Relationship Satisfaction and Sexual Functioning in Female Partners of Men with Premature

Ejaculation

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# ÅBO AKADEMI UNIVERSITY – FACULTY OF ARTS, PSYCHOLOGY AND THEOLOGY

Subject: Psychology

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**Titel:** Relationship Satisfaction and Sexual Functioning in Female Partners of Men with Premature Ejaculation

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## Abstract:

*Introduction:* Premature ejaculation (PE) is considered the most common male sexual dysfunction and is regarded as a disorder that impacts both the man's and his partner's life (Althof, 2009; Hartmann, Schedlowski & Krüger, 2005). The aim of the present study was to investigate how women's ratings of their sexual function and relationship satisfaction are associated with their estimates of their male partner's level of PE symptoms. The second aim was to investigate whether prevalence rates of PE differ when women report on their male partners compared to when males self-report. Results from earlier studies have indicated an association between PE and decreased female sexual functioning. Past research has also suggested associations between PE, decreased relationship satisfaction and distress in female partners, though these findings have been equivocal. Findings regarding how female partners are equivocal.

*Method:* The sample comprised of responses from 1,778 Finnish women (mean age 33.320 years) and a control group of 1,024 Finnish men. The diagnostic screening tool CHEES (Jern et al., 2013) was used to measure PE. The FSFI self-report questionnaire (Rosen et al., 2000) was used to measure female sexual functioning in six subdomains. Relationship satisfaction was measured through a self-report questionnaire, PRQC (Fletcher et al., 2000a). The hypotheses were tested using a Student's *t*-test and a series of generalized estimating equation (GEE) regression models.

*Results:* The analyses revealed an association between more pronounced PE symptoms in the male (reported by women) and lower relationship satisfaction after age and relationship duration were controlled for ( $\eta^2_{partial} = .054$ ). Regarding female sexual functioning, an association between more pronounced PE symptoms in the male (reported by women) and lower sexual functioning was found for all subdomains (arousal, orgasm, satisfaction, lubrication, pain) except sexual desire. However, the effect sizes were small. Comparative analyses showed that men and women report slightly different rates of PE, though this difference was not statistically significant.

*Discussion:* The findings were mostly in line with earlier research All measures were validated and reliable, and the sample was large and population-based. A clear limitation was that all measures relied on self-reports. Further research of PE based on objective measures is needed.

**Keywords:** premature ejaculation, sexual dysfunction, relationship satisfaction, women, female partners, women's perception, female sexual function, female sexual dysfunction

**Date:** 8.6.2019

Page count: 30

Level: Master's thesis

# ÅBO AKADEMI - FAKULTETEN FÖR HUMANIORA, PSYKOLOGI OCH TEOLOGI

## Ämne: Psykologi

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Avhandlingens titel: Tillfredställelse med parförhållande samt sexuell funktion hos kvinnor vars manliga partners lider av prematur ejakulation

## Handledare: Patrick Jern

**Abstrakt:** *Introduktion:* Prematur ejakulation (PE) är den vanligaste sexuella dysfunktionen hos män och ses som en dysfunktion som både påverkar mäns och deras partners livskvalité och hälsa. (Althof, 2009; Hartmann, Schedlowski & Krüger, 2005) Syftet med den föreliggande studien var att undersöka hur kvinnor som rapporterar att deras manliga partners lider av PE rapporterar sin egen sexuella funktion samt hur nöjda de är med sitt parförhållande. Därtill undersöktes hur lika kvinnor som uppskattar PE symptom i sina partners och män som rapporterar om sig själva uppskattar prevalensen av PE i ett populationsbaserat sampel. Tidigare forskning visar att det finns ett samband mellan PE och sämre kvinnlig sexuell funktion. Däremot är resultaten gällande sambandet mellan PE och tillfredställelse med parförhållandet mindre entydiga. Likaså är tidigare forskningsresultat gällande hur kvinnor och män uppskattar prevalensen av PE tvetydliga.

*Metod:* Samplet bestod av 1779 finländska kvinnor (medelålder 33.230 år) och av en kontrollgrupp bestående av 1024 finländska män. För att mäta PE användes frågeformuläret CHEES (Jern et al., 2013). Frågeformuläret FSFI (Rosen et al., 2000) användes för att mäta kvinnlig sexuell funktion. För att mäta tillfredsställelse med parförhållandet användes frågeformuläret PRQC (Fletcher et al., 2000a). Alla mått baserade sig på självrapportering. Ett Student's t-test samt ett GEE- test (generalized estimating equation regression models) användes för att testa hypoteserna.

*Resultat:* Analyserna visade på ett samband mellan mer uttalade PE symtom, rapporterade av kvinnor, och lägre tillfredställelse med parförhållandet. Likaså fanns ett samband mellan mer uttalade PE symtom och sämre kvinnlig sexuell funktion. Detta gällde för alla domäner av sexuell funktion (upphetsning, lubrikation, orgasm, smärta, tillfredställelse) förutom lust. Emellertid var all effektstorlekar mycket små. Analyserna visade även att män och kvinnor rapporterar liknande prevalensnivåer av PE, med en mycket liten och icke-signifikant skillnad. *Diskussion:* Samtliga använda mått var validerade och reliabla och samplet var stort och populationsbaserat. Resultaten stämde delvis överens med tidigare forskning. En klar begräsning var att alla mått vilade på frågeformulär som byggde på självrapportering. Inom området behövs fortsatt forskning som med objektiva mått av PE kunde bidra med tillförlitligare resultat.

**Nyckelord:** prematur ejakulation, sexuell dysfunktion, parförhållande, kvinnor, kvinnliga partners, kvinnlig sexuell funktion, kvinnlig sexuell dysfunktion

Datum: 8.6.2019	Sidantal: 30
Nivå: Pro-gradu avhandling	

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#### **1** Introduction

Premature ejaculation (PE) is considered the most common male sexual dysfunction and is regarded as a disorder that impacts both the man's and his partner's life. (Althof, 2009; Hartmann, Schedlowski & Krüger, 2005). PE has been shown to significantly and negatively impact a man's quality of life, psychological functioning and sexual relationship (Rosen & Althof, 2008). Men with PE report lower levels of emotional well-being and higher levels of distress than men without PE (Rowland, Patrick, Rothman, and Gagnon 2007). While the effect of PE on men is well documented in the scientific literature, less is known about how female partners of men with PE are impacted in terms of quality of life, relationship satisfaction, sexual satisfaction and sexual functioning. In the present study the focus therefore lies on how female partners of men with premature ejaculation experience their relationship satisfaction and sexual function.

