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ORIGINAL RESEARCH—EJACULATORY FUNCTION

Understanding the Effects of Establishing Various Cutoff Criteria in the Definition of Men with Premature Ejaculation

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ABSTRACT

Introduction. Over the past decade, professional organizations and consensus groups have offered a variety of definitions for premature ejaculation (PE), all generally including a set of common concepts but all varying in specific language and operationalization. Clearly articulated definitions of such conditions are important because they not only affect prevalence rates but also diagnostic inclusion—who is deemed to have the condition and therefore who might be eligible for treatment.

Aim. The current study had two goals: (i) to examine the effects on prevalence rates of moving the cutoff points from more stringent to less stringent for each of three PE criteria—ejaculatory latency, distress, and ejaculating before desired; and (ii) to explore in detail the relationships among the three criteria.

Methods. Using an Internet-based sample of 1,183 men, we examined the responses of 374 with PE-type symptoms based on consensus definitions, and determined the effect of decreasing restrictions on the cutoff criteria. In addition, we calculated both correlations and concordance rates among criteria.

Results. Numeric and graphic depiction of the effects of moving the cutoff point for each of the three criteria is provided in the URL “PE Prevalence©,” a dynamic tool developed specifically for this study (<https://sites.google.com/a/valpo.edu/PEprevalence/>). In addition, statistical relationships among the PE criteria suggest sufficient independence to warrant inclusion of all three in a diagnostic procedure as well as to consider a 2-minute ejaculatory latency as the threshold for a PE diagnosis.

Conclusions. Based on our data, clinicians should approach the 1-minute ejaculatory latency time (ELT) criterion with flexibility, considering ELTs up to 2 minutes for a PE diagnosis. At the same time, frequency of occurrence of either ejaculating before desired or of distress about the condition, as long as they reach at least 50% of the time, had only minor impact on PE diagnostic inclusion. **Rowland DL and Kolba TN. Understanding the effects of establishing various cutoff criteria in the definition of men with premature ejaculation. J Sex Med 2015;12:1175–1183.**

Key Words. Premature Ejaculation; Prevalence; Distress; Self-Efficacy; Ejaculate before Desired; Sexual Dysfunction

Introduction

The definition of premature ejaculation (PE) has recently been the focus of discussion and debate among healthcare professionals. Specifically, over the past decade, professional organizations and consensus groups have offered a variety of definitions for PE, all generally similar but varying in language, emphasis, qualifying condi-

tions, and operationalization. Indeed, many studies on PE have not explicitly specified the criteria for PE inclusion or, alternatively, they have used varying criteria for inclusion. For example, studies have used ejaculatory latencies following penetration (ejaculatory latency time or ELT), extending from one to several minutes [1,2]. And some studies have included dimensions of ejaculatory control and/or psychological distress while

others have not. This lack of uniformity not only may affect prevalence estimates (3–30% by some estimates: [3]), but also makes it difficult to compare findings across studies. More importantly, it has the potential to affect diagnostic inclusion—that is, who is deemed to have the condition, who is eligible for treatment, and in some instances, who qualifies for third-party reimbursement.

Recognizing the need to address this problem, in 2008 the International Society for Sexual Medicine (ISSM) developed a consensus-based definition for “lifelong” PE (PE that has been present during the man’s entire sexual life) which has three essential components: an ejaculatory latency of about 1 minute or less after penetration; the inability to delay the ejaculatory response (i.e., a lack of self-efficacy or sense of control over the behavior/problem/situation); and distress or other negative consequences to the individual and/or partner [4]. Recently, the American Psychiatric Association followed suit with the 1 minute cutoff latency to define PE and included general text indicating “ejaculation before desired” and “significant clinical distress” in the individual [5]. In contrast, the definition of the International Statistical Classification of Diseases and Related Health Problems (ICD) currently specifies a 15-second cutoff; whether the ICD adopts the 1 minute criterion in its forthcoming revision is yet to be seen [6].

