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Sex Role Identity, Communication Skills, and Group Popularity

Abstract

Using two groups of undergraduate students ($N = 71$) the present paper argues about the importance of sex role identity (Bem, 1981) as a potential predictor of group popularity. The results show that participants with psychological androgine identity tend to use better their communication skills and become popular among their peers. Contrary to previous studies (e.g. Hall, 1984; Saarni, 1999) focused on gender gap in communication skills, the current study emphasis on the importance of the sex role identity (Bem, 1974, 1975) in undstanding the relation between communication skills and likeability.

Keywords: communication skills, sociometric popularity, sex role identity, psychological androgyny

Introduction

The importance of interpersonal communication skills in producing positive outcomes for individuals and groups is largely accepted and scholars agree that differences in communicational competence are associated with differences in the way social actors achieve personal and professional success.

When studying communication skills, considerable research emphasized that men and women differ in their cognitive responses to interpersonal situations (Hall, 1984; Hall & Halberstadt, 1981) and at least at common sense women are perceived as better than men in their abilities to communicate with others(see Gray, 1992). Contrary to the stereotypical representation on gender differences in communication skills, the empirical evidence suggests that differences between men and women are rather small for each of the communication aspect measured or research instrument used to assess the communication competence. "Meta-analyses of sex differences in communication behavior generally indicated that there are small differences between women and men in communication behaviors, and these differences are moderated by other variables". (Dindia, 2009, p. 4). The effect size of biological sex on different communication skills is small ($d \sim .02$). In most studies sex did not explain more that 1% of the variances in communication competence and 85% of men and women overlapped in their scores on the communication aspect measured in that particular study (Canary & Hause, 1993; Hyde, 2005).

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One interpersonal communication area in which sex differences proved to be larger is nonverbal communication. The work of Judith Hall (1984), *Nonverbal Sex Differences: Communication, Accuracy and Expressive Style*, is one of the most quoted research study in the regard of sex differences and nonverbal communication skills. Using a meta-analysis of more than 900 empirical studies, Hall found a medium effect size ($d \sim .05$) for half of the dependent variables, meaning that one third of women and men do not overlap in their scores, when nonverbal communication skills were measured. Even though some authors (e.g. Dindia & Canary, 2009) have criticized these results mainly because Hall did not report also the studies in which not gender effect was found, it seems that sex differences in nonverbal communication are larger compare with other interpersonal communication areas. The research findings provided by Hall (1984, p.142) show also that while the size effect ranges from $d \sim .02$ to $d \sim .05$ across studies, in the case of dependent variables which refer to decoding skills, the probability to find sex differences increases. In other words, there are not significant sex effects in communication skills, except for nonverbal competence and, within this research area, women score better especially in the nonverbal decoding accuracy tasks. Such statement seems in line with the research findings provided by Robert Rosenthal and collaborators (1979) using the PONS test (The Profile of Nonverbal Sensitivity), one of the first instrument to measure nonverbal decoding skills, widely used in empirical studies on adult groups: A consisted effect on gender for PONS test was found in 80% of the tested samples ($N = 2615$).

Taking all these into account, the current study investigates potential gender differences in nonverbal decoding accuracy using PONS, when psychological sex is also considered. The study argues on the importance to use the sex role identity to analyze differences in communication competence and the impact of communication skills on individuals' social success. Thus, people might differ in their abilities to decode nonverbal cues, not because they are women or men, but because they think about themselves in stereotypically feminine terms (i.e. emphatic) or in stereotypically masculine terms (i.e. tough). In addition, their communication skills could be a mediator between their psychological sex identity and social success.

In the subsequent paragraphs, first we discuss about the main findings on gender and nonverbal accuracy, then we argue about the usefulness of sex role identity theory in interpreting and generalizing these findings and in the end we will provide evidence for the interplay between nonverbal sensitivity and sex role identity on group popularity, particularity on likeability.