Being able to enjoy and feel pleasure from one's sex life is seen as important for psychological functioning and relationship satisfaction (Althof, 2009). Sexual dysfunctions are associated with decreased sexual satisfaction, lower levels of sexual well-being and decreased relationship satisfaction and quality (Althof, 2009; Fugl-Meyer & Fugl-Meyer, 2002; Virtanen, 2002). The studies that have identified these associations have however focused mostly on the experience of the person suffering from the dysfunction, ignoring the experiences of the person's partner. This study seeks to fill this gap in the research field by focusing on the experiences of the female partners of men with PE.

#### 1.1 Personal aspects of PE

PE has been defined in numerous ways and difficulties with defining PE have been discussed in the scientific literature. The World Health Organization (WHO, 1992) defines PE as "the inability to control ejaculation sufficiently for both partners to enjoy sexual interaction" (International Classification of Diseases-10, p. 151). The American Psychiatric Association's (2013) fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines premature ejaculation as "a persistent or recurrent pattern of ejaculation occurring during partnered sexual activities within approximately 1 minute following vaginal penetration and before the individual wishes it. The symptom must have been present for at least 6 months and must be experienced on almost all or all occasions of

sexual activity. The symptom causes clinically significant distress in the individual." (DSM-5, p. 443).

Due to varying definitions of PE and discrepancies in diagnostic criteria, prevalence estimates vary widely. Most studies report a prevalence of 20% to 30% in the general population (de Carufel, 2017; Jern, 2009), but prevalence rates vary widely between studies depending on the definition of the disorder. In studies where PE has been defined with an intra-vaginal ejaculation latency time (IELT) of less than one minute, prevalence rates around 1.5% or less have been reported (Jern, 2009). Waldinger (2004) pointed out that subjective experiences of PE symptoms are common in men, but that this does not warrant a PE diagnosis. Jern (2009) showed that the likelihood of perceiving oneself as suffering from PE increases with decreasing ejaculation latency time. In the present study, the Checklist of Early Ejaculation Symptoms (CHEES; Jern, Piha & Santtila, 2013), a diagnostic tool that is used for measuring PE, covers both the subjective experiences of PE symptoms and a more objective point of view (i.e. IELT).

The definitions for premature ejaculation have changed over time. The varying definitions have had an effect on both the diagnostics and treatment of PE (de Carufel, 2017). Furthermore, the different definitions of PE take the partner into account in different ways. PE, like other sexual dysfunctions, has both a personal and an interpersonal dimension. Jern (2009) argued that one problem with defining PE comes down to the question about "how quickly is too quickly" and whether the partner's experience should be included in the definition. Jern (2009) emphasized the importance of perceived distress in either the man suffering from PE or his partner as a diagnostic criteria, as this is ultimately what causes individuals to seek help.

#### **1.2 Interpersonal aspects of PE**

The association between PE and relationship satisfaction, sexual functioning and sexual satisfaction in female partners has been the subject of some research in the past. This chapter will briefly describe this research, as well as the research that has explored the differences between prevalence ratings as reported by the men suffering from PE compared to the rating reported by their female partners. First female sexual functioning as well as female sexual dysfunctions will be defined.

Female sexual functions can be defined as bodily reactions related to sexual activity. However, reactions that are not purely physical, for example desire, are also considered domains of sexual functioning. Sexual dysfunctions refer to distressing difficulties related to sexual activity. Different diagnostic manuals and assessment questionnaires use different classifications and definitions of female sexual dysfunctions (Gunst, 2019).

Prevalence rates for female sexual dysfunctions in the general population vary widely. Sjögren Fugl-Meyer and Fugl-Meyer (2002) found that 48% of women reported experiencing at least one sexual dysfunction, while about half as many women (26%) experienced suffering from their sexual dysfunction.

#### 1.2.1 The importance of the orgasm and its timing

The timing of orgasm in sexual interaction may be crucial from the standpoint of sexual satisfaction and pleasure. Kontula (2009) noted in the FINSEX survey, which has tracked Finnish, mostly heterosexual, trends since the 1970s up to present day, that heterosexual women's ability to have orgasms was enhanced by a male partner not ejaculating too quickly from the woman's point of view. The FINSEX survey also showed that the issue of PE had been present at some point in nearly half of all heterosexual relationship, while one-third of all heterosexual relationships had not been affected at all. The results did not differ based on age or relationship duration (Kontula, 2009).

Furthermore, women who reported recurrent lack of sexual desire were more likely than other women to report that their male partner ejaculated too quickly. It should be noted, however, that 10% of women who were not experiencing any lack of desire reported that their male partner ejaculated too quickly. The FINSEX study found an association between women's lack of desire and premature ejaculation in their male partner. Kontula (2009) postulated that the lack of desire in some women might be caused by insufficient time to enjoy intercourse, which might lead to a lack of desire for it.

Burri et al. (2018) assessed the importance of subjectively perceived ejaculation intensity and ejaculation volume for female sexual function and satisfaction in a sample of 240 sexually active, heterosexual women. They found that 50% of the women considered it very important that the partner ejaculates during intercourse. Furthermore, 18% of women preferred that the partner ejaculates before they reach orgasm, whereas for 54% this did not matter. Although male ejaculation and its different aspects seem to play an important role for women, the study demonstrated a considerable variability of women's attitudes toward ejaculatory characteristics.

#### 1.2.2 The association between PE and female sexual functioning

Results from earlier studies indicate that there is an association between PE and decreased female sexual functioning. Sjögren Fugl-Meyer and Fugl-Meyer (2002) found in a large, population-based sample in Sweden that 54% of women who reported suffering from low sexual interest also reported that their male partner suffered from PE. Furthermore, 24% of women who reported insufficient lubrication and 50% of women who reported low orgasmicity also reported that their male partner suffered from PE.

Verze et al. (2018) found in a sample of 3,104 women that women with PE partners reported a higher percentage of sexual dysfunction and more anxiety compared to female partners of men not affected from PE. Female partners of men with PE also reported an increased prevalence of sexual distress and a reduced quality of sexual life when compared to women whose partners were not affected from PE. Graziottin and Althof (2011) also found more orgasmic problems in partners of men with PE than in partners of non-PE men. Both men with PE and their partners felt that control over ejaculation was the central issue in PE. For both, the lack of control led to dissatisfaction and a decrease in intimacy.

Canat et al., (2018) showed that partners of men with PE had significantly lower total female sexual function index (FSFI) scores than did partners of men without PE. Hobbs, Symonds, Abraham, May and Morris (2008) reported high levels of sexual dysfunctions in female partners of men suffering from PE. The most reported dysfunctions in PE partners were problems with orgasm and arousal. 78% of PE partners had at least one sexual dysfunction (43% in the control group) and 48% of PE partners had two or more sexual dysfunctions (22% in the control group).