While the 1 minute cutoff has modest empirical support, it is, to a large extent and as with many diagnostics, an index that reflects both “risk” and “convenience,” more so than a true determinant of dysfunctional status. Specifically, this criterion captures the idea that men with PE ejaculate shortly after penetration (the shorter the latency, generally the higher the PE risk) and, furthermore, it is a convenient and discrete numeric (cf. 1 minute/60 seconds vs. something like 85 seconds, or 110 seconds, and so on). However, the 1-minute criterion has its own problems as it excludes a large number of men who have longer latencies but who otherwise meet the criteria for PE [7]. Indeed, such men tend to appear similar to those fitting the 1-minute PE criterion both in demographic parameters and attribution patterns—that is, the causes to which they ascribe their problem (e.g., lack of control) as well as the patterns of self-blame for their lack of sexual self-efficacy are similar across groups ([7]; Rowland et al., unpublished data). As a result, the 1-minute criterion might be viewed as both convenient and associated with increasing risk, but not hard and fast.

As data accumulate, the 1-minute criterion itself needs to be reexamined periodically for both its utility and validity. Quite surprisingly, the two other PE criteria—namely distress and self-efficacy (i.e., unable to postpone ejaculation or ejaculating before desired [8])—have received much less attention and even today have yet to be fully operationalized on the basis of empirical evidence. That is, although the constructs themselves are empirically supported, their operationalization (or quantification) has not been investigated: either no quantitative standard has been offered [4,9] or, alternatively, that which has been offered is expert-based rather than evidence-based (see, e.g., the new *DSM-5* definition that indicates ejaculation within 1 minute on 75% of occasions [5]). In other words, although these constructs are considered part of the PE diagnosis, their operationalization has not been carefully explored or delineated; for example, in terms of the *frequency* of ejaculating before desired or the associated *magnitude* of distress.

Aims

The current study had two goals: (i) to examine the effects of moving the cutoff points for each of the three PE criteria—ejaculatory latency, distress, and ejaculating before desired (a measure of self-efficacy)—from more stringent to less stringent on PE prevalence rates within a sample; and (ii) to explore in detail the relationships among the three criteria themselves. Such information is critically important because it affects prevalence rates for PE and therefore determines who is and who is not eligible for treatment.

Methods

Participants

Potential participants for this study included 374 men at least 18 years of age (mean age = 26.4, SD = 9.3; range = 18–75) drawn from a community-based convenience sample of 1,183 men visiting one of 12 postings in the forums on reddit.com, or visiting the research home page on facebook.com. Participation in this study occurred through self-selection, with the only promotion being a forum post identifying the need for men ages 18+ for a survey on sexual health. No paid advertisements were used; participants finding the survey through Facebook were directed by their general interest in issues regarding men’s sexual health.

Table 1 Demographics, sexual and relationship functioning

Category	EBD (n = 374)	Not EBD (n = 809)
Demographics		
Age	26.4 (9.3)	25.8 (8.6)
Education (%)		
High school or less	15	14
Some college	39	40
Bachelor's degree	33	33
Postgraduate	13	13
Medical and personal history		
% with medical/medication risk for sexual problem	11.6	13.3
% reporting ongoing anxiety or depression	19.1	19.7
Number of alcoholic drinks per week (1 = 0, 2 = 1–5, 3 = 6–10, 4 => 10)	2.0 (0.9)	2.0 (0.9)
Sexual and relationship parameters		
% having sexual partner	73.6	76.5
*Importance of having sex	3.8 (1.0)	3.9 (0.9)
*Satisfied with primary sexual relationship	3.6 (1.5)	3.8 (1.4)
*Satisfied with overall relationship	4.0 (1.4)	4.1 (1.4)
*Interest in sex	4.4 (0.8)	4.5 (0.7)
*Erectile difficulty	1.7 (1.0)	1.6 (0.9)
†Frequency of sex (with or without partner)	2.6 (1.5)	2.5 (1.6)

*1 = not at all or never, 5 = very or most of the time

†1 = once or more per day, 2 = 2–3×/week, 3 = once/week, 4 = once/2 weeks, 5 = about once/month, 6 =< once/month

EBD = ejaculating before desired

The 374 men were ones whose response to an item on the online survey about “how often you ejaculate before desired” (assuming a time frame of “over most of your adult sexual life”) identified them as possibly having PE. Specifically, men who responded 3, 4, or 5 to this question on a five-point scale (1 = almost never to 5 = almost always) were used to establish the “ejaculating before desired” group, hereafter referred to as the *PE symptom* group.¹ Of those men falling into the 3–5 category on this item, 55% responded “3” (about half the time), 32% responded “4” (about 75% of the time), and 13% responded “5” (nearly all the time).

