

PUCRS

ESCOLA DE MEDICINA
PROGRAMA DE PÓS-GRADUAÇÃO EM MEDICINA E CIÊNCIAS DA SAÚDE
DOUTORADO EM CLÍNICA MÉDICA

LAURA DICK E SILVA GUERIM

SEXO, PORNOGRAFIA E TEMPERAMENTO

Porto Alegre

2018

PÓS-GRADUAÇÃO - *STRICTO SENSU*



Pontifícia Universidade Católica
do Rio Grande do Sul

PONTÍFICA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL
PROGRAMA DE PÓS-GRADUAÇÃO EM MEDICINA E CIÊNCIAS DA SAÚDE
ÁREA DE CONCENTRAÇÃO: CLÍNICA MÉDICA

LAURA DICK E SILVA GUERIM

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Orientadora: Prof^a. Dr^a. Rita Mattiello

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PORTO ALEGRE

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SEXO, PORNOGRAFIA E TEMPERAMENTO

Tese de doutorado apresentada ao Programa de Pós-Graduação em Medicina e Ciências da Saúde, da Faculdade de Medicina da Pontifícia Universidade Católica do Rio Grande do Sul, como parte dos requisitos necessários à obtenção do título de Doutora em Ciências da Saúde.

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PORTO ALEGRE

2018

Ficha Catalográfica

S586s Silva Guerim, Laura Dick e

Sexo, pornografia e temperamento / Laura Dick e Silva Guerim .
– 2018.

100p.

Tese (Doutorado) – Programa de Pós-Graduação em Medicina e
Ciências da Saúde, PUCRS.

Orientadora: Profa. Dra. Rita Mattiello.

Co-orientadora: Profa. Dra. Tatiana Vargas Maia.

1. Comportamento sexual. 2. Pornografia. 3. Temperamento afetivo. 4.
Sexualidade. 5. Web-survey. I. Mattiello, Rita. II. Vargas Maia,
Tatiana. III. Título.

Elaborada pelo Sistema de Geração Automática de Ficha Catalográfica da PUCRS
com os dados fornecidos pelo(a) autor(a).

Bibliotecária responsável: Salete Maria Sartori CRB-10/1363

AGRADECIMENTOS

Agradeço ao professor Diogo R. Lara e à professora Rita Mattiello, pelas orientações e pela paciência.

Agradeço à professora Tatiana Vargas Maia, por me ajudar a enxergar além e a organizar eventos incríveis!

Minha mãe maravilhosa! Meu pai lindo e querido! Minha irmã diva e brilhante! Vocês são incríveis e deixaram tudo sempre mais fácil. Muito obrigada pelo amor, pelo apoio (emocional, financeiro e intelectual), pelas risadas e pelos conselhos. Somos uma Massa Só!

Minha abuelita! Te agradeço pelos conselhos, mimos, sorrisos e por ter me permitido viver tanto tempo contigo! Eu te amo sempre!

Minha família querida e gigante, cheia de tios e tias e primos de todas as idades, muito obrigada pelo carinho, pelos conselhos e pelo amor! Fazemos as melhores festas e estamos sempre juntos!!!

Agradecimento especial aos amigos Fabrício, Tatiana e Camila. Por várias razões, mas principalmente porque vocês são maravilhosos. Valeu por tudo sempre!

Mônica, Bartolomeu, Steven, Lidiana, Raquel, Ricardo, Luiza, Bruna e Juca. Vocês sempre se empolgaram com a minha pesquisa e quiseram saber de tudo, nos mínimos detalhes. Os comentários e o interesse de vocês foram fundamentais (e divertidos demais)! Muito obrigada!

RESUMO

Introdução: Uma vida sexual satisfatória e saudável é um dos quatro marcadores considerados pela Organização Mundial da Saúde para medir a qualidade de vida. Ao estudarmos os comportamentos sexuais, podemos criar evidências que poderão ser utilizadas de diversas maneiras na área de saúde.

Objetivos: Analisar a relação entre o consumo de pornografia e determinadas práticas sexuais, bem como a relação entre temperamento afetivo e comportamento sexual.

Métodos: Foram incluídos participantes entre 21 e 50 anos que responderam, por meio do site www.temperamento.com.br, perguntas padronizadas sobre o consumo de pornografia e determinadas práticas sexuais (e.g. frequência de relação sexual, frequência da prática de masturbação, número de parceiros sexuais ao longo da vida e sexo casual). Através deste mesmo questionário validado foi possível categorizar os indivíduos pelos seus temperamentos afetivos. As análises estatísticas foram realizadas por meio de qui-quadrado, correlação de Spearman e regressão logística multinomial.

Resultados: O elevado consumo de pornografia correlaciona-se com a prática mais frequente de parte dos comportamentos sexuais, sendo este diferente entre homens e mulheres. Além disso, existe uma relação entre a intensidade da prática de determinados comportamentos sexuais e o temperamento afetivo dos indivíduos. Sendo os indivíduos de temperamentos do tipo externalizantes mais intensamente envolvidos em práticas sexuais, enquanto o contrário é observado em indivíduos de temperamentos do tipo internalizante.

Conclusão: O consumo de pornografia está associado a prática e frequência de comportamentos sexuais e existe diferenças de gênero em relação aos comportamentos e atitudes sexuais. A intensidade dos comportamentos sexuais está relacionada ao tipo de temperamento afetivo.

Palavras-chave: Comportamento Sexual. Pornografia. Temperamento afetivo. Sexualidade.

Web-survey.

ABSTRACT

Introduction: A satisfactory and healthy sex life is one of four markers considered by the World Health Organization to measure quality of life. When we study sexual behaviors, we can create evidence that can be used in different ways in the health area.

Objectives: To analyze the relationship between the consumption of pornography and certain sexual practices, as well as the relationship between affective temperament and sexual behaviors.

Methods: Participants between the ages of 21 and 50 were included, who answered standardized questions about the consumption of pornography and certain sexual practices (e.g. frequency of sexual intercourse, frequency of masturbation, number of sexual partners, casual sex), through the website www.temperamento.com.br. Through this validated questionnaire it was possible to categorize individuals by their affective temperaments. Statistical analyzes were performed using chi-square, Spearman's correlation and multinomial logistic regression.

Results: The high consumption of pornography correlates with the more frequent practice of some sexual behaviors, which is different between men and women. In addition, there is a relationship between the intensity of the practice of certain sexual behaviors and the affective temperament of individuals. Individuals with externalizing temperaments are more strongly involved in the practice of sexual behaviors, whereas the opposite is observed among internalized individuals.

Conclusion: The consumption of pornography is associated with the practice and frequency of sexual behaviors and there are differences between men and women in relation to sexual behaviors and attitudes. The intensity of sexual behaviors is related to the type of affective temperament.

Keywords: Sexual Behavior. Pornography. Affective Temperament. Sexuality. Web-survey.

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1. INTRODUÇÃO

A satisfação sexual é um dos quatro marcadores considerados pela Organização Mundial da Saúde para medir a qualidade de vida (HULL, 2008). Uma vida sexual satisfatória e saudável, assim como o acesso à saúde e ao lazer e a realização profissional, são os fatores que promovem a qualidade de vida de um indivíduo. Estudos recentes relacionaram mudanças na qualidade e na satisfação sexual com a qualidade de vida geral, e como esses podem ser influenciados pela qualidade do relacionamento e a vontade de ter ou não filhos (CHENG; SMYTH, 2015; DAVISON et al., 2009; LOEWENSTEIN et al., 2015; MUISE et al., 2016; SCHMIEDEBERG et al., 2017 SCHMIEDEBERG; SCHRÖDER, 2015; SCHRÖDER; SCHMIEDEBERG, 2015). No geral, melhorias na frequência e na satisfação sexual têm relação com o aumento da qualidade de vida. Assim também ocorre com o aumento da satisfação em uma relação íntima. Essas evidências nos fornecem a base para que possamos explorar esses assuntos na nossa comunidade.

Conforme os estudos na área da neurociência se desenvolvem e, os diversos conceitos utilizados pela psiquiatria e psicologia se transformam, cada vez mais é possível compreender o temperamento como uma disposição geral envolvendo características comportamentais, cognição e bases emocionais. A partir dessa compreensão, podemos categorizar os tipos de temperamento e relacioná-los com qualquer aspecto da vida, desde a maneira como nos alimentamos até como nos comportamos sexualmente (LARA et al., 2012).

Como a relação entre o temperamento e os comportamentos sexuais é influenciada por inúmeros fatores (e.g. culturais e religiosos) torna-se importante avaliar essa associação em diferentes cenários, visando uma caracterização dos comportamentos diretamente relacionados à própria natureza da sexualidade de forma mais específica.

