013). Several methods to mitigate the problem have been suggested, one of which is to consider effect size together with the significance level (see Shmueli et al., 2013, for a more detailed discussion). A subjective judgement has to be made on the practical effect size of a difference before interpretations are made about its importance (see Gabrielatos, 2018). Hence, apart from frequency, the Log-likelihood ratio value and significance level, effect size is also reported in the results.

#### Results

### Judgement Evaluation in the Suspected Scammer and General Profiles

The number of words available in both sets of data were comparable, at 7322 and 7299 words for the SS and G profiles, respectively. To observe the patterns of proportions of the judgement resources used in both the sets of profiles, the frequencies were converted to frequency per 1000 words (see Table 4).

The frequencies (normalized) of judgement linguistic resources used were observed to be higher in SS profiles than in G profiles for all the categories (see Table 3). These findings suggest that judgement evaluation is deployed much more intensively in SS profiles than in the G profiles, confirming the hypothesis that the notions of social esteem and social sanction are strategically highlighted in SS profiles in the quest to attract potential victims.

The Log-likelihood ratio for each pair of values in the SS and G profiles was also computed (see Table 4). The Log-likelihood ratio shows the statistical significance of the difference between the two groups, with asterisks indicating the level of significance (\* p < .05; \*\* p < .01).

The results showed that tenacity was the most distinguishing category diffe-

Table 4. Comparison of Judgement Categories of Language Used in Suspected Scammer and General Profiles Log-Judgement Suspected Scammer profiles General profiles Effect Size Rank Likelihood (Total no. of words: 7322) (Total no. of words: 7299) %DIFF category Ratio Frequency Frequency Raw (Normalized) Raw (Normalized) 80(11) 22(3) 1 Tenacity 262.49 34.86\*\* 2 Normality 143(20) 66(9)115.99 28.81\*\* Capacity 3 51(7) 15(2)238.93 20.64\*\* 4 **Propriety** 81(11) 41(6) 96.94 13.23\* 5 Veracity 42(6) 16(2) 161.68 12.00\*

rentiating the SS and the G profiles, followed by normality, capacity, propriety, and lastly, veracity. The fact that tenacity was the most significant in differentiating the profiles shows that loyalty and commitment are the most important traits used to attract target victims. Tenacity appeared 80 times in the SS profiles and only 22 times in the G profiles, representing a difference of 262.49% (which is the highest %DIFF). Examples of sentences found in the SS profiles alluding to traits associated with tenacity are:

- (1) <u>Devotion</u> and <u>faithfulness</u> are basic elements for my future relationship.
- (2) I'm <u>loyal</u>, thoughtful, <u>dependable</u>, sweet and good natured.
- (3) I am sincere and  $\underline{loyal}$  looking for the same in a  $\underline{committed}$  future relationship.

The success of the online romance scam depends to a large extent on the conviction of victims in being loyal to the relationship. This is especially important when money is being demanded by the scammer time after time during the course of the relationship. Certainly, someone who has not yet bought into the commitment narrative of the scammer would be able to more easily extricate themselves from the relationship when suspicious requests for money are received. Hence, it is not surprising that tenacity as a semantic category of language was the highest in distinguishing the SS profiles from the G profiles.

The second in rank of importance was normality, with a percentage difference of 115.99%. Examples from the data are:

- (1) I am <u>romantic</u>, <u>affectionate</u>, and <u>imaginative</u> in the relationships.
- (2) I am looking for my soulmate, someone who is exciting and adventurous.

Words in the sample sentences indicate inherent traits that are deemed desirable and special on the scale of normality. Normality is an important feature in the language of SS profiles as it works to establish how far from the center the special qualities possessed by the person are.

<sup>\*</sup> p < .001; \*\* p < .0001

<sup>%</sup>DIFF indicates the proportion (%) of the difference between the normalized frequencies of a word in two corpora (following Gabrielatos, 2018).

The term "soulmate," for example, encompasses the qualities and role of a person deemed to be highly desirable as a life partner.

The third category was capacity, where capability, expertise, and social power are indicated. Examples of sentences from the data are:

- (1) I'm an easy going yet focused guy always willing to lend a hand.
- (2) I believe myself to be <u>smart</u> and <u>talented</u> in various fields mainly writing, gaming and sleeping ...

Evidently, people who are capable would appear more attractive to others. Scammers utilize these descriptions in their profiles more than general dating service users do in positioning themselves as capable and in control as part of their strategy to attract potential victims.

The above three categories are what Martin and White (2005) refer to as social esteem categories, where in the context of dating site user profiles, positive traits are often highlighted. The next two categories, propriety and veracity, are categories with the lowest rank. These categories are described as social sanction categories, where transgression of the values would incur societal disapproval. Examples of sentences construing propriety from the SS profiles are:

- (1) I do not judge others, that is up to God.
- (2) I am God-fearing and do go to church.
- (3) I'm an easy going yet focused guy always willing to <u>lend a hand</u>.

Positioning oneself or one's desired partner as socially obedient, such as being polite and caring towards others and being religious, foregrounds compliance and conformity as virtues. Using propriety to depict the self and the desired partner in the dating profile establishes the expectation of a relationship that is grounded in social conformity. This has implications for easier control of the victim. Interestingly, veracity appears in the last position on the list. Although alluding to truthfulness is a characteristic of SS profiles, it was not focused on as much as the other categories. Some examples of veracity in the data are:

- (1) I am <u>honest</u>, intelligent, loyal, affectionate, easy going, romantic, soft-spoken, generous, stable and sensual.
- (2) I dislike people who are <u>fake</u>, <u>liars</u> and those who always <u>pretend</u>, as if they never did nothing.

The use of veracity in deceptive communication serves an important function. Apart from demanding that the potential victims put their trust in the scammer, it also serves as a strategy to deflect or pre-empt suspicion on the scammers themselves.

#### Conclusion

This study examined the extent to which the discourse semantic category of words used in SS profiles adopt a social orientation of language in attracting po-

tential victims. This strategy of capitalizing on the human socio-psychological need for social approval is executed using particular language identified in the judgement evaluation framework (Martin & White, 2005). The key findings of the study show that SS profiles make intensive use of linguistic resources to highlight social esteem and social sanction meanings, drawing on societal approval to attract and control potential victims. These linguistic resources are shown to have significantly higher frequencies in the SS profiles compared with a set of G profiles.

