

Functional and Psychological Characteristics of Belgian Men with Premature Ejaculation and Their Partners

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ABSTRACT

Physiological, behavioral, cognitive, and emotional factors are generally acknowledged to play a role in premature ejaculation (PE). However, the nature and the extent of their etiological impact remain largely imprecise. The present study examined functional and psychometric dynamics at work in a PE population. A total of 461 men with PE and 80 partners completed an online questionnaire. The main outcome measures were self-reported ejaculatory latency time, the feeling of control upon ejaculation, sexual satisfaction, distress related to PE, trait anxiety (STAI-B), sexual cognitions (SIQ), social anxiety (LSAS and SISST), and personality traits (TCI-R). In our sample, the median latency time to ejaculation was between 1 and 2 minutes. Sexual satisfaction and distress correlated more strongly with the feeling of control than with the self-reported latency time. Men experienced more distress and dissatisfaction related to PE than did their partners while overestimating their partners' distress and dissatisfaction. PE participants' scores differed significantly, albeit slightly, from STAI-B, SIQ, LSAS, and SISST norms. The differences were negligible on TCI-R. Some differences became stronger when subtypes were considered. Participants combining generalized and lifelong PE with self-reported latency times of < 30 sec reported lower sexual satisfaction and control, higher distress, higher social anxiety, and harm avoidance (TCI-R/HA) scores. By contrast, the situational subtype of PE was found to be characterized by a higher level of satisfaction, a greater feeling of control, less distress, and higher trait anxiety scores. However, the trends remained statistically discrete.

KEY WORDS: Premature ejaculation; anxiety; social anxiety; sexual cognitions; personality traits

INTRODUCTION

The objective of the present study was to examine a number of functional and psychological (i.e., personality, anxiety and sexual cognitions) dynamics operating in a large sample of participants suffering from premature ejaculation (PE) and to assess the extent to which these dynamics can serve to distinguish among several clinical categories of PE.

Definitions and Criteria for Premature Ejaculation

Premature ejaculation (PE) is quite common, with prevalence rates at around 20-30% of the male population. However, prevalence can vary widely depending on the location and the methodology of the study. Geographic differences likely derive, in part, from cultural influences (Carson et al., 2003; Laumann et al., 2005). Considering that social representations of sexuality and ways of performing and appreciating erotic activities vary cross-culturally, it is not surprising to note variations in complaints related to ejaculation speed. In regard to assessment of the problem, a lack of consensus among clinicians and researchers concerning the precise definition of PE naturally contribute to the wide variation in prevalence.

Most clinicians and researchers seem to agree on three main criteria for diagnosing the disorder: (1) an ejaculation occurring quickly, (2) a lack of control upon ejaculation, and (3) sexual dissatisfaction and/or personal or relational distress due to this condition. However, there are significant differences in how clinicians and researchers measure these criteria. Some use dichotomous responses (e.g., Nolzco et al., 2004) while others use multipoint scales (e.g., Giuliano et al., 2007; Porst et al., 2007; Rowland et al., 2004); some explicitly assess the subject's feeling of control (e.g., Porst et al., 2007) while others assume a lack of control since the subject complains about an ejaculation occurring before he wished (e.g., Giuliano et al., 2007; Patrick et al., 2005); some consider the frequency of the problem (e.g., Laumann et al., 2005; Levinson, 2008; Revicki et al., 2008) while others do not assess it (e.g., Porst et al., 2007); some exclude from the diagnosis rapid ejaculations which are clearly due to the effects of substance use (e.g., Patrick et al., 2005) while others do not pay any attention to substance use (e.g., Porst, 2007).

Such methodological diversities can lead to variation in prevalence estimates. The most critical point in the assessment of PE is the criterion of rapidity. On the one hand, some defend a purely subjective assessment of this criterion (e.g., De Carufel, 2008). From this point of view, the subject's judgment is central: ejaculation is regarded as too rapid if it occurs before the subject wishes, even if he reports that it occurs, for example, 6-7 minutes after penetration. On the other hand, others focus on ejaculations occurring up to 1-2 minutes after penetration, assessing the time with a stopwatch (e.g., McMahon, 2008; Waldinger, 2004). The latter assessments are principally used by those involved in pharmacological studies where it is important to get objective measures of drugs effects. One can see how these differences in approach to PE inevitably affect the number and the nature of the samples obtained.

Etiological Hypotheses

Biology

Biological risk factors are far from being totally understood whereas there is little doubt that certain substances can influence ejaculation time. Waldinger (2002) (see also Olivier, Van Oorschot, & Waldinger, 1998; Waldinger, Hengeveld, Zwinderman, & Olivier, 1998; Waldinger & Olivier, 2005; Waldinger, Zwinderman, & Oliver, 2001; Waldinger et al.,

2005) largely contributed to demonstrating the involvement of central serotonergic pathways in the ejaculatory reflex. More specifically, drugs stimulating the 5-HT_{2c} receptors appear to delay ejaculation, while those stimulating the 5-HT_{2a} receptors accelerate it. Dopaminergic neurons probably also intervene (Peeters & Giuliano, 2008) and research has been conducted which supports the involvement of some oxytocin receptors (Pattij et al., 2005). The sensitivity of these neurophysiological systems varies from one individual to another, depending notably on genetic factors. From a study on Finnish twins, Jern et al. (2007) rated the part played by heredity to be 28% overall in the explanation of PE. Such a constitutional variable would lead to a normal theoretic distribution of intra-vaginal ejaculatory latency time (IELT) values in the population. Waldinger (2007) suggested that men who have always ejaculated, under any circumstances, within one minute of penetration would be those located at the lower extreme of this distribution. These men, presenting a very unfavorable neurophysiological constitution, would not exceed 5% of the general population.

Age

It has been suggested that PE decreases with age, perhaps as a function of experience or as a function of physiological changes associated with aging (Corona et al., 2004; Janini & Lenzi, 2005a; Masters & Johnson, 1970). However, studies on representative samples appear to suggest otherwise, showing that prevalence rates remained rather stable through different age brackets (Levinson, 2008; Porst et al., 2007). Waldinger et al. (2005) even found that mean IELT values decreased with age. Both assertions are not necessarily incompatible. The prevailing forms of PE may actually be different between younger and older men: lack of experience could be a chief explanatory factor in young men with PE while, in older men, the disorder would be more often secondary to an erectile dysfunction. Epidemiologic studies are not yet precise enough to settle the matter.

Learning

The efficacy of treatments focused on behavioral methods such as the stop-start technique (Semans, 1956), the squeeze technique (Masters & Johnson, 1970) or regulation techniques (De Carufel & Trudel, 2006; Kempeneers, Bauwens, & De Sutter, 2004) demonstrates the sensitivity of the disorder to learning factors. It is important to note that although the therapeutic effects of corrective learning proposed in behavioral approaches is recognized (Althof, 2006; De Carufel & Trudel, 2006; Hatzimouratidis et al., 2010; Melnik, Glina & Rodrigues, 2009; Oguzhanoglu, Ozdel & Aybek, 2005; Rowland et al., 2010), this does not necessarily mean that the cause of PE must be found in early dysfunctional sexual learning conditions. Nowadays, the prevailing idea is not so much that PE would result from specific dysfunctional learning conditions but from a lack of learning.

