

“TELL ME WHO YOU ARE” LATENT SEMANTIC ANALYSIS FOR ANALYZING SPONTANEOUS SELF-PRESENTATIONS IN DIFFERENT SITUATIONS

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The aim of the study was to analyze freely generated self-presentations through the natural language processing technique of Latent Semantic Analysis (LSA). Four hundred fifty-one participants ($F = 360$; $M = 143$) recruited from LinkedIn (a professional social network) were randomly assigned to generate 10 words to describe themselves to either an employer (recruitment-condition) or a friend (friendship-condition). The words' frequency-rate and their semantic representation were compared between conditions and to the natural language (Google's n-gram database). Self-presentations produced in the recruitment condition (vs. natural language) had significantly higher number of *agentive* words (e.g., problem-solver, responsible, able team-worker) and their contents were semantically closer to the concept of agency (i.e., competence, assertiveness, decisiveness) comparing to the friendship condition. Furthermore, the valence of the self-presentations' words was higher (i.e., with a more positive meaning) in the recruitment condition. Altogether, these findings are consistent with the literature on the “Big Two,” self-presentation, and impression management.

Keywords: Latent semantic analysis; Agency; Communion; Self-presentation; Impression management.

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Let's imagine the following situation: you are in front of an interviewer to get a new job, and she/he says “So, tell me a little about yourself.” What will you answer? Whatever the answer will be, research suggests that your intent will be to positively impress the recruiter. This process is the well-known and widely studied phenomena of impression management, defined as: “the conscious or unconscious attempts to influence images during interaction and self-presentation as attempts to influence self-relevant images” (Gilmore, Stevens, Harrell-Cook, & Ferris, 1999).

Jones and Pittman (1982) have proposed five classes of self-presentational strategies that people can use in order to shape others' impressions of their personality: ingratiation, intimidation, self-promotion, exemplification, and supplication. Ingratiation refers to the attempt to achieve "the attribution of likability" (p.234); intimidation refers to the attempt to receive "the attribution that he has the resources to inflict pain or stress and the inclination to do so if he does not get his way" (p.238); self-promotion refers to the attempt to achieve "the attribution of competence" (p.241); exemplification refers to the attempt "to project integrity and moral worthiness" (p.245), in other words, the exemplifier wants to be admired for her honesty, discipline, charitability, and so forth; supplication refers to the attempt to solicit help and to activate the norm of obligation or social responsibility in a target person by showing weakness and dependence (p. 247). This theoretical framework suggests the presence of different strategic self-presentations in different contexts (e.g., self-promotion in recruitment situation, ingratiation in a romantic date). For sure, offering a socially desirable image, whether in a recruitment situation or in other life circumstances, is an important goal for individuals, who are typically motivated to be evaluated positively by others (Leary, 2003). If successful, the use of impression management tactics could lead to positive outcomes for the individual. For instance, self-presentations with a positive valence in recruitment situations lead to higher probability of getting hired. Nevertheless, positive self-presentation in a recruitment situation is only a weak predictor of later job performance (Barrick, Shaffer, & DeGrassi, 2009). In other words, if the candidate's self-presentation is deceptive or too favorable, then hiring the candidate may result in negative individual and organizational outcomes (Leary & Bolino, 2017).

Many researchers have tried to detect which are the most common deceptive strategies that applicants use in a recruitment situation and their power in affecting hiring decisions (Gilmore et al., 1999; Higgins & Judge, 2004; Sandal et al., 2014). A lot of effort has been spent to identify the level of honesty of the candidates and the authenticity of their self-presentations during job interviews (Levashina & Campion, 2007; Weiss & Feldman, 2006). However, little evidence exists to determine the contents of the portraits offered by job applicants. What we know is that in general people organize the content of self-presentations around two broad conceptual personality coordinates, one concerned with "getting ahead" or self-affirmation (i.e., agency) and one referred to "getting along" or other-orientation (i.e., communion) (Abele & Wojciszke, 2007; Bartz & Lydon, 2004; Paulhus & Trapnell, 2008). It has been widely shown that agency and communion guide our social judgements, our self-concept, and the way we present ourselves to others (Diehl, Owen, & Youngblade, 2004; Paulhus & Trapnell, 2008). However, to the best of our knowledge, there are only a few studies that have investigated these two dimensions in overly favorable self-presentations (e.g., Blasberg, Rogers, & Paulhus, 2014) and none in recruitment situations.

The aim of this study was to investigate people's preference for agentic or communal self-presentations in recruitment situations and the valence (positive vs. negative) of these self-presentations. Since agency is, by definition, the aspect of personality related to traits of self-assertion, self-enhancement, and self-protection (Bartz & Lydon, 2004), and because recruitment is a competitive context where applicants have to affirm their superiority over other applicants, then, self-presentations in this situation should reflect agentic portraits. In addition, since people are more likely to use impression management techniques in recruitment situations (Weiss & Feldman, 2006) and given that they resort to more favorable self-presentations with strangers, whereas they are more modest with friends (Tice, Butler, Muraven, & Stillwell, 1995), we expected self-presentations in a recruitment situation to have higher positive valence compared to those in a friendship situation. Differently, communion, which pertains to "getting along" with others (Abele & Wojciszke, 2014) should be activated in a friendship situation. In the following sections, we introduce the

literature on agentic and communal orientations and on deceptive self-presentation that provides us with the theoretical basis for our study. Then, we will present our hypotheses in detail and the results of the research.

