Agency and communion in LinkedIn professional candidates’ profiles. Bias in recruitment process?

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Abstract
Agency and communion are two content dimensions present of person perception that play a dominant role in making decisions of social nature. Apart from general favourability towards communion when forming judgements about others, people have a tendency to assess more positively persons who reveal stereotypical content categories; men – agency, women – communion. A few research papers offer systematisation of possible biases hiring professionals may exhibit during research and selection (R&S) process and basing the R&S on information found in social media is not immune to those biases. Two experiments with $2 \times 2$ design ($N = 147$) were conducted to test whether stereotype-consistent information presented in LinkedIn profiles influences candidates’ assessment. The findings suggest hiring professionals are less biased than lay people and the direction of the observed tendencies is contrary to previously hypothesised.

Paper type: research paper

Keywords: recruitment and selection, LinkedIn, person perception, agency and communion

Introduction
Observing popular culture and gender roles portrayals present in it may lead to a conclusion that, especially in western European countries, traditional stereotypical depictions of men and women no longer exist. Neither is a woman tied to her housekeeper and mother representation nor is toughness and emotionless approach...
to dealing with life obstacles reserved only for men (see Furnham & Paltzer, 2010 for review). These simplified sketches of women and men, once pervasive in media and everyday life, pertain to masculinity- and femininity-related content dimensions of person's image explored in psychology since Bakan theoretical proposition (1966) and contemporarily enriched and reformulated into agency and communion – the most basic dimensions of person's perception (see Wojciszke & Baryła, 2006; Wojciszke, Brycz, & Borkenau, 1993). Wojciszke's theory is largely based on the realisation that impression formation process is not merely deciding whether a person is good or bad. It is asymmetrical and prone to perceiver's goals. Among many domains impression formation processes play an important role in, recruitment and selection (R&S) of job candidates stands out as especially affecting various aspects of organisational life; work atmosphere and financial effectiveness being on top of the list. As R&S professionals have been shifting their attention to online sources of information about applicants (Jobvite, 2014), the need to understand regularities in online presentations strategies of candidates and possible biases recruiters may be liable to seem evident (see Brown & Vaughn, 2011; Chiang & Suen, 2015; Davison, Marais, & Bing, 2011).

The goal of this paper is to investigate how using agency and communion content categories in LinkedIn (LI) professional profiles influences judgement of HR professionals and thus impact hiring intention.

1. Content categories in person perception

Advocates of situated social cognition perspective perceive language as the most important context of human behaviour (e.g. Mesquita, Barrett, & Smith, 2010; Mischel & Shoda, 2010; Smith & Semin, 2007). As such, language content should be considered a factor influencing the decision-making process, as the majority of human judgements do not take place in a virtual, content-free environment. Indeed, what makes many decisions difficult and arduous is compound content-filled environment. Among various attempts to systemically analyse content effects on judgement formation, one of the most widely examined is Wojciszke's model of social perception incorporating two distinct content categories: agency and communion (see Wojciszke, 2010 for review). Wojciszke proposes that most human actions are perceived from two divergent perspectives, that of agent or recipient. The agent perspective is dominated by agentic content (connected with goal completion), recipient – communal (aimed at sustaining social relationships). Perceiving others from these two different perspectives serves different needs and is intended at maximizing people's interests. Taking a perspective of an agent motivates to gain or sustain control, achieve and dominate as well as develop concrete procedures that help attaining goals. Communion, on the other hand, induces affiliation and intimacy
motivations and focuses person’s perception on abstract and declarative interpretation of reality part important from the group’s (vs. individual) standpoint. Traditionally we can find traces of the above-mentioned content categories in earlier conceptualisations of masculinity vs. femininity (Bakan, 1966) or individualism vs. collectivism dimensions (Hofstede, 1980). Stereotypically men are depicted using agentic content (e.g. effective, self-confident, ambitious), whereas women’s descriptions are filled with communal information (e.g. compassionate, helpful, understanding). Contents of gender stereotypes are on the one hand consistent with information categories anticipated by perceivers and on the other – help in building social evaluations of people. Although one may expect especially gender bias should be less eminent in professional settings, and as Marlowe, Schneider, and Nelson (1996) suggest more experienced managers should be aware of it, it would be rather surprising R&S professionals form impressions of candidates distinctive-ly different from any other people.