Kinsey, Pomeroy, and Martin (1948) suggested that rapid ejaculation was the biological norm in the human species. Hong (1984) developed this thesis from an evolutionary viewpoint: at the level of natural selection, a rapid ejaculation would be a highly adapted response. In such conditions, most men would have to learn to delay their ejaculation. Many of them would learn to do so spontaneously, but some others, i.e., men with PE, would need some help. From this point of view, men's bioconstitution would predispose them to fast ejaculation but, on the other hand, this biological tendency would have an important plasticity (Rowland, 2005). PE may thus be regarded as an inadequately trained sexual response. Adequate learning is certainly harder to achieve when the biological constitution is very unfavorable and this is probably the case for those few presenting a lifelong and generalized PE with very short IELTs. However, as De Carufel (2008) emphasized, just because someone

finds the task “harder” does not mean it will be “impossible,” so, even in such cases, a behavioral approach can be recommended as the first therapeutic line.

Anxiety and Personality

Anxiety has often been suggested as a cause of quick ejaculation. Several of its forms have been blamed: trait anxiety (Corona et al., 2004; Costa, Fagan, Piedmont, Ponticas, & Wise, 1992; Porst et al., 2007), social anxiety (Corretti, Pierucci, De Scisciolo, & Nisita, 2006; Figueira, Possidente, Marques, & Hayes, 2001), and sexual anxiety (Hartmann, Scheldowski, & Krüger, 2005; Rowland, 2005). Although anxiety can interfere with learning and links with PE have been frequently reported, the causal role of anxiety has been questioned. Anxiety may simply be a single correlate of a neurophysiological profile predisposing both to PE and to anxiety traits and disorders. Moreover, a laboratory study by Strassberg, Mahoney, Schaugaard, and Hlae (1990) failed to demonstrate that anxiety was able to reduce ejaculatory latency. It has been suggested that anxiety is also a consequence of PE (Jannini & Lenzi, 2005; Rosen & Althof, 2008; Waldinger, 2004). Moreover, treatments for PE targeting anxiety exclusively have had disappointing results (De Carufel, 2008; Lawrence & Madakasira, 1992). One cannot exclude the possibility that anxiety intervenes differently in different forms of PE. For instance, Cooper, Cernovsky, and Colussi (1993) believed that anxiety characterizes mainly the lifelong forms of PE, but there are very few studies on this topic.

Apart from those relating to anxiety traits, systematic studies on the impact of personality factors on PE are rare (Costa et al., 1992). In fact, statements regarding this issue remain highly speculative.

Characterization of Premature Ejaculation

On the whole, PE can certainly be regarded as a biopsychosocial problem involving behavioral, constitutional, biomedical, emotional, cognitive, and cultural factors. However, the relative roles of these factors can vary from case to case, resulting in different characterizations of the disorder. It has been hypothesized that different subtypes of PE can be distinguished based on their main etiological component. For instance, Cooper et al. (1993) argued that anxiety characterizes mainly the lifelong forms of PE. Waldinger (2007) suggested that cognitive and relational factors are predominant in cases of latency time of more than 3 minutes, while constitutional factors are predominant in cases of latency time below 1 minute under any circumstance. Metz and Pryor (2000), Perelman (2006), and Waldinger (2007) have suggested that emotional and relational variables are quite active when the problem is situational. Godpodinoff (1989), Metz and Pryor (2000), and Waldinger (2007) have furthermore posited that acquired PE is mainly due to somatic dysfunctions or to psychological problems, such as depression, stress, and relational conflicts. Others have maintained more caution about this topic and avoided associating subtypes of PE with the predominance of any particular kind of etiology. Janini and Lenzi (2005), for instance, stressed “that subtyping does not mean diagnosing [and that] acquired, situational PE...can be due to organic factors in the same way as primary absolute PE” (p. 72). Research is still needed to understand the relative impact of various possible causal factors in PE and its subtypes.

Aim of the Present Study

The study was carried out within the context of the *BibliothEP* study,^{*1} which had a dual purpose: (1) to explore some characteristics of men with PE and their partners and (2) to assess the efficacy of a new form of bibliotherapy designed to help people to overcome PE problems. The present article focused on the first part of the study. At baseline, the experience of PE was assessed in men complaining about this problem and partner data were available for some of the men. During the baseline assessment, several psychometric measurements were also made concerning factors that have been hypothesized to have an etiological role (e.g. anxiety, sexual cognitions, personality traits). These measures were first compared to norms prevailing in the general population. Secondly, comparisons were made within the sample in order to test the hypothesis that different profiles are associated with different subtypes of PE (e.g. acquired vs. lifelong PE, generalized vs. situational, shorter vs. longer self-reported latencies, highest vs. lowest scores on anxiety scales).

METHOD

Participants

A sample of PE participants was recruited via advertisements in the Belgian French-speaking media. In the advertisements, voluntary PE participants were invited to phone the study call-center. A total of 492 men responded. During the phone call, the diagnosis of PE was confirmed ($N = 461$) or not ($N = 31$) on the basis of DSM-IV-TR criteria (American Psychiatric Association, 2000). To be precise, the interview dealt with two inclusion criteria and five exclusion criteria. The inclusion criteria were: (1) the subject reported an ejaculation generally occurring before he wished it, with sexual stimulation estimated as minimal before, on or shortly after penetration and (2) he expressed distress due to this condition. The exclusion criteria were: (1) the difficulty seemed mainly due to a substance use factor, such as an opioid, antidepressant or antipsychotic withdrawal, (2) the difficulty seemed due to an organic affliction, such as a urinary tract infection or a pelvic or medullar trauma, (3) the PE seemed secondary to an erectile dysfunction, (4) the problem started less than three months previous to the study, and (5) the subject was not yet 18 years old.

The interviews were conducted by psychology or sexology students, specifically trained and supervised by experienced sex therapists. At this step, 31 of 492 candidates were excluded from the study. In 18 cases, the problem was obviously due to erectile dysfunction. If included, participants gave their e-mail address and received a password allowing them to complete an online questionnaire, after having read and agreed to an informed consent form. Of the 461 participants eligible for the protocol, 421 completed the questionnaire at least partially; 398 completed the entire questionnaire. The participants were also invited to include their (main) partner in the study. Where both the subject and his partner agreed, the partner received her own password in order to complete an online questionnaire. Eighty women completed the entire questionnaire.

The mean age of the participants was 39 years (± 11.35 ; range, 18-74). Eighty percent of the sample was between the ages of 25 and 55 years. A total of 422 (91.5%) of the participants had only one partner, 11 (2.5%) had several partners, and 28 (6%) had no fixed

¹ The word *BibliothEP* is a contraction of the word *bibliotherapy* and the acronym *EP* for "Ejaculation Précoce" ("premature ejaculation" in French). This study was led in collaboration by the University of Liege (Belgium) and the Province of Liege Department of Health and Quality of Life (Belgium). It received the Best Presentation Award 2010 from the French Association for Cognitive and Behavioural Therapies (AFTCC).

partner. The educational level of men with PE was rather high: 58% had at least some college. By contrast, the educational level of the partners was rather low: for 66%, their primary school diploma was their highest degree. Differences were not found regarding age, relationship characteristics, and educational level. There were also no significant differences found between the 398 participants who completed the entire questionnaire and those who did not. Finally, no significant differences were found between the 80 men with a partner participating in the study and the remaining 381 participants whose partners did not participate.