#### **1.2.3 PE and relationship satisfaction in female partners**

Earlier research has identified associations between PE, decreased relationship satisfaction and distress in female partners, but these findings have been equivocal. Rosen, Heiman, Long, Fisher, and Sand, (2016) found in a sample of 1,009 couples that female partners of men with PE did not report lower sexual or relationship satisfaction than partners of men without PE. Byers and Grenier (2003) also found that having more characteristics of PE was related to lower sexual satisfaction, but not to relationship satisfaction. Byers and Grenier suggested that for most couples, the timing of ejaculation affects sexual satisfaction but not overall relationship or personal functioning.

Burri, Giuliano, McMahon and Porst (2014) investigated 1,463 women's perception of ejaculatory function and specific aspects of PE that cause distress in females. Burri et al.

found a significant correlation between the importance of ejaculatory control and felt distress. Women reporting less sexual problems considered ejaculatory control more important and reported more PE-related distress. The male's lack of attention and focus on performance was the most frequently reported reasons for sexual distress, followed by the short time between penetration and ejaculation and the lack of ejaculatory control. Almost a quarter of women reported that the man's ejaculatory problem had previously led to relationship break-ups. Women who considered duration to be important were more likely to report breakups.

Rosen and Althof (2008) examined the consequences of PE regarding sexual relationship and quality of life through a literature review. High levels of personal distress, such as anxiety, stress, low sexual satisfaction (in 7 out of 11 include studies), as well as a negative impact on quality of life (in 4 out of 11 studies) and relationship (in 8 out of 11) was reported by female partners of men with PE. Patrick et al. (2005), Rowland et al. (2007), Graziottin and Althof (2011), Limoncin et al. (2013) and Giuliano et al. (2008) showed that female partners of men with PE had significantly lower satisfaction with sexual intercourse, higher personal distress, higher sexual distress and more interpersonal difficulty compared to partners of men with PE.

#### 1.2.4 Prevalence rates of PE when reported by men and female partners

Findings regarding how female partners estimate the PE in their partners compared with how men estimate PE in themselves are equivocal. Sjögren Fugl-Meyer and Fugl-Meyer (2002) found that women's reports of their male partner's sexual dysfunctions were generally fairly close to the rates reported by the male sample. Likewise, Rowland, Patrick, Rothman, and Gagnon (2007) found that PE reports (regarding control, satisfaction, distress and interpersonal difficulty) from men suffering from PE and from their female partners correlated significantly.

By contrast, Byers and Grenier (2003) investigated the relationship between men's and their female partner's perceptions of men's ejaculatory behaviour and found that men's and women's reports on the man's ejaculatory functioning were only moderately correlated. In general, the women saw PE as less of a problem for their partners than their male partners did. In the FINSEX study (Kontula, 2009) PE was studied by asking women if their male partner had ejaculated too quickly within the last year. In 2007, 22% of women reported that it had happened at least fairly frequently, and 5% said it had happened very often. However, men reported higher rates of PE than women did. Kempeneers, Andrianne, Cuddy and Blairy (2018) found that female partners of men with PE were less distressed by the PE than the men

themselves were. Female partners of men with PE also estimated the duration of penetration before ejaculation to be longer (M = 4.31 minutes) compared to self-reports from men with PE (M = 3.77 minutes).

To summarize, earlier research of PE has varied widely in sample size and measures, and clinical samples have been used more often than population-based samples. Furthermore, the findings in these studies have been somewhat contradictory. The present study contributes to clarifying these ambiguities with a large population-based sample, which allows for replication of some of the earlier research done in the field with good statistical power. Population-based samples are necessary for determining accurate prevalence rates in the whole population. Furthermore, in order to get a more accurate view of how PE is associated with relationship satisfaction and female sexual functioning a population-based sample is preferable. A population-based sample includes women who report the full range of levels of PE symptoms in their male partners. This, for example, also includes all those women who may suffer from the partners PE but who have never sought help for it, and therefore are excluded from clinical samples.

#### 1.3 Aims and hypotheses of the present study

Because sexual functioning and relationship satisfaction are closely linked and ejaculatory dysfunctions such as PE can affect the intimate relationship, as well as sexual functioning and satisfaction of the female partner, (Burri et al., 2018) it is vital to investigate how exactly PE might affect these domains. The present study uses validated measures of relationship satisfaction and female sexual functioning. Therefore, the present study can contribute with important knowledge about which domains of the female sexuality are associated with PE and how relationship satisfaction might be linked to PE with its large, population-based sample. This study aims to fill the knowledge gap regarding how accurately female partners estimate PE symptoms and whether PE symptoms reported by female partners differ from self-reported symptoms by males in a population-based sample.

In the present study, only the experience of the partner is taken into account, the study does not reveal if the partner of the woman actually suffers from PE as no data were available from couples. The main focus lies on PE symptoms reported by female partners of men and it is important to keep in mind that this study only uses partner-reported estimates of PE. When assessing the associations between PE, relationship satisfaction and female sexual function

the PE is measured through the female partner. It is not known if the male partner actually suffers from PE.

This study aims to enlighten explicitly how the female partner is affected by PE. This study focuses only on heterosexual couples and their functioning and experiences. This is due to the sample already being collected before this study was conducted and heterosexual women offered the largest possible sample. Earlier research in this field also focuses almost exclusively on heterosexual couples. Therefore, only studies and definitions proceeding from a heterosexual perspective will be used.

Based on earlier research the hypotheses for the present study are:

- Higher levels of PE symptoms in male partners of women predicts lower relationship satisfaction scores and higher scores on variables measuring female sexual dysfunctions when self-reported by women.
- 2. The prevalence rate of PE does not differ when comparing self-reports from men to self-reports from women reporting on their male partners.

#### 2 Methods

#### 2.1 Participants

The sample comprised of responses from 1,779 female twins and sisters of twins (mean age 33.230 years, SD = 4.995 years) who had participated in two waves of a large-scale Finnish population-based study: the Genetics of Sex and Aggression study conducted in 2006 and 2013. The original data collection was carried out in 2006 and targeted all Finnishspeaking twins aged 18-33 years and their over-18-year-old siblings living in Finland at the same time (for a detailed description of this sample, see Johansson et al., 2013). All participants in the data collection were identified from the Finnish Central Population Registry. A total of 7,680 female twins and 3,983 sisters were contacted by mail and asked if they were interested in completing a sexuality-related questionnaire. A total of 6,200 women completed the questionnaire either by mail or online through a secure web page, resulting in a response rate of 53%. In 2013, women in the first data collection who had declared an interest in participating in future studies were contacted again by mail and asked if they were interested in participating in a follow-up study. Of these 5,197 women, 2,173 participated by completing an online questionnaire through a secure web page, resulting in a response rate of 42%. These women constituted the sample of the present study. Since the mean age of the participants was relatively low at both time points, confounding effects of hormonal changes relating to menopause were avoided (the average age of menopause is 51 years; te Velde et al. 1998). An ethical research permit was obtained for both data collections from the Ethics Committee of Åbo Akademi University, in accordance with the Helsinki Declaration. The purpose of the study was clearly described, and the voluntary and anonymous nature of the participation emphasized. Written informed consent was obtained from all participants at both time points.

