INTRODUCTION

Social expectations and stereotypes are determined by perception according to information about social actor’s sex and sexuality. Hence, the representation of an academic teacher in the context of his/her supposed sexual orientation and gender could be considered a basic element of the course in the educational process.

The same seems to be one of the key factors which determines the expectations toward features and behavior in the course of education. Especially, when perception of teacher’s authority is acknowledged as one of the basic factors of attitudes toward teacher (Koutrouba et al., 2012).

When those preconceptions are seen as effects of culture patterns and individual experiences, awareness is raised. Therefore, it implicitly determines interpretations and behavior during educational situations. Within a scientific scope, the issue of gender and sexual orientation seem to be crucial educational factors; particularly, from the point of view of the effectiveness of the realization of social roles and the reproduction of social structure, including domination and emancipation mechanisms.

According to the theory of sexual orientation four types of sexuality can be distinguished: hetero-, homo-, bi- and asexual (Prause and Graham, 2007). Each of these are appointed mainly by biological determinants (Garcia-Falgueras and Swaab, 2010), but in addition the social environment may have additionally influence. Sexual orientation is defined as “an individual’s pattern of physical and emotional arousal toward other persons” (Frankowski, 2004, p. 1827). Therefore it can be supposed as a significant factor of social behavior and social perception.
In order to explore interpersonal power and resistance many theories and models may be considered. The idea of power distance developed by Hofstede (2010) is also the bases of the power model developed by Raven (1998; 2008); embodied theories of cognition; the spatial representation of power (Schubert, 2005) and finally Brehm’s theory of psychological reactance (Brehm and Brehm, 1981) are sociological models of contestation or pedagogical theories inspired by the concepts of critical resistance (e.g. Giroux, 1983) and form an excellent basis for exploring the problem. The theories and concepts are extremely helpful to describe and regulate power relations in education.

As social behaviors depend on the perception of social objects and situations during analysis, it is necessary to take into account issues of social cognition. In particular, the concepts of cognitive schema and implicit theories which describe the functioning of human knowledge.

Implicit theory as a term describes an individual or social belief about the occurrence of some characteristics or properties associated with those things or phenomena. Therefore, it is very useful to explain the connection between social power and features of social actors (eg. perceived sexual orientation and gender). Those theories are used in daily social life and determine which properties should coexist and both the reasoning and the extent of their existence (Gelman and Noles, 2011).

Implicit statements can determine formulation of courts and assessments. On the basis of one feature another features of person are replenished. The preconceptions determine the implementation of the roles attributed to participants in the education process. As mentioned above, they are implicated by cultural conditions and individual experiences hence are usually beyond the reach of critical evaluation. Therefore, in a hidden and unconscious way they define direction of interpretation and behavior in educational situations. They can function as elements of the reproduction of social structures, mechanisms, and dominance and thus they limit the chances of emancipation of people participating in education.

Social power is defined as the resources one person has, in the scope of influence, on other people, to determine their choices, behaviors and access to goods without being subject to the same extent as these people
(Raven et al., 1998; Raven, 2008). From that perspective the relation between teacher and student looks like an asymmetric configuration with reciprocal implications (Frieze and Boneva, 2001). The teacher controls the scope of students’ achievements and access to some things desired by students.

According to the model of power proposed by French and Raven (Raven et al, 1998; Raven, 2008) different types of social power can be distinguished. The authors have defined five types determined by different sources which exert social influence: coercion, reward, legitimate, referent, expert power. In subsequent works (Raven, 1992) the sixth type was elaborated: informational.

It was subsequently noted that some of the bases have personal and impersonal aspects (e.g. Raven et al., 1998).

The first power base, coercion is established on the grounds of punishment and discipline. The second, reward power on different forms of rewards and privileges. The third, legitimate power relies on referring to standards, laws and social norms. Referent power is based on identification with the agent and the bestowal of personal popularity. Expert power is expressed as being associated with knowledge where students perceive that the teacher has special knowledge or expertise; and the teacher can use this to maintain control. The last base, informational is connected with direct delivery of logical arguments and persuasiveness. The bases of power are determined by the different motivations of the ‘influencer’.