Gender and nonverbal communication accuracy

Studies that have analyzed gender differences in nonverbal sensitivity consistently show that women have higher abilities to encode and decode nonverbal cues (C. Saarni, 1999). In most studies, nonverbal competence is tested by asking participants to mimic or to decode facial expressions associated to the basic emotions: happy, sadness, fear, anger and surprise. One possible explanation for the higher performance of women in nonverbal communication of basic emotions is the difference in early socialization: At least in European and North American cultures, women are encouraged, beginning with the early years of their life, to express emotions and to read others' emotional feelings (Buck, Miller, & Caul, 1974; Zuckerman & Przewuzman, 1979). However, at least in case of decoding accuracy, a large body of studies (Ekman & Friesen, 1969; Izard, 1971) found that people from different cultures,

including primitive ones, men and women, could easily decode facial expressions of the basic emotions, regardless their level of emotional socialization. If we accept the idea of universal, basic emotions (as happy, sadness, fear, anger) we implicitly accept the idea that women and men do not differ in their abilities to decode basic emotions, but their might differ in their abilities to decode others' nonverbal cues associated with daily interactions.

Gender stereotypes could be a source of differences in communication skills between women and men. We expect women to be more involved in interpersonal communication, more emotional and interested in others' feelings, whereas men are expected to be more emotional controlled, rational and less interested in others' emotional experiences. When people hold these schemata about gender roles, they probably pay less attention to behavioral aspects which are counter-schematic. It is well known that mental schemata influence the way we select and process information from the environment (Cohen, 1981; DeLamater & Myers, 2011) and gender stereotypes are nothing more than mental schemas that we have about women' and men' role in the society. It might be that women and men have similar communication abilities but they react differently according to their expected gender role. In the case of decoding accuracy, gender stereotype might help women to get higher scores because they are expected to pay more attention to others' feeling and nonverbal sensitivity is included in their self-schema. One experiment conducted by Casey (1993), using participants from 6 to 12 years of age, proved that although boys and girls experienced the same emotions when a person gave them positive or negative feedback, girls were more emotional expressive than boys and they were also more able to give details about the emotions they had shown to others. Other research studies (Fuchs & Thelen, 1988; Klein & Pitman, 1993) have found that men have higher performance at controlling negative emotions (i.e. sadness, anxiety, fear) than women. Such findings suggest that gender differences in communication skills, particularly in nonverbal accuracy, are more related to sex role identity than to biological sex particularities.

Sex role identity and communication skills

Bem (1974, 1975) advocated for the sex-role identity theory in which femininity and masculinity are seen as interdependent dimensions of self-identification with stereotypically gender characteristics. From this point of view individuals, both men and women, could identify themselves more with culturally defined masculine characteristics (e.g. 'dominant') and be a masculine sex-oriented type or with culturally defined feminine characteristics (e.g. 'sensitive') and be a feminine sex-oriented type.

Additionally, Bem (1981) described the third type, neither masculine nor feminine sex-oriented but androgynous – individuals who described themselves both through feminine and masculine characteristics, representing a more flexible sex-identity type. For the current research we hypothesize that: *The differences in nonverbal decoding accuracy will be higher when we consider people's sex role identity than when we take into account their biological sex (H1)*. Because people will pay more or less attention to nonverbal cues if their self schema includes stereotypically feminine characteristics, as emotional sensitive or emphatic, we expect differences in their nonverbal decoding scores especially between masculine oriented type and feminine oriented type or androgynous type. In other words, people who include in their self role identity attributes typically defines as feminine, will also score higher on nonverbal decoding accuracy, regardless their biological sex.

Current research on the relationship between stereotype and performance emphasis that holding a particular self schema does not always help people to performed better. Stereotype threat (see Steele & Aronson, 1995) describes what happens when stereotypes are activated and people become aware of them: People might act in order to confirm or disconfirm the stereotype with direct implications on their performance. Although such process has been originally studied on negative stereotypes, showing a negative impact on individual's performance, current findings have distinguished the implications of stereotype threat also in case of positive stereotype (Seibt & Förster, 2004): When negative streotype are activated, individuals performance in creative tasks decreases, whereas in analystic tasks increases and when positive stereotypes are activated, the reverse is possible. When people are aware of the negative stereotype associated with their group (ex. "women are not so good in maths") they will act in order to disconfim it and this will results in higher concern for mistakes which might eventually lead to bad performance, especially when the task is new or requires creative approach. Contrary, when the positive stereotype is activated (ex. „women are emphatic”), people could act in order to confirm it and this will eventually increase the probability of making errors in basic, rutinier tasks. Following this argumentative line, we predict that: women with strong feminine role identity, will not necessary score higher on nonverbal decoding tasks, especially because they are overconfident in their abilities to do so. *Due to stereotype threat process decribed above, women with a strong feminine sex identity would not benefit from their highly expected nonverbal competence and their scores will be lower on nonverbal decoding skills compare with the fellow participants with androgynous role identity (H2).*