Men in the PE symptom group completed supplementary questions about their ejaculatory experiences. Specifically, these participants were automatically directed to a subsection of the survey designed to gain additional information, including: (i) their estimated ejaculatory latency time (ELT²), beginning with penile insertion (response categories: 0–1; 1–2; 2–5; 5–10; >10 minutes); and (ii) the extent to which they experi-

enced distress, bother, or avoidance of intimacy due to their ejaculating before desired (five-point scale: 1 = almost never; 5 = almost always).

Questionnaire

The first portion of the 24-item online survey gathered information about demographics, lifestyle behaviors, medications, partnership status, and overall relationship characteristics and satisfaction. The second portion of the survey gathered information specific to sexual response, and included items related to sexual desire, sexual arousal and erectile response, and ejaculatory response (see Table 1), this final portion being most relevant to this study. Items regarding PE were similar to or identical with ones used in validated questionnaires (see Table 2 [10,11]). The final part of the questionnaire presented five hypothetical scenarios involving sexual successes or failures, with respondents ascribing possible attributions to each scenario. An analysis of attribution data has been presented elsewhere (Rowland et al., unpublished data).

Procedure

As part of the survey development, a pilot was conducted with 20 men to appraise overall item face validity and reliability, ensure clarity of the items, and assess the time required for survey completion. The final, anonymous online survey took approximately 15–20 minutes to complete.

¹We refer to this group as the “PE symptom” group rather than “PE group” because they show signs of having symptoms of PE, including ejaculating before desired (wording borrowed from *DSM-5* [5]) and experiencing distress, but were not formally diagnosed as having PE.

²ELT is preferred to IELT (intravaginal ejaculatory latency time) as a more inclusive term that encompasses different penetrative possibilities, that is, beyond just vaginal.

Table 2 Source for key items/questions from the survey

Item	Source
Do you ejaculate (have an orgasm) before you want?	PEDT, Wording from <i>DSM-5</i> , ICD-10
About how long does it usually take you to ejaculate after penile insertion?	Numerous studies over the past 10 years
If you ejaculate before you want, does this bother you, upset you, or make you feel frustrated or anxious?	PEP, PEDT
If you ejaculate before you want, do you think your partner sees this as a problem? (e.g., upset, bothered, frustrated)	PEP, PEDT

PEDT = premature ejaculation diagnostic tool (see Symonds et al. [11]); PEP = premature ejaculation profile (see Patrick et al. [10]).

Participant approval was obtained through the Institutional Review Board (IRB) at the authors' university. Informed consent was obtained from participants prior to their opening of the survey. Participants were also provided with IRB contact information in case they had questions regarding informed consent, wanted to file a complaint, or contact the research team.

Statistical Analyses

Standard two-sample *t*-tests and two-sample *z*-tests were used to compare various means and proportions, respectively. Goodman and Kruskal's gamma for ordinal-scaled data was utilized to measure the correlations between the three measures used to diagnose PE. A permutation-based rank correlation test was performed using the *rococo* package in R (<http://www.bioinf.jku.at/software/rococo/>) to evaluate the significance of each of the correlations.

Results

We first describe the study sample on a number of demographic, lifestyle, and sexual parameters, and compare this sample with the remainder of the men in the survey to illustrate similarity between the groups on measures not related to ejaculatory response (Table 1). Second, we present the results of step-by-step movement on each of the PE criteria from more stringent to less stringent. Third, we explore in detail relationships among the three PE criteria, both in terms of correlations and concordance.

Description of the Sample

The PE symptom group was not statistically different on demographic, medical and personal history, and sexual and relationship parameters from the remainder of the men in the study who indicated little or no issue with ejaculating before desired (Table 1). Notable, however, is the youth-

ful age of the respondents for both groups, not surprising given that the survey was promoted and completed online.