Expectation of loyalty, commitment, and conviction as represented by the tenacity category was the most significant in distinguishing the SS profiles from the G profiles. This is unsurprising as tenacity works to ensure a victim who would be fiercely loyal to their online romance partner even in the face of financial loss and counter-advice from friends and family, before they realize they have been scammed. Other categories of language in the judgement framework include normality, capacity, propriety and veracity, all of which construe individuals as people in admired or respected positions in society (the social esteem dimension), as well as conforming members of society (the social sanction dimension) who abide by society's rules. By drawing on this power of informal social control where individuals who have internalized the values of the society they live in would tend to engage only in behavior that is in line with what is deemed acceptable within that society, scammers are able to target and attract a particular type of victim - one who can be more easily persuaded to sacrifice their resources as a duty.

The current findings add to Buchanan and Whitty's (2014) seminal finding that individuals who subscribe to a high idealization of romance are more likely to fall victim to online romance fraud. People in this category are preoccupied with aspects of love, romance, loyalty, and commitment in a relationship. The finding that social approval, including a strong focus on commitment as a social obligation extends research in this direction by offering explanations about how such a victim type is targeted through the use of language in scammer user profiles.

The findings of the study provide some insight into how cybercriminals who carry out such crimes largely through language are able to exercise power over their victims. While the entire fraud takes place through communication with the victim over a period of time, it is nevertheless a linguistic interactional event where the victim and the scammer typically never meet in person. The success of online romance fraud as reported in the news worldwide attests to the power of language in persuasion and leading to material action.

The current study highlights the role of the linguistic theory of appraisal, specifically the subsystem of judgement, in illuminating the social-psychological processes connected with online romance fraud by providing observable linguistic evidence that can explain how appropriation or manipulation of social approval is carried out. Language is not merely a vehicle for message transaction, but is an integral force in constituting the speaker/writer and the hearer/reader by invoking assumptions of shared values and practices, and harnessing the po-

wer of social approval in controlling individual members. The current findings show that scammers are adept at using social approval as a tool to increase their desirability as well as to attract socially compliant victims through the strategic use of language.

There are several limitations to the current study. The first is related to the representativeness and balance of the general corpus which serves as the comparison corpus. It is recommended that the comparison data be collected from more dating service portals to be more representative of general users, and random sampling be used. Sample profiles can also be drawn based on clusters of demographic and other contextual categories. Second, the general profiles used as comparison data cannot be confirmed as being free of fraudulent profiles. It is likely that there would be an unknown proportion of profiles that are not genuine in the set. Hence, the comparison data represent users of dating websites in a general sense, and not specifically profiles of genuine users. Third, the dating site from which the comparison data set was drawn might have introduced some bias, as there were slight differences in the user platforms of the two websites, where OK-Cupid provides prompts to help users write their profiles, and datingnmore.com, from which the scamdigger.com group harvested the fraudulent profiles, allows free writing by users. However, one of the considerations at the time was the need to ensure a high-popularity dating website that would be more likely to have a broad spectrum of demographics of users as the comparison data set. While OK-Cupid provides prompts to help users to write their profiles, not all users utilize this function and go direct to free writing. Furthermore, as the selection criteria included selecting only profiles with number of words exceeding 80, most of the user profiles that fit this criterion were written in a narrative style, similar to those in datingnmore.com. This, in a way, mitigates the limitations of using a different website from the one from which the suspected scammer profiles were obtained.

Further research is needed, particularly to examine the subsequent interactions between scammer and victim to identify patterns of language use at the discourse and conversation level, which can shed more light on the linguistic strategies used by online romance scammers in manipulating victims. Work in this direction can contribute to public awareness raising efforts by law regulators. The linguistic description of scam strategies may also lead to the development of linguistic scam detection tools that can help members of the public screen suspicious communication texts.

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The Authors declare no conflicts of interest.

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### **Research Ethics Statement**

This research received ethical clearance from the Ethics Committee for Research Involving Human Subjects of Universiti Putra Malaysia (Ref: JKE-UPM-2019-101).

## **Data Availability Statement**

The data that support the findings of this study are available from the corresponding author, M. Y. Chan, upon a reasonable request.

## **Authorship Details**

Kam-Fong Lee: research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article, final approval of the article. Mei Yuit Chan: research concept and design, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article. Afida Mohamad Ali: research concept and design, data analysis and interpretation, final approval of the article

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## Appendix 1

## Words (Synonyms) Obtained from Dictionary Search

			Judgement - social es			
SOCIAL ESTEEM	Positive [admire] (Martin & White, 2013)	Cambridge Dictionary	Thesaurus	Negative [criticize] (Martin & White, 2013)	Cambridge Dictionary	Thesaurus
Normality 'how special?'	lucky	fortunate, blessed, fortunate enough, fortunate in love or life, jammy (informal), serendipitous	fortunate, serendipitous, favored, blessed, prosperous, fortuitous, providential, auspicious, opportune lucky,	unlucky	unfortunate, hapless, ill- fated, jinxed, cursed, doomed, inauspicious	unfortunate, hapless, jinxed, cursed, doomed, inauspicious, ill- starred
	fortunate	lucky, blessed, lucky enough, lucky in love or life, jammy (informal), serendipitous	serendipitous, favored, blessed, prosperous, fortuitous, providential, auspicious, opportune	hapless	unlucky, unfortunate, jinxed, cursed, ill- fated, star-crossed, luckless	unlucky, unfortunate, ill-fated, luckless, jinxed, cursed, sta crossed
	charmed	lucky, blessed, lucky enough, lucky in love or life, jammy (informal), serendipitous	lucky, enchanted, bewitched, captivated, fascinated, spellbound, entranced	star-crossed	unlucky, ill-fated, doomed, cursed, jinxed, unfortunate	unlucky, ill-fated, doomed, cursed, jinxed, unfortuna luckless
	normal	usual, standard, typical, customary, regular, ordinary	usual, standard, typical, ordinary, commonplace, everyday, regular, average, routine	odd	peculiar, strange, eccentric, quirky, offbeat, unusual, different, unconventional	peculiar, strange, eccentric, quirky, outlandish, offbea unconventional, different, unique
	natural	normal, innate, inherent, instinctive, intuitive, native, inborn	normal, innate, inherent, intrinsic, inborn, instinctive, intuitive, spontaneous, untaught	peculiar	odd, strange, unusual, eccentric, bizarre, weird, queer, outlandish, idiosyncratic	odd, strange, unusual, eccentric, bizarre, weird, queer, idiosyncratic, offbeat
	familiar	well-known, recognized, accustomed, established, conventional, routine	well-known, recognized, accustomed, customary, usual, everyday, common, routine, habitual	eccentric	odd, peculiar, unconventional, idiosyncratic, quirky, strange, unusual, bizarre	odd, peculiar, unconventional, idiosyncratic, quirky, strange, unusual, bizarre, weird

# DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

cool	calm, collected, composed, unperturbed, unflappable, level-headed, self- possessed	calm, collected, composed, unflappable, phlegmatic, imperturbable, equable, level-headed, dispassionate	erratic	unpredictable, inconsistent, irregular, unstable, fluctuating, volatile, capricious, fickle	unpredictable, inconsistent, irregular, unstable, fluctuating, volatile, capricious, fickle
stable	steady, secure, balanced, dependable, reliable, sound	steady, secure, balanced, constant, steadfast, unwavering, reliable, dependable, firm expected,	unpredictable	erratic, capricious, volatile, fickle, unstable, mercurial, changeable, variable	erratic, capricious, volatile, fickle, unstable, mercurial, changeable, variable, uncertain
predictable	expected, anticipated, foreseen, calculable, reliable, certain	anticipated, foreseen, certain, reliable, expected, inevitable, foreseeable, foreseeable outcome	dated	outmoded, old-fashioned, antiquated, obsolete, unfashionable, passé, behind the times	outmoded, old-fashioned, antiquated, obsolete, unfashionable, passé, behind the times
in	trendy, hip, fashionable, stylish, up-to-date, current, modern	trendy, fashionable, popular, modish, chic, contemporary, up- to-date, stylish	daggy	dated, unfashionable, uncool, old- fashioned, out of date, outmoded dated, old-	dated, unfashionable, outmoded, old- fashioned, obsolete, passé, antiquated, unstylish dated, old-
fashionable	trendy, in vogue, popular, stylish, chic, up-to-date, modern	trendy, chic, stylish, modish, popular, in vogue, contemporary, current, up-to-date	retrograde	fashioned, behind the times, outmoded, obsolete, unfashionable, passé	fashioned, behind the times, outmoded, obsolete, unfashionable, passé, antiquated
avant garde	innovative, experimental, pioneering, unconventional, cutting-edge, new, original	innovative, experimental, revolutionary, unconventional, cutting-edge, groundbreaking, pioneering, modern, new	obscure	unknown, unfamiliar, little-known, unexplored, undiscovered, remote, esoteric	unknown, unfamiliar, little- known, unheard- of, undiscovered, esoteric, enigmatic, mysterious
celebrated	renowned, famous, acclaimed, distinguished, notable, eminent	famous, renowned, acclaimed, distinguished, esteemed, notable, prominent, illustrious, eminent	also-ran	obscure, unknown, little-known, unsuccessful, unnoticed, insignificant, unimportant.	obscure, unknown, little-known, unsuccessful, unnoticed, insignificant, unimportant, irrelevant.

Capacity 'how capable?'	unsung	unrecognized, unappreciated, unnoticed, uncelebrated, obscure, unknown  strong, potent, mighty, robust, vigorous, forceful, influential, commanding	unrecognized, unheralded, uncelebrated, anonymous, obscure, forgotten, unnoticed, overlooked, unappreciated. strong, potent, mighty, forceful, influential, commanding, robust, muscular, vigorous, dominant	mild,	gentle, moderate, temperate, mellow, easy, light, bland, soothing, agreeable.	mild: gentle, moderate, temperate, subdued, lenient, meek, soft, calm, easygoing, relaxed
	vigorous	strong, energetic, robust, active, dynamic, lively, spirited, forceful	energetic, lively, robust, dynamic, active, spirited, animated, strong, forceful, powerful, vigorous, lively, zestful	weak	feeble, frail, delicate, puny, fragile, debilitated, enfeebled, anemic, powerless, ineffectual, insipid.	weak: feeble, frail, delicate, powerless, impotent, ineffectual, ineffective, faint, fragile, debilitated
	robust	strong, sturdy, healthy, vigorous, hardy, resilient, tough, sound	strong, sturdy, healthy, vigorous, powerful, hardy, hearty, durable, rugged, resilient, tenacious	whimpy	wimpy, weakling, pusillanimous, cowardly, timid, timorous, spineless, effete, lily-livered.	whimpy: feeble, weak, spineless, ineffectual, ineffective, timid, meek, powerless, unassertive, submissive
	sound	healthy, fit, robust, well, in good shape, in good health, hale, hearty	healthy, fit, in good shape, in good health, robust, hale, hearty, well, whole, unimpaired, unblemished, flawless	unsound	unhealthy, sickly, diseased, impaired, damaged, weakened, flawed, unsound.	unsound: faulty, flawed, unreliable, invalid, weak, questionable, problematic, defective, uncertain, shaky
	healthy	sound, fit, robust, hale, hearty, well, in good shape, in good health	fit, sound, robust, hearty, hale, well, strong, vigorous, blooming, thriving, wholesome, salubrious	sick	ill, unwell, ailing, poorly, indisposed, infirm, queasy, nauseous, dizzy, weak.	sick: ill, unwell, ailing, diseased, unhealthy, infirm, debilitated, weak, feeble, queasy
	fit	healthy, sound, robust, hale, in good shape, in good health, well, strong	healthy, sound, robust, strong, athletic, muscular, trim, in shape, able-bodied, nimble, agile	crippled	disabled, incapacitated, paralyzed, lame, impaired, handicapped, infirm, weakened, injured, debilitated.	crippled: disabled, handicapped, impaired, paralyzed, lame, maimed, debilitated, incapacitated, infirm, weakened

# DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

adult	mature, grown-up, developed, full- grown, responsible, experienced	mature, experienced, grown-up, full- grown, fully developed, matured, of age, responsible, seasoned, sophisticated	immature	childish, infantile, puerile, juvenile, naive, inexperienced, callow, undeveloped, unripe, raw.	immature: childish, juvenile, infantile, puerile, naive, inexperienced, unsophisticated, underdeveloped, raw, undeveloped
mature	adult, grown- up, developed, ripe, seasoned, experienced, responsible	adult, grown- up, seasoned, experienced, fully developed, ripe, established, accomplished, sophisticated, thoughtful, wise	childish	juvenile, immature, puerile, infantile, babyish, silly, naive, frivolous, capricious, petulant.	childish: immature, juvenile, puerile, infantile, naive, silly, foolish, unsophisticated, silly, trivial
experienced	mature, adult, skilled, practiced, seasoned, trained, proficient, knowledgeable	knowledgeable, seasoned, skilled, proficient, practiced, qualified, expert, versed, adept, trained, well- versed	helpless	vulnerable, defenseless, powerless, dependent, weak, frail, feeble, impotent, ineffectual, incapable.	helpless: powerless, vulnerable, defenseless, weak, feeble, dependent, unable, hapless, impotent, disadvantaged
witty	humorous, droll, amusing, comical, entertaining, funny, clever, sparkling	humorous, droll, amusing, entertaining, clever, jocular, comical, whimsical, facetious, funny, playful	dull	boring, uninteresting, tedious, monotonous, flat, lifeless, dreary, mundane, uninspired, unexciting.	dull: boring, tedious, monotonous, uninteresting, unexciting, uninspiring, bland, lifeless, flat, drab
humorous	witty, droll, amusing, comical, entertaining, funny, whimsical, jocular	witty, droll, amusing, entertaining, jocular, comical, whimsical, funny, lighthearted, playful, cheerful	dreary	drab, bleak, gloomy, dull, somber, monotonous, tedious, boring, dull, lifeless.	dreary: dull, bleak, gloomy, depressing, monotonous, tedious, lifeless, somber, uninviting, dark
droll	witty, humorous, amusing, comical, funny, entertaining, whimsical, odd	humorous, witty, amusing, entertaining, comical, quirky, eccentric, odd, funny, whimsical, offbeat	grave	serious, solemn, somber, earnest, sober, sedate, weighty, important, significant, critical.	grave: serious, solemn, somber, earnest, weighty, important, significant, severe, critical, crucial
insightful	clever, gifted, astute, perceptive, discerning, penetrating, shrewd, wise	clever, gifted, perceptive, astute, shrewd, discerning, penetrating, intelligent, wise, knowing, sagacious	slow	unhurried, gradual, sluggish, leisurely, tardy, lagging, sluggish, plodding, lethargic, indolent.	slow: sluggish, unhurried, gradual, leisurely, plodding, sluggish, gradual, lagging, lethargic, tardy