AGENTIC AND COMMUNAL ORIENTATIONS

The way people present themselves to others can be organized in two big dimensions of personality: agency and communion, also called the “Big Two” (Bakan, 1966; Paulhus & Trapnell, 2008). Agency concerns with the “individual’s striving to master the environment, to assert the self, to experience competence, achievement, and power” (Diehl et al., 2004, p. 1). In contrast, communion refers to “a person’s desire to closely relate to and cooperate and merge with others” (Diehl et al., 2004, p. 1). Agency is driven by motives like autonomy, achievement, and control, whereas communion is driven by motives like intimacy, sociability, and belonging to a group or need for affiliation (Horowitz et al., 2006). Agency and communion, can be interpreted as basic components of personality and, in this vein, can be measured as stable individual differences (Li, Tseng, Wu, & Chen, 2007; Spence, Helmreich, & Holahan, 1979; Ward, Thorn, Clements, Dixon, & Sanford, 2006). Interestingly, agency and communion can also be induced or triggered by situational conditions (Uchrowski, 2008). That is, situations may cause the activation of one orientation over the other, or individuals can consciously or unconsciously choose to enhance one or another dimension according to the situational demands.

As stable individual differences, the preference for agency or communion orientations is affected by individual characteristics (e.g., sex, age, personality traits like agreeableness and cooperativeness, conscientiousness and self-directedness) (Cloninger, 2004; Diehl et al., 2004) and by environmental influences (e.g., reference culture; Markus & Kitayama, 1991; Shweder, Much, Mahapatra & Park, 1997). As situational variables, they can vary according to the context. For instance, the activation of one attachment style over another in a relationship can determine the predominance of one orientation over another, in the way that secure relationships increase the accessibility of communion, whereas anxious-ambivalent relationships increase the accessibility of agency (Bartz & Lydon, 2004). Another contextual variable that constitutes an antecedent for the enhancement of agency or communion orientation is the nature of the relationship between the actor and the interlocutor (in this study, for example, the candidate and the recruiter). Indeed, there is evidence indicating that people emphasize agency (e.g., dominance) when they interact with a colleague and that they are less agentic (e.g., submissiveness) when they interact with their boss (Moskowitz, Suh, & Côté, 1996; Moskowitz, Suh, & Desaulniers, 1994).

In sum, agency and communion widely guide our social judgement and our behavior (Abele & Wojciszke, 2014; Diehl et al., 2004; Paulhus & Trapnell, 2008). Therefore, it is reasonable to think that agency and communion play also a key role in self-presentation in a challenging social situation as the recruitment one.

SELF-PRESENTATIONS IN RECRUITMENT

The perfect employee. In recruitment situations, applicants provide an image that they believe will increase the probability to achieve their goal of being hired. As the literature suggests, the content of this perfect employee image reflects a desired identity, composed of attributes that the candidate thinks that the job requires for positive job outcomes, such as, knowledge and competence, interpersonal attributes such as

collegiality, cooperativeness, and organizational loyalty, and personal qualities such as self-discipline, conscientiousness, and honesty (Ferris, Johnson, & Sedikides, 2017). This suggests that the perfect employee image is a complex cognitive schemata with both agentic and communal contents (cf. Abele, Uchrowski, Suitner, & Wojciszke, 2008). However, other line of research suggests that candidates have a relatively more simplistic cognitive schemata, or a ideal-employee profile in their mind, characterized mainly by high consciousness and high emotional stability (cf. Klehe et al., 2012). In other words, in order to create the image of the ideal-employee, candidates might present themselves with agentic words, such as, able, active, assertive, creative, independent, intelligent, rational, self-reliant (cf. Abele et al., 2008; Diehl et al., 2004). Indeed, these words are often associated with competence and individual-level characteristics like instrumentality, ambition, dominance, and efficiency in goal attainment. This might imply that in other social situations, such as, when interacting with a friend, agency should be less relevant. Moreover, candidates might describe themselves as less communal than people in a friendship-situation. In other words, candidates self-presentations should have less communal content, for example, containing words, such as, caring, helpful, loyal, polite, sensitive, sympathetic, trustworthy, understanding (cf. Abele et al. 2008; Diehl et al., 2004), which are commonly ascribed to the sphere of intimacy (Abele et al., 2008).

To be more specific, since the ideal-employee schemata is active in recruitment situations, we expected that people will present themselves as more agentic (i.e., using words with agentic meaning more frequently) (Hypothesis 1a) and less communal (i.e., using words with communal meaning less frequently) (Hypothesis 1b) in a recruitment situation than people in a friendship situation. That being said, in a recruitment situation we also need to consider that people have a tendency to present an overly positive self-image. In this sense, it is reasonable to assume that the valence (i.e., the connotation) of self-descriptions will be more positive (vs. negative) in a recruitment situation than in other social situations.

The overly positive image. The primary goal during social interaction is to give a desirable impression of ourselves (Leary, 2003). People are often deceptive when describing themselves, both in situations where the goal of self-promotion (promoting one's strength and abilities) is particularly important, such as during job interviews (Rosse, Stecher, Miller, & Levin, 1998; Weiss & Feldman, 2006) or during the first date of a romantic relationship (Rowatt, Cunningham, & Druen, 1998), as well as when there is apparently no reason to appear more desirable. In fact, people use deceptive favorable self-enhancement even when they present themselves to strangers (Tice et al., 1995). But why are people willing to be deceptive (e.g., claiming some skills they do not have during recruitment situation) in self-promoting themselves, even when that means that they risk to lose face in the future (e.g., not being able to handle a too difficult task in their new job)? One possible answer is that people have "the desire and preference for maximizing the positivity of self-views" (i.e., self-enhancement) and also the "the desire and preference for minimizing the negativity of self-views" (i.e., self-protection; Sedikides & Alicke, 2012, p. 303). These mechanisms of self-enhancement and self-protection are activated when people feel threatened, hence, they become overly defensive of the self (Roesse & Olson, 2007). This should be the case in a recruitment situation. Indeed, the potential of a negative evaluation by the interviewer and the risk of not getting the job, might be perceived by the candidate as a threat to her/his self-esteem (cf. Ellis & Taylor, 1983).