Moving PE Criteria from More Stringent to Less Stringent

Baseline definition for PE: In order to establish a reference point, we have assumed the following criteria for PE inclusion: ELT \leq 1 minute; frequency of occurrence \geq 75% of the time (named Occurrence Frequency); and frequency of being bothered or distressed by the condition \geq 75% of the time (named Distress Frequency). Using these criteria, only 4.28% of the 374 men indicating that they ejaculate before they want would qualify for a PE diagnosis, and this represents only 1.35% of the entire sample taking the survey.

Moving ELT from 1 minute to 2 minutes: By relaxing the ELT to 2 minutes, 12.3% of the 374 men ejaculating before they want would qualify as having PE, representing 3.89% of the total sample.

Moving frequency of distress from 75% of the time to 50% of the time (but retaining the 1 minute criterion): By relaxing the Distress Frequency criterion, the baseline percentage increases from 4.28% to 4.55% for men indicating that they ejaculate before they want, or 1.44% of the total sample.

Moving frequency of ejaculating before desired from 75% to 50% of the time (but retaining the 1-minute criterion and the Distress Frequency criterion of 75%): By relaxing the occurrence frequency criterion, the baseline percent moves from 4.28 to 4.55, or 1.44 of the total sample.

As is evident, using highly stringent cutoffs on all three criteria yields very small percentages falling into the PE category, making the great majority of men who indicate that they ejaculate before they want fall outside the PE classification and therefore not typically eligible for treatment. Even moving both Occurrence Frequency and Distress Frequency together from 75% to 50% of

the time resulted in only 4.81% of men ejaculating before desired falling into the PE category, representing 1.52% of the total sample.

On the other hand, the factor having the greatest impact on percent of men meeting PE criteria is ELT. If all three criteria as indicated above are moved together to one-step less stringent, the percent of men ejaculating before they want meeting the PE criteria is 17.91, or 5.66 of the total sample.

Numeric and graphic depiction of the effects of moving the cutoff point for each of the three criteria is provided in the URL “PE Prevalence©,” a dynamic tool developed specifically for this study (<https://sites.google.com/a/valpo.edu/PEprevalence/>). This link enables the reader to manipulate each of the PE criteria individually or in concert in order to determine the percent of the entire sample ($n = 1,183$) falling into a PE diagnosis. A visual illustration showing the proportion of men falling into each of the response categories for the three criteria is provided as well. This link also calculates the percent that would fall into a PE diagnostic category using only the subset of men who reported ejaculating before desired on at least 50% of occasions ($n = 374$).

Relationships among Measures

We explored both correlation and concordance among the three measures: ELT, Occurrence Frequency, and Distress Frequency. Correlation refers to the degree to which measures vary together; concordance refers to the degree of agreement between two or more measures (e.g., If the respondent indicated ejaculating before desired “nearly all of the time,” did that respondent also report being stressed or bothered by the occurrence “nearly all of the time?”).

Correlations among Measures

Using Goodman and Kruskal’s gamma for ordinal-scaled data, the correlation between ELT and Distress Frequency was 0.415 ($P < 0.001$); between frequency of ejaculating before desired (Occurrence Frequency) and distress (Distress Frequency), 0.358 ($P < 0.001$); and between ELT and frequency of ejaculating before desired (Occurrence Frequency), 0.383 ($P < 0.001$).

Concordance among Measures

In order to further investigate the effects of various cutoff values for ELT, we compared the Occurrence Frequency and Distress Frequency between