The manifestation of power cannot to be eliminated from social situations, especially in the case of the asymmetric relations between educator and educated. Similarly, the presence of sexuality detection in human relations is a base in the process of adjusting decisions and behaviors toward social actors. Based on the mechanism of social attitudes toward gender, and sexuality and the meaning which is assigned to social roles we can anticipate the relation between the perception of power and sexuality in an educational context. Hence these key questions which could be raised:

(1) Is the power attributed to teachers differentiated by assigned gender and sexual orientation to them?
(2) Is the power attributed to teachers dependent on the gender and sexual orientation of the observers? To answer these questions an investigation was prepared.

**METHOD**

**Participants**
The sample consisted of 215 undergraduate and graduate polish students surveyed online. There were 174 females and 41 males. The mean age was 24 years (standard deviation = 5.67, median = 22.5). Declaration in the range of sexual orientation was as follows: heterosexual (n = 135), homosexual (n = 48), bisexual (n = 30), asexual (n = 2).

**Measures**
The data was gathered by Bases of Teacher’s Power Linear Scale. The scale measures 6 types of power in relation to the 6 types of teacher. The types of power were distinguished according to French and Raven's model. Types of teacher were set by the configuration of gender and sexual orientation (male (M), female (F); heterosexual (het), homosexual (hom), bisexual (bi)). As the aim of investigation was exploring whether the perception of some teacher’s behavior converges with convictions about her/his sexual orientation, the asexual orientation was excluded due to lack of consolidation of this category in the public awareness. In the instructions, respondents were asked to imagine the types of teachers defined by gender and sexual orientation. Next they read the question: How do academic teachers influence undergraduates? In fact, they were asked about using bases of power. This was the same in the case of all types of teacher. Generally the questionnaire had 36 items (6 types of power x 6 types of teacher). Participants responded to the questions by placing their answer on a sliding scale where their individual feeling was best reflected. Intensity of feeling in relation to influence increased from left to right, with the left end described and the minimum and the right end described as the maximum. The length of lines was 501 pixels. The gradation of the slider was 2 pixels. Each line was connected with a separate description of behaviors that met the criteria of the concrete bases of power.
The reliability of all scales measured by Cronbach’s α was satisfactory: coercive, α = 0.86; reward, α = 0.88; legitimate, α = 0.80; referent, α = 0.76; expert, α = 0.80; informational, α = 0.89. Among the observed demographics features were gender, sexual orientation and status (undergraduate, graduate) of respondents.

**Procedure**
Research was promoted on the website of some polish universities and on some social networking sites.

Participation was voluntary and without time limitation. The general time of reading and filling out the questionnaire was approximately 10 minutes.

Analysis was conducted by using ANOVA Repeated Measures. There were three independent variables (type of teacher, respondent’s gender, respondent’s sexual orientation) and one dependent variable (type of power). Analyses were conducted in the scheme: repeated measures of the power type by the type of teacher with controlling respondent’s gender and sexual orientation.

**Results**
Summary of the research results are in Table 1. The analysis (see Table 2) showed differences between types of teacher in the scope of power attribution to them. Only the informational power bases are similarly attributed to teacher, independent of his/her supposed sexual orientation. On the other hand, the highest differentiation is visible in the cases of coercive and legitimate power. The biggest effect size (eta²) is also in the cases of power, but the effect is still small.

The most evident result occurred with regard to the heterosexual (M_{het}) and homosexual male (M_{hom}) as a type of teacher. The heterosexual male teacher received the highest level of coercive and legitimate power and the lowest level of reward power. The homosexual male teacher acquired the highest level of referent power and close to the other types of high reward power and low coercive power. However both male types demonstrated similarly high levels of expert power. The results are surprising. What is especially visible is the profiles of power attribution to
the type of teacher. The heterosexual male teacher is distinctly different from the others (Figure 1).

Additionally it is interesting to note the effect that the intensity of coercive power in the case of homosexual teachers ($F_{\text{hom}}, M_{\text{hom}}$), is lower than bisexual teachers ($F_{\text{bi}}, M_{\text{bi}}$). Furthermore, the homosexual teacher, particularly women, are perceived as less empowered in relation to legitimate power than teachers with another sexual orientation.

There were other effects noted in regards to the importance of the observer’s sex and observer’s sexual orientation. There was no interaction between the variables and in conclusion the gender generally did not affect the findings. Nevertheless, the results are complex and extensive, hence it is difficult to present them exhaustively. Because of this, more general information will be presented in this study. Because of the insufficient size of the subgroup the schema of division which was used encompassed two categories: heterosexual and non-heterosexual. The second were composed of the all other categories except heterosexual orientation.