2. LinkedIn in recruitment and selection

According to Jobvite Social Recruiting Survey 2014 report, 94% of HR professionals use LI for recruiting purposes and 79% have hired through the LI site. Using LI is not limited to searching for candidates but also includes contacting them, keeping tabs on potential employees and pre-interview assessment. What is especially relevant to the present studies, apart from looking for information related to professional experience and hard skills, recruiters also look for data providing some insight into candidates’ fit with organisational culture (Jobvite, 2014). This may suggest the importance of more psychological characteristics of a candidate, i.e. personality traits and/or demonstrable values that may influence recruiters’ final judgement. Especially screening process has been largely facilitated by the emergence of professional social network sites (SNS) that give recruiters a possibility to learn not only about candidates’ professional experience but also about his hobbies and interests.

Although there are a few analyses stressing growing importance of LI as an important source of information for hiring professionals (e.g. Caers & Castelyns, 2010; Damnjanović, Matović, Kostić, & Okanović, 2012; Sameen & Cornelius, 2013), very few studies in peer-review journals have addressed the need to better understand candidates’ self-presentation on LI profile pages and its influence on the recruitment process. Caers and Castelyns (2010), for example, analysed Belgian sample of R&S professionals and cite a number of factors biasing selection interviews – gender, race and sexual orientation among them – factors clearly unrelated to job performance. A common denominator of these biased judgements is stereotypicality of impression formation process – researchers showed that 40.2% of their respond-
ents look for Facebook profile pictures of potential candidates to assess their extraversion and maturity (Caers & Castelyns, 2010). Black and Johnson (2012) analyse SNS-related selection practices involved in recruitment procedures. Apart from giving insight into out-of-work potentially negative habits like heavy drinking, using drugs or practicing lifestyle incongruent with organization’s values and/or culture, information found via SNS may help recruiters learn about candidate’s sexual orientation, race or denomination. Basing hiring decisions on the latter information is biased, stigmatizing in some cases and illegal in many countries. In addition to that, as Kluemper and Rosen (2009) aptly pointed, individual traits-related information shows rather low relevance with respect to future job performance. As an extreme example of misleading influence of SNS websites on candidates’ selection process Black and Johnson (2012) refer to an online blog mention of an HR professional (Gen Y’d, 2006) who found student applicants had created fake “unflattering” profiles of people perceived as competition for jobs. It may only be assumed that at least some part of the selection process is characterised by unintended preference for information consistent with a dominant group, social role or cultural norm.

Among most cited factors influencing positive perception of job candidates’ profiles on SNS authors (e.g. Black & Johnson, 2012; Hosoda, Stone-Romero, & Coats, 2003; Kluemper & Rosen, 2009; Marlowe et al., 1996) list gender (men viewed better than women), age (youth over maturity), physical attractiveness and possessing SNS profile vs. lacking it. Although it may not always be possible to assess whether an SNS profile reflects an actual person, or corresponds to her/his qualifications, HR professionals undoubtedly will be using it more frequently and systematically. It thus seems reasonable to examine whether gender role-consistent portrayal manifesting with the use of specific content categories, namely agency and communion-related, adds up to a list of biases influencing selection and screening of job applicants. To answer the above research question two experiments were conducted.

3. Experiment 1

Although now experts advise to use LI not only as a form of online resume, professional self-presentation is a key functionality offered by LI. Each LI profile is structured with sections incorporating information on various aspects of a person’s professional life. These include: summary, experience, education, skills, causes and recommendations. The summary section of LI profile gives candidate a chance to highlight certain aspects of a professional image and draw recruiter’s attention to personal characteristics that are desired from the candidate’s viewpoint. If the visibility of the section is turned on, it is also the first piece information (apart from the photo and current candidates position) that is being encountered by a viewer.
Participants. 84 people, 59 women and 25 men (age range: 19–34, \( M = 22.19, \ SD = 2.02 \)) recruited from the students and visitors of the Management and Social Communication Faculty, Jagiellonian University, participated in the study.