From the total sample of 2,173 participants, women without a steady male sexual partner were excluded. This resulted in a sample of 1,853 women. Missing data were found for measures of relationship duration, relationship satisfaction (PRQC) and age. Since the measure relationship duration consisted of only one item, the participants who had not answered that one particular item were excluded, resulting in the exclusion of 70 more participants. In addition, 4 more participants had not reported their age and were excluded. The final sample consisted of 1,779 women. To control for dependence between members of the same family, only one individual from each family was randomly included in the internal consistency analyses.

To test hypothesis 2 a population-based longitudinal sample with responses from 1,024 Finnish men (mean age 32.904 years, SD = 4.884 years) was also included the study. Participants were taken from the Genetics of Sexuality and Aggression (GSA) sample collected in 2006 (Johansson et al., 2013). In the 2006 data collection, 2,559 men indicated willingness to participate in follow-up studies. In 2012, these participants were invited to participate in an online follow-up survey. Altogether 1,173 men responded, resulting in a response rate of 46% for the 2012 data collection. Of these, 1,024 gave informed consent and participated in the study.

#### 2.2 Measures

### 2.2.1 Measurement of male premature ejaculation

Five items were used to measure premature ejaculation in the male. For this, the diagnostic screening tool CHEES (Checklist for Early Ejaculation Symptoms) developed by Jern, Piha and Santtila (2013) was used. This tool was developed empirically from three existing screening tools for PE and was found to have good validity (see Jern et al., 2013). The five items in CHEES are also more in line with updated diagnostic criteria for PE than any other available self-report tool for PE (e.g., DSM-5 criteria, American Psychiatric Association, 2013). In the present study, the male participants responded to the five items of the CHEES, but the questions were also modified so that the female partners of men could answer them (e.g., the original question 'Do you ejaculate from very little stimulation?' was phrased as 'Does your partner ejaculate from very little stimulation?' in the version completed by women). The five items used in the present study were responded to on a Likert-type scale ranging from 1 to 5. Higher scores are indicative of more pronounced PE symptoms. The items on the scale were added up to create a composite variable. In the present study, the internal consistency of this measure was acceptable in the female sample (when partner reported) (Cronbach's  $\alpha = 0.791$ ). In the male sample the internal consistency was good (Cronbach's  $\alpha = 0.824$ ).

#### 2.2.2 Measurement of female sexual function

In the present study the Female Sexual Function Index (FSFI; Rosen et al., 2000), a self-report questionnaire, was used to assess female sexual functioning. The FSFI has repeatedly demonstrated good validity and reliability in different settings and samples (Rosen et al., 2000; Wiegel et al., 2005; Witting et al., 2008) and is the most commonly used tool for assessing sexual function in women. The FSFI includes 19 items, which assess female sexual function over the past 4 weeks in six subdomains. These are: desire, subjective arousal, lubrication, orgasm, sexual satisfaction and intercourse-related pain. For the present study questions assessing female sexual function in a lifelong perspective were created. The same 19 items as in FSFI were used, so that for each item there was one question assessing the function over the past 4 weeks and one question assessing the lifelong function. Due to a technical error in the data collection phase, one pain-related question was omitted from the data collection (item 18: 'Life-long, how often did you experience discomfort or pain following vaginal penetration? '). Consequently, this item was excluded from all subsequent analyses in the present study (i.e., the sexual pain factor was measured by two items, instead of three). Despite this, the composite variable measuring sexual pain had good reliability ( $\alpha =$ 0.852).

In the present study, only the questions assessing life-long female sexual function (FSF) were used in the analyses. The questions are scored on a Likert-type scale ranging from 1 to 5 for some of the items, with lower scores indicating increased sexual function, and from 1 to 6 for some of the items with the supplementary option 'no sexual activity/did not attempt intercourse' (see Rosen et al., 2000, for a complete listing of FSFI items and response options). Four women reported that they had not had a partnered sexual experience and were therefore excluded from statistical analyses. The items of each subscale were calculated in line with the FSFI scoring system (Rosen et al., 2000) and added up to create a composite variable.

Cronbach's  $\alpha$  (internal consistency) indicated high reliability for most domains of sexual function. The internal consistency was excellent for lubrication ( $\alpha = 0.904$ ) and orgasm ( $\alpha = 0.922$ ), good for subjective arousal ( $\alpha = 0.870$ ) and sexual satisfaction ( $\alpha = 0.866$ ). For the subdomain of sexual desire, however, Cronbach's  $\alpha$  was questionable ( $\alpha = 0.688$ ). However, the composite variable for sexual desire only consisted of two items which might explain the low level of internal consistency.

#### 2.2.3 Measurement of relationship satisfaction

The Perceived Relationship Quality Components scale (PRQC; Fletcher, Simpson, & Thomas, 2000a) was used to measure relationship satisfaction. The scale has been shown to have good internal consistency and predictive validity in previous studies (Fletcher et al., 2000a; Fletcher, Simpson, & Thomas, 2000b). The PRQC consists of six questions (e.g., *"How satisfied are you with your relationship?")* with response alternatives on a 7-point Likert scale with the anchors "not at all" and "extremely". Higher scores indicate increased relationship satisfaction. The items on the scale were added up to create a composite variable. In the present study, the internal consistency of this measure was good (Cronbach's  $\alpha = 0.894$ ).

#### 2.2.4 Measurement of relationship duration

Relationship duration was measured with one question "For how long have you been in your present relationship?" The question was scored on a scale ranging from 1 to 6, where 1 = less than a month, 2 = more than a month but less than six months, 3 = 7-12 months, 4 = 1-3 years, 5 = 4-10 years, 6 = more than 10 years.

#### 2.3 Statistical analyses

Descriptive statistics and correlations were computed using IBM SPSS Statistics (v. 24) software package. The hypotheses were tested using a Student's *t*-test (for testing population means of PE symptoms reported by men or female partners of men) and a series of generalized estimating equation (GEE) regression models also conducted with SPSS. Composite variables were formed by summing all items belonging to the same factor; composite scores were used in all analyses, and age and relationship duration were controlled for. The GEE procedure allows for controlling for between-subjects dependence, which was necessary because the data consisted of genetically related individuals (belonging to the same family was thus the first level in the regression).

Variable	M	SD	Range			
Women Participants $(n = 1,779)$						
Age	33.230	4.995	25-56			
Relationship duration	4.990	1.089	1-6			
PE (partner's)	9.539	3.735	5-25			
PRQC	35.214	6.232	7-42			
FSFI desire	3.984	0.711	1.2-6			
FSFI arousal	2.673	0.907	1.2-7.2			
FSFI lubrication	1.863	0.809	1.2-7.2			
FSFI orgasm	2.862	1.365	1.2-7.2			
FSFI satisfaction	2.645	1.072	1.2-6.8			
FSFI pain	1.424	0.650	0.8-4.8			
Control Sample of Men $(n = 1,024)$						
Age	32.940	4.884	23-63			
PE, self-reported	9.929	3.364	5-25			
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Table 1Descriptive Statistics for Age, Sexual Function, Premature EjaculationSymptoms and Relationship Satisfaction and Duration.

