Performance anxiety related to sexual functioning – the role of sexual identity and minority stress.

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Abstract

Aim of the study: The study aimed to inquire if sexual identity was related to performance anxiety, and if proximal minority stress processes contributed to performance anxiety in gay and bisexual men.

Subject or material and methods: The present study was based on a database obtained from a larger Internet-based research project on the sexuality of Polish men of different sexual identities. The present sample consisted of 3,495 participants, i.e., 1,096 straight, 1,701 gay, and 698 bisexual men. The main outcome measure was performance anxiety which was measured using a single-item question: During the last 12 months has there ever been a period of several months when you felt anxious about your ability to perform sexually? Explanatory variables were demographics, relational and sex life characteristics – measured using a self-designed questionnaire, and minority stress processes – measured using the Sexual Minority Stress Scale.

Results: Gay and bisexual identities were related to performance anxiety in bivariate analyses however they lost their significance when other factors were controlled for. Relational status was identified as responsible for this change. Internalised homophobia, and expectations of rejection contributed to performance anxiety in minority men.

Discussion: A subset of gay and bisexual men, i.e., men who do not stay in committed relationships, may be particularly prone for developing performance anxiety, which is one of major factors contributing to sexual dysfunctions. Minority stress processes should be included in planning clinical interventions targeting sexual problems in theses populations.

Conclusions: Gay and bisexual men's sexual problems need to be addressed in an individualised manner, with inclusion of minority specific processes.

sexual identity, gay, bisexual men, performance anxiety, minority stress

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INTRODUCTION

Performance anxiety is the fear of future sexual failure associated with sexual activity. It is a common maintaining contribution for almost all male and female sexual dysfunctions. Many theorists considered performance anxiety to be the central causal factor interfering with sexual arousal, since it serves as a distraction from sen-

sual feeling, undermines sexual self-confidence and leads to sexual avoidance. It is one of the major inhibitory factors in psychogenic sexual dysfunctions, especially in men [1].

Gay sexual milieu was described as particularly challenging in terms of valuing sexual performance, potency, and endurance, making gay men exposed to evaluation by, comparison and competition with other men and thus particularly prone to performance anxiety [2, 3, 4].

Some studies [5], but not all [6] indeed showed that it is more prevalent or pronounced in gay men. Bisexual men particularly seem not to have been studied in this regard at all.

Minority men are also exposed to minority stress, which was described as the unique, chronic, and socially based additional burden experienced by those with socially stigmatised identities. Distal (e.g., prejudice events) and proximal (i.e., internalised homophobia, expectation of rejection, concealment) minority stress processes were described [7]. Internalised homophobia is considered to be particularly vicious in terms of its negative impact on sexual function and satisfaction as it interferes from the within an individual's psyche with sexual and mental wellbeing [8, 9, 10].

As minority stress is an additional burden experienced by stigmatised groups, it is possible that it will be a contributing factor to sexual difficulties, performance anxiety included. Studied exploring this latter possibility seem not to have been conducted by now.

AIM

We aimed to answer two research questions to fill existing gaps:

1.   Is sexual identity related to performance anxiety?
2.   Do proximal minority stress processes contribute to performance anxiety in gay and bisexual men?

MATERIAL AND METHODS

Procedure and study design

The present analysis drew on a database obtained from a larger research project on the sexuality of Polish men of different sexual identities (N = 3,697), which methodology has been fully described in our previous publications [e.g., 8]. This was an online cross-sectional study. It was carried out between June and September 2016 on a convenience sample of men. The research project was approved by the Bioethical Committee of the Jagiellonian University[1] and meets the requirements of the Declaration of Helsinki. Inclusion criteria of this parent study were: 1) minimum age of 18 years; 2) male gender; 3) informed consent to take part in the study, expressed by clicking a button to confirm that the participant had read the provided information on the study; 3) past and/or current sexual contacts. Participants were recruited through announcements placed on health – and lifestyle-related websites, and websites directed at the non-heterosexual audience.