Materials and procedure. Two fictitious LI summaries were created. The summary sections which were created using agentic or communal content dimensions included sentences: Working in multinational environments taught me how to make quick and independent decisions as well as: The most important values that guide both my professional and private life are intelligence and efficiency in agency-related condition. The communal summary on the other hand included sentences like: Working in multinational environments taught me how to build sustainable relations with a group of fellow employees and The most important values that guide both my professional and private life are sincerity and integrity. Each of the accounts visualisations included the same information on candidate's experience i.e. her/his position (marketing manager), current and past employer (Coca-Cola HBC Poland and Unilever respectively), education (Jagiellonian University) and number of people in the network (169). In addition, in every condition a brief list of self-describing, work-related competences was included in the summary. The candidates’ accounts visualisations were created with professional photo editing software.

Four experimental conditions resulting from a 2 (male vs. female) × 2 (agency vs. communion) design were presented randomly to participants who were informed that they participated in a decision making study and asked to learn information included in a candidate’s account visualisation and answer four questions on a seven-point Likert scale. The questions pertained to the following hypotheses.

Hypotheses
1. Male candidates using agency-related (vs. communion-related) content in their LI background introduction are:
   a. assessed as more competent,
   b. assessed as more physically attractive,
   c. perceived as more likeable,
   d. intended to be hired with higher probability.
2. Female candidates using communion-related (vs. agency-related) content in their LI background introduction are:
   a. assessed as more competent,
   b. assessed as more physically attractive,
   c. perceived as more likeable,
   d. intended to be hired with higher probability.
4. Results of experiment 1

Competence ascribed to candidates did not differ across four experimental conditions ($F(3, 77) = .287, p = .834$). Neither hypothesis 1a nor 2a were confirmed. Mean competence of agentic male candidates ($M = 5.19, SD = .680$) and communal male candidates ($M = 5.33, SD = .840$) did not vary: $t(37) = -.587, p = .561$. No difference was also found with respect to means of agentic female candidates ($M = 5.38, SD = .637$) and communal female candidates ($M = 5.25, SD = .961$); $t(40) = -557, p = .581$.

Obtained results do not allow confirming hypothesis 1b. Overall, content categories used in LI summary does not influence candidates physical attractiveness ($F(3, 77) = 1.475, p = .228$). There is no difference between agentic male candidates’ physical attractiveness ($M = 4.48, SD = 1.778$) and male communal candidates’ physical attractiveness ($M = 4.56, SD = 1.464$). However, hypothesis 2b is confirmed. Communal content present in women candidates’ summary positively influences physical attractiveness ($M = 5.44, SD = 1.209$ vs. $M = 4.54, SD = 1.630$ in agentic condition); $t(40) = -1.903, p < .05$. Figure 1 illustrates the latter effect.

Although participants did not differ in perceived likeability of candidates depending on the used content categories ($F(3, 80) = 2.504, p = .065$), men perceive female candidates using communal content as more likeable ($F(3, 21) = 8.213$, $p = .002$).
$p = .001$, $\eta_p^2 = .540$), which partially supports hypothesis 2c (Figure 2). Communal women are perceived as more likeable when compared to agentic women ($M = 5.40$, $SD = .699$ and $M = 3.33$, $SD = .577$ respectively); $t(11) = -4.626, p < .001$. This difference is also significant when compared to male candidates – agentic men ($M = 3.86$, $SD = .9$), $t(15) = -3.985, p < .001$ and communal men ($M = 3.80$, $SD = 1.095$), $t(13) = 3.472, p < .005$.

Figure 2. Likeability of candidates depending on the content categories as perceived by men.

Overall, hiring intention differed across participants, ($F(3, 77) = 4.868, p < .005$, $\eta_p^2 = .159$) – communal women were assessed as potentially more hireable than other candidates (see Figure 3). Specifically, mean intention of hiring communal women ($M = 5.75$, $SD = .775$) was higher than agentic women ($M = 4.58$, $SD = 1.065$); $t(40) = -3.82$, which confirms hypothesis 2d. However, the data does not allow to confirm hypothesis 1d, mean hiring intention of agentic male candidates ($M = 5.0$, $SD = .894$) and communal male candidates ($M = 4.94$, $SD = 1.056$) did not differ; $t(37) = .178, p = .860$.

Additional analyses also revealed that female candidates are perceived as generally more likeable ($F(1, 79) = 6.613, p < .05, \eta_p^2 = .077$). This effect is presented in Figure 4.
Figure 3. *Hiring intention of candidates depending on the content categories used in LI account summary.*

Figure 4. *Perceived likeability of candidates depending on their gender.*
5. Experiment 2

Given results indicating moderate biases toward communal women of inexperienced people in experiment 1, experiment 2 aimed at assessing S&R professionals was conducted. It was expected that HR S&R professionals were generally less biased in their assessment of candidates.