Nonverbal accuracy and likeability

Generally speaking, nonverbal decoding accuracy has been related to individual's popularity in groups, in studies conducted on children (Nowicki & Marshall, 1992; Nowicki & Mitchell, 1998) and adolescents (Nowicki & Strand, 1999). People with high nonverbal accuracy seem to be more liked by their peers (Nowicki & Marshall, 1992) and have higher rate of social participation (Custrini & Feldman, 1989; Verbeek & de Wal, 2001). Studies conducted on adults show also that the nonverbal decoding accuracy is related to relational well-being (Carton, Kessler, & Pape, 1999) and social status (Scherer & Scherer, 2011). Such findings are not surprising because people expect others to be sensitive to their feelings. Moreover, systematic research findings (see Archer, Akert, & Constanzo, 1993) show that extraverts and empathic people have higher scores at both nonverbal accuracy and likeability. Thus, the relation between nonverbal competence and popularity could be mediated through some core personality features. In addition, self identity schemata could shape the relation between decoding skills and likeability. It is well known that schemas induce expectations about how things will develop (Fiske & Taylor, 1991) and when people hold feminine or androgynous role identity, they would probably expect to be more interpersonal sensitive and, as a result, more liked by others. People are feeling uncomfortable when situations are progressing in a different way compare to their schemas (Forgas, 2001) and they would probably try to modify the reality so to confirm de expectations (Rosenthal &. Jacobson, 1966). We predict that the sex role identity mediate the relation between nonverbal accuracy skills and likeability: *People with high feminine role identity and high nonverbal competence will be more liked by*

their peers than people with low feminine role identity and high nonverbal competence (H3). We estimate that similarly pattern is valid in the case of masculine role identity: Participants having high masculine role identity and nonverbal competence are less liked than those with low nonverbal competence, but consistent to their self identity schema.

Method

Participants

Two groups of undergraduates from a Romanian public university ($N = 71$; 57 women and 14 men), age 19 to 21 ($M = 20.3$, $SD = .64$) took part in this study as a part of their weekly seminar meetings. One group was enrolled to a Nonverbal communication class, 35 students (7 men and 28 women) and another group was enrolled for a Social psychology class, 36 students (7 men and 29 women). Each group completed the tasks separately.

Measures

Sex role identification. The Bem Sex Role Inventory (BSRI, Bem, 1981) has been used to assess participants' self-description in 'masculine' or 'feminine' terms. A Romanian back-translated version of BSRI has been firstly pre-tested on a group of 40 students and then used for the current research. The instrument consists in 60 scales of bi-polar attributes stereotypically associated with masculinity and femininity. After calculated 'femininity' and 'masculinity' scores for each individual, the instrument allows also the distinction between four possible categories of sex-role identity: F (individuals with high femininity scores), M (individuals with high masculine scores), MF (psychological androgyny, both feminine and high masculine scores above the mean) and N (non-differentiated – individuals with both masculine and feminine scores below the mean).

Nonverbal sensitivity. A face and body form of Profile of Nonverbal Sensitivity (PONS, Rosenthal et al., 1979) has been used to assess participants' ability to decode emotional situations. This form contains visual items from the full PONS, 20 body-only items and 20 face-only items and consists in 40 slides, 2 seconds each, enacted by a young woman (aged 24, white, resident in US) who is filmed when expressing spontaneous emotions associated to different situations: some with low emotional intensity (e.g. 'ordering food in a restaurant') and others with high emotional intensity ('expressing jealous anger'). The face and body PONS measures nonverbal sensitivity on visual channel only, having a .63 overall reliability. The internal consistency of the PONS ranges from .86 to .92 and its median test-retest reliability is .69 (Ambady, Hallahan, & Rosenthal, 1995). The visual channel scores significantly correlate ($r = .50$, $p < .001$) with the full PONS (Rosenthal et al., 1979, p. 53). Participants have to choose the correct answer from a dual answering sheet.