Measures

Sociodemographic and Relational Data

The participants' age and their relational situation (one, several or no fixed partner) were assessed during the phone call. Their educational level was assessed in the online questionnaire.

Sexual Functioning

The subtypes of PE (lifelong/acquired; generalized/situational) were assessed during the phone call. In cases of acquired and/or situational forms, some details were requested, using an open question, regarding the circumstances of onset and/or the variations of the condition. During the phone call, the participants were also invited to report their previous treatment attempts to overcome the problem. In the online questionnaire, sexual functioning was assessed using self-report multi-point scales. The measures dealt with the frequency of sexual intercourse (1. more than once a week → 3. less than once a month), the frequency of ejaculations, including during masturbation (1. more than once a week → 3. less than once a month), and the perceived latency time ("During the last few months, what has been the mean duration of your penetrations?" 1. ejaculation before intromission → 8. >10 minutes, see *Table 1*), the number of thrusts before ejaculation (1. ejaculation before intromission → 5. >20 thrusts), the feeling of control upon ejaculation (1. no control → 7. total control), general sexual satisfaction (1. no satisfaction → 7. total satisfaction) and the level of distress related to PE ("To what extent is your PE a problem for you now?" 1. not a problem at all → 7. an enormous problem). The measures also concerned the satisfaction and the level of distress that the participants attributed to their (main) partner ("In your opinion, what is your partner's general level of sexual satisfaction?" "In your opinion, to what extent is your PE a problem for your partner?").

Anxiety During Sexual Intercourse

The anxiety experienced during sexual intercourse was evaluated using an adaptation of the French version of Spielberger's State-Trait Anxiety Inventory (STAI) (Schweitzer & Paulhan, 1990) where the original period of time taken into account, "now", was replaced by "when you have sexual intercourse". This produced a scale ranging from 20 (minimal anxiety) to 80 (maximal anxiety).

Sexual Cognitions

Sexual cognitions were measured using the French version of McCormick and Jordan's Sexual Irrationality Questionnaire (SIQ) (Kempeneers, Louwette, Mormont, &

Doudali, 2000). The SIQ produces five scores: one for the total scale and four for factorial subscales. The first subscale, called *Control* (SIQ-F1), refers to an irrational need to keep sexuality, sexual reactions and desires under control; the second subscale, called *Communication* (SIQ-F2), refers to a lack of communication in order to adapt sexual activities to differences in their partner's level of erotic sensitivity; the third subscale, *Fantasies* (SIQ-F3), expresses a tendency to regard certain fantasies as inappropriate; and the fourth subscale, *Frustration* (SIQ-F4), refers to a lack of tolerance to sexual frustration. The higher scores obtained by the subject, the more he is assumed to have dysfunctional or "irrational" beliefs about sexuality. The SIQ total scale ranges from a minimum of 32 to a maximum of 192 (Cronbach $\alpha = .67$), SIQ-F1 ranges from 10 to 60 ($\alpha = .75$), SIQ-F2 from 6 to 36 ($\alpha = .65$), SIQ-F3 from 3 to 18 ($\alpha = .67$), and SIQ-F4 from 4 to 24 ($\alpha = .25$).

Anxiety Trait

The anxiety trait was measured using the French version of Spielberger's STAI Y-B (Schweitzer & Paulhan, 1990). This scale produces a *T* score varying from 20 to 80 ($M = 50$; $SD = 10$), with a Cronbach α coefficient of .91.

Personality Traits

The subject's personality was assessed using the French version of Cloninger's Temperament and Character Inventory-Revised (TCI-R) (Pélissolo, Notides, Musa, Téhérani, & Lépine, 2000). The TCI-R produces scores on seven dimensions: Novelty seeking (NS, that ranges from a minimum of 35 to a maximum of 175 and has a Cronbach α coefficient of .78), Harm avoidance (HA, that ranges from 34 to 170, $\alpha = .90$), Reward dependence (RD, that ranges from 30 to 150, $\alpha = .81$), Persistence (PS, from 34 to 170, $\alpha = .90$), Self-directedness (SD, from 39 to 195, $\alpha = .81$), Cooperativeness (C, from 37 to 185, $\alpha = .85$) and Self-transcendence (ST, from 26 to 130, $\alpha = .85$).

Social Anxiety

Social anxiety was measured using the French version of Liebowitz's Social Anxiety Scale (LSAS) (Yao et al., 1999) and the French version of the Social Interaction Self-Statement Test (SISST) (Yao et al., 1998). The LSAS produces two main scores, that both range from 0 to 72 points: a score of fear or anxiety experienced in social situations (LSAS-F) and a score of avoidance of such situations (LSAS-A). Each of these scores concerns either situations of social interaction ("S") or situations of social performance ("P"). Overall, there are four sub-scores: LSAS-FS, LSAS-FP, LSAS-AS, and LSAS-AP. They all range from 0-36. The SISST measures the frequency of certain thoughts in situations of social interaction. These thoughts may be either "positive" or "negative," so this test comprises two scales: SISST+ and SISST-. They both range from 15-75. The more socially anxious a subject is, the lower he scores on SISST+ and the higher on SISST-.

Women's Reports

The partner questionnaire assessed the following variables for the partners, in the same way as for the men: educational level, perceived ejaculatory latency, sexual satisfaction, the level of distress related to PE, the level of distress attributed to the man and sexual cognitions.

Statistical Analyses

Statistical analyses were carried out with Statistica© software, version 8.0 (StatSoft Inc.) They mainly involved Spearman ranks, *t* tests, chi squares and discriminant analysis.

RESULTS

General Distributions

Sexual Functioning

Of the 461 participants involved in the study, 341 (74%) presented a lifelong form and 120 (26%) an acquired form of PE. This distribution was consistent with the approximate prevalence of two-thirds vs. one-third that Althof (2007) thought to be the general rule. For 380 (82.5%) participants, the problem was generalized and for 81 (17.5%), it was situational. No distribution differences were found between participants who completed the whole questionnaire and those who did not.

The majority ($N = 74$; 62%) of those (120) suffering from an acquired PE were unable to link the onset of their disorder to any specific event; 20 (17%) explained that their PE began in a new relationship; 17 (14%) thought it was related to a change in their marital dynamics (e.g. pregnancy, birth of a child, getting married, conflict, etc.); 10 (8%) blamed a change in their own life conditions (new job, stressful environment or health problems) and one reported a relapse after previous sex therapy. The explanations given were not mutually exclusive, especially the personal and the relational changes.

Of the 81 participants suffering from a situational form of PE, 19 (23%) failed to identify possible factors causing the variations in their condition; 21 (26%) put forward negative events such as stress, arguments or tiredness; for 16 of the 81 (20%), PE occurred only with specific partners; 11 (14%) reported that the short ejaculation time mainly derived from the intensity of positive feelings such as sexual arousal, desire or love; for 10 (12%) participants the problem often occurred when their frequency of sexual activity was low; 9 (11%) thought it was largely a question of body position; 5 (6%) reported that alcohol improved their condition and one specified that ejaculation latency was only satisfactory early in the morning. These reasons were not necessarily mutually exclusive.