**Participants.** 63 professionals (age range: 22–36, \( M = 26.63, SD = 5.55 \)) working in Polish and multinational companies’ HR departments and recruitment consultancies took part in an online experiment. Respondents who claimed no experience in Human Resources were thanked for their time and excluded from presenting subsequent parts of the procedure.

**Materials and procedure.** The procedure in experiment 2 was exactly the same as in experiment 1. Additionally, before introducing manipulation, to assess the level of individual need for closure – a construct influencing a tendency to form stereotypical judgements – each of the participants was asked to answer questions from the Need for Cognitive Closure Scale (short version) (Kossowska, Hanusz, & Trejto-wicz, 2012). The shortened 15-item version of the scale was created by Kossowska and her colleagues (2012) to address some methodological pitfalls of the previous 32-item Polish adaptation (Kossowska, 2003) of Webster and Kruglanski (1994) measurement tool. Participants are asked to answer questions on a 6-point Likert scale (ranging from: 1 – strongly disagree to: 6 – strongly agree) pertaining to the extent to which they differ in a desire to hold unambiguous and predictable views of a given situation or person. The structure of the scale is 5-dimensional and includes subscales: (1) preference for order (e.g. *I experience discomfort when someone’s actions or intentions are unclear*), (2) preference for predictability (e.g. *I avoid situations the consequences I cannot predict*), (3) intolerance for ambiguity (e.g. *I avoid unclear situations*), (4) close-mindedness (e.g. *Usually I find many possible solutions to a problem I face*) and (5) decisiveness (e.g. *I could describe myself as an undecided person*). In the present research the scale is characterised by adequate reliability (Cronbach \( \alpha = .72 \)).

**Hypotheses**

1. It was hypothesised that both male and female candidates with LI background descriptions including communion-related characteristics would be perceived as more likeable (as opposed to candidates revealing agentic characteristics).

2. Male candidates whose description includes agentic characteristics (as opposed to communion-related) are:

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3 Reversed item.
a. perceived as more likeable,
b. assessed as more competent,
c. assessed as more physically attractive,
d. intended to be hired with higher frequency.

3. Additionally it was hypothesised that participants receiving higher scores on the Need for Cognitive Closure Scale would generally favour candidates described consistently with a traditional gender role stereotype (i.e. agentic men and communal women), i.e. such candidates are:
   a. perceived as more likeable,
   b. assessed as more competent,
   c. assessed as more physically attractive,
   d. intended to be hired with higher frequency.

6. Results of experiment 2

ANOVA analysis of variance showed no significant effect of summary description content type (communal vs. agentic) on perceived likeability of candidates $F(1, 61) = .098, p = .755$. Participants also showed no preference of candidates presented in any of four experimental conditions. Perceived competence $F(3, 59) = .337, p = .799$, perceived physical attractiveness $F(3, 59) = .198, p = .897$, perceived likeability $F(3, 59) = 1.415, p = .247$ and hiring intention $F(3, 59) = .180, p = .910$ were assessed similarly.

Additional pairwise comparisons revealed that male and female participants significantly differ in assessing male candidates described with communal attributes. Male participants declare higher hiring intention of male candidates described with communion-related attributes $t(10) = –2.797, p < .05$ (as seen in Figure 5).

The first of the hypothesis related to differences in need for cognitive closure (H3a) was not confirmed. Male and female candidates revealing stereotype-consistent characteristics in the LI summaries are not perceived as more likeable ($\beta = .266, t(16) = .656, p = .521$, with $R^2 = .026, F(1, 16) = .431, p = .521$ and $\beta = .334, t(13) = .649, p = .528$, with $R^2 = .031, F(1, 13) = .421, p = .528$ respectively) by people high in need for closure. Hypothesis 3b was also disconfirmed. Agentic male candidates are not assessed as more competent ($\beta = .725, t(16) = 1.773, p = .095$, with $R^2 = .164, F(1, 16) = 3.144, p = .095$) and neither are communal women ($\beta = -.022, t(13) = -.046, p = .964$, with $R^2 = .00, F(1, 13) = .002, p = .964$). Need for Cognitive Closure (NFCC) also does not influence assessed physical attractiveness of candidates described with stereotype-consistent content (disconfirmation of hypothesis 3c). Agentic men ($\beta = -.192, t(16) = -.354, p = .728$, where $R^2 = .008, F(1, 16) = .125, p = .728$) and communal women ($\beta = .878, t(13) = 1.502, p = .157$, where $R^2 = .148, F(1, 13) = 2.255, p = .157$) physical attractiveness is not positively influenced by NFCC. Interestingly however, agentic women are assessed as more competent
the higher degree of need for cognitive closure of women participating in the experiment ($\beta = 1.588, t(16) = 3.202, p < .01$, with $R^2 = .391, F(1, 16) = 10.253, p < .01$).