Ao utilizar o modelo Affective and Emotional Composite Temperament (AFECT), podemos ter uma ferramenta que pode diagnosticar os pontos de intersecção entre os comportamentos que queremos analisar e o perfil dos sujeitos de pesquisa. A utilização das categorias de temperamento afetivo e escalas de traços emocionais pode proporcionar um panorama mais completo para a análise dos comportamentos sexuais.

Estudos que relacionam o temperamento e os comportamentos sexuais da nossa população podem auxiliar em abordagens de saúde mais específicas e efetivas para os brasileiros. No entanto, quando estamos lidando com questões de peso moral, como boa parte dos comportamentos sexuais e o consumo de drogas, uma das possíveis limitações é a

dificuldade de os participantes relatarem de forma sincera suas condutas. Neste sentido, o uso de um questionário *online* pode permitir o acesso às mais íntimas características do comportamento humano sem este tipo de barreira. A ausência do pesquisador na investigação pode permitir que os participantes respondam de forma mais sincera e segura, sem medo de julgamentos (TURNER et al., 1998). Além disso, há a praticidade de estar em casa e poder responder a um questionário com uma maior liberdade, inclusive de tempo. Somando-se a este fato, a internet permite a coleta de grandes quantidades de dados a um custo relativamente baixo. Ainda, existe a vantagem de que todos os itens são necessariamente respondidos, não existem os erros de transferência de dados e a identificação é somente parcial, através de um endereço eletrônico.

Ciente da importância de estudos que avaliem o temperamento e comportamento da população brasileira e das vantagens das ferramentas on-line, um grupo de pesquisadores, com diferentes áreas de expertise, coordenado pelo Dr. Diogo Lara criou uma pesquisa sobre estes fatores mediante um website de pesquisa (www.temperamento.com.br). (LARA et al., 2012). Desde então, diversas pesquisas vêm sendo realizadas com profissionais de diferentes áreas do conhecimento.

Esta tese surgiu do interesse nos dados sobre comportamento sexual dessa grande amostra que o site nos proporcionou. Das diversas perguntas sobre sexo que compõem o questionário, escolhemos as quatro que caracterizam as relações mais básicas que os indivíduos podem ter com o sexo. A frequência de relação sexual semanal, a frequência da prática da masturbação, o número de parceiros sexuais que os indivíduos tiveram ao longo da vida e se eles já fizeram sexo com alguém que acabaram de conhecer (referido nesta tese como ‘sexo casual’), são práticas sexuais muito comuns e nos trazem dados importantes (e até então inéditos em uma grande amostra brasileira), que podem ser recortados e avaliados de acordo com diferentes propósitos.

Aqui utilizamos essas perguntas sobre sexo e as relacionamos com o tipo de temperamento afetivo categórico dos indivíduos. Como este trabalho é parte das pesquisas do Dr. Diogo Lara, iremos focar exclusivamente no modelo de temperamento proposto por ele (AFECT) (Lara et al., 2012). Apresentaremos aqui os resultados e a discussão que estão presentes no artigo que será submetido para a Revista Brasileira de Psiquiatria.

A partir de discussões, em outros grupos de pesquisa, sobre pornografia e gênero, aproveitamos os dados do questionário para relacionar o consumo de pornografia com os mesmos quatro comportamentos sexuais. Descobrimos aí uma diferença imensa no consumo

entre homens e mulheres, o que levou à uma pequena discussão sobre as diferentes visões do feminismo sobre esse assunto. Acreditamos que uma análise interdisciplinar no estudo dos comportamentos sexuais é fundamental para o desenvolvimento de teorias que dêem conta da diversidade e de questões concernentes a demandas sociais mais urgentes. Essa discussão está presente no artigo submetido para a revista *Archives of Sexual Behavior*.

Diante de uma amostra brasileira que respondeu a um questionário online, não podemos deixar de destacar que 63.3% das casas brasileiras possuem acesso à Internet¹. A nossa amostra é composta por pessoas de alta escolaridade, majoritariamente brancas e heterossexuais. Sabemos que nossa amostra não representa a maior parte dos brasileiros², mas acreditamos que todos os dados contribuem para o desenvolvimento de trabalhos futuros em políticas sociais e de saúde pública. Isto aqui é um começo.

¹ O Globo. Rio de Janeiro. Disponível em <https://g1.globo.com/economia/noticia/mais-de-63-dos-domicilios-tem-acesso-a-internet-aponta-ibge.ghtml>. Acesso em: 06 ago. 2018.

² IBGE. Disponível em: <http://www.ibge.gov.br/home/estatistica/populacao/censo2010/>. Acesso em: 29 jun. 2018.

2. REVISÃO DA LITERATURA

2.1 COMPORTAMENTO SEXUAL

Considerada um marcador de qualidade de vida pela Organização Mundial da Saúde (OMS), uma vida sexual saudável e prazerosa é fundamental. Reconhecer e promover o prazer sexual são alguns dos fatores mais desafiadores a serem trabalhados por agências de saúde, Estado e grupos sociais (HULL, 2008). A declaração da *World Association for Sexual Health*³, “*Sexual Health for the Millenium*” de 2005, trata de direitos e ideias relacionados aos gêneros e de doenças sexualmente transmissíveis, bem como de questões sociais que influenciam aspectos sexuais da vida e da falta de serviços especializados em atendimentos com essa finalidade. Neste documento, é possível identificar aspectos focados em ajudar as pessoas a superar problemas e atingir um melhor nível de saúde sexual. Assim, também tratam da questão do prazer sexual, ao afirmar que devemos reconhecê-lo como parte de uma política de saúde e bem-estar holística (HULL, 2008).

O sexo é um prazer fundamental e crucial para a reprodução da nossa espécie, apesar de ser muito mais complexo do que isso. Ele pode ser muito prazeroso e, também, muito frustrante. Mesmo quando as funções sexuais estão normais, ou seja, mesmo quando todos os fatores fisiológicos funcionam em perfeitas condições para se praticar atos sexuais, indivíduos podem achar que suas performances são inadequadas e/ou suas experiências insatisfatórias (HULL, 2008). O desejo sexual pode ser induzido por qualquer estímulo externo, como visual e olfatório, auditivo e tátil, além de ser induzido mediante representações mentais e fantasias (MESTON; BUSS, 2007).

A sexualidade de um individuo é influenciada por diversos fatores (e.g. anatômicos, fisiológico, mentais e culturais) (GEORGIADIS et al., 2012). O número expressivo e a complexidade de interação entre os fatores que podem estar relacionados com a sexualidade vem sendo tema de investigação há muitos anos.

Os comportamentos sexuais e atitudes em relação ao sexo que iremos associar com o temperamento são a frequência da prática do sexo por semana, a frequência da prática de masturbação por semana, o número de parceiros que os participantes reportaram ter ao longo

³ World Association for Sexual Health (2005). *Montreal Declaration, Sexual health for the millennium*. 17th World Congress of Sexology. Montreal.

da vida e o sexo feito com alguém que se conheceu poucas horas antes (referido aqui como sexo casual).

A masturbação é a atividade sexual mais discutida e praticada universalmente e é um precursor natural do comportamento sexual voltado a um objeto (KAESTLE; ALLEN, 2011). Pode envolver fantasias e é uma maneira normal de reduzir tensões sexuais ou atingir o prazer. Já se sabe que sua frequência está relacionada ao estado civil e à frequência de atividade sexual com parceiro(a) (REGNERUS et al., 2017). Além de ser parte fundamental do desenvolvimento do relacionamento com o próprio corpo e, assim, influenciar a vida sexual e o prazer como um todo.

O número de parceiros que as pessoas reportam ter tem uma associação, claro, com a idade, com a geração e também com a idade em que se teve a primeira relação sexual. Uma pesquisa espanhola (SANJOSE et al., 2008) mostrou, por exemplo, que mulheres com menos de 25 anos tinham 39 vezes mais chance de ter feito sexo antes dos 18 anos, do que mulheres com mais de 55 anos. Além disso, a porcentagem de mulheres com menos de 25 anos que tiveram dois ou mais parceiros sexuais, era quatro vezes maior do que a de mulheres com mais de 55. Em uma pesquisa sobre populações africanas (TODD et al., 2009), os homens disseram ter mais parceiros sexuais no último ano do que as mulheres. Na Internet, é possível saber se o número de parceiros sexuais que você teve ao longo da vida corresponde ao número reportado por norte-americanos participantes do *General Social Survey*, de 2006-2014, de acordo com o seu gênero e que estão na sua mesma faixa etária⁴.