The frequency of sexual intercourse was more than once a week for 28% participants, between once a week and once a month for 59% and less than once a month for 13%. The same levels of frequency were reported respectively by 30%, 66%, and 4% of partners. No significant differences were found between men and women on this topic. The frequency of ejaculation, including during masturbation, was more than once a week for 65% of the sample, between once a week and once a month for 33% and less than once a month for 2%.

It is interesting to note that 2 (0.48 %) participants scored “1” and 6 (1.43 %) scored “2” on the 7 points distress scale, meaning their opinion was that their PE “was not” (“1”) or “was almost not” (“2”) a problem (see Table 1). This raised a possible discrepancy regarding their inclusion in the study since the DSM IV-TR criteria used during the phone interview required that participants have “marked distress” related to their condition for a diagnosis of PE. However, these participants also reported on the baseline questionnaire quite low sexual satisfaction rates and poor control over ejaculation. Some of them even attributed major distress to their partner. This discrepancy underscores how difficult it is to describe complex sexual discomfort with a single index.

Table 1 Patient and partner-reported outcomes (PROs)

		PE participants		sub-sample of PE participants with a partner participating			
		N = 421 (100%)		N = 80 (100%)		Spearman ranks	t tests
				men	partners		(df = 79)
perceived latency time	ante portas		2.38%	2.50%	1.25%		
	< 30 sec		14.96%	12.50%	5%	0.56 (<i>p</i> < .001)	-3.99 (<i>p</i> < .001)
	30 sec - 1 min		29.69%	27.50%	20%		
	1 - 2 min		23.99%	25%	22.50%		
	2 - 4 min		19.24%	16.25%	27.50%		
	4 - 6 min		7.84%	13.75%	15%		
	6 - 10 min		1.43%	2.50%	7.50%		
	> 10 min		0.48%	0%	1.25%		
	median		<i>1 - 2 min</i>	<i>1 - 2 min</i>	<i>2 - 4 min</i>		
number of thrusts	ante portas		2.38%	2.5%	0%		
	< 3 thrusts		4%	1.25%	5%		
	3 - 10 thrusts		43%	41.25%	37%		
	10 - 20 thrusts		33.73%	32.50%	23%		
	> 20 thrusts		16.86%	22.50%	15%		
	median		<i>10 - 20 th.</i>	<i>10 - 20 th.</i>	<i>3 - 10 th.</i>		
distress	PE is not a problem at all	1	0.48%	0%	5%	0.27 (<i>p</i> < .02)	8.27 (<i>p</i> < .00001)
		2	1.43%	0%	5%		
		3	2.61%	2.50%	18.75%		
		4	7.60%	7.50%	11.25%		
		5	17.10%	16.25%	21.25%		
		6	34.92%	36.25%	15%		
	PE is an enormous problem	7	35.87%	37.50%	13.75%		
	mean (SD)		5.9 (1.2)	6 (1)	4.3 (1.8)		
sexual satisfaction	no satisfaction	1	17.33%	13.75%	5%	0.35 (<i>p</i> < .005)	-4.73 (<i>p</i> < .00001)
		2	31.35%	28.75%	17.5%		
		3	28.50%	31.25%	27.5%		
		4	15.44%	12.50%	15%		
		5	5.23%	10%	22.5%		
		6	1.66%	2.50%	8.75%		
	total satisfaction	7	0.48%	1.25%	3.75%		
	mean (SD)		2.7 (1.2)	2.9 (1.3)	3.7 (1.5)		
feeling of control	no control	1	25.18%				
		2	51.78%				
		3	16.15%				
		4	6.18%				
		5	0.24%				
		6	0.24%				
	total control	7	0.24%				
mean (SD)		2.1 (0.9)					

Men and Partners' Approaches

Reported Outcomes

Table 1 shows how the patients and partners reported outcomes. Men with a partner involved in the study reported more distress regarding PE than their partners, and a lower level of satisfaction. Note that no significant outcome differences were found between men with a participating partner or without.

These results revealed significant differences between men and women in their perception of the problem. Except for the number of thrusts, the differences between men and partners' mean outcomes were significant, showing that men experienced PE more dramatically than their partners. The correlations between men's and partners' outcomes were moderate, especially for the most subjective ones (distress due to PE and sexual satisfaction).

Attributions

Men were also asked to estimate the level of their partner's distress and sexual satisfaction, and partners were asked to estimate the man's level of distress due to PE. Table 2 shows that male participants with a partner in the study tended to overestimate the impact of PE as a distress factor for their partner and to underestimate their partner's sexual satisfaction, while the partners had a more accurate estimation of the man's feelings. Note that there were no significant differences in the men's estimation scores of their partner's distress and sexual satisfaction whether the subject had a partner participating in the study or not.

Table 2 Attributed vs. actual satisfaction and distress in the sub-sample of 80 PE men with a partner participating

	M (SD)	<i>t</i> (<i>df</i> = 79)
distress attributed by the man to his partner / partner's actual level of distress	4.85 (1.6) 4.28 (1.9)	1.5 (<i>p</i> < .001)
satisfaction attributed by the man to his partner / partner's actual level of satisfaction	3 (1.5) 3.7 (1.5)	4.5 (<i>p</i> < .001)
distress attributed by the partner to the man / man's actual level of distress	6.1 (1) 5.98 (1)	<i>ns</i>

Correlations between PROs

Men's satisfaction was moderately correlated to the perceived latency time and to the number of thrusts ($\rho = .24$ and $.22$ respectively, $p < .05$). The correlation was stronger with the feeling of control over ejaculation (.49) and with the satisfaction attributed to the partner (.62). With the partner's actual level of satisfaction, the coefficient was $.35$ ($p < .05$). For the participants' distress due to PE, the tendencies were the same but at a slightly lower level: the Spearman's rank coefficient was $-.16$ with perceived latency time, $-.15$ with the number of thrusts, $-.33$ with the feeling of control, $.41$ with the distress attributed to the partner and $.27$ with her level of actual distress. Partners' satisfaction and distress were not correlated with latency time or the number of thrusts, whether perceived by the partners themselves, or by the male subject ($p < .10$). The link was also non-significant with the man's feeling of control. A partner's satisfaction was only linked to the male's satisfaction ($.35$, $p < .05$) and to the satisfaction that he attributed to his partner ($.58$, $p < .05$), and her distress was only linked to the male's distress ($.27$, $p < .05$) and to the distress that he attributed to his partner ($.61$, $p < .05$).

Previous Attempts to Overcome the Problem

A total of 177 (37%) participants reported having consulted one or more health worker(s) to try to improve their condition. Of these, 123 (26.7%) had turned to a specialized practitioner (sexologist, urologist, psychologist or psychiatrist), 23 (5%) had seen a general practitioner, and 24 (5.2%) had consulted both a general and a specialized practitioner. A total of 132 (28.6%) participants reported visiting websites and/or reading books about their problem and 100 (21.7%) described consulting both a health practitioner and websites or books.

A total of 91 (20%) participants reported having previously followed some form of treatment. For 57 participants (12%) this was a pharmacological treatment, for 28 (6.1%) it was a psychosexual one, and for 6 (1.3%) the treatment was both pharmacological and psychosexual. It is interesting to note that not all the participants who had consulted a health worker had received or followed a form of treatment.