Therefore, we expect that, potential candidates (vs. friends) will maximize the positive aspects of their personality by presenting themselves preeminently with words with more positive valence (Hypothesis 2a). At the same time, the desire to minimize the negative aspect of the self in a recruitment situation was expected to lead potential candidates to use less words with negative valence compared to participants in the friendship situation, in which people might feel less threatened, and therefore less self-protective in hiding their own weakness (Hypothesis 2b).

METHOD

Participants

The study was promoted through advertising, between August to October 2014. The advertisement informed Swedish LinkedIn (i.e., a website used mainly for searching employment and improving the probability of finding a new job by showing one's professional profile and enhancing professional network; see <http://www.linkedin.com>) users that they were invited to participate in a scientific study in collaboration with the University of Gothenburg (Sweden). The advertisement also informed potential participants that they would receive their results from a recruitment test developed in Sweden for free. After receiving the invitation on LinkedIn, participants who expressed their willingness to participate by clicking on the invitation were re-addressed on a separate website for the online registration and to provide them with the general information about the study (e.g., ensuring confidentiality, that their participation was voluntary). Each participant completed the survey online on their PC.

Five-hundred one Swedish LinkedIn users expressed their willingness to participate at the study. Fifty of them were excluded from the final analyses, since they failed to complete at least the 95% of the survey. The final sample consisted of 451 participants (Male = 143, Female = 360). Participants were randomly assigned to the recruitment and friendship condition. The two groups were homogeneous regarding socio-demographic variables: sex (men = 28.9%, women = 71.1% for the recruitment condition; men = 26.3%, women = 73.7% for the friendship condition), age ($M_{\text{age}} = 39.94$, $SD_{\text{age}} = 11.43$ for the recruitment condition; $M_{\text{age}} = 40.46$, $SD_{\text{age}} = 12.10$ for the friendship condition), and educational level (in general, bachelor degree was the more common qualification with 67.5% in the recruitment condition and 73.2% in the friendship condition). The majority of them were corporate managers (27.7%), or professionals (24.7%; e.g., chemical engineers, biologists, nurses, medical doctors), and technicians (22.1%; e.g., computer assistants, air traffic controllers, veterinary assistants); the rest of participants were clerks (8.8%; e.g., office secretaries and data entry operators, cashiers, receptionists), service workers and shop sales workers (3.1%; e.g., waiters, waitresses and bartenders, housekeepers, child-care workers, shop salespersons), craft and related trades workers (1.6%; e.g., rail and road construction workers, roofers, metal moulders), plant and machine operators and assemblers (0.6%; e.g., papermaking plant operators, assemblers, tobacco production machine operators), elementary occupations (0.6%; e.g., agricultural, fishery and related labourers), just 0.4% of them did not have a job (two participants) while 10.4% of participants failed to provide with information about their job.

Measures

The 10 Words Personality Inventory (Garcia, Rosenberg, & Sikström, 2016; Garcia & Sikström, 2019) was designed to ask participants to freely generate self-descriptive words. It contains one question, asking the participants to generate 10 words that describe her/his personality ("Please describe your personality using ten words"). The instrument has been validated in different studies in which we found that the semantic representation of the words people use to describe themselves predict their personality as measured by the Temperament and Character Inventory and the Short Dark Triad (e.g., Garcia & Sikström, 2019) and also is reliable for the conceptualization of identity profiles (e.g., Garcia, Cloninger, Sikström, Anckarsäter, & Cloninger, 2020).

Procedure

In the recruitment condition, participants were asked to imagine to be an applicant for a job position and to present themselves using ten words (“Please, describe yourself using ten words as you would do for a potential employer”). In the friendship condition, participants were asked to describe themselves to a friend by using ten words (“Please, describe yourself using ten words as you would do for a friend”). These are variations of the question in the 10 Words Personality Inventory (see Subsection “Measures”). As part of another study participants were also presented with other scales (e.g., commitment, learning climate, and emotions) that have not been taken in consideration for this study.

Latent Semantic Analysis

The latent semantic analysis (LSA) is a quantitative method particularly appropriate for our study because it permits to analyze statistically the meaning of the words using a powerful mathematical analysis. This opens up possibilities of inferring much semantic relations among words (thus the phrase *latent semantic*; Landauer, Foltz, & Laham, 1998, p. 261). The quantified semantic representation of the generated words is the core characteristic of LSA.

In this study, we used the LSA to create a semantic representation of the words participants generated for describing themselves with the personality adjectives (Landauer, McNamara, Dennis, & Kintsch, 2007). The statistical procedure we used is briefly explained below. However, for a more detailed description of the LSA, please refer to specific methodological articles (see e.g., Foltz, Kintsch, & Landauer, 1998; Kjell, Kjell, Garcia, & Sikström, 2019; Landauer 1998; Landauer & Dumais, 1997; Landauer et al. 2007).