Explanatory variables measurement

Data was collected using a self-designed questionnaire developed for the parent study, which consisted of single – and multiple-choice items, as well as open – and closed-ended questions. It was subject to assessment by a group of 6 competent judges (2 gay men, 2 heterosexual men, 1 sexologist, and 1 methodologist), whose feedback was used in the development of the final version of the survey. The variables collected for the present analysis were: demographics (age, education, place of residence, financial situation), and relational and sex life characteristics (relational status, number of sexual partners in the last 12 months). Additionally, minority stress proximal processes – internalised homophobia (IH), expectations of rejection (ExR), and concealment (Clm), were measured using the Sexual Minority Stress Scale (SMSS). The scale is based on Meyer's minority stress model [7]. The scale consists of the Likert-type subscales, which eval-

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uate individual minority processes. The scale has been translated and adapted for use in Polish language [11]. The alpha reliability coefficient (Cronbach' alpha) for the individual subscales of the Polish version used in this study was IH = .86, ExR = .88, Clm = .83.

DEPENDANT VARIABLE MEASUREMENT

The main outcome measure was performance anxiety which was measured using a single-item question based on the National Health and Social Life Survey (NHSLS) [12]: During the last 12 months has there ever been a period of several months when you felt anxious about your ability to perform sexually?

PARTICIPANTS

202 respondents (5.5%) from the parent study were excluded from the present analysis on the grounds of reporting incomplete data. The final sample consisted of 3,495 participants, including 1,096 straight, 1,701 gay, and 698 bisexual men.

Straight men in our sample were statistically slightly younger than both gay and bisexual men, and bisexual men were the oldest group. Straight, and gay men more often resided in bigger cities (> 500,000), and bisexual men in smaller towns (< 50,000). They less often experienced financial hardship than both gay and bisexual men. Bisexual men less often than straight and gay men had higher education level. Straight men more often than gay and bisexual men stayed in committed relationships.

The demographic characteristics of the study sample are summarised in the Table 1 and Table 2.

Table 1. Categorial variables.

Variables	Straight (n=1096)		Gay (n=1701)		Bi (n=698)		Total (n=3495)		Effect Size
	%	n	%	n	%	n	%	n	
Education									chi2(4) = 46.50. p < .001. V = .08
Vocational or lower	4.0	44	8.5	144	10.4	73	7.5	261	
Secondary	36.3	397	37.1	631	42.6	298	38.0	1 326	
Higher	59.7	655	54.4	926	46.9	327	54.6	1 908	
Place of residence									chi2(4) = 51.69. p < .001. V = .09
< 50k	28.1	308	26.8	455	38.2	267	29.5	1 030	
50.1 – 500k	27.9	305	32.6	554	32.1	224	31.0	1 083	
> 500k	44.0	482	40.7	692	29.8	207	39.5	1 381	
Relationship status									chi2(2) = 247.99. p < .001. V = .27
Single	28.9	316	57.7	981	57.1	399	48.5	1 696	
In relationship	71.1	780	42.3	720	42.9	299	51.5	1 799	
Financial problems									chi2(2) = 19.39. p < .001. V = .07
Without problems	64.4	706	56.6	963	56.4	393	59.0	2 062	
Some problems	35.6	390	43.4	738	43.6	305	41.0	1 433	

Note: Effect size = chi2 test with Crammer's V correlation.

Table 2. Continuous variables.

Variable	Straight			Gay			Bi			Total			Effect Size
	median	iqr	min – max	median	iqr	min – max	median	iqr	min – max	median	iqr	min – max	
Age	26	9	18 – 73	27	11	18 – 72	28	15	18 – 71	27	12	18 – 73	$F_{(2, 3492)} = 15.06$, $p < .001$, $eta^2 = 0.01$
No of sex part (last 12 m)	1	1	0 – 50	2	5	0 – 300	2	4	0 – 150	2	3	0 – 300	$F_{(2, 3492)} = 55.66$, $p < .001$, $eta^2 = 0.03$
IH	-	-	-	13	8	9 – 36	19	11	9 – 36	14	9	9 – 36	$F_{(2, 2397)} = 274.90$, $p < .001$, $eta^2 = 0.10$
EXR	-	-	-	13	6	6 – 24	12	8	6 – 24	13	6	6 – 24	$F_{(2, 2397)} = 2.01$, $p < .156$, $eta^2 < 0.01$
CLM	-	-	-	14	9	6 – 30	18	8	6 – 30	16	9	6 – 30	$F_{(2, 2397)} = 99.26$, $p < .001$, $eta^2 = 0.04$