**Discussion and conclusions**

The goal of the presented set of studies was to assess a possible bias in judgement formation process that may result from favouring content categories consistent with traditional male and female stereotypes. Obtained results show a moderate bias in social judgment process based on LI profile assessment but the direction of the observed tendencies is opposite to primarily hypothesised.

One could say that, in general, psychological research on agency and communion is consistent with obtained results and within this perspective they are not sur-
prising. When forming judgements about other people, we look for information pertaining to abilities of sustaining good relationships with others, communicating effectively with peers and acting in accordance with group values. Both experiment 1 and 2 show favourability of candidates revealing communion-related characteristics in their descriptions (female candidates in experiment 1 and male candidates in experiment 2). Additionally experiment 1 shows higher favourability of stereotype-consistent depictions of women with the effect attributable to male participants. If assumed, still in congruence with Wojciszke theoretical proposition (e.g. Wojciszke, 2006), that human preference for communion-related traits in person perception process is a valuable adaptation to environment and context, we can end up in conclusion that presented results show no significant bias at all. The definition on human, bounded rationality (see Gigerenzer & Todd, 1999 for a review) treats human judgement process as context dependent and adaptable to frequently repeating situations. Preference for communality is in that sense rational as it helps in judging others quickly and effectively.

Although the above argumentation should be accepted as psychologically reasonable, another contextual element should be taken into account when trying to understand data both experiments produced. The goal of participants was to assess job candidates, i.e. look for context-specific information that could predict future job behaviour. In that sense, communion should be valued higher irrespectively of a candidates’ gender. Assessing female candidates as more likeable and showing greater intention of hiring them, as in experiment 1, shows more a bias resulting from sex roles’ portrayals consistent with cultural stereotypes rather than a general psychological tendency to value communality. A different sort of a conclusion can be drawn from the data obtained in experiment 2, which shows lower asymmetry of judgements made by HR professionals and a moderate bias of male professionals towards male candidates revealing communality-related content in his self-description. It may be assumed that skills gained by experienced recruitment specialist help them unbias the process of gathering information related to potential job candidates. An explanation of bias toward communal male candidates stemming from knowledge of successful candidates’ characteristics may also be offered. Participants who took part in experiment 2 were recruited mostly from Kraków based companies’ HR departments and recruitment consultancies personnel. In terms of an ideal candidate’s profile, Kraków is a home for IT and financial outsourced services companies. Although must-have abilities of desired candidates include mainly technical programming- or finance-related competencies, the role of soft skills, has already been widely recognized by both HR professionals as well as academics (e.g. Robles, 2012). Maturity of an employee in any organizational settings may stem not only from his ability to make quick decisions and complete goals but also from warmth-related social competencies that enable building a team of dedicated co-workers and good work atmosphere. Observed preference for communal candidates may be indicative of an experienced recruitment and selection specialist
knowledge of what are the important and frequently missing attributes of job candidates. At the same time such candidates they may seem less endangering. Obtained results are to some extent consistent with recent findings of Skrzypczyk (2015). In his experiment he manipulated different types of message in printed shampoo advertisements. The study showed male participants rating advertisement significantly higher if its key message included communal content.

Concluding, data provided by both experiments is yet another example of the importance of including content variable in understanding decision making process, particularly when analysing judgement formation and person perception. HR, especially recruitment and selection, seems prone to content-related biases but experience gained during R&S practice makes professionals less biased towards traditional gender portrayals than lay people. The discussed research also suggests professionals’ biases being rather adaptive and context-sensitive than harmful with female professionals generally better at unbiased social judgements.

References


**Note about the Author**

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