Já o sexo casual e sem compromisso praticado com alguém desconhecido ou que se conhece há poucas horas, é uma prática cada vez mais comum. As representações midiáticas populares e as redes sociais são um exemplo dessa abertura e permissividade a esse comportamento. Personagens de filmes e novelas, assim como letras de músicas, retratam esse comportamento de forma cada vez mais natural. Seus resultados também podem ser analisados a partir da Teoria da Aprendizagem Cognitiva Social, se comparados com estudos mais antigos (GARCIA et al., 2012). Analisamos a frequência dessa prática associada ao temperamento e, depois, ao consumo de pornografia.

⁴ Slate. EUA. Disponível em: www.slate.com/articles/life/moneybox/2015/05/sex_history_calculator_is_your_number_of_sexual_partners_low_average_or.html. Acesso em: 29 jun. 2018.

As proporções de indivíduos não-heterossexuais pode ser um fator influente em algumas diferenças comportamentais (PEPLAU, 2003; SALU, 2011), por isso a orientação sexual é uma covariada nas análises estatísticas.

Esses são os comportamentos sexuais mais básicos e que foram analisados justamente por demonstrarem as relações mais naturais e intrínsecas que as pessoas têm com a sexualidade.

A pornografia é envolta por diversos tabus, tanto em relação ao seu consumo quanto em relação à sua produção. Algumas feministas radicais defendem seu fim por objetificar as mulheres, além de normalizar diferentes formas de exploração e comportamentos agressivos em atos sexuais (HALD et al., 2010; MACKINNON; DWORKIN, 1998; PAUL, 2005). O consumo de pornografia também possui relação com a adição sexual (WEINBERG et al., 2010).

Por outro lado, feministas “*sex positive*” acreditam que seu consumo, bem como a sua produção, faz bem à libertação sexual feminina (QUEEN, 2002; TAORMINO et al., 2013; WEINBERG et al., 2010). Diversos estudos já mostraram a relação do consumo de pornografia com a prática de novas experiências sexuais para ambos os sexos, assim como a aceitação de atividades sexuais vistas antes como repulsivas e inaceitáveis (HALD; MALAMUTH, 2008; KLAASSEN; PETER, 2014). Exposição à pornografia também possui relação com o número de parceiros sexuais de um indivíduo, bem como a prática de sexo em grupo (BÖHM et al., 2015; HALD, 2006; ROGALA; TYDÉN, 2003; TRÆEN et al., 2004).

São duas as formas de avaliar os efeitos da pornografia. A primeira, a partir da análise de conteúdo, mostra que os vídeos mais populares na Internet podem objetificar ambos os sexos, apresentar situações assimétricas de poder (onde os homens são dominadores e as mulheres submissas) e violência. Além disso, a pornografia amadora – a mais frequente entre os principais sites de pornografia (e.g. RedTube, YouPorn, Xvideos e PornHub) – pode apresentar mais inequidade de gênero do que a pornografia produzida em estúdios (KLAASSEN; PETER, 2014). A segunda forma de analisar, avaliando os efeitos auto-percebidos pelos participantes, mostra que ambos os gêneros reportam os efeitos do consumo entre moderados e positivos (HALD; MALAMUTH, 2008). Essa diferença entre os efeitos observados impacta fortemente a forma como podemos lidar com a pornografia e fortalece os argumentos de ambos os lados na luta contra ou a favor dessa prática e seu consumo.

Outra característica importante de ser observada é a diferença de consumo entre os sexos. Em estudos anteriores, as mulheres acham a pornografia entediante ou repulsiva e os

homens a consomem mais frequentemente, visto que esse consumo está relacionado à frequência de masturvação (HALD, 2006; LEWIN, 1997; TRÆEN et al., 2006).

2.2 TEMPERAMENTO

Na origem da medicina ocidental (400 a.C) surgiu a teoria humoral. Nessa teoria – inspirada pelos elementos naturais básicos –, as características essenciais eram a temperatura (quente ou frio) e a umidade (seco ou molhado). As combinações dessas características produziam o temperamento, do latim *temperare* (misturar) do indivíduo (LARA, 2012).

No século XX, os modelos de temperamento foram propostos por Kraepelin. O pai da psiquiatria moderna considerava a interação entre excitação e inibição, mesmo sem mostrar claramente como esses fatores se relacionavam, ao focar os estados de humor (maníaco, depressivo e misto). Ele também observou as disposições fundamentais, hoje conhecidas como temperamento afetivo, como inclinações psíquicas constantes e que ocorrem frequentemente em indivíduos com transtornos de humor (LARA, 2012).

Na década de 1960, Eysenck acrescentou métodos estatísticos aos modelos de personalidade (LARA, 2012). Ao analisar as respostas de testes autoaplicáveis é possível compreender como as diversas características podem se agrupar. Assim, ele caracterizou duas principais dimensões de personalidade: extroversão (relação com o mundo externo, na busca pela gratificação) vs. introversão e neuroticismo (tendência a sentir ansiedade, culpa, tristeza, raiva e nervosismo, bem como ter alta reatividade e sensibilidade ao estresse) vs. estabilidade emocional. As principais tendências emocionais e comportamentais surgem a partir da relação dessas dimensões (EYSENCK, 1997). Características como agressividade, hostilidade interpessoal e baixo controle de estímulos são representadas por um terceiro fator, o psicotismo. Sendo assim, chamamos esse modelo de P.E.N. (psicotismo – extroversão – neuroticismo).

Na década de 1980, McCrae e Costa alteraram os conceitos centrais de extroversão e neuroticismo propostos por Eysenck e acrescentaram os traços de amabilidade, conscienciosidade e abertura para a experiência, formando assim um modelo mais completo de personalidade (LARA, 2012). Esse modelo, denominado Modelo dos 5 Fatores, é o mais bem estudado na psicologia, apesar de sua limitada utilidade clínica na psiquiatria.

O temperamento afetivo foi proposto por Akiskal ao reformular o conceito de disposições fundamentais de Kraepelin (AKISKAL, 1998). Ele também incluiu o tipo

“ansioso” e, para avaliar esse construto, desenvolveu a escala TEMPS (Temperament Evaluation of Memphis, Pisa, Paris and San Diego) (AKISKAL et al., 2005). Suas pesquisas apresentaram relações claras entre temperamentos afetivos e transtornos de humor (LARA, 2012). Akiskal também trouxe para a prática clínica a avaliação do temperamento afetivo.

O modelo AFECT foi desenvolvido a partir da análise das inconsistências e virtudes desses modelos anteriores (*Affective and Emotional Composite Temperament*) (LARA et al., 2012; LARA et al., 2006). Esse modelo é baseado na hipótese de que o temperamento é um componente fundamental para o entendimento da saúde e disfunções no domínio mental por estar em uma posição central para atuar em outros aspectos, como comportamento, cognição, percepção, humor e afeto. Um objetivo importante da análise do temperamento afetivo é caracterizar os padrões de saúde e doença mental para a utilização clínica. Assim, sete novos tipos de temperamentos afetivos foram desenvolvidos, além dos quatro já criados por Kraepelin e um desenvolvido por Akiskal, que representam predisposições a determinados transtornos. Esses doze tipos afetivos, divididos em quatro grupos (externalizantes, internalizantes, instáveis e estáveis) com três integrantes e definições gerais compreendem o estilo afetivo e os diferentes padrões de humor da maioria das pessoas de forma simples e prática. São os seguintes:

- Externalizantes – irritável (sincero, direto, determinado, explosivo e desconfiado), desinibido (inquieta, espontâneo, distraído, precipitado e inconsequente) e eufórico (expansivo, rápido, falante, intenso, imediatista, impulsivo, avesso a regras e rotina);
- Internalizantes – depressivo (melancólico, quieto, não se valoriza), evitativo (preocupado, cuidadoso, inseguro) e apático (passivo, lento, desligado);
- Instáveis – ciclotímico (apresenta altos e baixos, reações desproporcionais e rápidas), disfórico (agitado, tenso, ansioso e irritado ao mesmo tempo) e volátil (disperso, inquieto, precipitado, desorganizado e irresponsável);
- Estáveis – obsessivo (exigente, dedicado, perfeccionista, rígido e controlador), eufórico (equilibrado, previsível, boa disposição e auto-estima) e hipertímico (de bom humor e confiante, obstinado e influente).

De acordo com os resultados da AFECTS, 99% dos participantes se identificam com, no mínimo, um dos temperamentos afetivos desenvolvidos (LARA et al., 2012).