Note: No of sex part (last 12 m) = number of sexual partners in the last 12 months; IH: internalised homophobia; EXR: expectations of rejection; CLM: concealment, Effect size = one-way ANOVA with eta2 correlation

STATISTICAL ANALYSES

The differences between participants of the three sexual identities in terms of preselected variables, were examined with a chi-square test and Crammer's V as an effect size measure for categorical variables, and ANOVA with eta2 as an effect size for continuous variables. The relation between the dependent variable (0 = no performance anxiety, 1 = performance anxiety) was tested with logistic regression model ("logit" command in Stata 17.0 software). A bivariate analysis (a series of logistic regression models with a single predictor) with a set of preselected variables assumed to influence performance anxiety was conducted. For the sexual minority men subsample, proximal minority stress processes measures (internalised homophobia, expectations of rejection, and identity concealment) were tested. Finally, a multivariate logistic regression model was created, with significant variables as confounders. To test the signifi-

cance of the minority stress processes, a separate multivariate logistic regression model was constructed for the sexual minority men subsample. The overall model fit for both the models was measured using the McFadden pseudo-R2 statistic and Hosmer-Lemeshow test.

Results

Bivariate analyses

In the bivariate analyses both gay (OR = 1.35) and bisexual (OR = 1.42) identities positively predicted the experience of performance anxiety. Other positive predictor were financial difficulties and all the investigated proximal minority stress processes (i.e., internalised homophobia, expectation of rejection, concealment). Age, higher education, and being in a relationship negatively predicted performance anxiety. The full results of the analyses were presented in the Table 3.

Table 3. Performance anxiety in bivariate models

	OR	Std. Err.	z	P value	95% CI	
ALL MEN						
Sexual identity (ref = straight)						
Gay	1.35	0.109	3.78	< .001	1.16	1.59
Bi	1.42	0.140	3.54	< .001	1.17	1.72
Age	0.99	0.004	-3.22	.001	0.98	1.00
Education (ref = vocational or lower)						
Secondary	0.80	0.105	-1.67	.094	0.62	1.04
Higher	0.63	0.081	-3.62	< .001	0.49	0.81
Place of residence (ref = < 50k)						
50.1 – 500k	0.89	0.078	-1.38	.167	0.75	1.05
> 500k	0.95	0.079	-0.60	.549	0.81	1.12
In relationship (ref = single)	0.47	0.033	-10.63	< .001	0.41	0.54
No of sex part (last 12 m)	1.00	0.003	-1.20	.232	0.99	1.00
Financial problems (ref = without problems)	1.46	0.102	5.49	< .001	1.28	1.68
GAY AND BISEXUAL MEN						
Sexual identity (ref = gay)						
Bi	1.05	0.093	0.50	.614	0.88	1.25
Minority stress						
IH	1.06	0.007	9.37	< .001	1.05	1.07
EXR	1.05	0.010	4.91	< .001	1.03	1.07
CLM	1.05	0.007	7.17	< .001	1.04	1.06

IH: internalised homophobia; EXR: expectations of rejection; CLM: concealment

Univariable analyses

The results for all men (Table 4) showed loss of statistical significance for gay and bisexual identities. The factor responsible for this change, which was identified in stepwise analysis was relational status (Table 5). Age, higher education, financial problems, being in a relationship, and financial problems maintained their predictive value and the direction of the association with performance anxiety. The analysis conducted in minority men only (Table 6) revealed no difference between gay and bisexual identities in this respect, with both being statistically insignificant. Internalised homophobia (OR = 1.04), and expectation of rejection (OR = 1.02) both positively predicted performance anxiety, and again, higher education, being in relationship, and financial problems maintained their significance and the direction of association with the outcome variable.

Table 4. Performance anxiety in multivariable analysis for the sample of all men.