clever	insightful, gifted, astute, intelligent, sharp, smart, quick- witted, resourceful	intelligent, astute, shrewd, ingenious, resourceful, gifted, talented, quick- witted, sharp, smart, inventive	stupid	dumb, foolish, dim-witted, dense, slow-witted, unintelligent, simple-minded, witless, imbecilic, moronic.	unintelligent, foolish, dim-witted, dense, ignorant, slow-witted, brainless, daft, moronic, simple- minded
gifted	insightful, clever, talented, skilled, accomplished, proficient, brilliant, exceptional	talented, clever, intelligent, exceptional, prodigious, able, skilled, accomplished, proficient, expert, masterful	thick	dense, heavy, viscous, syrupy, gooey, sticky, pasty, cloying, impenetrable, inscrutable.	thick: dense, heavy, opaque, impenetrable, murky, obtuse, stupid, dull-witted, slow, unintelligent
balanced	together, sane, stable, rational, level-headed, calm, composed, steady	together, sane, rational, stable, level-headed, calm, composed, unflappable, even- tempered, equable, poised	flaky	eccentric, unpredictable, erratic, whimsical, capricious, flighty, unreliable, unsteady, inconsistent, mercurial.	flaky: unreliable, erratic, inconsistent, untrustworthy, quirky, odd, eccentric, peculiar, idiosyncratic, unconventional
together	balanced, sane, composed, level- headed, rational, calm, collected, steady	balanced, sane, level-headed, rational, calm, collected, unflappable, poised, self- possessed, cool- headed, composed	neurotic	anxious, obsessive, compulsive, phobic, paranoid, high-strung, tense, nervous, unstable, insecure.	neurotic: anxious, worried, tense, uptight, unstable, insecure, obsessive, compulsive, phobic, paranoid
sane	balanced, together, rational, sound, reasonable, sensible, sober, clear-headed	balanced, rational, level-headed, sensible, sound, stable, sober, clear-headed, lucid, coherent, collected	insane	crazy, deranged, lunatic, mad, psychotic, demented, unhinged, mentally ill, delusional, irrational.	insane: crazy, deranged, mad, mentally ill, psychotic, unhinged, demented, lunatic, delirious, irrational
sensible	expert, shrewd, wise, practical, astute, sound, judicious, knowledgeable	expert, shrewd, judicious, wise, intelligent, astute, practical, pragmatic, level- headed, rational, grounded	naive	innocent, unsophisticated, inexperienced, green, naive, gullible, trusting, credulous, simple, childlike.	naive: gullible, innocent, unsophisticated, inexperienced, trusting, credulous, unsuspecting, ingenuous, green, simple

stupid:

## DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

expert	sensible, knowledgeable, skilled, experienced, proficient, adept, masterful, competent	knowledgeable, skilled, proficient, competent, experienced, adept, masterful, practiced, accomplished, qualified, specialist	inexpert	unskilled, untrained, amateurish, inexperienced	inexpert: unskilled, inexperienced, unqualified, untrained, incompetent, inept, amateurish, unprofessional, bungling, clumsy
shrewd	sensible, astute, sharp, clever, intelligent, discerning, perceptive, wise	astute, clever, intelligent, perceptive, sharp, canny, savvy, discerning, insightful, wise, judicious	foolish	silly, absurd, ridiculous, nonsensical	foolish: silly, stupid, unintelligent, imprudent, unwise, thoughtless, inane, absurd, ridiculous, nonsensical
literate	educated, learned, well-read, erudite, knowledgeable, scholarly, cultivated	educated, learned, scholarly, erudite, cultured, knowledgeable, well-read, informed, intellectual, highbrow, lettered	illiterate	uneducated, unschooled, ignorant, unlettered	illiterate: uneducated, unlettered, unschooled, unlearned, ignorant, uninformed, untaught, benighted, unread, untrained
educated	literate, learned, cultured, knowledgeable, erudite, scholarly, well-read	literate, learned, knowledgeable, erudite, cultured, scholarly, well-read, well-informed, well-educated, intellectual, informed	uneducated	unschooled, untaught, uninstructed, unlearned, ignorant, illiterate, inexperienced, untrained, uncultivated, untutored	ignorant, unlearned, untutored, untaught, unschooled, untrained, illiterate, unlettered, unenlightened, uninformed.
learned	literate, educated, scholarly, erudite, knowledgeable, well-read, cultivated	scholarly, erudite, knowledgeable, educated, well-read, well-informed, cultured, intellectual, wise, sagacious, profound	ignorant	uninformed, unenlightened, unaware, unknowing	ignorant: uneducated, unenlightened, uninformed, unaware, naive, inexperienced, unschooled, illiterate, unlearned, oblivious
competent	accomplished, capable, proficient, skilled, qualified, able, talented, efficient	accomplished, capable, qualified, proficient, able, skilled, experienced, adept, talented, gifted, effective	incompetent;	inept, incapable, unqualified, bungling unpolished, unpracticed	incompetent: inept, unskilled, incapable, unqualified, unfit, inexperienced, inadequate, bungling, clumsy, inefficient