*Note*. PRQC = measurement of relationship satisfaction (higher scores indicate higher satisfaction), PE = Premature Ejaculation (higher scores indicate more pronounced PE symptoms), FSFI = Female Sexual Function Index (higher scores indicate decreased sexual function). M = mean, SD = Standard Deviation

#### **3 Results**

As can be seen in Table 2, hypothesis 1 (that higher levels of PE symptoms in male partners of women would predict lower relationship satisfaction scores and higher scores on variables measuring female sexual dysfunctions) was supported for all variables except sexual desire. The analysis revealed an association between more pronounced PE symptoms in the male as reported by women and lower relationship satisfaction after age and relationship duration were controlled for  $(\eta^2_{partial} = .054)^1$ 

Regarding the different subscales of the FSFI clear differences were found. The analysis revealed a negative association between the partner's PE symptoms reported by women and the female arousal ( $\eta^2_{partial} = .019$ ), orgasm ( $\eta^2_{partial} = .012$ ), satisfaction ( $\eta^2_{partial} = .027$ ) and pain ( $\eta^2_{partial} = .004$ ) measured by FSFI after age and relationship duration were controlled for.

A smaller but also significant negative association was found for lubrication. The analysis revealed a negative association between the partner's PE symptoms reported by women and the female lubrication ( $\eta^2_{partial} = .002$ ) measured by FSFI after age and relationship duration were controlled for.

The analysis revealed no association between the partner's PE symptoms reported by women and the female desire measured by FSFI after age and relationship duration were controlled for ( $\eta^2_{partial} = .000$ ).

The results indicate that female partners who report more pronounced PE symptoms in their male partners tend to report lower sexual function on all subdomains except sexual desire.

An independent sample t-test was conducted to test hypothesis 2 (the prevalence rat of PE does not differ when comparing self-reports from men to self-reports from women reporting on their male partners).

The results showed that the prevalence rate of PE differs slightly when women reported on their male partners (M = 9.560, SE = 0.098) compared to when men self-report. (M =10.010, SE = 0.130). It should be noted that the men who self-reported were not partners to the women in the female sample. This difference, 0.450, CI [0.131, 0.770] was significant *t* (1497.508) = 2.764, p = .012; however, the effect was minor, d = 0.132.

<sup>&</sup>lt;sup>1</sup> Note. As the GEE procedure in SPSS does not have an option to calculate effect size, effect size was estimated using the univariate General Linear Model procedure, using one randomly selected individual from each family to control for any between-subjects dependence due to genetic relatedness.

Table 2

Associations between Partner-Reported Symptoms of Premature Ejaculation, Relationship Satisfaction, and Female Sexual Function.

Variable	Wald $\chi^2$	р	В	SE	$\eta^2_{partial}$
PRQC	75.061	<.001	390	.045	.054
FSFI desire	0.021	.886	.001	.005	.000
FSFI arousal	28.758	<.001	.036	.007	.019
FSFI lubrication	5.242	.022	.014	.006	.002
FSFI orgasm	21.740	<.001	.043	.009	.012
FSFI sex satisfaction	38.838	<.001	.045	.007	.027
FSFI pain	7.949	.005	.011	.004	.004

*Note.* PRQC = measurement of relationship satisfaction (higher scores indicate higher satisfaction), FSFI = Female Sexual Function Index (higher scores indicate decreased sexual function). Wald  $\chi^2$  = Wald chi squared, *B* = unstandardized regression coefficient, SE = standard error of the *B*.

Table 3

Correlations between, Age, Relationship Duration, Different Domains of Female Sexual Function and Partner-Reported Levels of Premature Ejaculation.

	Age	RD	PEpr	PRQC	FSFI-d	FSFI-a	FSFI-1	FSFI-o	FSFI-s	FSFI-p
Age	1									
RD	.237**	1								
PEpr	.122**	.124**	1							
PRQC	142**	047*	246**	1						
FSFI-d	.093**	.094**	.021	066**	1					
FSFI-a	004	044	.138**	138**	.448**	1				
FSFI-1	059*	081**	.050*	052*	.293**	.610**	1			
FSFI-o	085**	130**	.094**	098**	.197**	.584**	.418**	1		
FSFI-s	.026	161**	.140**	288**	.253**	.594**	.451**	.490**	1	
FSFI-p	084**	025	.053*	037	.166**	.311**	.393**	.213**	.299**	1

Note. RD = Relationship duration, PEpr = Premature Ejaculation, partner's (higher scores indicate more pronounced PE symptoms), PRQC = measurement of relationship satisfaction (higher scores indicate higher satisfaction), FSFI = Female Sexual Function Index ((d = desire, a = arousal, l = lubrication, o = orgasm, s = satisfaction, p = pain) higher scores indicate decreased sexual function).

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed)

#### **4** Discussion

The aim of the present study was to investigate how women's ratings of their sexual function and relationship satisfaction are associated to their estimates of one's male partner's level of PE symptoms. The second aim was to investigate whether prevalence rates of PE differ when women report on their male partners compared to when males self-report. With a large, population-based sample consisting of 1,779 Finnish females and 1,024 Finnish males, the present study contributes with important knowledge on the association between PE, women's sexual problems and relationship quality, and also allowed for replication of some previously reported findings. In addition, the present study used validated measures, which has not been the case in all earlier studies.

To recapitulate, the first hypothesis of the study was that higher levels of PE symptoms in male partners of women would predict lower relationship satisfaction scores and higher scores on variables measuring female sexual dysfunctions when self-reported by women. This hypothesis was supported both for relationship satisfaction and female sexual dysfunctions, with the exception of sexual desire, which was not associated in either direction with PE symptoms reported by female partners of men. In regard to the second hypothesis, that is whether the prevalence rate of PE were similar when comparing self-reports from men to selfreports from women reporting on their male partners, the results showed that men and women report slightly different rates of PE, though this difference was not statistically significant. This finding supports the findings by Sjögren Fugl-Meyer and Fugl-Meyer (2002) and Rowland et al. (2007) who also found that men and women estimate similar rates of PE symptoms. By contrast, Kontula (2009), Byers and Grenier (2003) and Kempernees et al. (2018) found that women estimated the duration of penetration longer than men did and women also saw PE as less of a problem than men did.