	OR	Std. Err.	z	P value	95% CI	
Sexual identity (ref = straight)						
Gay	1.07	0.093	0.82	.414	0.91	1.27
Bi	1.16	0.123	1.42	.156	0.94	1.43
Age	0.99	0.004	-2.65	.008	0.98	1.00
Education (ref = vocational or lower)						
Secondary	0.82	0.115	-1.38	.167	0.63	1.08
Higher	0.76	0.105	-1.98	.047	0.58	1.00
In relationship (ref = single)	0.51	0.038	-9.00	< .001	0.44	0.59
Financial problems (ref = without problems)	1.37	0.100	4.32	< .001	1.19	1.58
constant	1.14	0.214	0.72	.472	0.79	1.65

Note: R2McFadden = .03, Model χ2 = 160.25, P < .001; H-L χ2 (8) 6.30, P = .614.

Table 5. Changes in the significance of the sexual identity variable with adding confounders to the model

	step 1						step 2						step 3						step 4						step 5					
	OR	Std. Err.	z	P value	95% CI		OR.	Std. Err.	z	P value	95% CI		OR	Std. Err.	z	P value	95% CI		OR	Std. Err.	z	P value	95% CI		OR.	Std. Err.	z	P value	95% CI	
Sex identity (ref = straight)																														
Gay	1.33	0.109	3.48	<.001	1.13	1.56	1.35	0.111	3.7	<.001	1.15	1.59	1.32	0.109	3.39	.001	1.13	1.56	1.29	0.107	3.11	.002	1.10	1.52	1.07	0.092	0.77	.442	0.90	1.27
Bi	1.43	0.144	3.55	<.001	1.17	1.74	1.49	0.151	3.93	<.001	1.22	1.82	1.43	0.146	3.46	.001	1.17	1.74	1.4	0.144	3.26	.001	1.14	1.71	1.16	0.123	1.42	.156	0.94	1.43
Age							0.98	0.004	-4.23	<.001	0.97	0.99	0.99	0.004	-3.38	.001	0.98	0.99	0.99	0.004	-3.38	.001	0.98	0.99	0.99	0.004	-2.56	.010	0.98	1.00
Education (ref = vocational or lower)																														
Secondary													0.77	0.105	-1.95	.051	0.58	1.00	0.79	0.109	-1.71	.087	0.60	1.04	0.83	0.115	-1.37	.17	0.63	1.09
Higher													0.65	0.088	-3.17	.002	0.50	0.85	0.70	0.095	-2.65	.008	0.53	0.91	0.76	0.105	-1.99	.047	0.58	1.00
Financial problems (ref = without problems)																			1.42	0.102	4.81	<.001	1.23	1.63	1.37	0.1	4.3	<.001	1.19	1.58
In relationship (ref = single)																									0.51	0.038	-8.98	<.001	0.44	0.59
constant	0.47	0.031	-11.62	<.001	0.41	0.53	0.77	0.101	-2.02	.043	0.59	0.99	1.00	0.18	0.01	.994	0.70	1.42	0.84	0.154	-0.98	.329	0.58	1.20	1.15	0.216	0.72	.473	0.79	1.66

Note: R2McFadden = step 1 < .01, step 2 = .01, step 3 = .01, step 4 = .01, step 5 = .03

Table 6. Performance anxiety in multivariable analysis for the sample of gay and bisexual men.

	OR	Std. Err.	z	P value	95% CI	
Sexual identity (ref = gay)						
Bi	0.84	0.086	-1.65	.099	0.69	1.03
Age	0.99	0.005	-1.43	.152	0.98	1.00
Education (ref = vocational or lower)						
Secondary	**0.72**	0.114	-2.05	**.040**	0.53	0.99
Higher	**0.63**	0.099	-2.93	**.003**	0.47	0.86
In relationship (ref = single)	**0.59**	0.053	-5.89	**< .001**	0.49	0.70
Financial problems (ref = without problems)	**1.32**	0.117	3.16	**.002**	1.11	1.57
IHR	**1.04**	0.009	5.34	**< .001**	1.03	1.06
EXR	**1.02**	0.010	2.32	**.020**	1.00	1.04
CLM	1.01	0.009	1.60	.109	1.00	1.03
constant	0.37	0.098	-3.76	< .001	0.22	0.62

Note: R2McFadden = .05, Model χ2 = 168.98, P < .001; H-L χ2 (8) 6.24, P = .621.