	accomplished	competent, proficient, skilled, expert, masterly, adept, talented, accomplished	competent, skilled, proficient,	unaccomplished	inexperienced, unskilled, untrained, amateur, novice, green, raw, unpracticed, untested, untried, unproven, undeveloped, unpolished, unrefined, unschooled, inexpert, unqualified, incompetent. failed, abortive,	inexperienced, unskilled, untalented, inept, untrained, amateurish, unpolished, raw, clumsy, unsophisticated
	successful	productive, prosperous, thriving, flourishing, lucrative, effective, efficient, accomplished	accomplished, fortunate, thriving, victorious, effective, profitable, productive, fruitful, triumphant, thriving, prosperous, auspicious.	unsuccessful	fruitless, futile, unproductive, unprofitable, vain, ineffectual, ineffective, inefficient, weak, feeble, inadequate, lacking, deficient, wanting, unsuccessful, unlucky, unlucky in love. barren, infertile,	crippled:disabled, handicapped, impaired, paralyzed, lame, maimed, debilitated, incapacitated, infirm, weakened
	productive	fruitful, efficient, effective, prolific, creative, industrious, fertile, thriving, successful, profitable, worthwhile, generative, prolific, constructive, advantageous, gainful, busy, active.	fruitful, prolific, fertile, generative, effective, efficient, profitable, constructive, industrious, active, busy, creative, fecund, fruitful, prolific, rich, teeming, thriving.	unproductive	fruitless, unfruitful, unyielding, nonproductive, idle, stagnant, uncreative, unprofitable, useless, pointless, ineffective, inefficient, ineffectual, unavailing, futile, unhelpful.	fruitless, barren, ineffectual, idle, unprofitable, futile, ineffective, unavailing, unfruitful, pointless, useless, nonproductive.
Tenacity 'how dependable?'	plucky	brave, courageous, bold, fearless, valiant, intrepid, spirited, daring, heroic	plucky: brave, courageous, fearless, gallant, heroic, intrepid, resolute, spirited, valiant, audacious	timid	shy, fearful, apprehensive, hesitant, diffident, nervous, hesitant, unsure	fearful, shy, hesitant, apprehensive, nervous, meek, diffident, bashful, unassertive, reserved, tentative.

# DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION 198 IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

brave	courageous, valiant, fearless, heroic, bold, daring, gallant, intrepid, plucky, dauntless	brave: courageous, valiant, heroic, daring, intrepid, fearless, gallant, plucky, stout, stalwart	cowardly	fearful, pusillanimous, craven, timid, timorous, spineless, yellow-bellied, faint-hearted, lily- livered	craven, fearful, pusillanimous, timorous, chicken-hearted, faint-hearted, lily- livered, spineless, weak-kneed, yellow-bellied.
heroic	brave, courageous, valiant, intrepid, gallant, fearless, daring, noble, selfless, chivalrous	heroic: brave, courageous, valiant, gallant, intrepid, noble, selfless, bold, daring, chivalrous	gutless	spineless, cowardly, timid, weak, feeble, ineffectual, irresolute, indecisive	cowardly, spineless, timorous, craven, fearful, chicken-hearted, pusillanimous, spiritless, unassertive, weak- kneed.
cautious	careful, wary, guarded, watchful, circumspect, prudent, vigilant, discreet, alert, attentive	cautious: careful, watchful, guarded, circumspect, discreet, vigilant, hesitant, mindful, aware, leery	rash	impulsive, hasty, reckless, impetuous, imprudent, thoughtless, foolhardy, heedless, brash	impulsive, reckless, impetuous, hasty, imprudent, foolhardy, heedless, thoughtless, brash, daring, audacious.
wary	cautious, careful, suspicious, distrustful, apprehensive, vigilant, watchful, circumspect, guarded	wary: cautious, careful, circumspect, distrustful, suspicious, vigilant, watchful, guarded, hesitant, chary	impatient	restless, agitated, eager, anxious, hasty, impulsive, impetuous, restless, antsy	restless, agitated, anxious, eager, antsy, hasty, impetuous, restless, edgy, tense, fidgety.
patient	tolerant, forbearing, long-suffering, uncomplaining, stoical, enduring, persistent, persevering, steadfast	patient: enduring, forbearing, long- suffering, resigned, stoic, tolerant, uncomplaining, persistent, persevering, steadfast	impetuous	impulsive, hasty, rash, reckless, foolhardy, imprudent, thoughtless, headstrong, impulsive	impulsive, reckless, hasty, headlong, precipitate, impulsive, impromptu, spontaneous, unthinking, foolhardy, wild.
careful	cautious, thorough, meticulous, diligent, attentive, vigilant, circumspect, scrupulous, fastidious	careful: meticulous, thorough, diligent, fastidious, attentive, exacting, scrupulous, vigilant, precise, painstaking	tireless	indefatigable, unflagging, unrelenting, unwavering, persistent, unyielding, energetic, vigorous, relentless	indefatigable, unflagging, energetic, persevering, determined, relentless, unwearying, unrelenting, untring, assiduous, dogged.

thorough	meticulous, careful, detailed, exhaustive, comprehensive, systematic, rigorous, exacting, scrupulous	thorough: meticulous, careful, exhaustive, comprehensive, detailed, rigorous, systematic, complete, accurate, methodical	persevering	persistent, determined, tenacious, dogged, unyielding, resolute, steadfast, single-minded, unwavering	persistent, determined, steadfast, resolute, unwavering, unyielding, dogged, tenacious, unrelenting, indefatigable, patient.
meticulous	thorough, precise, detailed, exact, scrupulous, fastidious, diligent, conscientious, painstaking	meticulous: careful, precise, thorough, fastidious, exacting, painstaking, scrupulous, detailed, conscientious, attentive	resolute	determined, firm, unwavering, steadfast, unflinching, resolved, persistent, unyielding, steadfast	determined, firm, steadfast, unyielding, unswerving, unwavering, resolved, strong- willed, purposeful, committed, persistent.
hasty	impulsive, rushed, hurried, impetuous, rash, reckless, thoughtless, abrupt, sudden, ill-considered	hasty: impetuous, rash, reckless, precipitate, thoughtless, hurried, sudden, abrupt, impulsive, headlong	weak	feeble, frail, fragile, infirm, delicate, powerless, ineffective, ineffectual, impotent	feeble, frail, fragile, delicate, enfeebled, infirm, debilitated, impotent, powerless, effete, flimsy.
capricious	unpredictable, fickle, erratic, whimsical, mercurial, unstable, changeable, inconsistent, variable	capricious: fickle, erratic, unpredictable, whimsical, changeable, unstable, volatile, mercurial, variable, flighty	distracted	absent-minded, preoccupied, inattentive, unfocused, absent, abstracted, bewildered, confused, perplexed	preoccupied, absent-minded, inattentive, confused, troubled, agitated, discomposed, distressed, distraught, unfocused, absent.
reckless	careless, thoughtless, heedless, imprudent, irresponsible, rash, impulsive, foolhardy, hasty, impetuous	reckless: heedless, rash, foolhardy, impulsive, careless, thoughtless, daring, hasty, precipitous, imprudent	despondent	disheartened, discouraged, dispirited, downhearted, hopeless, dejected, depressed, crestfallen, melancholy	depressed, discouraged, disheartened, hopeless, melancholy, miserable, woebegone, blue, downcast, forlorn.
reliable	dependable, trustworthy, consistent, unfailing, responsible, credible, proven, solid, faithful	reliable: dependable, trustworthy, faithful, consistent, responsible, credible, proven, steadfast, solid, unwavering	unreliable	undependable, untrustworthy, fickle, unpredictable, inconsistent, erratic, flaky, faithless, treacherous	untrustworthy, undependable, unfaithful, capricious, fickle, erratic, inconsistent, unpredictable, unstable, flighty.

# DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

dependable	reliable, trustworthy, consistent, steadfast, responsible, dependable, unfailing, trustworthy, solid	dependable: reliable, trustworthy, consistent, responsible, steadfast, trustworthy, unfailing, solid, proven, loyal faithful: loyal,	undependable	unreliable, erratic, untrustworthy, inconsistent, fickle, unpredictable, unstable, capricious, faithless	unreliable, untrustworthy, fickle, capricious, erratic, unpredictable, unstable, faithless, treacherous, disloyal.
faithful	loyal, devoted, true, dedicated, steadfast, reliable, trustworthy, constant, unwavering	dedicated, devoted, steadfast, true, trustworthy, dependable, constant, unwavering, staunch loyal: faithful,	unfaithful	disloyal, faithless, untrustworthy, treacherous, deceitful, perfidious, false, traitorous, untrue	treacherous, perfidious, deceitful, false, untrustworthy, undependable, unreliable, inconstant, untrue. unfaithful,
loyal	faithful, devoted, steadfast, true, trustworthy, dependable, reliable, committed, staunch	steadfast, true, devoted, trustworthy, dependable, unwavering, committed, resolute, dedicated constant:	disloyal	unfaithful, traitorous, treacherous, perfidious, faithless, untrue, false, deceitful, untrustworthy	faithless, perfidious, deceitful, false, untrustworthy, undependable, unreliable, inconstant, untrue.
constant	consistent, steadfast, unchanging, unvarying, reliable, unwavering, persistent, continual, perpetual	consistent, unchanging, unwavering, persistent, continual, perpetual, incessant, stable, steadfast, enduring	inconstant	fickle, capricious, volatile, mercurial, erratic, changeable, unstable, unpredictable, variable	fickle, capricious, variable, erratic, unpredictable, unstable, wavering, vacillating, changeable, mercurial.
flexible	adaptable, versatile, adjustable, pliable, malleable, supple, accommodating, easygoing, open- minded	flexible: adaptable, versatile, pliable, malleable, adjustable, easygoing, open-minded, resourceful, accommodating, compliant adaptable:	stubborn	obstinate, headstrong, inflexible, unyielding, dogged, mulish, pigheaded, bullheaded, tenacious	obstinate, obstinate, pigheaded, headstrong, mulish, dogged, unyielding, inflexible, uncompromising, rigid, resolute.
adaptable	flexible, versatile, adjustable, accommodating, pliable, malleable, amenable, open- minded, easygoing, resourceful	flexible, versatile, adjustable, accommodating, resourceful, pliable, malleable, open-minded, easygoing, compliant	obstinate	stubborn, inflexible, dogged, unyielding, headstrong, bullheaded, pigheaded, adamant, resolute	stubborn, obstinate, pigheaded, headstrong, mulish, dogged, unyielding, inflexible, uncompromising, rigid, resolute.

	accommodating	obliging, helpful, cooperative, amenable, flexible, adaptable, willing, friendly, courteous, considerate	accommodating: obliging, helpful, cooperative, amenable, compliant, flexible, adaptable, friendly, courteous, considerate	willful	stubborn, headstrong, obstinate, pigheaded, unyielding, inflexible, determined, resolute, unbending	stubborn, headstrong, obstinate, mulish, self-willed, pigheaded, determined, resolute, unyielding, inflexible, uncompromising.
		J	Judgement – social sar	nction		
Veracity [truth] 'how honest?'	truthful	sincere, honest, genuine, frank, candid, open, transparent, trustworthy, reliable, accurate, factual	sincere, honest, genuine, frank, candid, forthright, veracious, trustworthy, reliable, accurate, factual	dishonest	untruthful, deceitful, fraudulent, insincere, underhanded, treacherous, disingenuous, duplicitous, false, fake	untruthful, deceitful, false, insincere, treacherous, duplicitous, disingenuous, untrustworthy, fraudulent, crooked
	honest	truthful, sincere, straightforward, candid, frank, trustworthy, reliable, genuine, open, upright	truthful, sincere, straightforward, candid, frank, trustworthy, reliable, genuine, open, upright	deceitful	dishonest, misleading, fraudulent, duplicitous, insincere, treacherous, disingenuous, false, fake, double- dealing	dishonest, false, misleading, fraudulent, insincere, double- dealing, two-faced, treacherous, hypocritical, phony
	credible	trustworthy, reliable, believable, convincing, plausible, authentic, valid, sound, accurate	trustworthy, reliable, believable, convincing, plausible, authentic, valid, sound, accurate	lying	untruthful, deceitful, dishonest, false, fake, insincere, misleading, deceptive, mendacious, prevaricating	untruthful, deceitful, false, dishonest, mendacious, prevaricating, dissembling, misrepresenting, fabricating, falsifying
	frank	honest, candid, direct, open, straightforward, sincere, plain- spoken, forthright, unreserved, blunt	honest, candid, direct, straightforward, sincere, open, plainspoken, outspoken, blunt, transparent	deceptive	misleading, dishonest, deceitful, tricky, fraudulent, illusory, illusive, ambiguous, insincere, double- dealing	misleading, false, deceitful, tricky, fraudulent, illusory, illusive, ambiguous, insincere, double- dealing
	candid	honest, truthful, frank, direct, straightforward, open, sincere, blunt, unreserved, plainspoken	honest, truthful, frank, direct, straightforward, open, sincere, blunt, unreserved, plainspoken	manipulative	scheming, calculating, controlling, cunning, devious, duplicitous, Machiavellian, crafty, conniving, artful	scheming, calculating, controlling, conniving, crafty, cunning, devious, duplicitous, Machiavellian, wily

# DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

	direct	straightforward, frank, honest, candid, explicit, clear, unambiguous, unequivocal, open, transparent	straightforward, frank, honest, candid, explicit, clear, unambiguous, unequivocal, open, transparent	devious	cunning, sly, tricky, wily, crafty, deceitful, dishonest, underhanded, duplicitous, sneaky	cunning, sly, tricky, wily, crafty, deceitful, dishonest, underhanded, duplicitous, sneaky
	discrete	separate, distinct, individual, isolated, detached, unconnected, discontinuous, unattached diplomatic,	separate, distinct, individual, isolated, detached, unconnected, discontinuous, unattached diplomatic,	blunt	straightforward, frank, honest, candid, direct, abrupt, curt, brusque, plain- spoken, outspoken chatterbox, gossip,	straightforward, frank, honest, candid, direct, abrupt, curt, brusque, plain- spoken, outspoken gossip, chatterbox,
	tactful	considerate, thoughtful, sensitive, discreet, judicious, prudent, circumspect, careful, polite	considerate, thoughtful, sensitive, discreet, judicious, prudent, circumspect, careful, polite.	blabbermouth	blabber, blabberer, windbag, loquacious, talkative, verbose, voluble, gabby	blabberer, windbag, loquacious, talkative, verbose, voluble, gabby, chatty
Propriety [ethics] 'how far beyond reproach?'	good	excellent, great, fine, wonderful, fabulous, superb, outstanding, exceptional, marvelous, admirable	excellent, great, fine, superior, first- rate, top-notch, outstanding, superb, marvelous, wonderful, fantastic, fabulous, amazing, impressive, remarkable	bad	terrible, awful, poor, unpleasant, substandard, unsatisfactory, unfavorable, disagreeable, dreadful, inadequate, defective, faulty, flawed, incorrect.	negative, unfavorable, unpleasant, lousy, poor, wicked, defective, faulty, inferior, low-grade, unsatisfactory, imperfect, inadequate, substandard, mediocre, trashy unethical
	moral	ethical, virtuous, righteous, upright, honest, honorable, principled, just, decent, good	ethical, virtuous, righteous, upright, honest, honorable, principled, conscientious, scrupulous, decent, right, proper	immoral	wicked, evil, unethical, sinful, depraved, corrupt, unprincipled, amoral, licentious, promiscuous, dissolute, dishonest, deceitful, fraudulent, unscrupulous, shady.	corrupt depraved wicked sinful unscrupulous dishonest dishonorable evil improper indecent unethical unprincipled vile nefarious heinous

ethical	moral, virtuous, righteous, upright, honest, honorable, principled, just, decent, good	moral, virtuous, righteous, upright, honest, honorable, principled, conscientious, scrupulous, decent, right, proper	evil	wicked, malevolent, sinister, vile, malicious, maleficent, diabolical, iniquitous, nefarious, pernicious, villainous, monstrous, heinous, atrocious, fiendish, demonic, satanic.	sinful depraved corrupt malevolent vicious malicious nefarious sinister diabolical demonic hellish fiendish atrocious monstrous dishonest
law abiding	obedient, compliant, conforming, dutiful, law- abiding, respectful, responsible, orderly, well-behaved, conscientious	lawful, legal, obedient, conforming, upright, honest, honorable, virtuous, conscientious, compliant, dutiful	corrupt	dishonest, fraudulent, deceitful, unscrupulous, dishonorable, venal, bribable, shady, crooked, underhanded, treacherous, perfidious, disreputable, degenerate, immoral, sinful.	immoral unscrupulous crooked deceitful fraudulent nefarious shady venal depraved perverse rotten wicked vile unethical illegitimate unjust
fair	just, impartial, unbiased, equitable, even-handed, objective, neutral, disinterested, honest, honorable	just, impartial, unbiased, even-handed, equitable, honest, honorable, decent, objective, neutral, dispassionate, reasonable, rational	unfair	unjust, inequitable, biased, prejudiced, discriminatory, partial, one-sided, unreasonable, improper, inappropriate, unbalanced, excessive, arbitrary.	inequitable biased prejudiced discriminatory partial one-sided unreasonable improper dishonest unethical unjustified undue unmerited unwarranted

immoral

inequitable

## DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

just	fair, impartial, unbiased, equitable, even-handed, objective, neutral, disinterested, honest, honorable	fair, impartial, unbiased, even-handed, equitable, honest, honorable, decent, objective, neutral, dispassionate, reasonable, rational	unjust	unfair, inequitable, biased, prejudiced, discriminatory, partial, one-sided, unreasonable, improper, inappropriate, unbalanced, excessive, arbitrary.	biased prejudiced discriminatory partial one-sided unreasonable improper dishonest unethical unjustified undue unmerited
sensitive	perceptive, responsive, empathetic, sympathetic, understanding, considerate, tactful, diplomatic, discerning, delicate	empathetic, compassionate, caring, understanding, perceptive, responsive, considerate, delicate, subtle, touchy, emotional	insensitive	unfeeling, unresponsive, indifferent, apathetic, cold, callous, heartless, unsympathetic, tactless, thoughtless, inconsiderate, unaware, unperceptive, uncomprehending.	unwarranted unfeeling indifferent callous cold-hearted unsympathetic uncaring aloof detached remote unsentimental unemotional hard-hearted stony-hearted heartless impassive
kind	compassionate, caring, considerate, sympathetic, understanding, helpful, generous, thoughtful, gracious, benevolent	benevolent, compassionate, considerate, gracious, humane, sympathetic, thoughtful, warm- hearted, gentle, tender	mean	cruel, unkind, malicious, spiteful, nasty, vicious, vindictive, malevolent, merciless, heartless, pitiless, ruthless, hard- hearted, cold- blooded.	unkind stingy miserly tight-fisted parsimonious selfish inconsiderate thoughtless cruel malicious spiteful nasty petty snide vindictive

caring	compassionate, considerate, sympathetic, kind, understanding, helpful, nurturing, affectionate, loving, attentive	compassionate, considerate, empathetic, nurturing, solicitous, sympathetic, thoughtful, attentive, kind- hearted, gentle, loving	cruel	brutal, barbaric, savage, inhuman, sadistic, vicious, heartless, merciless, pitiless, ruthless, harsh, unfeeling, callous, cold-blooded.	brutal savage barbaric inhumane sadistic merciless ruthless callous heartless unfeeling unkind pitiless cold-blooded vicious fiendish heinous conceited
unassuming	modest, humble, self-effacing, unpretentious, down-to-earth, low-key, meek, self-deprecating, mild-mannered, unostentatious	modest, humble, self-effacing, unpretentious, meek, mild, low-key, retiring, diffident, reserved, shy	vain	conceited, narcissistic, egotistical, self-centered, self-absorbed, self-important, arrogant, haughty, pompous, proud, snobbish, superior, presumptuous, overconfident.	arrogant egotistical narcissistic self-centered self-important self-obsessed self-absorbed self-loving self-admiring self-regarding proud haughty snobbish pompous
modest	humble, unassuming, unpretentious, self- effacing, demure, bashful, reserved, unobtrusive, discreet, simple	unassuming, humble, self-effacing, unpretentious, meek, mild, low-key, retiring, diffident, reserved, shy	snobby	elitist, arrogant, haughty, snooty, conceited, supercilious, pompous, proud, superior, disdainful, condescending, patronizing.	elitist arrogant haughty snooty conceited pompous self-important superior condescending disdainful patronizing aloof distant unsociable