#### 4.1 Main findings and interpretation

The earlier research concerning relationship satisfaction and PE has produced ambiguous results. Rosen et al. (2016) and Byers and Grenier (2003) did not find any associations between PE and relationship satisfaction in women. Burri et al. (2014), Patrick et al. (2005), Rowland et al. (2007), Graziottin and Althof (2011), Limoncin et al. (2013) and Giuliano et al. (2008), as well as the literature review by Rosen and Althof (2008), found that PE was associated with higher personal distress in female partners and more interpersonal difficulties in the relationship. It should be noted that none of the studies referred to used the same measure for relationship satisfaction, PRQC, as the present study did.

However, the present study showed a clear association between lower relationship satisfaction in women, who reported more pronounced PE problems in their male partners. This association, however, had a relatively small effect size ( $\eta^2_{partial} = .054$ ). The present study can contribute with a robust finding to the earlier equivocal findings. The sample in the present study is large and population-based and therefore representable, and all measures used are validated.

Regarding the six subdomains of FSFI the present study, the results revealed significant associations but with small effect sizes, which is in line with earlier research. Specifically, associations were found between arousal, orgasm, lubrication, satisfaction, pain and partner-reported PE. These findings are consistent with previous research done by Verze et al. (2018), Canat et al. (2018) and Hobbs et al. (2008). The effect sizes for all associations were small, but this can partially be explained by the fact that the sample was population-based. Population-based samples tend to have smaller effect sizes compared to clinical samples, in which the rate of psychological, physiological and sexual problems usually are higher. Therefore, the results from this study should not be overlooked because of small effect sizes.

However, not all findings concerning the subdomains of FSFI were in line with past studies. In contrast to the findings of Sjögren Fugl-Meyer and Fugl-Meyer (2002) and Kontula (2009) the present study did not show any association between the FSFI subdomain desire and PE. This result might have to do with the fact that this study used life-long questions when measuring FSFI, instead of the standard last four weeks. The subdomain desire was also only measured by two questions and showed questionable internal consistency in the present sample ( $\alpha = 0.688$ ).

Regarding all the six subdomains of FSFI and the fact that they were measured with a life-long perspective instead of the last four weeks is worth mentioning. The life-long version was chosen because measuring only the last four weeks in relationships that on average lasted four to ten years is not very accurate. The life-long questions include a broader perspective on sexual functioning and are more in line with the other questions measuring relationship satisfaction and PE symptoms, which do not have a time limit. Using the questions covering the entire lifespan instead of ones covering the last four weeks also gives a more accurate view of what is going on in the relationship in a broader perspective. Four weeks is a short period of time, and according to the latest FINSEX study (Väestöliitto, 2019), Finnish women have sexual intercourse on average once a week if their romantic relationship has lasted

longer than two years. Therefore, the risk of errors in a four-week measurement period, during which it is reasonable to estimate that around four intercourses have happened, is greater than in life-long measurements, where a greater amount of sexual intercourses in different situations and environments probably are taken into account.

Furthermore, the average age for the participants in the study was 33.230, and the average age for first sexual intercourse is 17.5 years for Finnish women born after 1970. (Väestöliitto, 2019). This also justifies the use of the life-long version, as a majority of the participants have had an active sex life for at least ten years and been in their present relationship between four and ten years. As the purpose of the study was to examine overall sexual functioning, it is justified to use the life-long questions to get the most accurate view of the current functioning in the current relationship. On the other hand, it is possible that the participants were not considering their current relationship and partner, when asked to think about sexual functioning in a life-long perspective. Whether this happened is unclear, but since the mean relationship duration for the participants ranged from 4 to 10 years, it is reasonable to assume that the participants also took the current relationship into account when measuring their sexual functioning.

The present study suggests that on a population level prevalence estimates are remarkably similar irrespective of whether men report on PE symptoms themselves, or women report on their partners. The earlier studies focusing on this aspect of PE have seldom used a validated measure to investigate how men and women estimate PE. Kempeneers et al. (2018) asked men and female partners to estimate the duration of penetration before PE, but other studies have focused on how men and their female partners experience PE and the circumstances surrounding it differently. Kontula's (2009) measure consisted of one question (whether the man hade ejaculated too quickly within the last year) and found that men reported higher rates of PE than women did. The strength of the CHEES-tool used in the present study is that the same five questions were answered by both sexes, and it is in line with the DSM-5 diagnostic criteria. The findings of the present study suggest that, when given exact and validated questions, men and women estimate the prevalence of PE very similarly. Kempeneers et al. 2018 also found that men were more distressed than their partners by the present PE symptoms. One strength of the CHEES instrument is that one of the five questions address the frustration caused by ejaculating before wanting to do so and includes this in the measurement of PE. So, whereas earlier studies have compared different details about PE, the present study measures PE and the estimates of its prevalence more thoroughly and more precisely.

It is debateable how important the man's ability to prolong vaginal intercourse is for the female pleasure and satisfaction. On one hand, Weiss and Brody (2009) suggested that the female orgasm is strictly correlated with the duration of vaginal intercourse. Althof (2006) found that women reported both lack of own orgasm, lack of sexual pleasure and the sudden interruption of sexual intercourse as the main complaints due to their partners early ejaculation. Some more recent studies (Burri et al., 2014; Burri et al., 2018) argued that the timing of both his and her own orgasm is crucial for how sexually satisfied the female partner is. The present study shows that there is a significant association between partner-reported PE and the woman's ability to reach orgasm and her satisfaction with that ability. However, what remains unclear is whether it is the timing of the male orgasm that is associated with women's' lowered ability to reach orgasm and lower satisfaction with this ability or whether this is caused by the other factors related to PE. Burri et al. (2014) asked female partners to men with PE about the reasons for their reported distress concerning their partner's PE. The majority of women indicated that the lack of attention to sexual needs, such as kissing and caressing, was the reason for the distress. This reason was followed by the short time between penetration and ejaculation and lack of ejaculatory control. Furthermore, the women reported more distressed about the partner focusing on himself, his performance and his ability to control ejaculation than about the fact that he ejaculated quickly. Thus, Burri et al. (2018) concluded that women show a considerable variability in how important the male ejaculation and its characteristic are for them. Burri et al. (2018) indicated that women consider the importance of male ejaculation in divergent ways. This finding can be seen as support for the studies implying that it is not the premature ejaculation per se that causes dissatisfaction in women, but rather that the man focuses his attention on himself instead of on his partner and his distress following the early ejaculation.

PE might also become a problem only later in a relationship. It is conceivable that at least some women could experience rapid ejaculation positively (i.e., as a sign of them being very attractive) in the beginning of a relationship. However, if the PE is or becomes a recurrent pattern, it could then become a problem in the relationship. On the other hand, Santtila et al. (2007) found that Finnish women desire vaginal intercourse more than masturbation and oral sex, but that they desire kissing and petting the most. From this point of view, the penile-vaginal intercourse is not the most important in terms of female sexual pleasure. A satisfying sex life depends on more than the timing and presence of the orgasm.