Psychometric Data

Table 3 shows the scores obtained by the PE participants and their partners on the STAI Y-B, the SIQ and the TCI-R scales. The results are comparable with the norms published respectively by Schweitzer and Paulhan (1990), Kempeneers et al. (2000), and Hansenne, Delhez, and Cloninger (2005).

As shown in Table 3, the differences between participants' scores and the norms are small. It is interesting to note that on the SIQ-F1 subscale (need to control sexuality), the partners of men with PE appeared to have fewer dysfunctional cognitions than the general population. While significant, the impact of these scales on satisfaction and distress remained moderate. Only sexual irrationality and, in particular, the dimension of sexual irrationality viewed as a need to keep sexuality under control exceeded a value of 0.30.

Table 4 shows the social anxiety scores. The scores were compared to the values reported by Yao et al. (1998, 1999) for participants with and without a diagnosis of social phobia. As shown in Table 4, LSAS-F, LSAS-FP, LSAS-A, LSAS-AP and SISST scores were clearly higher for the PE participants than for non-clinical participants. However, the scores of PE participants on these social anxiety scales were closer to those of non-clinical participants than to the scores obtained by social phobic participants. Obviously, the

influence of social anxiety scales on satisfaction and distress was small, limited to ρ values of around .10. No significant relationships with partners' satisfaction were found.

Table 3 Anxiety, sexual irrationality and personality scales: comparisons with norms and relationships to dissatisfaction and distress related to PE

	mean scores (S.D.)	norms	links** to:			
			man's level of satisfaction	man's level of distress	partner's level of satisfaction	partner's level of distress
PE participants (N = 421)						
STAI-B trait anxiety	59.57 (4.22)*	50 (10)		-0.19 ($p < .0001$)		
SIQ sexual irrationality	107.75 (13.31)*	102.50 (13.70)	-0.24 ($p < .0001$)	0.34 ($p < .0001$)		
SIQ-F1 need for control	37.97 (6.83)*	36.30 (8.30)	-0.25 ($p < .0001$)	0.36 ($p < .0001$)	-0.25 ($p < .03$)	
SIQ-F2 lack of communication	17.66 (3.81)	16.80 (4.90)				
SIQ-F3 fantasies	10.92 (3.05)*	10.20 (3.50)				
SIQ-F4 intolerance to frustration	14.35 (3.16)	14.10 (3)	-0.14 ($p < .005$)	0.26 ($p < .0001$)		
TCI-R NS novelty seeking	99.57 (14.93)	100 (13.90)		0.1 ($p < .04$)		
HA harm avoidance	90.74 (19.30)	88.90 (17)	-0.1 ($p < .05$)			-0.28 ($p < .02$)
RD reward dependence	96.70 (13.92)	97.80 (12.30)				
PS persistence	120.84 (19.46)	119.10 (18.70)			-0.24 ($p < .05$)	
SD self-directedness	138.43 (19.59)	139.90 (17.40)	0.13 ($p < .01$)	-0.22 ($p < .0001$)		
C cooperativeness	131.62 (16.74)*	129.40 (16.30)				
ST self-transcendence	67.57 (15.61)*	71.20 (14.50)		0.14 ($p < .005$)		
partners (N = 80)						
STAI-B trait anxiety	57.74 (4.21)*	50 (10)				
SIQ sexual irrationality	98.03 (14.17)	99.80 (15.10)		0.25 ($p < .03$)	-0.28 ($p < .02$)	0.33 ($p < .003$)
SIQ-F1 need for control	31.98 (7.59)*	35.20 (7.80)	-0.22 ($p < .05$)	0.23 ($p < .05$)	-0.31 ($p < .006$)	0.34 ($p < .003$)
SIQ-F2 lack of communication	16.01 (3.62)	16.20 (4.50)				
SIQ-F3 fantasies	11.50 (3.58)*	10.20 (3.60)				
SIQ-F4 intolerance to frustration	13.91 (3.63)	13.80 (3.40)		0.24 ($p < .04$)		0.25 ($p < .03$)

* different at $p < .0005$ from the norms (homogeneity test)

** Spearman coefficient (and p value) reported when $p < .05$

Table 4 Social anxiety scales: comparisons with norms and relationships to dissatisfaction and distress related to PE

		mean scores (S.D.)			links** to:	
		PE participants	non-clinical participants	social phobic participants	satisfaction	distress
LSAS	Fear or anxiety	21.33 (11.90)*°	16.86 (11.12)	45.06 (10.09)	-0.11 ($p < .04$)	
	avoidance	18.71 (11.97)*°	13.29 (12.27)	35.97 (11.61)	-0.12 ($p < .03$)	
	fear of social interaction	9.11 (6.08)°	9 (5.65)	21.94 (5.92)		
	fear of performance	12.01 (6.53)*°	7.86 (6.35)	23.12 (5.51)	-0.10 ($p < .04$)	0.12 ($p < .02$)
	avoidance of social interaction	8.32 (6.15)°	6.96 (6.51)	17.09 (6.89)	-0.10 ($p < .05$)	
	avoidance of performance	9.99 (6.64)*°	6.32 (6.49)	18.88 (6.22)	-0.10 ($p < .04$)	
SISST	facilitative self-statements (+)	42.56 (7.05)*°	48.31 (8.63)	35.62 (7.69)		
	inhibitory self-statements (-)	37.82 (11.18)*°	30.54 (8.72)	55.15 (9.15)	-0.15 ($p < .003$)	0.17 ($p < .0001$)

* different from non-clinical participants at $p < .0001$ (homogeneity test)

° different from social phobic participants at $p < .0001$ (homogeneity test)

** Spearman coefficient (and p value) reported when $p < .05$

Subtypes of PE

The reliability of several variables in characterizing different subtypes of PE was examined by assessing, with t -tests, the extent to which their different values were associated to differences in sexual functioning. When the variables were ordinal, the comparisons were made between the lowest and highest values. In the case of psychometric variables, the values taken into account were those below ± 1 SD. The significant threshold was $p < .05$. Some discriminant analyses were also performed in order to test the first results.

Acquired vs. Lifelong

Participants suffering from an *acquired* form of PE were slightly older than those suffering from a *lifelong* form (40.9 vs. 38.5 years; $t = 2.0$, $df = 459$), and they attributed more distress to their partner ($t = 2.0$, $df = 419$). At $p < .05$, a discriminant analysis ($N = 421$) included these two variables ($F = 5.1$ and 4.1 , respectively) as significant predictors in an explanatory model of the acquired vs. lifelong subtype.

Situational vs. Generalized

Participants with a *situational* form of PE were older than those with a *generalized* form (41.6 vs. 38.6 years; $t = 2.2$, $df = 459$) and they had a higher educational level ($t = 2.4$, $df = 419$). They also reported longer latency times ($t = 2.3$), a better feeling of control ($t = 3.5$) and a better level of sexual satisfaction ($t = 2.1$, $df = 419$). On the STAI-B, they appeared a little more anxious (60.6 vs. 59.4; $t = 2.2$, $df = 404$) but, on the LSAS, they reported lower social anxiety scores than those with a generalized form (18.8 vs. 21.9 at LSAS-F; $t = 2$, $df = 412$ and 16.2 vs. 19.6 at LSAS-A; $t = 2$, $df = 407$). Their scores on the harm avoidance (HA) scale were also lower (86 vs. 91.8; $t = 2.3$, $df = 397$). At $p < .05$, a discriminant analysis ($N =$

388) recognized only the age ($F = 9.5$), the educational level ($F = 4.0$), and the feeling of control as discriminative variables.