O detalhamento sobre o desenvolvimento do modelo e sobre a construção e validação da escala está disponível em Lara et al. (2012a).

2.3 GÊNERO

Na pesquisa sobre pornografia e comportamento sexual, em função das diferenças no consumo observadas entre homens e mulheres, utilizamos alguns conceitos sobre gênero para aprofundar a discussão. A seguir, contextualizamos algumas questões e trazemos o que foi discutido em outros grupos de pesquisa.

Os estudos de gênero e feminismo ganharam relevância para este trabalho em função das diferenças observadas nas práticas sexuais entre homens e mulheres. Apenas a abordagem biológica não é capaz de explicar a razão pela qual as mulheres se masturbam muito pouco ou consomem muito menos pornografia do que os homens. Os estudos disponíveis sobre este tema, além de analisarem as relações de dominação e subordinação entre homens e mulheres, focam em como a organização e a estrutura da sociedade, bem como sua produção de conhecimento e reprodução cultural são *generificadas*⁵, ou seja, baseadas em uma construção binária de gênero (a saber, homem e mulher) (BEAUVOIR, 1949; BUTLER, 1999; PETERSEN; HYDE, 2010; SCOTT, 1999).

Sendo assim, adotamos no presente trabalho o conceito de *gênero*, pois ele engloba, além das diferenças biológicas, as diferenças socioculturais entre homens e mulheres. Quando lidamos com sexo e sexualidade é fundamental considerar as construções culturais que se fazem sobre o que é certo e errado ou o que é permitido e não é entre os gêneros (BUTLER, 1999; SCOTT, 1989). Assim, quando falamos de mulher, não estamos falando apenas de uma pessoa do sexo feminino e, sim, de tudo que ainda constitui o ser-mulher em nossa sociedade (BEAUVOIR, 1949): a passividade, a submissão, a elevada consideração com o que os outros têm a dizer, e o recato, para citar alguns exemplos.

As diferenças entre os gêneros, observadas nos comportamentos sexuais, podem ser explicadas por diversas teorias:

- Teoria Social Cognitiva, que explica como os comportamentos sexuais são aprendidos, por exemplo, pela televisão, revistas e Internet. Essa teoria envolve uma explicação que vai além dos aspectos cognitivos e considera aspectos socioculturais de aprendizagem de comportamento (BANDURA, 2008);

⁵ Tradução da autora a partir da palavra inglesa *gendered*, sem tradução formal para a língua portuguesa.

- Teoria da Estruturação Social, que propõe a ideia de que as diferenças entre os gêneros são frutos da divisão social do trabalho e do poder, sempre maior nos homens, assim, sociedades menos igualitárias entre os gêneros apresentam maiores diferenças nos comportamentos sexuais e vice-versa (GIDDENS, 2009);
- Hipótese da Similaridade dos Gêneros, que mostra que a diferença entre homens e mulheres é pequena na maioria dos aspectos (como habilidades cognitivas), mas não em todos (PETERSEN; HYDE, 2010); e
- Teoria Queer, que busca ultrapassar as teorias baseadas na dicotomia homem X mulher / homossexual X heterossexual, criticando justamente a construção social dessas categorias normativas de identidade e comportamentos sexuais (BUTLER, 1999; LOURO, 2004; JAGOSE, 1996;).

Grande parte dos projetos paralelos desenvolvidos durante o doutorado (Anexos A e B) envolve estudos de gênero e feminismo, e esses projetos contribuem de maneira importante para a ampliação da compreensão a respeito de dinâmicas e comportamentos sexuais humanos, particularmente na população brasileira. Dessa maneira, julgamos fundamental considerar tal abordagem epistemológica em todos os trabalhos desenvolvidos neste projeto.

2.4 A INTERNET COMO FERRAMENTA PARA O ESTUDO DO TEMPERAMENTO

Nosso questionário online permite, além do acesso à muitas pessoas, uma forma prática e confiável de lidar com questões moralmente sensíveis (como o uso de drogas e o consumo de pornografia). Além disso, vários aspectos da saúde são alvo de estigma significativo na sociedade, impondo um desafio extra ao estudo. Questões sobre o comportamento sexual são exemplos de informações que podem ser negadas em contextos tradicionais de pesquisa com avaliadores frente a frente (TURNER et al., 1998)

Nesse sentido, ferramentas que permitem que os sujeitos da pesquisa fiquem à vontade para fornecer informações pessoais são extremamente úteis e necessárias. Uma estratégia importante para aumentar o relato e a precisão desse comportamento é poder manter o anonimato do sujeito. Além disso, TURNER et al. (1998), já demonstraram que a coleta de informações pelo computador é particularmente proveitosa e sensível. Seu estudo mostrou que avaliações anônimas pelo computador obtêm cerca de 5 vezes mais respostas de tópicos de estigma do que avaliações anônimas em papel. Outros estudos demonstraram que dados coletados pela internet revelam mais dados com estigma do que entrevistas face a face e

entrevistas por telefone (GOSLING et al., 2004). Por fim, o uso da internet possibilita a coleta de dados de milhares de participantes.

Ciente da importância de estudos que avaliem o temperamento e comportamento da população brasileira e das vantagens das ferramentas on-line, um grupo de pesquisadores com diferentes áreas de expertise, coordenado pelo Dr. Diogo Lara, criou uma pesquisa sobre estes fatores mediante um website de pesquisa (www.temperamento.com.br) (LARA et al., 2012).

Diversas pesquisas já utilizaram modelos de temperamento vistos aqui, como o Big-Five e o Temps-A (Temperament Evaluation of Memphis, Pisa, Paris and San Diego Autoquestionnaire), para avaliar comportamentos sexuais (COSTA et al., 1992; KURPISZ et al., 2016; PINTO et al., 2013; RETENBERGER et al., 2016; SCHMITT, 2004). Uma discussão sobre como essas pesquisas relacionam-se com a nossa pode ser encontrada no artigo submetido.

3. OBJETIVOS

3.1 OBJETIVO GERAL

Caracterizar o comportamento sexual de indivíduos e avaliar as suas possíveis associações com o temperamento e o consumo de pornografia.

3.2 OBJETIVOS ESPECÍFICOS

Analisar as relações entre o consumo de pornografia e a prática de comportamentos sexuais, e suas diferenças de sexo/gênero.

Descrever a relação entre a prática de alguns comportamentos sexuais e o tipo de temperamento afetivo categórico dos indivíduos pesquisados, utilizando o modelo AFECT.

4. MÉTODOS

4.1 DELINEAMENTO DO ESTUDO

Este é um estudo transversal.

4.2 SETTING

Os dados desta pesquisa foram obtidos através do site www.temperamento.com.br. Contamos com a participação de pessoas do Brasil inteiro. O site está no ar desde 2010.

4.3 PARTICIPANTES

Foram incluídos participantes voluntários com idade entre 21 e 50 anos de ambos os sexos que responderam, por meio do site www.temperamento.com.br, perguntas padronizadas sobre o consumo de pornografia e determinadas práticas sexuais (LARA et al., 2012).

4.3.1 CRITÉRIOS DE INCLUSÃO

- Idade superior a 21 anos e menor de 50 anos;
- Aceite do Termo de Consentimento Livre e Esclarecido para participação do estudo.

4.3.2 CRITÉRIOS DE EXCLUSÃO

- Não ter respondido corretamente às questões de controle de atenção (validação);

4.4 SISTEMA DE COLETA DE DADOS E PERGUNTAS

O sistema de coleta de dados por meio do site www.temperamento.com.br é constituído por duas seções, cada uma com tempo médio de 60 a 90 minutos para ser respondida. O voluntário dispõe de até uma semana para preencher o sistema a partir de iniciado. Ao final da primeira seção é fornecido um retorno com o perfil de temperamento do indivíduo. Visando triar somente aqueles que responderam o sistema com seriedade e atenção, o sistema conta com diversas perguntas de validação, como por exemplo:

- Por favor, marque a alternativa "às vezes" nessa questão;

Opções de Respostas: nunca; poucas vezes ou a menor parte do tempo; às vezes; muitas vezes ou a maior parte do tempo; sempre.

As perguntas referentes aos dados sociodemográfico utilizadas neste estudo e suas opções de resposta são as seguintes:

- Idade

Respostas: Entre 11 e 100 anos ou mais.

- Sexo

Respostas: masculino; feminino.

- Raça

Respostas: branco; negro; pardo; asiático; outro.