respondents based upon their latency time. The percent of respondents with high Occurrence Frequency ($\geq 75\%$ of the time) among men with $ELT \leq 1$ minute was 94.44, compared with 71.43 among men with $ELT 1-2$ minutes and 36.86 among men with $ELT > 2$ minutes. Hence, we observed moderate differences in Occurrence Frequency ($z = 1.72$; $P = 0.086$) between respondents with $ELT \leq 1$ minute and respondents with $ELT 1-2$ minutes, but highly significant differences in Occurrence Frequency ($z = 4.89$; $P < 0.001$) between respondents with $ELT 1-2$ minutes and respondents with $ELT > 2$ minutes. A similar trend was observed with the percent of respondents who experience high Distress Frequency ($\geq 75\%$ of the time): 94.44% among men with $ELT \leq 1$ minute, 60.32% among men with $ELT 1-2$ minutes, and 37.54% among men with $ELT > 2$ minutes. Again, we obtained moderate differences in Distress Frequency ($z = 2.45$; $P = 0.014$) between respondents with $ELT \leq 1$ minute and respondents with $ELT 1-2$ minutes, but highly significant differences in Distress Frequency ($z = 3.19$; $P = 0.001$) between respondents with $ELT 1-2$ minutes and respondents with $ELT > 2$ minutes. These comparisons of Occurrence Frequency and Distress Frequency indicate the critically important point that although there are differences between men with $ELT \leq 1$ minute and men with $ELT 1-2$ minutes, the men with $ELT 1-2$ minutes share more similar characteristics with men who meet the typical PE criterion of 1 minute than with men with $ELT > 2$ minutes, who typically would not be diagnosed with PE.

Discussion

Unlike ELT, which has been operationalized in both ISSM and DSM definitions of PE as 1 minute, the two other criteria for PE—distress regarding the condition and ejaculating before desired (indicating a lack of self-efficacy)—have generated little or no discussion regarding an evidenced-based operationalization. In this analysis, we have empirically demonstrated the effect on PE prevalence of moving the operational criteria from more restrictive/stringent to less restrictive/stringent for each of the three criteria. Specifically, the URL “PE Prevalence” enables the reader to view the effect on PE prevalence of choosing specific operationalization levels for each of the PE criteria, or for various combinations of the PE criteria.

In addition, the URL allows the reader to see the effect of removing all restrictions on two of the criteria, namely ELT and/or the measure of distress, that is, if one or both of the measures are completely unrestricted, a procedure comparable with omitting them from a PE diagnosis. For example, if a researcher asks the patient or research participant about ejaculatory latency and self-efficacy (ability to postpone ejaculation or frequency of ejaculating before desired) as part of a PE diagnosis but does not inquire about distress (i.e., distress is completely omitted from the PE diagnosis), the effect on prevalence can be clearly seen (prevalence rises, but generally not by more than a couple of percentage points). This comparison is relevant because several clinical researchers have supported the position that “stress” or “bother” should not be a condition for a PE diagnosis—that is, as long as the short latency and lack of efficacy are present, the individual should qualify for a PE diagnosis, whether or not bothered or distressed by the condition (e.g., Althof [12]). This conceptualization of PE aligns more closely with that of erectile dysfunction, where lack of ability to get an erection could lead to an ED diagnosis, independent of whether the man is actually bothered by the situation.

On the other hand, correlation coefficients among the three measures generally affirm the potential value of each of the three criteria, and indeed, this point is reinforced using the URL analysis above. Specifically, gamma values ranged from 0.358 to 0.415, thereby indicating that the three measures are nonredundant yet show similar relatedness to one another, suggesting that each criterion contributes independent information of about equal magnitude to the PE diagnosis.

Overall, a large percent of men in our sample (about 32%) indicated that they ejaculated before they wanted on 50% of occasions or more—a percentage similar to ones reported in earlier studies on PE [13–16]. Such percentages have led to the well-worn (and now, questionable) lead sentence in many research articles on this topic, that PE is the most common sexual dysfunction in men. Our data quite clearly indicate that as constructs such as self-efficacy, latency time, and distress are quantified and operationalized, the percentage of such men actually meeting a PE diagnosis is likely to be far lower, perhaps closer to 2–6%. Indeed, this prevalence is consistent with more recent studies suggesting that PE affects 3–8% of the male population [17]. Stated in another way, about 10–25% of those men reporting dissatisfaction with their

short ejaculatory latency would typically qualify for a PE diagnosis. At the same time, we note that the remainder would not necessarily fall into Waldinger’s alternative subtypes of Variable PE (occasional rapid ejaculation) or Subjective PE (complaint of short ELT with actual normal ELT) [18].