As Table 3 shows, sexual orientation differentiates the power attributed to the teacher in the field of reward, legitimate and informational base. Heterosexual observers attribute reward power in a more balanced way (Figure 2 (a)). There was no significant differences between the types of teacher. While in the group with non-heterosexual orientations the attribution of legitimate power to heterosexual male teachers ($M_{\text{het}}$) was significantly less than other types. Additionally this was significantly less than assigning the power to all types of teacher in the heterosexual observers group.

A similar situation occurred in the case of legitimate power (Figure 2 (b)). In the group of non-heterosexual orientations homosexual female teachers ($F_{\text{hom}}$) are associated less with this type of power than heterosexual teachers and heterosexual male teachers ($M_{\text{het}}$) more significantly with legitimate power than another teacher types. Whilst the group of heterosexual observers attributed less this kind of power to the homosexual female teacher, this was only in comparison to the heterosexual male teachers. The status of all female teacher types was the same. Difference between male teachers ($M_{\text{het}}, M_{\text{hom}}, M_{\text{bi}}$) does not exist in this
group. Generally, differences between high levels of legitimate power attributed to heterosexual male teachers and less the power to others types of teacher, is smaller among heterosexual than non-heterosexual observers.

Regarding informational power, the differences between types of teacher were not evident in the heterosexual observer’s group (Figure 2 (c)). While the non-heterosexual group perceives the homosexual male teacher as possessing a higher level of the power type (maybe by association it with more expanded social network) than other teacher types.

**Discussion**
Depending on the type of teacher (his/her gender and sexual orientation) the size of powers are different, except for in relation to the informational power base. Generally size of effects is small but the assumption about the differences was confirmed. The most pronounced result is the predominance of heterosexual male teachers on the others types of teachers in terms of coercive and legitimate power. It seems strongly connected with cultural expectation and associate masculinity with dominance, hardness and restrictive exercise of power. Other types of male teachers may be perceived as a more feminine, hence more connected with those features as softness, gentleness, docility and weakness. It can be confirmed by the lack of differences in reward power between all of types of teacher, except heterosexual men which was attributed significantly with the fewest amount of reward power. The type of power could be associated with deferential behavior. In this context the highest level of referent power attributed to homosexual male teacher is surprising. It cannot be explained by gender and sexual orientation of the participants. This was not evident in the findings. Simultaneously, homosexual male teachers are perceived as possessing the least resources to have legitimate power but the same level of expert power as heterosexual male teacher. The former can be explained by association of legitimate power with social acknowledgement and confirmation for sexual correctness. Also social identification of homosexual men demonstrates an antithesis of social and cultural legitimacy of masculinity. The latter is evident by association of homosexuality with readiness to transgression and intel-
lectual resources. Paradoxically, high amounts of the expert power attributed to heterosexual males may be conditioned by culturally pairing professionalism with the concept of masculinity. Nonetheless, in the case of homosexual male teacher the results are still surprising.

When it comes to role of the observer's gender and sexual orientation the answer to the main research question is not definitely affirmative. Particular attention is attracted by the greater diversity of the power profile on the side of non-heterosexual persons. This seems to be more sensitive in the area of social perception of gender and sexuality. Conversely this may elucidate the lack of diversity in the attribution of power to different types of teacher by heterosexuals. We can risk the notion that non-heterosexuals are aware that in their surroundings heterosexual and homosexual teachers meet a typical view of sexuality expressed within power domains. The reverse notion is that their social perceptions in the sexual domain are more stereotypical.

The results for the observer’s gender in the research are quite unexpected. The lack of the gender effect may a be result of sampling, including insufficient numbers of men. Of course, the level of education may be the element which reduced the gender effect in the research sample.