Since the present study more or less replicates some of the earlier research and the effect sizes in this study were small, mentioning the ongoing so-called replication crisis is justified. Open Science Collaboration (2015) showed that when replicating published studies, the mean effect size of the replication effects was half the magnitude of the mean effect size of the original effects. Moreover, many earlier studies cannot be replicated, and those studies that have been replicated only small effect sizes have been found. To that background the results of the present study, with small effect sizes, are just what could be expected in the light if the replication crisis. Much bigger effect sizes in a population-based sample would not be reliable. However, it is defensible to replicate earlier studies, both from the perspective of the replication crisis and the fact that earlier findings in this field are equivocal.

### 4.2 Strengths and limitations of the present study

The present study used a large population-based sample which gives the results better generalizability than a clinical sample could. All the measures used were validated and had high or at least good reliability. None of the studies reviewed in the introduction chapter had used the same measure for relationship satisfaction, PRQC, even though it is a validated and reliable measure. The present study is also the first one in the field to use the CHEES screening tool for measuring PE. The CHEES tool is in line with the DSM-5 diagnostic criteria for PE and covers both physical PE symptoms and psychological, such as frustration.

A clear limitation of the present study is that all measures and variables are based on self-reports, which makes our results vulnerable to, for example, recall bias. It was also not possible to determine whether there is agreement between female partners' reports of PE symptoms in her male partner and the partner's self-evaluation of the same symptoms. Even though the present study indicates that women and men themselves estimate PE symptoms in a comparable manner, the fact that this study relied on partner-reported PE instead of a clinical diagnosis of PE is a flaw. For example, it is a possibility that women who are unsatisfied with their relationship could more easily exaggerate the PE symptoms in their partner. A similar explanation could be used for the connection between female sexual dysfunctions and PE, in that it is possible that women who suffer from a sexual dysfunction might also rate their partners' sexual functioning rate their partners functioning higher-This might happen if they feel that their sexual dysfunction makes their own sexual functioning so low that they experience anybody else's functioning higher than their own.

A limitation that characterizes the whole research field, including the present study, regarding PE, and its impact on relationships and the partners, is the heteronormativity of the research done. Almost every study conducted in the field focuses on heterosexual couples and PE is often measured and diagnosed using intra-vaginal latency time. This means that the results of this study are not generalizable outside of heterosexual couples.

### 4.3 Suggestions for future research

Even though a lot of research has been conducted in the field of PE and its associations with relationship satisfaction and sexual function in female partners, studies using other measures than only self-reports are needed. Population-based studies with large samples, where the presence of PE can be measured with objective measures (e.g. IELT) instead of self-reports are needed to account for the influence of other factors on the PE reports. Furthermore, it would be important to further explore how exactly the partner's PE impacts the female partner. Is it the shortened sexual act that causes distress, lost intimacy, disappointment and negative emotions driven by the early ejaculation or some other elements? Also why does female sexual dysfunctions and male sexual dysfunctions occur in the same romantic relationship?

Thus, while the association between partner-reported PE and decreased relationship satisfaction is clear in the present study, the exact mechanisms behind this association are still unknown. Maybe partners who are dissatisfied with their relationship report PE symptoms in their male partners more easily. One explanation could also be that the lack of attention during sexual intercourse causes distress and dissatisfaction in the overall relationship (Burri et al., 2014). The design of this study cannot answer questions regarding causality, but this is a suggestion for further research in the field.

Since research on how PE impacts non-heterosexual couples is non-existent it should get more attention in the future. It is unknown whether the problems within the romantic relationships look the same and whether PE is associated with different sexual domains in non-hetero relationships. It would also be important to explore whether female partners and male partners report different levels of PE symptoms in men.

#### 4.4 Conclusions

The aim of the present study was to investigate how women's ratings of their sexual function and relationship satisfaction are associated to their estimates of one's male partner's level of PE symptoms. The second aim was to investigate if prevalence rates of PE differ when women report on their male partners and when self-reported by males. To investigate this a large, population-based sample of Finnish women and men was used. All measures were validated and reliable and the analysis showed an association between lower relationship satisfaction in female partners, lower female sexual functioning, and more pronounced PE symptoms in men when reported by women. The study also indicates that men and women estimate prevalence rates of PE in men in a similar fashion. The findings were mostly in line with earlier research. A clear limitation was that all measures lied on self-reports.

## 5 Summary in Swedish Svensk sammanfattning

## Tillfredställelse med parförhållande samt sexuell funktion hos kvinnor vars manliga partners lider av prematur ejakulation

#### Inledning

Prematur ejakulation (PE) är den vanligaste sexuella dysfunktionen hos män och ses som en dysfunktion som både påverkar mäns och deras partners livskvalité och hälsa. (Althof, 2009; Hartmann, Schedlowski & Krüger, 2005) Det har forskats mycket i hur PE påverkar mäns livskvalité, psykiska hälsa och sexuella funktion. Däremot har färre forskare undersökt hur kvinnliga partners påverkas av att deras manliga partner lider av PE. Därför fokuserade den förliggande studien på hur kvinnor upplever sin parrelation och sexuella funktion då de rapporterar att deras manliga partner lider av PE.

Hur PE ska definieras har länge varit ett omtvistat ämne. American Psychiatric Association definierar i sin senaste diagnostiska manual PE som följande: "En man lider av prematur ejakulation när ejakulationen ofta och återkommande sker inom en minut efter vaginal penetration och innan individen själv önskar. Symtomen måste ha funnits i minst 6 månader och måste uppvisas under nästan alla eller alla tillfällen av sexuell aktivitet" (DSM-5). Prevalensen av PE varierar stort, men mellan 30 % och 1,5 % av hela världens män rapporterar att de lider av prematur ejakulation (de Carufel, 2017; Jern, 2009). Kvinnlig sexuell funktion kan definieras som kroppsliga reaktioner på sexuell aktivitet. Emellertid är lust även en domän av sexuell funktion även om den inte är en rent fysisk reaktion. Sexuella dysfunktioner är däremot svårigheter och problem förknippade med ångest som uppkommer i samband med sexuell aktivitet. Prevalensen av kvinnlig sexuell dysfunktion varierar stort, men Sjögren Fugl-Meyer and Fugl-Meyer (2002) rapporterade att 48 % av kvinnorna i ett populationsbaserat sampel hade minst en sexuell dysfunktion.

Resultat från tidigare studier visar på ett tydligt samband mellan PE och sämre kvinnlig sexuell funktion. Däremot är resultaten mindre tydliga gällande hur PE och kvinnans tillfredställelse med parförhållandet är associerade. Rosen med flera (2016) samt Byers och Grenier (2003) fann inga samband mellan PE och kvinnans tillfredställelse med parförhållandet. Däremot upptäckte Rosen och Althof (2008), Patrick med flera (2005), Rowland med flera (2007), Graziottin och Althof (2011), Limoncin med flera (2013) samt Giuliano med flera (2008) ett samband mellan PE och lägre tillfredställelse med parförhållandet.