Statistical procedure. In the first place, we created the semantic space of the generated words by using the web-based software SemanticExcel (www.semanticexcel.com) developed by Sverker Sikström at Lund University for computing and analyzing semantic representations. SemanticExcel uses predefined semantic representation, that are built on text data from Google n-gram, and uses a version of the LSA algorithm (Landauer & Dumais, 1997) to generate the semantic representations (for the particular method and technical details of how the semantic representation are generated see e.g., Kjell et al., 2019). Here we used a Swedish semantic representation, consisting of 256 dimensions and 120k words (i.e., 120,000 words), that is generated from a large n-gram corpus provided by Google, where used five grams (see <http://ngrams.googlelabs.com>), which comprises a large amount of Terabytes of text data (for recent description of the Google n-gram database, see Lin et al., 2012). The quality of the semantic representation is evaluated by a synonym test. In the semantic representation, the first dimension typically codes for word frequency — or log(frequency) — the second dimension of word for valence, and the following dimensions codes for more complex meanings for the words.

In the second phase, we used the words generated by the participants in this semantic space. Semantic spaces allow to estimate the semantic similarity (vs. difference) between words. Semantic similarity (SS) scores (vs. difference) between words can be estimated by taking the cosine of the angle between the two vectors representing two words. The length of the vectors representing a word was first normalized to a length of one. Following this normalization, the cosine of the angle becomes particular easy to calculate by simply taking the dot product between the vectors, that is, multiplying each dimension and summing the results. In this way, we obtained values in range typically from 0 (*unrelated words*) to 1 (*identical words*). However, it is also possible to have negative values, where -1 that represent two vectors pointing in the

opposite directions. With the SemanticExcel software we added the vectors representing each of the 10 personality words generated by the participants. In other words, each participant's set of 10 self-descriptive words obtains a quantified semantic representation based on the sum of the vectors corresponding to each of the participant's self-descriptive word. This vector was normalized to the length of one. The words generated by the participants are quantified based on the semantic representation of the Google n-grams database (i.e., co-occurrence in natural language). Words that do not exist in the semantic representation were simply ignored.

RESULTS

The total number of the generated words in the recruitment condition was 2,280, whereas the total number of generated words in the friendship condition was 2,230. For a word cloud summarizing the words in both conditions, see Figure 1.



FIGURE 1

Word cloud of all words produced by participants in both conditions (recruitment and friendship) that were significantly more frequent in the self-presentations than their occurrence in natural language.

Note. The words were significant following Bonferroni correction of multiple comparisons. Significance testing was made by correlation to a numeric variable. The data was contrasted to the frequency of how words are generally used in the Swedish language (i.e., Swedish Google n-grams database). The font size represents the frequency of occurrence of the words.

First, we compared the meaning of the words generated by the participants in the recruitment condition to the meaning of the words generated by individuals in the friendship condition. A semantic *t*-test (for technical details, see Arvidsson, Sikström, & Werbart, 2011) showed that the semantic representations

differed significantly between the two conditions, $t(450) = 11.85$, $p < .001$, Cohen's $d = .79$. In other words, the semantic content of the self-presentations differed between conditions, suggesting that the meaning of the self-presentations in each condition was different. Next, we compared the occurrence of the words generated by the participants in the recruitment condition, with their occurrence in natural language. Specifically, we compared the words generated by the participants in the recruitment condition with the words present in the Swedish version of Google n-gram database. Significant testing was made with chi-square tests, correcting for multiple comparisons using the Bonferroni method. Results shown that words like *energisk* ("energetic"), *kreativ* ("creative"), and *stresstålig* ("stress resistant") were more frequent in the recruitment situation than in natural language. In the friendship condition, words such as *kärleksfull* ("loving"), *givmild* ("generous"), and *känslosam* ("emotional"), were more frequent than in natural language (Table 1).

TABLE 1
Significant difference in word-use compared to Google n-grams (natural language) in self-presentations made by participants in the recruitment and friendship conditions (χ^2 , $p < .001$)

χ^2	Friend condition		Order	Employee condition		χ^2
1 987 622,3	empatisk	<i>empathic</i>	1	lojal	<i>loyal</i>	2 443 042,2
1 459 360,8	lojal	<i>loyal</i>	2	analytisk	<i>analytical</i>	732 673,0
1 290 103,7	omtänksam	<i>considerate</i>	3	energisk	<i>energetic</i>	645 151,2
532 673,5	energisk	<i>energetic</i>	4	engagerad	<i>committed</i>	638 305,6
457 999,9	envis	<i>stubborn</i>	5	strukturerad	<i>structured</i>	591 995,8
387 502,7	målmedveten	<i>dedicated</i>	6	empatisk	<i>empathical</i>	591 023,1
372 213,6	analytisk	<i>analytical</i>	7	målmedveten	<i>dedicated</i>	529 917,5
322 913,8	analyserande	<i>analyzing</i>	8	ambitiös	<i>conscientious</i>	430 545,6
311 406,9	kärleksfull	<i>loving</i>	9	lyssnande	<i>listening</i>	397 500,4
310 081,4	ambitiös	<i>conscientious</i>	10	målinriktad	<i>goal-oriented</i>	365 362,6
267 723,6	engagerad	<i>committed</i>	11	lyhörd	<i>perceptive</i>	328 951,7
250 883,7	hjälpssam	<i>helpful</i>	12	entusiastisk	<i>enthusiastic</i>	308 117,3
231 969,8	lyssnande	<i>listening</i>	13	analyserande	<i>analyzing</i>	282 945,3
186 165,3	givmild	<i>generous</i>	14	beslutsam	<i>determined</i>	279 809,6
158 374,0	otålig	<i>impatient</i>	15	omtänksam	<i>considerate</i>	235 875,5
157 769,8	bestämd	<i>determined</i>	16	kreativ	<i>creative</i>	233 905,0
153 954,9	humoristisk	<i>humorous</i>	17	noggrann	<i>accurate</i>	220 325,9
145 632,2	entusiastisk	<i>enthusiastic</i>	18	fokuserad	<i>focused</i>	185 394,2
127 457,4	kreativ	<i>creative</i>	19	stresstålig	<i>stress resistant</i>	168 916,2
127 274,3	tålmodig	<i>patient</i>	20	hjälpssam	<i>helpful</i>	166 273,0
123 960,5	generös	<i>generous</i>	21	problemlösare	<i>problem solver</i>	163 248,9
117 397,0	uthållig	<i>sustained</i>	22	envis	<i>stubborn</i>	160 232,5
113 704,1	ärlig	<i>honest</i>	23	allmänbildad	<i>educated</i>	154 737,5
110 698,2	snäll	<i>kind</i>	24	driven	<i>driven</i>	138 671,7
104 566,1	målinriktad	<i>goal-oriented</i>	25	kommunikativ	<i>communicative</i>	134 012,6
99 465,5	allmänbildad	<i>educated</i>	26	orädd	<i>fearless</i>	133 907,2
87 556,8	ödmjuk	<i>humble</i>	27	prestigelös	<i>able teamworker</i>	107 265,2
82 529,6	pålitlig	<i>reliable</i>	28	pålitlig	<i>reliable</i>	98 416,5
78 549,9	lyhörd	<i>perceptive</i>	29	humoristisk	<i>humorous</i>	89 086,9