The crucial cue is these results refer to a polish sample. It is necessary to consider the current social attitude around gender and sexuality. The cultural and historical conditions need to be taken into consideration and the occurrence and popularity of social movements which support or resist the problems of gender and sexuality. These are all significant factors which must be taken account during analysis and through the explanation of the processes and mechanisms of power attribution in educational domains. Caution should therefore be exercised in the generalization of the results presented here. The sample may be the key bias factor. The research is in the exploratory phase, and the phenomenon requires further in-depth research.
LITERATURE


**Table 1. Attribution of the types power to types of teacher. Mean scale scores and standard deviations between brackets**

<table>
<thead>
<tr>
<th>Base of power</th>
<th>heterosexual woman</th>
<th>heterosexual man</th>
<th>homosexual woman</th>
<th>homosexual man</th>
<th>bisexual woman</th>
<th>bisexual man</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coercive</td>
<td>81.09 (63.24)</td>
<td>100.30 (69.73)</td>
<td>73.45 (60.05)</td>
<td>74.63 (62.88)</td>
<td>88.10 (60.95)</td>
<td>88.90 (61.37)</td>
</tr>
<tr>
<td>Reward</td>
<td>133.97 (59.76)</td>
<td>115.52 (62.58)</td>
<td>139.14 (63.51)</td>
<td>143.20 (65.77)</td>
<td>132.65 (61.33)</td>
<td>135.06 (60.01)</td>
</tr>
<tr>
<td>Legitimate</td>
<td>127.66 (69.60)</td>
<td>149.49 (68.22)</td>
<td>107.14 (63.54)</td>
<td>118.72 (69.58)</td>
<td>123.41 (63.76)</td>
<td>129.93 (61.64)</td>
</tr>
<tr>
<td>Referent</td>
<td>142.18 (59.24)</td>
<td>143.73 (58.56)</td>
<td>142.08 (61.29)</td>
<td>157.93 (61.09)</td>
<td>144.41 (55.46)</td>
<td>152.19 (56.71)</td>
</tr>
<tr>
<td>Expert</td>
<td>166.13 (59.00)</td>
<td>169.07 (60.44)</td>
<td>162.73 (56.51)</td>
<td>169.99 (57.14)</td>
<td>155.91 (57.52)</td>
<td>159.51 (55.91)</td>
</tr>
<tr>
<td>Informational</td>
<td>92.19 (75.29)</td>
<td>93.47 (72.63)</td>
<td>93.99 (73.57)</td>
<td>99.14 (77.06)</td>
<td>93.44 (71.82)</td>
<td>93.33 (73.91)</td>
</tr>
</tbody>
</table>

**Table 2. Summary of ANOVA Repeated Measures for attribution of power to types of teacher**

<table>
<thead>
<tr>
<th>Base of power</th>
<th>Lambda Wilk's (T Hotelling’s)</th>
<th>$F_{(5,1055)}$</th>
<th>$eta^2$</th>
<th>post hoc (HSD Tukey’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coercive</td>
<td>0.79**** (0.26****)</td>
<td>12.56****</td>
<td>0.06</td>
<td>$M_{het} &gt; F_{het}$, $F_{hom}$, $M_{hom}$, $F_{bi}$, $F_{bi}$, $M_{bi}$</td>
</tr>
<tr>
<td>Reward</td>
<td>0.82**** (0.22****)</td>
<td>11.83****</td>
<td>0.05</td>
<td>$M_{het} &lt; F_{het}$, $F_{hom}$, $M_{hom}$, $F_{bi}$, $F_{bi}$, $M_{bi}$</td>
</tr>
<tr>
<td>Legitimate</td>
<td>0.78**** (0.29****)</td>
<td>15.20****</td>
<td>0.07</td>
<td>$M_{het} &gt; F_{het}$, $F_{hom}$, $M_{hom}$, $F_{bi}$, $F_{bi}$, $M_{bi}$, $F_{hom} &lt; F_{het}$, $M_{het}$, $M_{hom}$, $F_{bi}$, $F_{bi}$, $M_{bi}$</td>
</tr>
<tr>
<td>Referent</td>
<td>0.89**** (0.12****)</td>
<td>4.59****</td>
<td>0.02</td>
<td>$M_{het} &gt; F_{het}$, $M_{het}$, $F_{hom}$, $F_{bi}$, $F_{bi}$, $M_{bi}$</td>
</tr>
<tr>
<td>Expert</td>
<td>0.91*** (0.10*** )</td>
<td>3.64***</td>
<td>0.02</td>
<td>$F_{bi} &lt; M_{het}$, $M_{hom}$</td>
</tr>
<tr>
<td>Informational</td>
<td>0.96 (0.04)</td>
<td>1.31</td>
<td>0.01</td>
<td>-</td>
</tr>
</tbody>
</table>