Sociometric peer's rating. Social preference has been tested by a rating procedure: Participants were asked to rate each colleague on a 7-point scale from 'dislike very much' (assigned -3) to 'like very much' (assigned +3), with the midpoint of the scale (0) reflecting neutral judgments (e.g. Witvliet et al., 2010). Then likeability scores were calculated for each participant using the normalized average likeability rating. Sociometrically liked people have

been associated with prosocial behavior and, generally speaking, their likeability is explained by the way they offer gratifications to others (see Newcomb, Bukowski, & Pattee, 1993).

Procedure

First students had to answer each of the 40 items from the Face and Body PONS. Then, they were asked to describe themselves using the 60 polar attributes of BSRI. In the end, each participant received a set of rosters with the names and codes of all the other peers from the seminar group and he/she would be asked to rate each of them on likeability, using the social preference rating procedure described above. Additional information about participants' age and biologically sex were collected.

Results

Sex role identity and nonverbal decoding accuracy

We compare the PONS scores obtained by students from our sample with the normative group (Rosenthal et al., 1976). The mean scores of our student sample are similar with Rosenthal standardized group of 68 married people: face ($M = 15.51$, $SD = 1.66$); body ($M = 14.46$, $SD = 1.53$), total ($M = 29.97$, $SD = 2.35$). Only in the case of face-only items our subjects scored lower (see Table 1). Women were better than men in decoding emotional situations associated with the PONS test ($t = 2.45$, $p = .05$), particularly on body items ($t = 1.99$, $p < .05$). These results are consistent with previous studies using PONS on Romanian student samples (see Ivan & Duduciuc, 2011).

Table 1. Means and standard deviation for nonverbal decoding accuracy scores (PONS).

<i>Level of nonverbal</i>	<i>Face items</i>		<i>Body items</i>		Total PONS	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>sensitivity</i>						
Females ($N = 57$)	14.21	1.84	14.80	1.56	29.0	2.71
Males ($N = 14$)	13.90	1.56	13.12	1.31	26.40	2.42
Total ($N = 71$)	14.05	1.82	14.13	1.61	27.94	2.60

In order to test the first hypothesis, we conduct an Analysis of Variance on the mean accuracy scores of nonverbal accuracy between the three sex role identity types: masculine, feminine and androgynous (Table 2). The ANOVA revealed significant differences between the three sex identity types and nonverbal competence on all three dimensions: face, body and total PONS. Post-hoc tests showed that participants who tend to describe themselves both in feminine and masculine terms, called here 'psychological androgynous' were significantly more accurate in decoding nonverbal cues than those who could be described as 'masculine sex-oriented type'.

Table 2. Sex role identification and differences in nonverbal communication skills using PONS.

(ANOVA)					
	Sex role (BSRI)	N	M	SD	F
Total PONS	Feminine type	40	28.56	2.51	5.29 (p = .025)
	Masculine type	8	27.40	2.90	
	Androgyny type	23	29.30	2.62	
Face items	Feminine type	40	14.32	1.42	2.32 (p = .024)
	Masculine type	8	13.27	2.10	
	Androgyny type	23	14.56	1.62	
Body Items	Feminine type	40	14.78	1.51	3.26 (p = .002)
	Masculine type	8	13.63	1.96	
	Androgyny type	23	14.94	1.64	

Moreover, women who defined themselves in stereotypical feminine terms and got higher feminine scores on BSRI were also less able to decode the emotional situations of the PONS test ($r = -.27, p < .001$). These findings are intriguing especially because there is no similar work on emotion recognition and sex role identification. We found partial support for the second hypothesis: Women with a strong feminine sex identity will have lower decoding skills compare with the fellow participants having androgynous sex role identity. This particular relation was found on total PONS scores but not on the two PONS components (body-only and face-only).

Sex role identity, nonverbal decoding accuracy and likeability

In order to test the third hypothesis we compare the likeability scores for men and women participants with different sex role identities. Both women and men with androgynous role identity were more liked by their peers than women with feminine role identity and men with masculine role identity. Note that there was no woman in our sample that could be labeled as “masculine type” or man that could be labeled as “feminine type”, probably due to the reduced number of participants.