Very Low vs. Less Low Latency Times

Participants reporting mean ejaculation latency times of *less than 30 seconds* were older than those reporting periods of penetration *longer than 4 minutes* (41.9 vs. 36.6 years; $t = 2.3$, $df = 112$). They had intercourse less often ($t = 3.0$, $df = 112$), a poorer feeling of control ($t = 6.7$, $df = 112$), a worse level of satisfaction ($t = 5.9$, $df = 112$), and more distress ($t = 3.1$, $df = 112$). They also attributed less satisfaction ($t = 3.8$, $df = 112$) and more distress to their partner ($t = 2.2$, $df = 112$). They obtained higher scores on the harm avoidance (HA) scale (95.2 vs. 85.7 points; $t = 2.4$, $df = 108$) and lower scores on the persistence (PS) scale (116.3 vs. 126.1; $t = 2.5$, $df = 106$). Those reporting mean latency times of at least 4 minutes had partners with higher scores on SIQ-F1, a scale reflecting the need to keep sexuality under control (33.9 vs. 27.4; $t = 2.3$; $df = 23$). A discriminant analysis ($N = 108$) recognized only the feeling of control ($F = 13.0$) and the persistence score ($F = 6.5$) as significant ($p < .05$) predictive variables.

“Waldinger’s Lifelong Subtype”

The criteria of short latency time (< 30 sec) and lifelong and generalized forms of PE were combined in order to isolate a subgroup of 45 participants assumed to correspond best to *Waldinger’s lifelong subtype* of PE. In comparison with the 393 remaining participants, these men had intercourse less often ($t = 3.5$, $df = 419$), they presented a poorer feeling of control ($t = 4.7$), a poorer level of satisfaction ($t = 3$), and a greater feeling of distress ($t = 2.2$). They also attributed less satisfaction to their partner ($t = 2.7$). They obtained higher scores on the harm avoidance (HA) scale (98 vs. 89.9; $t = 2.6$, $df = 397$) and lower scores on the self-directedness (SD) scale (130.4 vs. 139.4; $t = 2.9$, $df = 395$). Their level of social anxiety appeared higher on the subscales “avoidance” (24.7 vs. 20.9; $t = 2.0$, $df = 412$) and “avoidance of social situations” (11 vs. 8.9; $t = 2.3$, $df = 416$) on the LSAS and on SISST- (“negative self-statements in social interactions”; 41.3 vs. 37.4; $t = 2.2$, $df = 411$). At $p < .05$, a discriminant analysis ($N = 388$) recognized only the feeling of control ($F = 6.6$) as discriminative variables.

Older vs. Younger Participants

Participants *over 50 years old* reported shorter latency times than those *under 25* ($t = 2.5$, $df = 102$). A similar difference was found for the number of thrusts ($t = 2.6$, $df = 103$). Their experiences of intercourse and ejaculation were less frequent ($t = 3.5$ and 5.2 , $df = 102$), and they obtained lower scores on SIQ-F3 (9.3 vs. 12; $t = 4.1$, $df = 100$). This means that young people were more inclined to regard certain sexual fantasies as inappropriate. A discriminant analysis ($N = 102$) recognized the frequency of ejaculations ($F = 13.1$) and the score on SIQ-F3 ($F = 18.3$) as significant ($p < .05$) variables in an explanatory model of the age effect.

Frequency of Ejaculation

Only 9 participants *ejaculated less than once a month* and these were older than the 273 who ejaculated at least once a week (35.8 vs. 36.6 years; $t = 2.8$, $df = 280$). Their experiences of sexual intercourse were less frequent ($t = 5.8$), their sexual satisfaction was

worse ($t = 2.9$) and they also attributed a worse level of satisfaction to their partner ($t = 3.2$, $df = 280$). Discriminant analysis was not possible here due to the low number of participants reporting ejaculation occurring less than monthly.

Anxiety During Sexual Intercourse

The higher anxiety scores during sexual intercourse were associated to high levels of trait anxiety as measured by the STAI-B (60 vs. 57 for the lowest scores; $t = 2.8$, $df = 115$). The higher scores were also linked to a higher intolerance to sexual frustration as measured by the SIQ-F4 (15 vs. 13.8; $t = 2$, $df = 112$) and to lower scores on the self-transcendence (ST) scale (64.3 vs. 74.6; $t = 3.8$, $df = 111$). Surprisingly, on SIQ-F1, their partners showed a lesser need to keep sexuality under control (28.6 vs. 35; $t = 2.2$, $df = 25$), but the number of observations here is rather weak. None of these variables were validated as discriminative.

Trait Anxiety (STAI-B)

Interestingly, the level of trait anxiety as measured by the STAI-B failed to discriminate the participants' sexual outcomes, except for the unexpected finding that the highest scores were associated to less distress ($t = 2.9$, $df = 129$).

Social Anxiety (SISST and LSAS)

Except for SISST+ (facilitative self-statements), which did not discriminate any sexual outcome, the high social anxiety scores were all associated to poorer feelings of control ($t = 2.6$, $df = 151$ on SISST-; $t = 2.8$, $df = 136$ on LSAS-fear and $t = 2.5$, $df = 132$ on LSAS-avoidance). The details for the LSAS subscales "social interaction" and "performance" are not reported here because they varied in the same way). High scores on SISST- (inhibitory self-statements) and on LSAS-avoidance were also linked to a worse level of sexual satisfaction ($t = 2.6$, $df = 151$ for SISST- and $t = 2.2$, $df = 132$ for LSAS-avoidance) and to a worse level of satisfaction attributed to the partner ($t = 3.1$, $df = 151$ for SISST- and $t = 2.6$, $df = 132$ for LSAS-avoidance). Moreover, high scores on SISST- were associated to more distress ($t = 3.8$), and to more distress attributed to the partner ($t = 2.0$, $df = 151$), while high scores on LSAS-avoidance were associated to fewer thrusts before ejaculation ($t = 3.1$, $df = 132$).

Sexual Cognitions (SIQ)

An important level of sexual irrationality as measured by SIQ appeared to be associated to younger people (37.1 vs. 41.7 years; $t = 2.2$, $df = 116$), to a lower educational level ($t = 3.4$), to a poorer feeling of control ($t = 3.0$), a worse level of satisfaction ($t = 3.2$), a worse level of satisfaction attributed to the partner ($t = 3.2$), to more distress ($t = 5.4$) and to more distress attributed to the partner ($t = 2.8$, $df = 116$). The subscale SIQ-F1 (need for control over sexuality) presented the same dynamics overall: the t values were 3.5, 3.9, 3, 6.2, and 2.9 ($df = 147$), respectively, for the feeling of control, sexual satisfaction, satisfaction attributed to the partner, distress and distress attributed to the partner. The subscale SIQ-F2 (lack of communication) was not a discriminant variable. The subscale SIQ-F3 was only related to age: the tendency to consider certain sexual fantasies as inappropriate was mostly found in young people (34.7 vs. 45.5 years; $t = 6.1$, $df = 140$). The highest levels of intolerance to sexual frustration (SIQ-F4) were related to a worse level of satisfaction ($t = 2.1$), to a worse level of satisfaction attributed to the partner ($t = 2.7$), to more distress ($t = 4.0$)

and to more distress attributed to the partner ($t = 3.4$, $df = 137$). They were also linked to a shorter latency time reported by the partner ($t = 2.2$, $df = 33$).