- Estado Civil

Respostas: solteiro (atualmente não envolvido em namoro); solteiro (atualmente namorando alguém); casado ou em relacionamento estável (morando junto); separado ou divorciado; separado/divorciado atualmente namorando alguém; viúvo; outro.

- Escolaridade

Respostas: ensino fundamental incompleto; ensino fundamental completo; ensino médio incompleto; ensino médio completo; ensino superior incompleto; ensino superior completo; mestrado ou especialização; doutorado.

- Qual a sua orientação sexual?

Respostas: heterossexual / homossexual / bissexual sem preferência / bissexual com preferência pelo sexo oposto / bissexual com preferência pelo mesmo sexo.

O questionário utilizado no site para categorizar os temperamentos encontra-se em anexo (Anexo A). Os tipos de temperamento, e suas características, propostos pelo modelo AFECT, são os seguintes:

Temperamentos externalizantes

- Irritável (sincero, direto, determinado, explosivo e desconfiado);
- Desinibido (inquieta, espontâneo, distraído, precipitado e inconsequente);
- Eufórico (expansivo, rápido, falante, intenso, imediatista, impulsivo, avesso a regras e rotina).

Temperamentos internalizantes

- Depressivo (melancólico, quieto, não se valoriza);
- Evitativo (preocupado, cuidadoso, inseguro);
- Apático (passivo, lento, desligado).

Temperamentos instáveis

- Ciclotímico (apresenta altos e baixos, reações desproporcionais e rápidas);
- Disfórico (agitado, tenso, ansioso e irritado ao mesmo tempo);
- Volátil (disperso, inquieto, precipitado, desorganizado e irresponsável).

Temperamentos estáveis

- Obsessivo (exigente, dedicado, perfeccionista, rígido e controlador);
- Eutímico (equilibrado, previsível, boa disposição e auto-estima);
- Hipertímico (de bom humor e confiante, obstinado e influente).

A pergunta sobre consumo de pornografia concerne especificamente à frequência desse consumo, sem especificar o tipo de pornografia consumida (e.g. revista, filmes, *tumblr*). A pergunta e as opções de resposta estão a seguir:

- Com que frequência você assistiu a algum material pornográfico nos últimos 30 dias?

Respostas: Nunca / quase nunca / menos de 1 vez por semana / cerca de 1 vez por semana / de 1 a 3 vezes por semana / de 4 a 7 vezes por semana / mais de 7 vezes por semana

Para facilitar as análises, colapsamos essas variáveis da seguinte forma:

- Nunca = NUNCA (*never*);
- Quase nunca e menos de uma vez por semana = OCASIONALMENTE (*sometimes*);
- Cerca de uma vez por semana e de uma a três vezes por semana = FREQUENTEMENTE (*often*);
- De 4 a 7 vezes por semana e mais de 7 vezes por semana = MUITO FREQUENTEMENTE (*very often*).

As perguntas que concernem o comportamento sexual e suas respostas estão apresentadas a seguir:

- Com que frequência fez sexo por semana nos últimos 30 dias?

Respostas para a pesquisa sobre temperamento: 0 / < 1 / 1-2 / ≥ 3

Respostas para a pesquisa sobre consumo de pornografia: 0 / < 1 / 1-2 / 3-4 / ≥ 5

- Com que frequência você se masturbou por semana nos últimos 30 dias?

Respostas para a pesquisa sobre temperamento: 0 / < 1 / 1-2 / ≥ 3

Respostas para a pesquisa sobre consumo de pornografia: 0 / < 1 / 1-2 / 3-4 / 5-7 / >7

- Quantos parceiros sexuais você teve nos últimos 10 anos?

Respostas para a pesquisa sobre temperamento: 0 / 1 / 2-5 / 6-15 / >15

Respostas para a pesquisa sobre consumo de pornografia: 0 / 1 / 2-5 / 6-15 / 16-30 / >30

- Você já fez sexo com alguém que conheceu algumas horas antes?

Respostas: não / sim

As respostas são diferentes em função da baixa frequência de indivíduos que responderam de acordo com seu temperamento afetivo. Quando separamos os indivíduos de acordo com seu temperamento, poucos deles de alguns comportamentos responderam com as opções “5-7” ou “>30”. Em função disso, apenas para a pesquisa do temperamento, colapsamos essas variáveis.

4.5 TAMANHO DA AMOSTRA E ANÁLISES ESTATÍSTICAS

Tamanho da amostra

Temperamento e comportamento sexual

Planejamos um estudo de casos e controles independentes com 1 controle(s) por caso. Dados anteriores indicam que a taxa de falhas entre os controles é de 0.05. Se a taxa de falha verdadeira para sujeitos experimentais for de 0.03, precisaremos estudar 2115 sujeitos experimentais e 2115 sujeitos de controle para rejeitar a hipótese nula de que as taxas de falha para sujeitos experimentais e controles são iguais com probabilidade (potência) 0.9. A probabilidade de erro Tipo I associada a este teste desta hipótese nula é de 0.05. Usaremos o teste de qui-quadrado corrigido por continuidade ou o teste exato de Fisher para avaliar essa hipótese nula.

Consumo de pornografia e comportamento sexual

Considerando uma correlação mínima de 0,15 entre consumo de pornografia e prática de comportamento sexual específico, um alfa de 5% e um beta de 20%, o número necessário de participantes é de 782. Considerando as demais variáveis associadas ao desfecho, sexo, estado civil, orientação sexual e escolaridade e as possíveis perdas este número foi estimado em 1000 participantes.

Análises estatísticas

Na pesquisa sobre a relação entre temperamento afetivo e comportamento sexual (n=36.833), utilizamos:

- Teste qui-quadrado;
- Regressão Logística Multinomial para calcular *Odds Ratio* e intervalo de confiança de cada comportamento sexual, ajustado para idade, etnia, orientação sexual, escolaridade e estado civil como covariadas;
- SPSS 20.0 com $p < 0.05$ como nível de significância.

Na pesquisa sobre as relações entre consumo de pornografia e comportamentos sexuais (n= 36.745), utilizamos:

- Teste qui-quadrado para os dados categóricos e relação entre consumo e comportamento sexual;
- Teste de Spearman para a correlação entre idade e frequência de consumo de pornografia;
- SPSS 20.0 com $p < 0.05$ como nível de significância.

5. RESULTADOS

5.1 Temperamento e comportamento sexual

The association between temperament and sexual behavior using the Affective and Emotional Composite Temperament Model (AFECT), in a large Brazilian sample.

Laura D. Guerim^{1*}, Rita Mattiello², Diogo R. Lara^{1,3}

1. Programa de Pós-Graduação da Faculdade de Medicina e Ciências da Saúde da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
2. Faculdade de Medicina, Pontifícia Universidade Católica do Rio Grande do Sul.
3. Faculdade de Biociências, Pontifícia Universidade Católica do Rio Grande do Sul.

* Corresponding Author:

Laura D. Guerim

Faculdade de Biociências – PUCRS

Av. Ipiranga, 6681 – Pd12A

Porto Alegre, RS

90619-900

Brazil

FAX +55 51 33203612

E-mail: lauraguerim@gmail.com

Abstract

Objective: To analyze the association between affective temperament and sexual behaviors (e.g. sexual intercourse and masturbation frequency, number of partners and casual sex).

Methods: Data on 36.833 participants, between the ages of 21 and 50 were collected by the Brazilian Internet Study on Temperament and Psychopathology (BRAINSTEP). The AFFECT Scale was used to categorize individuals by their affective temperaments. Statistical analyses were performed using multinomial logistic regression.

Results: 36.833 participants 72.2% women, mean age 30.6 ± 6.7 years. The frequencies of all sexual behaviors significantly differed according to affective temperaments, in both men and women. Individuals with internalized temperaments presented the lowest sexual intercourse frequencies, in both sexes. Men and women of stable and internalized temperaments masturbated less frequently, than those with externalized temperaments. Regarding the number of sexual partners, all internalized men and women presented the lowest frequencies and the opposite was observed among all externalized types in men and unstable temperaments in women.

Conclusion: Sexual practices differ according to the affective temperament of individuals.

Introduction

The concept of temperament in western culture were developed from the works of Hippocrates and Galen on humors, producing 4 different types (e.g. choleric, melancholic, sanguine and fleugmatic). The idea was further developed by Emil Kraepelin (1921), who proposed that different combinations of inhibition and activation in fundamental states could contribute to the heterogeneity of mood disorders¹. He proposed four fundamental states (e.g. manic, cyclothymic, depressive and irritable) which are constant psychic dispositions and representative forms of personality expressed by some individuals. More recently, Akiskal et al (1983) further included an anxious temperament type³, after revising the implications of temperament regarding mood disorders². To evaluate these affective temperaments (hyperthymic, irritable, cyclothymic, anxious and depressive), Akiskal and colleagues created The Temperament Evaluation of Memphis, Pisa, Paris and San Diego – autoquestionnaire version (TEMPS-A)⁴. According to TEMPS-A, ~20% of the population has a marked affective temperament.