## DISCOURSE SEMANTIC ANALYSIS OF JUDGEMENT EVALUATION IN SUSPECTED ONLINE ROMANCE SCAMMER DATING PROFILES

humble,	modest, unassuming, unpretentious, self-effacing, meek, lowly, unostentatious, unassuming, submissive, deferential	modest, unassuming, self-effacing, unpretentious, meek, mild, lowly, unimportant, unimposing, unobtrusive, retiring	arrogant,	haughty, proud, conceited, egotistical, overbearing, pompous, superior, presumptuous, self-important, imperious, overconfident, insolent, disrespectful, contemptuous.	haughty, conceited Egotistical, pompous, superior self-important, self-righteous, overbearing, presumptuous, snobbish, patronizing, imperious, high-handed, bossy, domineering impolite,
polite	courteous, well-mannered, civil, respectful, considerate, chivalrous, gallant, genteel, gracious, refined	courteous, mannerly, well-mannered, civil, respectful, gracious, genteel, refined, tactful, diplomatic, considerate	rude	impolite, discourteous, disrespectful, ill- mannered, uncivil, impertinent, insolent, abrupt, brusque, blunt, curt, surly, gruff, vulgar, crude.	discourteous, impertinent, insolent, disrespectful, uncivil, unmannerly, ill-mannered, boorish, churlish, crass, crude, coarse, vulgar, impudent, brazen, cheeky, snippy, impolite, rude,
respectful	polite, courteous, deferential, reverent, admiring, appreciative, obedient, dutiful, attentive, compliant	courteous, deferential, reverential, polite, civil, gracious, attentive, dutiful, obedient, compliant, reverent	discourteous	rude, impolite, disrespectful, ill- mannered, uncivil, impertinent, insolent, abrupt, brusque, blunt, curt, surly, gruff, vulgar, crude.	disrespectful, uncivil, unmannerly, ill-mannered, inconsiderate, thoughtless, impertinent, brusque, abrupt, curt, short, snippy, testy, snappy, crusty, surly. disrespectful,
reverent	respectful, worshipful, adoring, venerating, admiring, deferential, awed, humble, devout, pious	respectful, deferential, awed, adoring, worshipful, venerative, pious, devout, solemn, hallowed, sacred	irreverent	disrespectful, impious, sacrilegious, profane, blasphemous, insulting, impertinent, audacious, cheeky, flippant, ungodly.	impious, sacrilegious, blasphemous, profane, ungodly, godless, unrespectful, flip, flippant, cheeky, impertinent, insolent, saucy, impudent, audacious, presumptuous.

altruistic	selfless, unselfish, philanthropic, charitable, generous, humanitarian, compassionate, kind, magnanimous, benevolent	selfless, charitable, humanitarian, philanthropic, generous, benevolent, magnanimous, unselfish, kind-hearted, compassionate, caring	selfish	self-centered, self-absorbed, self-interested, egotistical, self-serving, narcissistic, inconsiderate, thoughtless, heedless, insensitive, ungenerous, stingy.	self-centered, self-seeking, self-absorbed, self-interested, egocentric, egotistical, egomaniacal, narcissistic, self-serving, self-important, inconsiderate, thoughtless, unthinking, uncaring, heedless, indifferent, insensitive, uncharitable. avaricious,
generous	charitable, benevolent, philanthropic, magnanimous, unselfish, giving, open-handed, liberal, big-hearted, munificent	charitable, philanthropic, benevolent, magnanimous, liberal, unselfish, big-hearted, munificent, bountiful, open- handed, free- handed	greedy	avaricious, covetous, rapacious, grasping, acquisitive, insatiable, gluttonous, voracious, selfish, mercenary, materialistic.	avaricious, rapacious, grasping, insatiable, gluttonous, covetous, acquisitive, predatory, mercenary, materialistic, money-grubbing, voracious, unquenchable, unappeasable, insatiate, insistent, grabby, selfish.
charitable	generous, benevolent, philanthropic, magnanimous, unselfish, giving, open-handed, liberal, big-hearted, munificent, kind- hearted	generous, philanthropic, benevolent, magnanimous, liberal, unselfish, big-hearted, munificent, bountiful, open- handed, free- handed	avaricious	greedy, acquisitive, grasping, rapacious, covetous, money-grubbing, mercenary, materialistic, selfish, insatiable, voracious, grabby, predatory, hoarding, possessive, selfishly eager for money or possessions	greedy, rapacious, covetous, grasping, acquisitive, mercenary, materialistic, money-grubbing, parsimonious, penurious, miserly, frugal, thrifty, stingy, tight-fisted, niggardly, grasping.

## Appendix 2

## **Word List Obtained from Past Research**

# Abidah (2022); Belz, (2003); Khosravi & Babaii (2017); Dong & Lin (2018); McEachrane (2009)

Judgement – social esteem				
SOCIAL ESTEEM	Positive [admire]	Negative [criticize]		
Normality 'how special?'	Usual, loved; famous; well-known; common;	Unusual; untimely; rare; unfortunate; unlucky		
Capacity 'how capable?'	Competent; able; corned; acid skills; capable; skilled;	Fails, leave; rival; kebabbed; out of control; failed; doesn't understand the presidency; incompetence; unwilling; unable; not changing;		
Tenacity 'how dependable?'	Tenacity 'how dependable?'  Dependable; reliable; passionate; forever; trusty; loyal;			
	Judgement – social sanction			
Veracity [truth] 'how honest?'	Honest; faithful; worthy; truthful; true; frank; straight	a partial summary; exaggerated respect; not a faithful interpretation;		
Propriety [ethics] 'how far beyond reproach?'	Beyond approach; norms of academic discourse; fairer; direct; awesome; glad; polite; rational;	Harsh; impolite; terrible; violated; beyond any limit allowed by the rules and laws; fury; ego; never appreciated; wrong; convinced; petty and vindictive; making it worse; worse; irrational; pride;		