Den föreliggande studien undersökte även hur kvinnor som uppskattar sina manliga partners PE symptom uppskattar dem i jämförelse med hur män uppskattar sina egna PE symtom. Tidigare forskningsresultat inom det här området är tvetydiga. Sjögren Fugl-Meyer and Fugl-Meyers (2002) och Rowland med fleras (2007) studier visade att män och kvinnor uppskattar PE symtom i män väldigt lika. Däremot fann bland annat Kontula (2009) och Kempeneers med flera (2018) att kvinnor tenderar uppfatta PE symtomen lindrigare än vad män gör.

Utifrån tidigare forskning ställdes följande hypoteser:

- Mer uttalade PE symtom hos manliga partners har ett samband med lägre tillfredställelse med parförhållandet samt sämre sexuell funktion hos kvinnor, då PE symtomen rapporteras av kvinnorna själva.
- 2. Prevalensnivåerna av PE skiljer sig inte då kvinnor uppskattar PE symtom i sina manliga partners jämfört med när män uppskattar sina egna PE symtom.

#### Metod

Samplet bestod av 1779 finländska kvinnor (medelålder 33.230 år) och av en kontrollgrupp bestående av 1024 finländska män. Deltagarna hade deltagit i en stor populationsbaserad studie i Finland under åren 2006 och 2013 (för närmare beskrivning av samplet och rekryteringsprocessen, se Johansson med flera, 2013). Deltagandet skedde genom en elektronisk enkät. Alla deltagarna måste ha fyllt 18 år och gett sitt samtycke till deltagandet i studien. Endast svar från kvinnor som rapporterat att de hade ett varaktigt parförhållande och var heterosexuella inkluderades i den föreliggande studien.

För att mäta PE användes frågeformuläret CHEES (Jern et al., 2013) som består av fem frågor. Frågeformuläret FSFI (Rosen et al., 2000) användes för att mäta kvinnlig sexuell funktion. FSFI består av 19 frågor som utgör sex undergrupper av kvinnlig sexuell funktion (lust, upphetsning, lubrikation, orgasm, tillfredställelse, smärta). Dessa sex undergrupper av kvinnlig sexuell funktion utgjorde skilda variabler i analyserna. FSFI mäter sexuell funktion över de senaste fyra veckorna, men i den föreliggande studien användes ett tillämpat livslångt alternativ. Kvinnorna rapporterade om sin sexuella funktion i ett livslångt perspektiv och inte endast för de senaste fyra veckorna.

För att mäta tillfredsställelse med parförhållandet användes frågeformuläret PRQC (Fletcher et al. 2000a). Alla använda mått uppvisade hög reliabilitet och var validerade. Ett Student's t-test samt ett GEE- test (generalized estimating equation regression models) användes för att testa hypoteserna. Analyserna utfördes i programvaran IBM SPSS Statistics (version 24).

#### Resultat

Se tabell 1 för deskriptiv statistik gällande ålder, sexuell funktion, PE, tillfredställelse med parförhållandet samt parförhållandet längd. Hypotes 1 bekräftades (se tabell 2), för alla variabler förutom sexuell lust som inte uppvisade något samband med PE. Sambandet mellan mer uttalade PE symtom, rapporterade av kvinnor, och lägre tillfredställelse med parförhållandet hos kvinnor uppvisade den största effektstorleken ( $\eta^2_{partial} = .054$ ). Sambanden mellan PE och lägre kvinnlig sexuell funktion var signifikanta men uppvisade små effektstorlekar. Gällande hypotes 2 visade analyserna att män och kvinnor rapporterar liknande prevalensnivåer av PE, med en mycket liten och icke-signifikant skillnad.

## Diskussion

Resultaten i den föreliggande studien stämde till viss del överens med tidigare forskning. Sambandet mellan PE, rapporterad av den kvinnliga partner, och hennes tillfredställelse med sitt parförhållande uppvisade en negativ association. Tidigare studier inom ämnet har kommit fram till tvetydiga resultat. Utmärkande för den aktuella studien var att självskattningsformuläret PRQC som användes för att mäta tillfredställelse med parförhållandet inte använts i någon annan studie inom detta ämne.

Att analyserna visade en negativ association mellan mer uttalade PE symtom och lägre kvinnlig sexuell funktion överensstämde med tidigare forskning. Däremot var lust inte på

något vis förknippat med rapporterade PE symtom, medan tidigare forskning utförd av Sjögren Fugl-Meyer och Fugl-Meyer (2002) samt Kontula (2009) uppvisat motsatta resultat.

Faktumet att kvinnlig sexuell funktion mättes ur ett livslångt perspektiv istället för de senaste fyra veckorna bör uppmärksammas. Det livslånga perspektivet var befogat eftersom de flesta deltagarna i studien varit i samma parförhållande de senaste fyra till tio åren. Det livslånga perspektivet gav även en mer omfattande uppfatting av kvinnans sexuella funktion. Emellertid kan det inte uteslutas att deltagarna i studien kanske tänkte på någon annan än sin aktuella partner då de besvarade frågorna om livslång sexuell funktion.

Kvinnor som uppskattade PE symtom i sina manliga partners rapporterade väldigt lika prevalensnivåer som män som självskattade sina egna symtom gjorde. Tidigare forskning har kommit fram till tvetydiga resultat i frågan. Den aktuella studien använde sig av ett validerat mått, CHEES, som dessutom lyckas ta flera olika faktorer av PE i beaktande.

Att den föreliggande studien uppvisade så små effektstorlekar som den gjorde är logiskt mot bakgrunden av den så kallade replikationskrisen. Open Science Collaboration (2015) kunde uppvisa att de studier som går att replikera ofta uppvisar hälften mindre effektstorlekar än de ursprungliga studierna.

Till studiens styrkor hör att samtliga använda mått var validerade och uppvisade hög reliabilitet samt att samplet var stort och populationsbaserat. En klar begräsning var däremot att alla mått vilade på frågeformulär som byggde på självrapportering. Inom området behövs fortsatt forskning som med objektivare mått av PE kunde bidra med tillförlitligare resultat. Nämnvärt är också att den föreliggande studien likt tidigare forskning uteslutande fokuserade på heterosexuella par. I fortsatt forskning behöver även icke heterosexuella personers upplevelser av PE inkluderas för att få en så bred och sanningsenlig förståelse av problematiken som möjligt.

Sammantaget bidrar den föreliggande studien med robusta resultat som vilar på validerade mått och ett stort populationsbaserat sampel. Sambandet mellan mer uttalade PE symtom, då de rapporteras av en kvinnlig partner, och lägre tillfredställelse med parförhållandet är tydligt. Likaså är mer uttalade PE symtom associerade med sämre kvinnlig sexuell funktion.

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