Akiskal's model includes the basic affective system and identifies individuals with high risk for mood disorders. His model also involves evolutionary approaches to the development of temperaments, thus explaining the main adaptive characteristics of the different temperaments⁵. The design of Akiskal's model allows us to understand other sides and particularities of human nature, such as creativity and artistic behaviors, connecting affective disorders, temperaments and its many expressions⁶.

This concept was further developed as the AFFECT (Affective and Emotional Composite Temperament) model, integrating specific trait dimensions (e.g. fear, anger...) and synthetic constructs (affective temperaments) that characterizes patterns of mental health and disorders⁷. The concepts created by Kraepelin and Akiskal were enlarged to include healthy types and

other predispositions. This model includes twelve types of affective temperaments divided in four groups:

1. externalized types – irritable (resolute, explosive and dubious), disinhibited (unease, uninhibited, distracted and reckless) and euphoric (communicative, intense, impulsive, averse to rules and routine);
2. internalized types – depressive (melancholic, private, low self esteem), avoidant (distressed, cautious, unconfident) and apathetic (acquiescent, plodding, disconnected);
3. unstable types – cyclothymic (ups and downs, disproportional and fast reactions), dysphoric (unsettled, tense, anxious and irritated at the same time) and volatile (unquiet, hasty, disorganized e irresponsible);
4. stable types – obsessive (nagging, dedicated, perfectionist, strict and controlling), euthymic (dispassionate, foreseeable, good disposition and self steem) and hyperthymic (self-assured, optimistic, strong-willed and influential).

Importantly, using a dimensional measure for these twelve descriptions in the AFECT scale (AFECTS), 99% of individuals identify with at least one type. Thus, the affective temperaments from the AFECTS provide a simple construct to evaluate behavioral traits in many aspects of life⁷.

Sexuality includes the perception of and attraction for others, behaviors, feelings, thoughts and attitudes towards sex and reproduction⁸. Sexuality is one of the most important factors for quality of life^{8,9,10}, and “sexual interactions can be a potent force that sustain and enhances intimate relationships”¹¹. Several aspects are involved such as gender identity, sexual orientation, sexual drive, specific behaviors and attitudes towards sex⁸.

In this research we have analyzed sexual intercourse frequency, masturbation frequency, number of partners participants have had throughout their lives and if they have had sex with someone they have just met a few hours before (addressed here as casual sex). These behaviors demonstrate a very basic relationship that participants have with sex^{12,13,14,15,16}.

Based on the AFECT model, we have studied the association of affective temperaments with sexual behaviors and attitudes in a large web-based Brazilian sample. Other researches have found a relationship between concepts of the Big Five factor model, such as Neuroticism, Extraversion, Agreeableness and Conscientiousness, with sexual behaviors^{17,18,19,20,21,22,23}. We intend to use some of the finds of these researches to build a parallel with our model.

This anonymous and voluntary survey by internet is particularly suitable to address such sensitive and morally loaded issues^{24,25}.

Methods

Sample and data collection

The Brazilian Internet Study on Temperament and Psychopathology (BRAINSTEP) is a web-based anonymous and confidential survey. Participants were asked to answer questions concerning personal information and personality characteristics in a non-commercial, advertisement-free web site (www.temperamento.com.br)²⁶. This website has two phases: a psychological and a psychiatric phase in which subjects fill various measures, which are sent through a secure and encrypted connection and stored behind a firewall. Several validity questions throughout the protocol ensure the quality of the data and this sample consists of subjects who have correct answers to all those questions.

All participants were volunteers and could quit the test any time. The ethics committee of Hospital São Lucas (PUCRS) approved the protocol used for this study and all participants gave their electronic informed consent, required by the National Research Council of Brazil and the Code of Ethics of the World Association.

Descriptive and behavioral variables

All participants provided sociodemographic data (sex, age, race, education, and marital status). Affective temperaments were assessed with the Affective and Emotional Composite Temperament Scale (AFECTS) instrument, which allows a qualitative assessment of affective temperaments. Twelve short descriptions of each affective temperament were presented, and the volunteers had to select which of these twelve profiles best represented hers/his affective temperament.

For the evaluation of sexual behavior, the following four questions were used in this study: (1) How often have you had sex per week for the last 30 days?; (2) How often have you masturbated per week for the last 30 days?; (3) How many sexual partners have you had?; (4) Have you ever had sex with someone you have only met a few hours before?

Statistical analysis

Odds Ratio with 95% confidence intervals (95% CI) were calculated for the frequency of each sexual behavior and accessed via multinomial logistic regression analysis, adjusted for sex, marital status, education, ethnicity and sexual orientation. Statistical Package for the Social Sciences (SPSS Inc, Chicago, IL), version 20.0 for Windows, using $p < 0.05$ as the significance level.

Results

The initial sample consisted of 75.888 participants. After the exclusion due to incorrect answers of the validity questions and the established age range (21 to 50 years) the sample was reduced to 36.833 individuals, 72.5% were females. The mean age was 30.7 ± 7.6 yrs among men and 30.8 ± 7.6 yrs among women. Most participants were Caucasian (72.7% of men and 73.9% of women) and well-educated (36.2% of men and 39.8% of women have a university degree). Single participants were 32% of men and 27.5% of women.

Table 1 shows the frequency of sexual intercourse per week for the last 30 days according to affective temperaments. The depressive type in both men and women, presented the highest percentage of subjects with no sexual intercourse in this period of time (46.4% and 44.5%, respectively). Euphoric men and disinhibited women presented the highest percentages of individuals that have had sex 3 or more times a week (21.9% and 17.6%, respectively). Overall, there are more people having no sex than having sex more than 2 times a week, regardless of their gender and temperament.

In Table 2, we present the frequency of masturbation per week for the last 30 days according to their affective temperaments. Among men, euthymic, hyperthymic and avoidant subjects present the highest percentages of men who haven't masturbate (13.3%, 12.2% and 12.2%, respectively), whereas the volatile, followed by disinhibited and apathetic subjects, practiced masturbation 3 or more times a week (65.2%, 65.1% and 59.8%, respectively). Among women, masturbation was not practiced at all among 56.8% of avoidant, 51.5% of depressive, and 51.1% of obsessive types. On the other hand, volatile, disinhibited and euphoric individuals presented the highest percentage of individual that have masturbated 3 or more times a week (14.2%, 12.9% and 11.3%, respectively).

There were also significant differences in the number of lifetime sexual partners between affective temperaments (Table 3). The highest proportion of men who have never had sex was observed among the internalized types (15.1% of depressives, 12.5% of apathetics, and 9.7% of avoidants). On the opposite side, the highest percentages of individuals who have had more than 15 partners throughout their lives belong to the externalized types (46.9% of euphorics, 37.6% of irritables, and 37.1% of disinhibited). In women (Table 3), the same characteristic was observed among the internalized types, where 13.7% of depressives, 13.4% of avoidants, and 12.6% of apathetics have never had a sexual partner. However, the highest percentages of women who have had more than 15 sexual partners throughout their lives belong to euphorics (24.2%), disinhibited (20.5%), and cyclothymics (17.3%). The most common frequency was 2 to 5 partners in women, and more than 15 partners for men.

Table 4 shows whether subjects have had sex with people they only met a few hours before the sexual activity, referred in this study as ‘casual sex’, which showed significant differences according to affective temperaments. Among men, internalized types presented the lowest percentage of individuals with this behavior (40.3% of depressives, 41.6% of avoidants, and 46.8% of apathetics), and the opposite was observed in externalized types, especially in euphorics (65.1%). Among women, avoidant (19.2%), euthymic (22.5%), and depressive (26.8%) present the lowest percentages of women who have had sex with someone they have just met, whereas euphoric (40.7%) and disinhibited (36.9%) presented the highest.

Discussion

The results showed that the externalized affective temperaments were more likely to engage in sexual behaviors, while the opposite was observed in internalized types. Stable and unstable types showed intermediate levels in this regard.