Table 3. Differences in likeability as a relation between sex and sex role identity.

Biological sex	Sex role (BEM)	N	Likeability	SD	ANOVA (F test)
Women	Feminine type	40	56.21	6.82	6.49 (p=.001)
	Androgyny type	17	60.73	6.32	
Men	Masculine type	8	61.75	8.94	9.03 (p=.000)
	Androgyny type	6	64.67	5.27	

The results show that participants with androgyny role identity have both high nonverbal decoding accuracy (on both face and body items) and high likeability scores. As we have pre-

dicted, participants from the androgyny type, regardless their biological sex, have higher nonverbal decoding accuracy and they also enjoy peers' appreciation.

In order to test the interplay between the two variables: sex role identity and nonverbal competence in predicting sociometric preference (likeability), we conducted A Two Way ANOVA, using likeability as a dependent variable, whereas the androgyny and the total PONS were factors (Table 4).

Table 4. Two way ANOVA. Test between – subjects effects.

Dependent variable: likeability ^a		
Variable	<i>F</i>	<i>p</i>
Sex role (androgyny)	5.592	.020
PONS	1.419	.184
Sex role * PONS	5.594	.004

^a R squared = .55 (Adjusted R squared = .27)

The analysis of variance show that: 1) there are not differences in likeability between participants with high nonverbal accuracy scores and those with low nonverbal sensitivity scores; 2) participants with androgynous role identity are significant more liked than those with feminine or masculine sex role identity. Moreover, the data support the third hypothesis: We found an interaction effect between the sex role identity, particularly the androgynous role identity and nonverbal competence in predicting likeability in peer groups. Having high nonverbal decoding skills and androgynous sex role identity increases chances for a participant to be liked by their peers with 27%.

Discussion

Consistent with previous studies using PONS test (Rosenthal et al., 1979) we found that women scored higher than men and this relation is particularly strong in the case of body items. Such differences in the nonverbal decoding accuracy at body cues had previously been found in studies on adult population in Romania (Ivan & Duduciuc, 2011) and abroad (Thibault, Bourgeois, & Hess, 2006). It could be that body-only items are more difficult to decode or require previous experience, and women are better at such nonverbal decoding tasks because they pay attention more to body cues in general or they are used to do so in daily interactions, because they occupy more submissive roles.

We have also found that the sex role identity could be used as an important predictor for the nonverbal decoding accuracy and studies that analyze gender differences in communication skills could benefit from using a comparison between biological and psychological sex. Androgynous type was associated with higher nonverbal decoding accuracy. We suggested as a possible explanation gender stereotypes and the way self schemas are working to transform the perceived situation: People who describe themselves both in stereotypically feminine and masculine terms (psychological androgynous), would pay more attention to nonverbal cues in general and would be also more motivated to decode others' feelings. Following the same argumentation line, we predict that when people hold strong feminine self identity, this will work against them and decrease their nonverbal competence though stereotype threat

phenomenon. And indeed we found a negative relation between feminine scores (on BSRI) and scores of the total PONS. It might be that women who are thinking about themselves in strong feminine terms would rely more on their intuition in interpreting the emotional situation. In a previous research (Ivan 2009) we used Rational Experiential Inventory (REI, Epstein, Donovan, & Denes-Raj, 1999) in relation to PONS test performance and we emphasized that participants who rely on intuition would have lower scores than those who rely on cognition. Thus, participants who are overconfident in their abilities to decode nonverbal cues, as women with strong feminine sex role identity, would eventually have lower scores on the PONS test, compare with those with androgynous role identity.

Finally we emphasized the interplay between the sex role identity and nonverbal competence to predict likeability/ sociometric popularity. Contrary to previous studies that directly linked nonverbal decoding skills with social status or likeability, we argue that such relation might be mediated through individual's sex role identity. Indeed, participants labeled as androgyny type and having high nonverbal scores were more liked by their peers than those having high nonverbal skills and different sex role types (feminine or masculine). The direct relation between nonverbal decoding accuracy and likeability was not significant, whereas the interaction effect between sex role identity and nonverbal competence significantly increased participants' chances to be liked by their peers.

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