Negative Postcoital Emotions:
Mental Disorder or Adaptive Mechanisms?

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Introduction

Negative post-coital emotions (NPEs) are a mostly unexplored phenomenon. However, they appear not to be rare: 32.9% of women report having experienced post-coital sadness or tearfulness at least once (Bird, Schweitzer, & Strassberg, 2011). Sadness, tearfulness (Bird et al. 2011, Burri & Spector, 2011) and mood swings (Burri & Spector, 2011) are the only emotions studied epidemiologically, but according to anecdotal evidence, individuals may experience several other NPEs (Sadock & Sadock, 2008).

A comprehensive characterization of this phenomenon is still much in need, to investigate the prevalence of emotions other than the ones mentioned above, and whether it is (a) one set of emotions, (b) separate clusters of emotions, or (c) emotions that are independently triggered.

NPEs have usually been seen as a disorder (Sadock & Sadock, 2008; Serrano et al., 2009). Nevertheless, in accordance with the "harmful dysfunction" definition of disorder (Kennair, 2003; Wakefield, 2007), we propose that a full understanding of NPEs and whether they classify as disorder should take into account evidence of function or dysfunction, besides the already clear evidences of personal nuisance.

Also lacking are evidences of whether or not specific NPEs are evolutionary predictable, adaptive responses to specific mating contexts and sex-specific stable adaptive problems, and therefore related to sexual strategies.

Method

Instruments

An online survey with:
• Sociodemographic questions
• List of NPE (frequency) – 23 negative emotions, scale ranges from 1-never to 5-always;
• List of NPE (intensity) – 23 negative emotions, scale ranges from 1-not at all to 5-extremely intense;
• Sociosexual Orientation Inventory – Revised (SOI-R) (Penke & Asendorpf, 2008);
• Mate Value Inventory (MVI-7) (Kirsner, Figueredo, & Jacobs, 2003);
• Mini-K Life History Strategy Scale (Figueredo et al., 2006);
• Relationship Questionnaire (Rusbult, 1983).

All the instruments are translated and validated for Braziliam Portuguese.

Participants

• In Brazil
N=622
68% females, 32% males
Mean age: 25.3 (SD=6.8)

• In the U.S.A
N=382
64% females, 36% males
Mean age: 19.51 (SD=3.1)

• In Norway:
N=114 (pending data collection)
82% females, 18% males
Mean age: 21.9 (SD=1.8)

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Support: CNPq   CAPES

Hypotheses and Results

Different groups of NPEs may be responses to distinct adaptive challenges. They may be related to:

Hypothesis 1: Having a greater perceived desire for bonding and commitment than one's partner,

Hypothesis 2: Having a lesser perceived desire for bonding and commitment than one's partner,

Hypothesis 3: Attempting to maintain social reputation, especially when there are differences in perceived mate value.

	Factor		
	1	2	3
Need to be comforted	**,825**	-,091	-,013
Feeling of helplessness	**,767**	,113	,035
Feeling of worthlessness	**,726**	-,061	,269
Feeling rejected	**,708**	,018	,151
Sadness	**,666**	,251	-,067
Loneliness	**,637**	,151	,120
Tearfulness	**,600**	,122	-,163
Insecurity	**,574**	-,010	,258
Disgust to partner	-,128	**,692**	,233
Need to be alone	,036	**,691**	-,075
Apathy/Emotional blunting	,003	**,623**	,092
Irritability	,190	**,530**	-,090
Frustration	,228	**,475**	,135
Uneasiness	,147	**,397**	,162
Guilt	,046	,027	**,808**
Remorse	-,042	,175	**,705**
Shame	,235	-,002	**,572**
Self disgust	,138	,236	**,496**
Mental confusion	,320	,113	**,342**

Table 1
NPE and Loading Factors.

Results of Factorial Analysis
(*Principal Axis with Oblimin rotation*)

KMO=.93
For factor 1, α=.92
For factor 2, α=.82
For factor 3, α=.84

Hypotheses 1, 2 and 3   SUPPORTED
The factors represent
(1) Need for bonding
(2) Avoidance of bonding
(3) Maintenance of reputation

Hypothesis 4: We expected men, more than women, to present higher overall incidence and intensity of NPEs related to "avoidance of bonding".   SUPPORTED
Brazil: effect sizes between .24 and .53
Norway: effect sizes between .30 and .76
U.S.A.: effect sizes between .17 and .22

Hypothesis 5: Conversely, we predicted that women would report more frequent and more intense NPEs related to "need for bonding" than men.   SUPPORTED
Brazil: effect sizes between .33 and .37
Norway: effect sizes between .33 and .43
U.S.A.: effect sizes between .23 and .35

Hypothesis 6: *Correlation*
↗ Sociosexual orientation
↗ NPEs related to "avoidance of bonding"
Brazil: *r*=.25
Norway: *r*=.18
U.S.A: *r*=.23   SUPPORTED

Hypothesis 7: *Correlation*
↘ Sociosexual orientation
↗ NPEs related to "need for bonding"
U.S.A.: *r*=.27 (MSOI)   PARTIALLY SUPPORTED

Hypothesis 8: *Correlation*
↗ Own mate value minus partner's mate value
↗ a) NPEs related to "maintenance of reputation"
Brazil: *r*=.16 and *r*=.21
Norway: *r*=.25 and *r*=.26
U.S.A.: *r*=.14 for frequency   SUPPORTED

↗ b) NPEs related to "avoidance of bonding"
Pending Norwegian data
Brazil: *r*=.16 and *r*=.17
U.S.A.: *r*=.10
Norway: positive but non-significant correlations   PARTIALLY SUPPORTED

Hypothesis 9: *Correlation*
↘ Own mate value minus partner's mate value
↗ NPEs related to "need for bonding"
Non significant correlations   NOT SUPPORTED

Hypothesis 10: *Correlation*
↘ Mini-K
↗ NPEs related to "avoidance of bonding"   SUPPORTED
Brazil: *r*=-.25 for frequency and *r*=-.20 for intensity
U.S.A.: *r*=-.24 for frequency

Hypothesis 11: *Correlation*
↗ Mini-K
↗ NPEs related to "need for bonding"
Non significant correlations   NOT SUPPORTED

Hypothesis 12: *Correlation*
↘ Satisfaction, commitment and attraction to long-term partner
↗ NPEs related to "avoidance of bonding"   SUPPORTED
Brazil: *r*=-.27, -.30 and -.25
Norway: *r*=-.32, -.30 and -.33

Conclusions

1) NPEs appear to have a functional basis in sexual strategies, being part of and facilitating their mode of functioning and their ultimate goals.
2) Some NPEs also appear to facilitate extraction from relationships with partners of low mate value.
3) Men experienced more NPEs related to "avoidance of bonding", and women to "need for bonding".
4) Maintenance of reputation was important for both sexes.
5) According to the "harmful dysfunction" analysis of disorder, a phenomenon could only be considered a disorder if it was both *(a) due to failure of an internal mechanism to perform as naturally selected and (b) harmful, i.e., producing suffering*. Hence, mere subjective suffering does not make NPEs pathology.

Appointments for New Studies

Around 80% of individuals have experienced NPEs, but the scores of intensity of emotions in the 75th percentile was 2.0. Therefore most individuals reported frequencies between 1 and 2, so future studies regarding NPEs would benefit from Likert scales with more than 5 points.