The fact that a sizable percentage of men indicate that they ejaculate before they want but that only a small percentage of this subset qualifies for a PE diagnosis raises important questions about both the PE criteria and their interpretation. Previous research has shown that men who ejaculate before they want *and* meet a 1 to 2-minute ELT criterion are very similar to those who ejaculate before they want *but do not* meet the 1 to 2-minute ELT criterion. Specifically, these two groups do not differ on demographic variables, general medical history, or relationship and sexual parameters (including erectile function), nor on their perceived causal attributions for the problem. That is, about 85% of men in either group identified a lack of self-efficacy (as defined by “unable to control or postpone ejaculation,” “penile hypersensitivity,” or “becoming aroused too quickly”) as the primary reason for ejaculating before desired [7]. In addition, these two groups show minimal differences in terms of their personal experience of their condition—in terms of assigning self-blame for sexual failures or taking credit for successful sexual encounters. Specifically, they were more similar to one another than to a comparison group of sexually functional men (Rowland et al., unpublished data).

These two groups, then, are homogenous in many respects: demographic characteristics, overall sexual functioning, perceived causal attribution, and self-blame. They are also similar to some degree with respect to their reported levels of distress or bother about the condition. Yet despite such similarities, men in these two groups would fall into diametrically opposing diagnostic categories based solely on the placement of the ELT cutoff for PE.

The above raises the question as to whether the 1-minute ELT cutoff for lifelong PE might need reevaluation or greater flexibility. The value for flexibility has already been noted in the text justifying the 1-minute criterion for lifelong PE by ISSM [4], but this flexibility is not conveyed particularly well in the language of the definition itself. The need for flexibility has now also been acknowledged in the ISSM definition for *acquired* PE, which uses a 3-minute rather than 1-minute cutoff for PE [9].

Interestingly, the 1-minute cutoff has never, to our knowledge, been adequately established through the traditional procedure for determining *criterion* validity, a process that requires verification that the measure correlates with an *independently* derived measure of the same phenomenon/construct [19]. Specifically, the 1-minute criterion has been established through two lines of reasoning [4,9]: (i) demonstrating through epidemiological studies that about 2.5% of the sample of men ejaculates in 1.3 minutes or less and inferring, based on disease models, that this percent likely represents men with PE [20,21]; and (ii) demonstrating over three separate studies (total $n = 1,346$ with PE, but with no comparison group included) that the majority of men ($\approx 90\%$) who self-identify as having PE *by seeking help at a clinic* show ejaculatory latencies of 1 minute or less [22–24].

From the perspective of validating a 1-minute criterion, these studies have four problems. Regarding the first method delineated above [20,21], men who ejaculate rapidly do so for any number of reasons, not just due to issues with self-efficacy/control [7]; furthermore, the men sampled in the epidemiological study were not clinically diagnosed or checked for any PE symptoms. Regarding the second method, a percentage of men with complaints of PE in each of the above studies [22–24] have ELTs greater than 1 minute. As a result, the 1-minute criterion excludes men who should qualify for a PE diagnosis, a problem of false negatives [25]. In addition, the criterion that men “seeking help at a clinic” use in order to define themselves as having PE has not been carefully articulated: in two studies cited above, no further elaboration is provided [22,24]; the third study [23] predefined men with lifelong PE as having a 1.5-minute ELT in 90% of intercourses. Indeed, to the extent that either the researcher or participant utilized a time-related measure of ejaculatory response (even if only to identify it as “rapid” ejaculation [21]) as a selection process to meet a PE designation, these studies failed to use an independent measure to establish criterion validation for latency. Finally, and perhaps most concerning, none of the above studies included men without PE, therefore making it impossible to establish true criterion validation.³

³This validation procedure would be akin to selecting a group of individuals who say they are depressed, giving them a newly constructed test purporting to measure depression, then concluding that the scores on this new test can be used to predict depression in other individuals.