Personality Traits (TCI-R)

Concerning the personality traits measured by TCI-R, participants with high scores of novelty seeking (NS) seemed to be younger (36.5 vs. 42.9 years; $t = 3$, $df = 102$), reporting a few more thrusts before ejaculation ($t = 2.1$) and more frequent ejaculations ($t = 2.0$, $df = 102$). Those with high levels of harm avoidance (HA) had a poorer feeling of control ($t = 2.0$, $df = 120$), but their partners reported less distress ($t = 2.2$, $df = 22$). Participants with high scores of reward dependence (RD) reported more frequent ejaculations ($t = 2.1$, $df = 108$). High levels of persistence (PS) were associated to longer latency times as perceived either by the participants themselves ($t = 3.0$, $df = 121$) or by their partners ($t = 2.0$, $df = 24$). However, the partners reported more distress ($t = 2.0$, $df = 24$). Participants with high levels of self-directedness (SD) reported more frequent intercourse ($t = 2.4$), a better feeling of control ($t = 3.4$), a better level of satisfaction ($t = 3.6$), and less distress ($t = 4.4$). They also attributed more satisfaction ($t = 3.9$) and less distress to their partner ($t = 2.3$, $df = 123$). Participants with high levels of cooperativeness (C) were more educated ($t = 3.0$), reported a better level of satisfaction and attributed a better level of satisfaction to their partner ($t = 2.1$, $df = 114$). By contrast, their partners reported a worse level of satisfaction ($t = 2.0$, $df = 21$). Participants with high scores on self-transcendence (ST) were older (41.7 vs. 37.4 years; $t = 2.1$), a little less educated ($t = 2.2$), and more distressed about their PE ($t = 3.2$). They also attributed more distress to their partner ($t = 2.1$, $df = 121$).

DISCUSSION

The Impact of PE on Sexual Satisfaction and Distress

Our results revealed that dissatisfaction and distress due to PE were correlated with the feeling of control, and these correlations were higher than the correlations found between dissatisfaction or distress and the perceived shortness of ejaculation latency time. These results are in line with previous findings (Giuliano et al., 2007; Patrick, Rowland, & Rothman, 2007; Revicki et al., 2008; Rowland et al., 2004). Thus, the feeling of control over ejaculation appears to be a central parameter characterizing the experience of PE. It should, therefore, be taken into account as a parameter for the assessment of the disorder.

An important variable affecting the male participants was their representation of their partner's dissatisfaction and distress due to PE. The results showed that men's dissatisfaction and distress correlated strongly with the dissatisfaction and distress that they attributed to their partners. However, analyses revealed that the male participants tended to overestimate their partner's level of dissatisfaction and distress as compared to the partner's actual feelings. Furthermore, it appears that partners' levels of dissatisfaction and distress were related neither to latency time nor to the men's feeling of control. The partners' levels of dissatisfaction and distress were linked to the men's own levels of dissatisfaction and distress. One might therefore wonder whether an important part of dissatisfaction within couples does not lie in erroneous projections made by men regarding the impact of their condition. From this point of view, clinicians managing PE should always keep an eye on the psycho-relational aspects of the problem and help their clients to consider their satisfaction with their relationship with their partner as going beyond a single question of ejaculatory latency. For instance, reactions to PE such as sexual avoidance or a lack of enjoyable alternative sexual behaviors other than coitus may be more determining of a couple's distress than the shortness

of the IELT in itself. It is important to promote communication within couples about these issues.

Sexual Cognitions

SIQ scores just above the norm showed that sexual cognitions appeared to be more dysfunctional among PE participants than in the general population. However, the differences remained slight. These differences mainly related to the first SIQ factor, that is to say an “irrational need to keep sexuality under control” (SIQ-F1). Note that such a cognitive trait is not necessarily a risk factor predisposing a man to experience PE. The development of PE could also be an attitudinal consequence of the actual lack of control over ejaculation. It is important to note that while the need to keep sexuality under control was slightly higher for men with PE than for the general population, the reverse was found for their partners. The difference between men with PE and their partners compared to the general population may be related to the discrepancy between men with PE and their partners in the way that they experience the situation. Be that as it may, cause or consequence of PE, this irrationality factor appeared to be associated with a worse level of satisfaction in both men and their partners. Sexual irrationality may therefore aggravate the clinical problem experienced by the couple and, from this point of view, this psychological factor requires a clinician’s attention. It has already been proposed (Kempeneers et al., 2000; Kempeneers, Andrianne, & Mormont, 2004) that sexual irrationality may not be very predictive of sexual dysfunction, but instead be predictive of a lack of ability to adapt in the case of actual sexual difficulty.

Links with Anxiety and other Personality Traits

On the STAI-B scale, PE participants and their partners reported more anxiety traits than those reported by the general population. The relationships between anxiety traits and PE have been widely demonstrated (Corona et al., 2004; Porst et al., 2007). However, the question remains as to whether anxiety traits are really a risk factor for PE rather than simply a consequence. The word “usually” as used in the STAI-B scale applies to a particular period of time and therefore did not allow us to determine in our participants whether anxiety was in fact lifelong and present prior to PE.

The social anxiety scores were higher in PE participants than in non-social phobic participants. These results are in line with the observations of Corretti (2006) and Figueira (2001), who suggested a co-morbidity between PE and social phobia. Nevertheless, this proposal must be qualified. First, the normative values concerning the LSAS and SISST scales measuring social anxiety were not recorded from the general population but from a reportedly non-phobic sample (Yao et al., 1998, 1999). According to Kessler et al. (1994), the prevalence of social phobia may reach 13.3% in the general population. Therefore, the norms published by Yao et al. were surely an underestimation of what would have been found in the general population. As a result, the gaps between PE participants and the general population may be smaller than those actually observed between PE participants and these norms. Secondly, the social anxiety scores of PE participants remained much closer to those of non-phobic participants than to those of social phobic participants. In other words, in the present study, the levels of social anxiety found in PE participants may be relatively close to the levels of social anxiety prevailing in the general population. On the whole, although PE problems are probably over-represented among social phobic people, this does not necessarily mean that social anxiety problems are over-represented to the same extent among men with PE.

Concerning the causal relationship between PE and social anxiety, the observation is the same as for the STAI-B scores: one cannot be sure that social anxiety as measured by the LSAS and SISST scales is a lifelong trait predisposing a man to PE rather than simply a consequence of experiencing PE.

On the TCI-R scale, the results barely supported the hypothesis that personality differences exist between men with PE and the general population. Cloninger's Personality Inventory obviously failed to clearly distinguish PE participants from the rest of the population. The present study showed little divergence from norms on the Cooperativeness and Self-Transcendence scales. These differences suggest that PE participants would be very slightly more compassionate, tolerant and helpful towards others and more materialistic than the general population, but these tendencies are probably negligible and, in any case, uncertain. Personality traits also had only a small impact here on satisfaction and distress.