These sexual behaviors and activities can be related to a characteristic such as openness to experience, involving curiosity, sensitivity, and more importantly, disinhibition, openness to new ideas and high tolerance toward what is different. McCrae and Costa (1987) developed this concept to create a more complete model of temperament, the Big Five factor model²⁸. They have also modified the central concepts of extroversion and neuroticism of Eysenck and created the concepts of agreeableness and conscientiousness. These last two concern interpersonal abilities, like being benevolent and trustworthy, and aspects linked to responsibility, organization, sense of duty and morality, respectively. Extroversion represents the inclination to be more optimistic, cheerful and sociable. In contrast, neuroticism involves the tendency to experience negative feelings, such as sorrow, guilt, fear and anger. Pinto et al (2013), found, in a nonclinical sample of male students in a Portuguese university, that agreeableness and neuroticism may be related to sexual compulsivity²³. However, researches recently found that, among young adult men, the personality traits proposed by the Big Five model have a weak to moderate influence on sexual behavior¹⁸.

On an analysis concerning sexual motivation, Italian researchers found that inhibitory characteristics of personality are more related to sexual motivation than the excitatory ones, in both men and women¹⁹. Accordingly, these characteristics are more expressed among the internalized temperaments.

In our model, we propose that internalized temperaments tend to avoid stimulations, lack attitude and curiosity to what is different and are apprehensive and passive. On the other hand, externalized temperaments are very open to new experiences and tolerant toward what is

different, they are active and curious, inconsequent and exaggerated²⁷. Those characteristics can explain the differences we have observed in their engagement in sexual activities. Depressive temperament individuals, male or female, are the ones who least have had sex and are among the types that least engage in sexual activities with someone they have just met, whereas euphoric temperament individuals are the ones that have had more sex with someone they have just met. This impulsive behavior relates to extroversion, highly expressed by externalized individuals. This is somewhat in line with the observations of Schmitt (2004) observed in a large world sample that sexual promiscuity was related to extroversion in many, but not all of the 10 world regions analyzed. He also found that infidelity was related with lower agreeableness and lower conscientiousness. Also, Prause and collaborators (2015) examined for the first time the differences in sensitivity to sexual cues. In a sample of 64 men and women, the researchers found that the number of partners participants have had was correlated with more or less sensitive responsiveness to sexual cues. Participants who have had more sexual partners “responded similarly to the more and less explicit sexual images”¹⁵.

Stable temperament types are very adaptable. They present a moderate search for stimulation, sincerity, and balance, and can be predictable²⁷. Unstable temperament types alternate between search and avoidance of stimulation, they either lack will or have it exaggeratedly and are inconstant²⁶. Stable and unstable types are intermediate and that is reflected in our results.

Our study presents some limitations. It is a cross-sectional study that relies solely on self-reported data. Also, because it is an online questionnaire - and just 57.8% of Brazilian homes have access to the Internet²⁹ - there is a selection bias.

In conclusion, engaging in sexual behaviors more or less intensively is related to affective temperaments. Overall, externalized and unstable temperament types individuals

presented the highest percentages of involvement in sexual activities, and that can be due to their higher extroversion. The opposite was observed in internalized types, and we propose that that it is due to the highest caution and fear, they present. Stable temperament types presented more intermediate percentages in sexual behaviors, tending to engage more than avoid certain activities.

Disclosure

The authors report no conflicts of interest.

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Table 1. Association between sexual intercourse and affective temperaments, in men and women

Affective Temperament	0		<1		1 to 2		≥3 ^b	
	Men	Women	Men	Women	Men	Women	Men	Women
Depressive	331 / 46.4%	913 / 44.5%	144 / 20.2%	376 / 18.3%	181 / 25.4%	549 / 26.8%	57 / 8%	214 / 10.4%
	2.87 (1.98-4.17)*	1.90 (1.54-2.34)*	2.61 (1.79-3.79)*	1.47 (1.18-1.84)*	1.82 (1.29-2.58)*	1.17 (.95-1.43)	1	1
Avoidant	349 / 31.1%	989 / 32.2%	235 / 20.9%	598 / 19.5%	402 / 35.8%	1,068 / 34.8%	136 / 12.1%	417 / 13.6%
	1.58 (1.16-2.14)*	1.05 (.88-1.27)	1.91 (1.42-2.58)*	1.18 (.98-1.43)	1.68 (1.29-2.19)*	1.10 (.93-1.31)	1	1
Apathetic	157 / 39.3%	285 / 38.5%	85 / 21.3%	135 / 18.2%	120 / 30%	226 / 30.5%	38 / 9.5%	95 / 12.8%
	2.42 (1.56-3.76)*	1.30 (.98-1.73)	2.52 (1.62-3.92)*	1.20 (.89-1.62)	1.91 (1.27-2.88)*	1.10 (.84-1.44)	1	1
Cyclothymic	317 / 32.3%	1,121 / 30.6%	241 / 24.5%	708 / 19.3%	291 / 29.6%	1,296 / 35.3%	133 / 13.5%	543 / 14.8%
	1.73 (1.27-2.34)*	1.09 (.92-1.30)	2.10 (1.56-2.84)*	1.16 (.97-1.40)	1.39 (1.06-1.83)*	1.16 (.98-1.36)	1	1
Dysphoric	81 / 27.8%	290 / 30.7%	59 / 20.3%	193 / 20.4%	115 / 39.5%	334 / 35.4%	36 / 12.4%	127 / 13.5%
	1.72 (1.06-2.77)*	1.20 (.92-1.55)	1.96 (1.22-3.14)*	1.32 (1.01-1.72)*	1.97 (1.30-2.99)*	1.23 (.96-1.56)	1	1
Volatile	149 / 35.5%	290 / 37%	89 / 21.2%	144 / 18.4%	135 / 32.1%	251 / 32%	47 / 11.2%	99 / 12.6%
	2.07 (1.37-3.13)*	1.36 (1.03-1.80)*	2.05 (1.36-3.11)*	1.23 (.92-1.65)	1.74 (1.19-2.54)*	1.23 (.94-1.60)	1	1
Obsessive	351 / 26.4%	1,306 / 32.9%	255 / 19.2%	721 / 18.2%	521 / 39.2%	1,429 / 36%	203 / 15.3%	514 / 12.9%
	1.06 (.79-1.41)	1.13 (.94-1.34)	1.34 (1.01-1.77)*	1.11 (.92-1.33)	1.47 (1.16-1.88)*	1.20 (1.02-1.41)*	1	1
Euthymic	359 / 23.8%	1,062 / 32%	285 / 18.9%	509 / 15.3%	595 / 39.5%	1,216 / 36.7%	269 / 17.8%	530 / 16%
	.93 (.71-1.23)	.80 (.67-.96)*	1.24 (.94-1.62)	.70 (.58-.85)*	1.30 (1.03-1.63)*	.95 (.80-1.12)	1	1
Hyperthymic	248 / 22.1%	697 / 31.3%	190 / 16.9%	351 / 15.7%	430 / 38.4%	749 / 33.6%	253 / 22.6%	432 / 18.4%
	.75 (.56-1.00)	.71 (.59-.86)*	.91 (.68-1.20)	.63 (.51-.77)*	1.04 (.82-1.31)	.75 (.63-.89)*	1	1
Irritable	182 / 25.3%	791 / 34.1%	141 / 19.6%	408 / 17.6%	266 / 37%	756 / 32.5%	130 / 18.1%	368 / 15.8%
	1.03 (.74-1.44)	1.00 (.83-1.21)	1.25 (.91-1.72)	.91 (.74-1.11)	1.25 (.95-1.65)	.92 (.77-1.10)	1	1
Disinhibited	152 / 27%	433 / 31.4%	107 / 19%	282 / 20.5%	211 / 37.4%	420 / 30.5%	94 / 16.7%	243 / 17.6%
	1.12 (.78-1.60)	.91 (.73-1.13)	1.25 (.88-1.78)	.97 (.78-1.21)	1.39 (1.03-1.88)*	.82 (.67-1.00)	1	1
Euphoric ^a	241 / 25.1%	682 / 30.7%	178 / 18.5%	428 / 19.2%	331 / 34.5%	752 / 33.8%	210 / 21.9%	363 / 16.3%
	1	1	1	1	1	1	1	1

Data presented as odds ratios (95%CI) calculated by multinomial logistic regression analysis, adjusted for marital status, education, ethnicity and sexual orientation. 95%CI = 95% confidence interval. Percentage of corresponding n for total of individuals in each type of temperament. Odds ratios are statistically significant ($p < 0.05$) when 1.0 is not included in the 95%CI; *statistically significant odds ratios. ^{a,b}Reference category.