(Table 1 continues)

Table 1 (continued)

χ^2	Friend condition		Order	Employee condition		χ^2
76 831,9	noggrann	<i>accurate</i>	30	ärlig	<i>honest</i>	86 203,3
71 173,1	känslösam	<i>emotional</i>	31	förtroendeingivande	<i>trustworthy</i>	82 966,8
69 729,1	beslutsam	<i>determined</i>	32	flexibel	<i>flexible</i>	82 441,4
61 877,9	impulsiv	<i>impulsive</i>	33	positiv	<i>positive</i>	81 053,3
60 654,0	förtroendeingivande	<i>trustworthy</i>	34	ansvarstagande	<i>responsible</i>	74 444,4
55 803,6	ivrig	<i>avid</i>	35	ansvarsfull	<i>responsible</i>	72 818,7
52 912,2	tolerant	<i>tolerant</i>	36	utåtriktad	<i>extrovert</i>	70 391,4
52 483,0	reflekterande	<i>thoughtful</i>	37	initiativrik	<i>resourceful</i>	64 103,8
51 812,6	förlåtande	<i>forgiving</i>	38	social	<i>social</i>	58 261,9
50 762,5	tystlåten	<i>quiet</i>	39	lagspelare	<i>team player</i>	56 245,3
48 338,9	driven	<i>driven</i>	40	förstående	<i>sympathetic</i>	52 845,6
47 260,5	spontan	<i>spontaneous</i>	41	organiserad	<i>organised</i>	46 407,1
46 854,0	initiativrik	<i>resourceful</i>	42	kunnig	<i>knowledgeable</i>	42 624,7
46 702,7	frågvis	<i>inquisitive</i>	43	ödmjuk	<i>humble</i>	39 152,5
46 638,8	slarvig	<i>careless</i>	44	uppmärksam	<i>attentive</i>	38 821,5
46 208,9	känslig	<i>sensitive</i>	45	driftig	<i>driven</i>	36 433,3
39 187,4	påhittig	<i>inventive</i>	46	visionär	<i>visionary</i>	32 064,7
38 272,0	orädd	<i>fearless</i>	47	bestämd	<i>determined</i>	32 056,7
38 035,0	ängslig	<i>anxious</i>	48	självständig	<i>independent</i>	27 928,2
37 441,2	positiv	<i>positive</i>	49	uthållig	<i>sustained</i>	25 740,6
32 448,6	strukturerad	<i>structured</i>	50	drivande	<i>proactive</i>	25 277,4
32 119,6	diplomatisk	<i>diplomatic</i>	51	accepterande	<i>accepting</i>	24 256,8
31 653,0	kommunikativ	<i>communicative</i>	52	påhittig	<i>inventive</i>	23 849,0
30 435,2	utåtriktad	<i>extrovert</i>	53	innovativ	<i>innovative</i>	22 638,7
29 928,0	ansvarsfull	<i>responsible</i>	54	passionerad	<i>passionate</i>	19 269,1
27 205,0	stresstålig	<i>stress resistant</i>	55	självgående	<i>independent</i>	17 094,1
26 400,5	fokuserad	<i>focused</i>	56	diplomatisk	<i>diplomatic</i>	15 836,8
26 323,7	tänkare	<i>thinker</i>	57	verbal	<i>verbal</i>	14 969,5
24 174,9	tankspridd	<i>absent-minded</i>	58	trofast	<i>faithful</i>	14 857,8

Note: English translation in italics.

In Figure 2, we summarize the results by showing words significantly more frequent than in natural language that appeared exclusively in each condition and that appeared in each condition, respectively. Together, these results suggest that participants in each condition used both specific words and similar words, but also that the meaning of the self-representation in each condition was significantly different. However, at this point these analyses do not show if agentic words or communal words are more or less common in any condition.