Lifelong, Acquired, Generalized, and Situational PE

Some men with a secondary form of PE emphasized emotional and relational triggers, but the majority (62%) did not report any significant factors accompanying the onset of the disorder. Thus, not all the acquired PE appeared to be clearly related to psycho-relational factors. One cannot exclude, for instance, the intervention of progressive and non-apparent changes in body condition. The fact that participants with a secondary form of PE were older than those with a primary form might reflect a natural link between age and the occurrence of adverse events: as the years go by, probabilities accumulate to join with factors possibly causing PE. The higher level of distress that men with an acquired PE attributed to the partner might express the fact that it is relatively more difficult to adapt to a new sexual condition than to manage a primary one.

Participants presenting situational PE were also older than those with a generalized form. This might also be due to a simple time effect where age increases the probability of experiencing variations in the condition. The participants with situational PE reported longer latency times, better control and less distress than those reported by participants with generalized PE. This might simply be due to the fact that they did not suffer from the disorder all the time: all things being equal, their overall appreciation of their sexual functioning was therefore better. Participants with situational PE frequently blamed the role of feelings, excitation, desire and relationship. They presented less social anxiety but higher scores on the STAI-B scale. This suggests that the interrelationships between PE and anxiety may be diverse. It is possible that the kind of anxiety shown by situational PE participants reflects the vulnerability of their sexual responses to circumstance-related emotions.

Severe Lifelong vs. Situational PE: Probably a Relevant Distinction

Men with a situational PE contrasted mostly with those presenting a lifelong and generalized PE combined with a latency time of less than 30 seconds. These participants appeared to present a particularly severe form of PE, corresponding to Waldinger's (2007) lifelong form. They reported quite poor satisfaction and control, and high levels of distress; they also showed the highest scores for harm avoidance, fear in social situations and negative self-statements in interpersonal situations. It is not possible here to identify the nature of the links between such anxious tendencies and this severe form of PE. However, we can point out that a serotonergic hypo-functioning has often been assumed to be an etiological factor in severe lifelong PE (Waldinger, 2002, 2007), as well as in high levels of harm avoidance (Hansenne & Ansseau, 1999; Nelson, Cloninger, Przybeck, & Czernansky, 1996) and in

social phobia (Lanzenberger et al., 2007, 2010). One cannot exclude its contribution as a common vulnerability factor.

It is noticeable that trait anxiety as measured by the STAI-B scale did not follow the same tendencies as social anxiety and harm avoidance. So called trait anxiety correlated with the situational anxiety experienced during sexual intercourse and with intolerance to sexual frustration. It was also mostly specific to participants presenting a situational form of PE, a form reputed by some authors (Metz & Pryor, 2000; Waldinger, 2007) to be the most susceptible to psycho-relational influences.

The relationship between anxiety and PE seems to be complex. We can hypothesize at least two processes: one lies in a deep tendency, perhaps biological in nature, determining a vulnerability to developing PE as well as social anxiety and avoidance of aversive stimuli. The second process is characterized by a more reactive anxiety linked to the variations of the disorder.

Age

The passage of time increases the probability of experiencing various sexual conditions and/or organic changes. Thus, a slightly higher number of older participants presented secondary and situational forms of PE. Nevertheless, this tendency was able to mask neither the many young people with acquired and/or situational forms nor the many older participants with lifelong and/or generalized PE. Participants over 50 years old also tended to show shorter latency times. This contrasts with the established opinion that PE problems spontaneously improve with age and experience. Nevertheless, it remains difficult to draw firm conclusions regarding the evolution of PE with age, since the trends found in this sample might fail to be representative of those at work in the general population. Finally, in this study, very few parameters appeared to be influenced by age. This variable did not seem able to clearly discriminate several specific dynamics.

The Problem of Latency Time

Perceived latency time is a subjective measure. However, in PE populations, Althof et al. (1995), Pryor, Broderick, Ho, Jamieson, and Gagnon (2005), and Rosen et al. (2007) reported good correlations between self-estimated latency times and objective IELTs as recorded with a stopwatch. This means that our participants' estimations might valuably reflect their objective ejaculatory latency.

An expert committee led by McMahon et al. (2008) proposed an IELT of 1-2 minutes as a cut-off value for diagnosing lifelong PE. It is therefore important to note that, as reported in other studies (e.g., Giuliano et al., 2007; Patrick et al., 2005), men with clinical PE in the present study reported latency times exceeding the values sometimes regarded as normal: almost 10% ejaculated after more than 4 minutes and almost 30% after more than 2 minutes. Among the participants reporting lifelong and generalized PE, these ratios remained at 9% and 26% for 4 and 2 minutes respectively. Thus, the value of 2 minutes advocated by McMahon et al. would have led in the present study to exclude a diagnosis of lifelong PE in at least 26% of participants actually diagnosed with the problem using the DSM IV-TR criteria. It is conceivable that the conclusions of authors who found relatively good correlations between perceived and stopwatch-recorded latency times are not applicable in our sample: it remains possible that, in reality, a proportion of our PE participants overestimated their latency. But, on the other hand, in daily clinics, it would probably be pointless and certainly unrealistic to require stopwatch measures in order to make a clinical

diagnosis. This underlines both the problematic nature of the question of chronometric landmarks, and the fact that this matter is not yet settled.

Limitations

The sample was not selected on a representative basis. Therefore, it cannot be assumed that the results reported in this study characterize the overall Belgian PE population. Several observations are persuasive that bias interfered with the sampling and that one needs to be cautious in generalizing. First, the male participants were more educated than the general population. Second, partners' educational level was quite low: such educational gaps inside couples are actually atypical in Belgium. Third, in this sample, the rate of previous consultation for PE reached 37%. This was higher than those reported by Levinson (2008) and Porst et al. (2007)--18% and 15%, respectively--from representative French, German, American, and Italian samples. Such a difference does not necessarily mean that health behaviors are different in Belgium than in other countries. It may simply derive from a method of recruitment using an invitation to test a new treatment. This probably led to selecting a particularly proactive part of the Belgian population suffering from PE. Another study performed in the Netherlands by Van Lankveld, Leusink, Van Diest, Gijs, and Slob (2009) corroborates the possibility of such a selection bias: in their sample, also recruited from an invitation to test a treatment, they found a rate of previous consultations for PE reaching 30%. This is quite close to the 37% found in the present study.

In conclusion, the results of the present study showed that lack of control upon ejaculation is a central feeling in the experience of PE. By contrast, self-reported latency time did not seem to be a very relevant landmark, even for diagnosing the lifelong form.

Cognitive variables such as an excessive need to keep sexual behaviors and responses under control or the process of attributing sexual dissatisfaction to the partner appeared to contribute to an increase in the distress related to PE. These cognitive factors therefore require special attention in the provision of efficient intervention and prevention programs.

Overall, psychometric differences were rather slight between PE participants and the general population. However, some differences became clearer when PE subgroups were considered. The most distinctive parameter related to the level of severity of PE. At one end of the severity continuum, we found the most distressing form: lifelong and generalized PE with very short latency times (<30 sec). This form was associated with higher social anxiety scores and with a stronger tendency to avoid aversive situations. Although it remained discreet and did not express in itself a causality, this association corroborated the etiologic hypothesis of a serotonergic hypofunctioning characterizing several psychological difficulties, including severe PE. At the opposite end of the continuum, we found a situational form of PE. This was characterized by a somewhat different kind of anxiety: probably a form of emotionalism responsible for the variations of the problem according to affective and relational circumstances.

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