DISCUSSION

In our study we have shown that both gay and bisexual identities were indeed related to performance anxiety at least in bivariate analyses. This result is in line with those obtained by other authors [5] and meets the expectations when considered from the perspective of challenging, performance oriented gay sexual milieu [4]. However, many other factors were also related to performance anxiety. Committed relationship, higher education level, and older age reduced chances of experiencing sexual anxiety. Safety and trust of a committed relationship can alleviate the compulsion to perform, higher education gives better access to sex facilitating resources (i.e., appropriate knowledge and ability to dispute myths or misunderstandings around sexuality, counselling, or therapy), and sexual and life experience gained with age could be reasonably assumed to lower anxiety. On the contrary poor financial situation, which is known to negatively interfere with sexual satisfaction [13] markedly contributed to sexual anxiety. As the investigated three groups of men differed in respect to these demographic characteristics controlling them in multivariable analysis was a necessary next step. Sexual identity lost its relation to performance anxiety, and age, being in a relationship, financial situation, and educational level maintained their significance. It was

the relational status that proved to responsible for this effect. It seems therefore that a generalised view that all gay and bisexual men are exposed to increased levels of anxiety associated with sexual performance does not adequately mirror reality. Minority men less often stay in committed relationships, which may expose them to increased levels of sexual insecurity, and thus performance anxiety. A proportion of them, but not all, participate in a sexual gay scene creating an additional sexual challenge. It seems thus necessary when approaching gay or bisexual men clinically to take an individual stance pertaining to the broader context for their sexual performance. Additionally, as revealed by analysis performed in minority men only, proximal minority stress processes were related to performance anxiety, both in the bivariate (internalised homophobia, expectation of rejection, concealment), and univariable (internalised homophobia, expectations of rejection) analyses. Unease concerning self as a gay person and expecting rejection by others as such seems by its nature interfere with sexual confidence. In fact, minority stress processes, especially internalised homophobia, were indicated as factors negatively influencing sexual performance, and sexual quality of life in previous studies [8, 9, 10, 14].

CONCLUSIONS

A proportion of gay men, but not all, may be more at risk of experiencing performance anxiety related to sexual function. Differences in relational patterns (i.e., being less often in committed relationships), and proximal minority stress process (especially internalised homophobia and expectations of rejection) may be partially responsible for this increased risk. The latter is thus a valid target of clinical interventions. However, sexual identity does not seem per se to be related to performance anxiety, so each patient should be assessed clinically in a highly individualised manner, avoiding clichés and simplified heuristics. Educational level and financial situation should also be included in the holistic assessment of the gay and bisexual men's sexualities and therapeutic approaches. Future studies might benefit from including explanatory variables pertaining to the co-existing disorders (e.g., anxiety/phobic, personality), and personality characteristics (e.g., attachment patterns, objects relations or early [maladaptive] schemas).

LIMITATIONS

The limitations of our study include: 1) non-probability sampling method: young, educated city-dwellers were over-represented as a result of convenience sampling and the online nature of the survey method; these demographic characteristics could have influenced the men's sexuality, performance anxiety included, and openness about sexual lives, as well as levels of minority stressors; 2) the retrospective method of data collection, which inevitably must have led to biases in reconstructing past events (e.g., number of sex partners); 3) the use of a single simple question pertaining to performance anxiety with no reference to the experienced distress or associated dysfunction, which limits its potential clinical significance.

Despite the above-mentioned limitations, the study presents considerable strengths: 1) the sample size is relatively large; 2) and it comes from an understudied Central-European context; 3) the study enabled a comparison of men of diverse sexual identities; 4) and it contributes to this understudied subject.

Although character of the sampling method affects the generalizability of the results of this study, it is worth noting that projects aiming at analyzing complex relations between variables should not necessarily rely on representative samples.

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