Meaning and Frequency of Agency and Communion Words in the Recruitment versus Friendship Condition

The first hypotheses concerned the more agentic meaning and the more frequent agentic words (Hypothesis 1a) and the less communal meaning and less communal words (Hypothesis 1b) in the recruitment

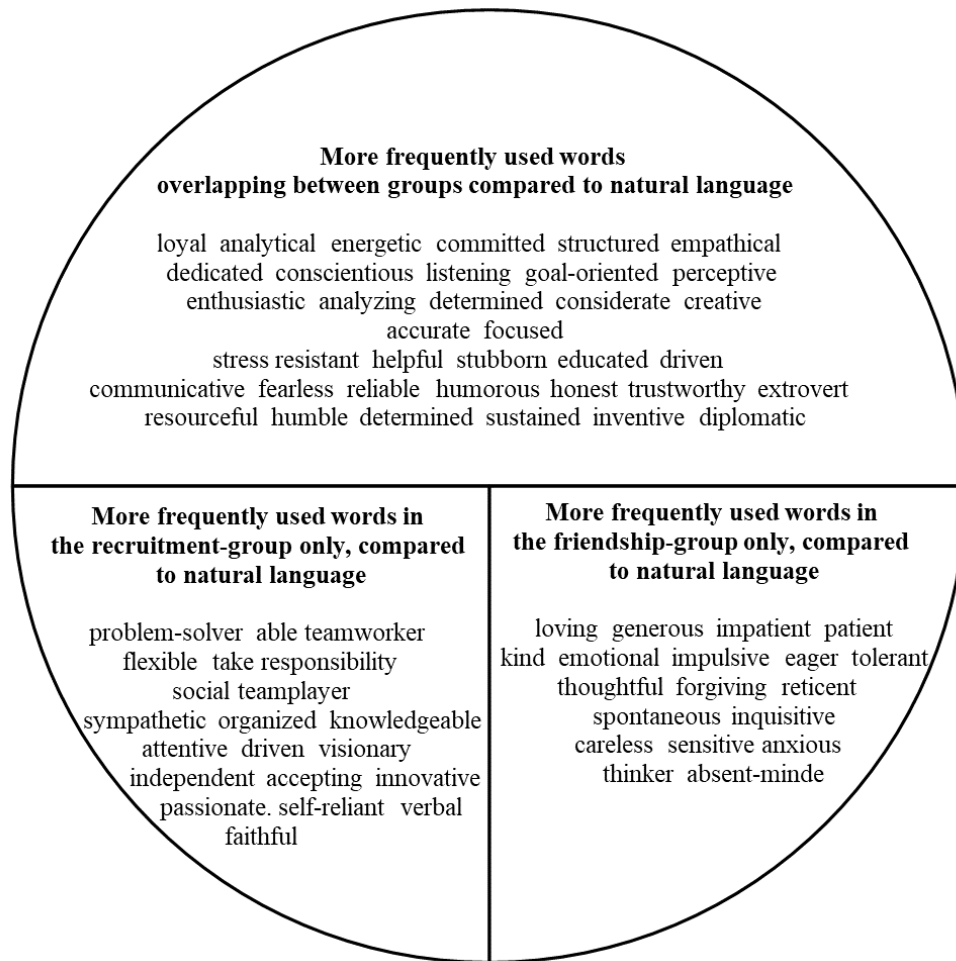


FIGURE 2

The words produced by participants in the study divided by condition (recruitment and friendship).

Note: The “unique” words that appeared significantly more frequently in the recruitment-group compared to Google n-gram are reported in the down left field of the figure. The “unique” words that appeared significantly more frequently in the friendship-group compared to Google n-gram are reported in the down right field of the figure. The “common” words, the ones that overlapped between the two groups, are reported in the top field of the figure.

situation (vs. friendship condition). To measure agentic and communal meaning, we used two Swedish word lists specially designed to measure these concepts and where the methods used for generated these list followed the standard guidelines used to construct the linguistic inquiry and word count list (LIWC; Pietraszkiewicz et al., 2019). We measured the semantic similarity (SS) scores between the wordlist and the statements generated by the participants. Here we report the mean value of SS scores for agency and communal over the participants in each condition. The semantic similarities scores between agency words list and the statements were significantly larger, $t(451) = 9.83, p < .001$, in the recruitment condition (mean SS score = 0.29) compared to the friendship condition (SS = 0.24) (Hypothesis 1a). On the contrary, the semantic similarity scores were significantly closer to the communal words list, $t(451) = 3.07, p = .002$, in the friendship condition (mean SS score = 0.30) compared to the recruitment condition (mean SS score = 0.29). In other words, the meaning of the words that participants used when asked to present themselves to a potential employer

were more agentic than the meaning of the words participants used to present themselves to a friend. Also, as expected (Hypothesis 1b), the meaning of the words participants used when asked to present themselves to an employer were less communal than the meaning of the words participants used to present themselves to a friend. In a second analysis, we used the LIWC agency and communal word lists (Pennebaker, Francis, & Booth, 2001) to compute the percentage of agentic and communal words in relation to all the self-representation words used by the participants in each condition. Then, using a *t*-test, we compared the percentages of agentic and communal words in the recruitment condition to the percentage of agentic and communal words in the friendship condition, respectively. The results showed that the percentage of words belonging to the communal words list were smaller, $t(451) = 2.17, p = .030$, in the recruitment condition (0.049%) compared to the friendship condition (0.063%). However, there was no significant difference for the percentage of agency words, $t(451) = 1.47, p = .140$, between the the recruitment condition (0.034%) and friendship condition (0.026%). That is, the communal words were less frequently used among participants asked to present themselves to an employer than among participants asked to present themselves to a friend. However, the frequency of agentic words was not different between conditions. To conclude, both meaning and frequency of communion orientation was less present in the self-presentations in the recruitment condition compared to the self-presentations in the friendship condition. Nevertheless, while the meaning of agency was more represented in the recruitment condition compared to the friendship condition, the frequency of agentic words did not differ between conditions. We did not found any gender differences with regard to either meaning or frequency of agency and communion using the same analyses described here.