In contrast—and not cited in the ISSM definition relative to ELT—another study [10] ($n = 1,587$ men, 207 clinically diagnosed as having PE) that relied solely on clinicians’ diagnosis of PE based on “ejaculating before desired” and self-rating of the severity of the problem—thus excluding any measure of ejaculatory latency and thereby meeting the criteria of independent measures—found that PE men had a median ELT of 1.8 minutes (7.3 for non-PE) and a mean of 3.0 minutes (9.2 for non-PE). This same study indicated that about 23% of men with PE ejaculated between 1 and 2 minutes, whereas only about 4% of non-PE men did, indicating a relatively small amount of overlap within this ejaculatory time interval. Indeed, this study, more so than those cited as support for the 1-minute cutoff in the ISSM definition, provides the more adequate means for establishing criterion validity for an ejaculatory latency cutoff.

One major impetus for ISSM’s developing a consensus definition with a 1-minute criterion was to couch PE within the medical/disease model for the benefit of regulatory agencies. However, regulatory agency considerations aside, viewing PE as a *functional impairment* rather than a disease allows focus solely on the empirical evidence defining the relationships among the three constructs—evidence that can then be used to establish cutoff criteria. While the above issues suggest a need to reexamine the 1-minute criterion, the present study provides significant empirical evidence supporting the extension of the ELT criterion from 1 to 2 minutes. Specifically, in assessing the concordance of all three PE criteria together (a concurrent validation procedure used to establish criterion validity [26]), our data indicate that although there are differences between men with $ELT \leq 1$ minute and men with ELT 1–2 minutes; the men with ELT 1–2 minutes share more similar characteristics on the two other criteria to men who meet the 1-minute PE criterion than to men having ELTs > 2 minutes.

Limitations

Our study included the benefits (e.g., robust sample size that mitigates bias, wide distribution, anonymity) and limitations common to Internet studies, including ones related to sexuality [27]. For example, our study undoubtedly drew from a biased population interested in sexual health issues and did not allow for face-to-face interviews to clarify issues or questions. In addition, typical of such studies, our sample was clearly age biased and

Internet user biased. Regarding age, we investigated this variable as a factor in attribution patterns in this same sample in two previous studies and found no or only minor effects [7]; nevertheless, our sample age (≈ 26) does not compare directly with other studies cited in this paper, where mean ages typically ranged from 35 to 41 years [10,18,20]. Regarding Internet user bias, both education level and socioeconomic class within our sample may not have been representative of the larger population. However, we also note that, common to both Internet studies and surveys distributed through other media, participation in any sexual health surveys is likely to be subject to significant self-selection.

Beyond the Internet medium for collecting data, we acknowledge several additional points. We did not have a clinically defined group of men without PE to compare on measures of distress and ejaculatory latency, as we did not include those men who reported little or no concern about ejaculating before desired (except for comparison on nonejaculatory measures). Also, we operationalized “distress” and “ejaculating before desired” based on frequency of occurrence (Distress Frequency; Occurrence Frequency); further, these measures utilized discrete categories rather than continua. Although frequency measures stand as a general proxy for intensity or magnitude of any variable, our distress variable might just as easily have been operationalized in terms of its *level*; for example, rather than asking “how often” are you distressed, we might have asked “how much” are you distressed (1 = not at all; 5 = very much). We encourage other researchers to explore the interrelationships among PE criteria, using a broader range of response categories as well as a variety of ways for operationalizing distress and self-efficacy. Finally, we acknowledge that some items (though not those related to ejaculatory latency) in our study survey had not been statistically validated. However, these items were not attempting to measure underlying constructs (when validation becomes an issue) and, further, the preexperiment focus groups confirmed their face validity.

Conclusions

This study, along with other research investigating ELT in independently defined samples of men with PE, provides reasonable empirical support to consider extending the 1-minute ELT cutoff to 2 minutes, suggesting that this criterion would greatly reduce errors of exclusion while minimally

increasing the rate of errors of inclusion. It further affirms the value of using all three measures in establishing a PE diagnosis, confirming the need for a tridimensional interpretation of PE [28]. Yet it also demonstrates that as long as Occurrence and Distress frequencies reach at least 50%, little is gained by requiring a more stringent cutoff at 75%. While we advocate no specific change in the cutoff frequencies for Occurrence and Distress, we wanted readers to understand the implications of using a 50% or 75% criterion vs. the “nearly always” criterion.

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(b) Revising It for Intellectual Content

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Category 3

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