****p<.001; ***p<.005; **p<.01; *p<.05

F – females, M – males, het – heterosexual, hom – homosexual, bi – bisexual
Table 3. Summary of ANOVA Repeated Measures for attribution of power to teachers as effect of observer’s sexual orientation (heterosexual, non-heterosexual)

<table>
<thead>
<tr>
<th>Base of power</th>
<th>Lambda Wilk’s ((\lambda_{W}))</th>
<th>(F_{(5,1055)})</th>
<th>(\eta^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coercive</td>
<td>0.96 (0.04)</td>
<td>2.21</td>
<td>.01</td>
</tr>
<tr>
<td>Reward</td>
<td>0.91** (0.09**)</td>
<td>4.56***</td>
<td>.02</td>
</tr>
<tr>
<td>Legitimate</td>
<td>0.94* (0.06*)</td>
<td>4.00***</td>
<td>.02</td>
</tr>
<tr>
<td>Referent</td>
<td>0.98 (0.01)</td>
<td>0.54</td>
<td>.002</td>
</tr>
<tr>
<td>Expert</td>
<td>0.97 (0.03)</td>
<td>1.34</td>
<td>.006</td>
</tr>
<tr>
<td>Informational</td>
<td>0.94* (0.06*)</td>
<td>3.42***</td>
<td>.02</td>
</tr>
</tbody>
</table>

***p<.001; **p<.005; *p<.01; p<.05

Figure 1. Profiles of power attribution to types of teacher
Figure 2. Profiles of power attribution to types of teacher. Reward power (a), legitimate power (b), informational power (c)
SUMMARY

The aim of the paper is the attribution of power in relation to academic teachers depending on their gender and sexual orientation. This paper discusses the findings from an investigation designed to explore this phenomenon. The relationships between acknowledged power and types of teacher were measured by a questionnaire specifically designed for the investigation using the ‘Bases of Teacher’s Power Linear Scale’. The types of power were distinguished suitably by Raven’s model, and the types of teacher, according to gender (women, men) and sexual orientation (hetero-, bi-, homosexual). The sample encompassed 215 Polish undergraduates and graduates, recruited via the internet. Results show that depending on the expected sexual orientation of the teacher, the assigned types of power to him/her were different. The gender and sexual orientation of observers were also controlled. Ultimately, those results allowed the profiles of power to be determined. The ones discussed here are the most frequently occurring results and the unexpected results.

Key words: teachers, power, gender, sexual orientation.
PŁEĆ, ORIENTACJA SEKSUALNA ORAZ PRZYPISYWANIE WŁADZY NAUCZYCIELOWI AKADEMICKIEMU PRZEZ STUDENTÓW

STRESZCZENIE

Artykuł poświęcony jest zagadnieniu przypisywania władzy nauczycielowi aca-
demickiemu w zależności od jego płci oraz spostrzeganej orientacji seksualnej. W artykule zaprezentowane zostały wyniki badania zaprojektowanego w celu przybliżenia tego zagadnienia. Relacje pomiędzy przyznawaną władzą a typem nauczyciela mierzono przy pomocy zaprojektowanej na potrzeby badania Skali Podstaw Władzy Nauczyciela. Rodzaje władzy zostały wyróżnione w oparciu o model podstaw władzy Bertrama Ravena, a ich zróżnicowanie obserwowano biorąc pod uwagę typ nauczyciela wyznaczany przez płeć (kobieta, mężczy-
zna) oraz orientację seksualną (hetero-, homo-, biseksulana). Próba badawcza obejmowała 215 polskich studentów i absolwentów studiów wyższych rekrutowanych przez internet. Rezultaty pokazały, że w zależności od oczekiważanej orientacji seksualnej nauczyciela inne były przypisywane mu/jej rodzaje wła-
dzy. Kontrolowano również płeć i orientację seksualną uczestniczących w ba-
daniu osób. Ostatecznie uzyskane wyniki pozwoliły określić profile władzy przypisywanej nauczycielowi. Uzyskane rezultaty zostały poddane dyskusji.

Słowa kluczowe: nauczyciele, władza, płeć, orientacja seksualna.