Overly Positive Self-Presentation and less Negative Presentation

We expected that participants in the recruitment condition (vs. friendship condition) would maximize the positive aspects of their personality (Hypothesis 2a) and minimize the negative aspects of their personality (Hypothesis 2b), whereas the overly positive self-presentation will be less pronounced in the friendship condition. In order to test our hypotheses, we calculated the valence of the self-representation words by first creating a prediction model of valence based on another data set consisting of 288 Swedish words rated for their valence (for methodological details, see Kjell et al., 2019). The valence of the word is given on a semantic scales, where lower value indicating negative valence (e.g., dead), and higher value indicating positive valence (e.g., love). The higher the value, the more positive valence and the lower the value, the more negative the valence. In the present study, we used multiple linear regression to predict the ranked scores based on their semantic representations (for methodological details, see Kjell et al., 2019). The regression coefficient from this prediction, were then applied to the current dataset, to predict their valence scores. The results showed that the mean valence (V) scores were significantly larger, $t(450) = 9.06, p < .001$, in the recruitment condition (mean V score = 1.28) compared the friendship condition (mean V score = 0.54). In Figure 3, we present the self-representations words that participants used in each condition (*x*-axis, left worker, right friend) in relation to the valence score (*y*-axis, positive values on top, negative valence on button). The value on the *x*- and the *y*-axis correlates, $r = -.36, p < .001$ (Figure 3).

In sum, the words generated in the recruitment condition were different from those generated in the friendship one, not just for the more agentic and less communal connotation, but also for their positive (vs. negative) connotation.



FIGURE 3

The valence of the words produced by the two groups (recruitment and friendship).

Note. The words in the figure were significant following Bonferroni correction of multiple comparisons. Significance testing was made by correlation to a numeric variable. The figure represents 2 dimensions. The data is arranged along scales. The figure shows the data-points that significantly discriminate between the high and the low value of the scale. The area outside of the inner grey box represents significant differences ($p = .05$) and the area outside of the greater grey box represents significant values following Bonferroni corrections for multiple comparisons. The font size represents the frequency of occurrence of the words. The x-axis has $N = 1$ data points that are significant with Bonferroni correction, $N = 69$ significant data points without correction for multiple comparisons, and $N = 836$ data points. The y-axis has $N = 67$ data points that are significant with Bonferroni correction, $N = 205$ significant data points without correction for multiple-comparisons, and $N = 836$ data points ($df = 450$).

DISCUSSION

The aim of this study was to investigate people's preference for agentic or communal self-presentations in recruitment situations and the valence (positive vs. negative) of these self-presentations. We focused on agency and communion, since the two orientations are important for our understanding of social cognition (Abele & Wojciszke, 2014). We showed that agency orientation is activated in recruitment self-presentations and that communion orientation is activated in friendship self-presentations. A second major result concerned with the valence of self-presentations suggests that individuals in a recruitment setting maximize their positive aspects and minimize their negative aspects compared to individuals in a friendship setting. This was shown by the fact that self-presentations in the recruitment situation had more positive valence and less negative valence than those self-presentations in the friendship situation. Hence, our findings confirm that the candidate's cognitive schemata of the ideal employee corresponds to an agentic, less communal, and more positively valenced image.

Accordingly, research on impression management in recruitment (Fletcher, 2013; Roulin, Bangerter, & Levashina, 2015), suggests that people are more likely to offer a deceptive image of themselves to a potential employer, even if this strategy could lead them to have more problems in the future (e.g., they could

have to face with overly difficult tasks). This suggests that the self-presentations in the recruitment situation, in the present study, might be just ideal and not accurate with who they really are. If the participants are consciously enhancing and protecting their self-concept or not, is beyond the scope of the present study.

Nevertheless, since a recruitment situation could be expected as more threatening than a friendship situation, it is plausible to state that in the former condition participants are triggered to defend their own self-esteem by being deceptive and/or overly positive in their self-presentation. As the matter of fact, to make a good impression or self-promotion seems to be the primary goal in the recruitment situation (cf. Leary & Kowalski, 1990). Differently, self-disclosure (revealing one's feelings or personal aspects for earning sympathy) seems to be the "ideal" frame for self-presentation in the friendship situation. It is reasonable to assume that people do not need to "protect" themselves from whom they trust (in this case friends) by hiding their weakness. That being said, our results do not suggest that people are not using deceptive self-enhancement in the friendship condition just because the valence of their self-presentations is negative. The reason of why participants in our study were more willing to show words with negative valence (e.g., sadness, anxiety) in the friendship condition could be interpreted as the use of supplication strategy. As the matter of fact, people generally offer deceptive self-descriptions both in situations where the goal of self-promotion is particularly important (Rosse et al., 1998; Rowatt et al., 1998), as well as when there is apparently no reason to appear more desirable (Tice et al., 1995). In this sense, it could be that different situations trigger different deceptive self-images: agentic self-enhancement or communal self-enhancement according with the goal-pursuit consistent with each situation. In other words, negative valence might indicate, the use of weakness in order to achieve the desirable self-image of a needy person, according to the supplication strategy described by Jones and Pittman (1982). Individuals could use this strategy purposely in order to receive assistance or sympathy (Bolino & Turnley, 2003; Jones & Pittman, 1982; Lai, Lam, & Liu, 2010). Therefore, in a motivational perspective, the expectation or desire to be successful in "getting the job" in the recruitment situation could correspond in self-promoting tactics that permit to reach the goal of self-affirmation with regard to agentic values, whereas the friendship situation could correspond to less positive self-promoting tactics (Bolino & Turnley, 2003) that respond to a need for affiliation and self-reassurance. This hypothesis could be more deeply investigate in further studies since supplication is an understudied impression management tactic and it has not been yet studied in a friendship situation, or in general in relation to social contexts, but just as a consequence of individual preferences (cf. Bolino & Turnley, 2003).

Value of the Study

Recent research suggests that people list more agentic traits in their self-descriptions compared to other-descriptions (of a friend) (Abele & Wojciszke, 2014). This is a hypothesis and an empirical finding generated from the dual perspective model of agency and communion (Abele & Wojciszke, 2014), in which it is assumed that depending on the perspective (actor vs. observer) of the one doing the social judgment, the descriptions would have either agentic or communal content. However, our findings suggest that the power of the situation (cf. Zimbardo, 2011) might also play a role in determining the content of self-descriptions. In other words, it is not only the perspective (actor vs. observer) that moderates the use of agentic versus communal descriptions; but also the social contexts. For example, a person might describe a friend using more communal words in one context, as explained by the dual perspective model of agency and communion (Abele & Wojciszke, 2014), but the model does not explain how a person will describe a friend, who has applied for a job, in, for example, a recommendation letter for a job. Further studies should investigate the presence of an interaction effect between perspective and social contexts.

At the practical level, interviewers' attempt to detect applicants' impression management tactic are often unsuccessful (Roulin et al., 2015), our findings suggest that recruiters could be more aware by recognizing the power of the recruitment situation in influencing individuals to present themselves not only more positively but also as more agentic. The method used here to quantify self-descriptions (i.e., LSA) could be useful in this endeavours. For example, presentation letters could actually be scanned to see if there is a overrepresentation of agency. This is important because agency does not cover all the requirements for positive job outcomes. Indeed, besides knowledge and competence, the "perfect employee" should have interpersonal attributes such as collegiality, cooperativeness, and organizational loyalty, and personal qualities such as self-discipline, conscientiousness, and honesty (Ferris et al., 2017). If this process is equally or more reliable than recruiters' subjective evaluation of the content in self-descriptions, the use of natural language processing (such as LSA) for this task might facilitate and make the whole recruitment process more accurate.

Also, from the candidates' perspective, it is useful to improve self-awareness about this tendency of presenting themselves in a biased manner (cf. Chmiel, 2015), and more specifically as more agentic and without any stain, that is, as the "ideal-employee." A self-presentation that is too positive could be interpreted as not authentic or as a cue for a deep insecurity (cf. Paulhus & Trapnell, 2008). If the recruiter makes this kind of interpretation, this could have a boomerang effect for the candidate. On the contrary, being aware of the direction of our biased self-presentation can permit the candidate to be more honest and accurate. Honesty might be appreciated during the selection process and will be a more effective strategy. In fact, research shows that employers value positively a trustworthy individual and that employee transparency, trust, and competence are strictly related (Rawlins, 2008; Shockley-Zalabak, Ellis, & Winograd, 2000).

Limitations and Suggestions for Future Studies

Although this study improves our understanding of the situational antecedents of agency and communion and enriches the theoretical framework of impression management in recruitment situations, it is not without limitations. First, like many other studies on self-presentation and impression management, the data collected are based on an imaginary or fictitious situation: the participants were not really looking for a job, and this might have had an effect in the way they described themselves. Future studies could repeat our experiment in a real life setting. That being said, the data was collected through LinkedIn, which is a website mainly used for professional networking. Hence we argue that there is a high level of ecological validity. In the present study, the participants were asked to present themselves to a general, potential employer without specifying any specific kind of company, however a more competitive business may be invoked a more ego-centric, individualistic, and agentic self-presentation than a social business. Future studies could take in consideration this aspect.

Second, our data have a cross-sectional nature. Further longitudinal studies may combine the agentic or communal self-presentations first with the recruiter decision, and then with the further job performance of the candidates. Future studies should also consider the influence of personality traits. For example, people who are more reward dependent tend to be more attentive to social cues (Cloninger, 2004) and therefore they could be expected to be oriented towards communal values or, they could use more impression management tactics. Also other important variables, such as social desirability, could be taken into consideration. Future studies should also control for stable differences in agency and communion of participants. Despite the fact that this was a randomized study, participants in the two conditions might have differed in agency and communion from the very beginning.

Furthermore, more work should be done to investigate if the preference for a more agentic or communal self-presentation varies not only accordingly to the social context (recruitment vs. friendship), but also accordingly to the level of intimacy between the ones interacting. For example, in future studies participants can be asked to describe themselves to a potential employer or to a potential new friend. We know from the literature that people present themselves in a certain way according to the familiarity with the interlocutor (Leary, Nezlek, Downs, Radford-Davenport, Martin, & McMullen., 1994; Tice et al., 1995). However, we do not have many cues on how the agentic and communal contents vary in different level of intimacy with others. Finally, we did not study the role of the different professions, which might have an effect on how people present themselves. For example, for a nurse position people might present themselves as more communal, whereas a candidate for a leadership position more agentic, and so on.

“You are who you are when nobody’s watching.”
Stephen Fry

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