Table 2. Association between masturbation frequency and affective temperaments, in men and women

Affective Temperament	0		<1		1 to 2		≥3 ^b	
	Men	Women	Men	Women	Men	Women	Men	Women
Depressive	61 / 8.6%	1.57 / 51.5%	77 / 10.8%	439 / 21.4%	154 / 21.6%	371 / 18.1%	421 / 59%	185 / 9%
	.91 (.63-1.32)	1.30 (1.05-1.61)*	1.24 (.88-1.75)	1.06 (.84-1.33)	.99 (.77-1.28)	.91 (.72-1.15)	1	1
	137 / 12.2%	1.744 / 56.8%	136 / 12.1%	676 / 22%	308 / 27.5%	451 / 14.7%	541 / 48.2%	201 / 6.5%
Avoidant	1.38 (1.01-1.89)*	1.58 (1.28-1.95)*	1.52 (1.12-2.07)*	1.28 (1.03-1.61)*	1.41 (1.13-1.75)*	.93 (.74-1.17)	1	1
	33 / 8.3%	335 / 45.2%	24 / 6%	178 / 24%	104 / 26%	158 / 21.3%	239 / 59.8%	70 / 9.4%
	.91 (.58-1.42)	1.12 (.83-1.52)	.71 (.44-1.16)	1.18 (.86-1.62)	1.20 (.90-1.60)	1.05 (.76-1.45)	1	1
Cyclothymic	78 / 7.9%	1.734 / 47.3%	86 / 8.8%	813 / 22.2%	241 / 24.5%	740 / 20.2%	577 / 58.8%	381 / 10.4%
	1.00 (.71-1.41)	1.15 (.95-1.38)	1.12 (.80-1.55)	1.03 (.85-1.26)	1.20 (.96-1.50)	.93 (.76-1.13)	1	1
	31 / 10.7%	480 / 50.8%	40 / 13.7%	216 / 22.9%	70 / 24.1%	163 / 17.3%	150 / 51.5%	85 / 9%
Dysphoric	1.40 (.87-2.25)	1.29 (.97-1.70)	1.85 (1.20-2.84)*	1.12 (.83-1.51)	1.24 (.89-1.72)	.86 (.64-1.17)	1	1
	26 / 6.2%	296 / 37.8%	27 / 6.4%	194 / 24.7%	93 / 22.1%	183 / 23.3%	274 / 65.2%	11 / 14.2%
	.65 (.40-1.05)	.72 (.55-.94)*	.70 (.44-1.12)	.86 (.65-1.15)	.94 (.70-1.26)	.79 (.60-1.05)	1	1
Obsessive	136 / 10.2%	2.030 / 51.1%	150 / 11.3%	953 / 24%	355 / 26.7%	727 / 18.3%	689 / 51.8%	260 / 6.5%
	1.26 (.93-1.71)	1.60 (1.31-1.94)*	1.46 (1.08-1.96)*	1.43 (1.16-1.76)*	1.33 (1.08-1.64)*	1.17 (.95-1.45)	1	1
	200 / 13.3%	1.664 / 50.2%	215 / 14.3%	812 / 24.5%	436 / 28.9%	621 / 18.7%	657 / 43.6%	220 / 6.6%
Euthymic	1.68 (1.25-2.24)*	1.42 (1.16-1.74)*	1.99 (1.50-2.64)*	1.37 (1.10-1.70)*	1.63 (1.33-2.00)*	1.15 (.92-1.43)	1	1
	137 / 12.2%	1.073 / 48.1%	131 / 11.7%	521 / 23.4%	313 / 27.9%	448 / 20.1%	540 / 48.2%	187 / 8.4%
	1.51 (1.11-2.06)*	1.22 (.98-1.51)	1.56 (1.15-2.12)*	1.13 (.90-1.42)	1.48 (1.19-1.83)*	1.03 (.82-1.30)	1	1
Irritable	79 / 11%	1.195 / 51.4%	96 / 13.4%	491 / 21.1%	172 / 23.9%	465 / 20%	372 / 51.7%	172 / 7.4%
	1.31 (.92-1.85)	1.55 (1.25-1.93)*	1.69 (1.21-2.34)*	1.23 (.97-1.55)	1.20 (.94-1.54)	1.21 (.95-1.52)	1	1
	40 / 7.1%	539 / 39.1%	44 / 7.8%	363 / 26.3%	113 / 20%	298 / 21.6%	367 / 65.1%	178 / 12.9%
Disinhibited	.80 (.53-1.22)	.80 (.64-1.00)	.90 (.61-1.34)	.96 (.75-1.22)	.86 (.66-1.12)	.79 (.62-1.00)	1	1
	89 / 9.3%	927 / 41.7%	85 / 8.9%	520 / 23.4%	213 / 22.2%	527 / 23.7%	573 / 59.7%	251 / 11.3%
	1	1	1	1	1	1	1	1
Euphoric ^a	1	1	1	1	1	1	1	1

Data presented as odds ratios (95%CI) calculated by multinomial logistic regression analysis, adjusted for marital status, education, ethnicity and sexual orientation. 95%CI = 95% confidence interval. Percentage of corresponding n for total of individuals in each type of temperament. Odds ratios are statistically significant ($p < 0.05$) when 1.0 is not included in the 95%CI; *statistically significant odds ratios. ^aReference category.

Table 3. Association between number of partners and affective temperaments, in men and women

Affective Temperament	0		1		2 to 5		6 to 15		>15 ^b	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Depressive	108 / 15.1%	281 / 13.7%	78 / 10.9%	329 / 16%	209 / 29.3%	715 / 34.6%	152 / 21.3%	481 / 23.4%	166 / 23.3%	246 / 12%
	4.52 (2.73-7.50)*	4.12 (3.02-5.61)*	2.70 (1.72-4.25)*	3.08 (2.37-4.02)*	2.38 (1.73-3.27)*	2.31 (1.86-2.86)*	1.63 (1.22-2.16)*	1.44 (1.18-1.76)*	1	1
Avoidant	109 / 9.7%	411 / 13.4%	142 / 12.7%	710 / 23.1%	325 / 29%	1,091 / 35.5%	276 / 24.6%	621 / 20.2%	270 / 24.1%	239 / 7.8%
	4.17 (2.58-6.74)*	7.28 (5.41-9.79)*	3.28 (2.20-4.91)*	5.59 (4.37-7.17)*	2.45 (1.85-3.24)*	3.13 (2.54-3.84)*	1.84 (1.44-2.34)*	1.75 (1.44-2.12)*	1	1
Apathetic	50 / 12.5%	93 / 12.6%	42 / 10.5%	134 / 18.1%	124 / 31%	232 / 31.3%	80 / 20%	194 / 26.2%	104 / 26%	88 / 11.9%
	4.18 (2.31-7.56)*	4.27 (2.80-6.49)*	2.55 (1.49-4.35)*	3.69 (2.56-5.31)*	2.41 (1.66-3.50)*	2.17 (1.59-2.96)*	1.33 (0.95-1.88)	1.66 (1.25-2.21)*	1	1
Cyclothymic	69 / 7%	276 / 7.5%	68 / 6.9%	492 / 13.4%	245 / 24.9%	1,188 / 32.4%	256 / 26.1%	1,079 / 29.4%	344 / 35%	633 / 17.3%
	1.90 (1.15-3.15)*	1.62 (1.22-2.15)*	1.33 (0.86-2.07)	1.54 (1.23-1.94)*	1.50 (1.13-2.00)*	1.34 (1.13-1.60)*	1.34 (1.06-1.69)*	1.20 (1.03-1.40)*	1	1
Dysphoric	19 / 6.5%	71 / 7.5%	26 / 8.9%	148 / 15.7%	64 / 22%	317 / 33.6%	80 / 27.5%	264 / 28%	102 / 35.1%	144 / 15.3%
	1.89 (0.93-3.84)	2.07 (1.38-3.09)*	1.59 (0.87-2.89)	2.13 (1.54-2.94)*	1.29 (0.84-1.97)	1.63 (1.25-2.13)*	1.40 (0.99-1.99)	1.30 (1.02-1.65)*	1	1
Volatile	29 / 6.9%	74 / 9.4%	40 / 9.5%	92 / 11.7%	113 / 26.9%	242 / 30.9%	111 / 26.4%	221 / 28.2%	127 / 30.2%	155 / 19.8%
	2.19 (1.17-4.11)*	2.17 (1.44-3.26)*	2.21 (1.30-3.75)*	1.65 (1.16-2.34)*	1.94 (1.35-2.80)*	1.42 (1.08-1.87)*	1.58 (1.16-2.16)*	1.12 (0.88-1.43)	1	1
Obsessive	93 / 7%	396 / 10%	136 / 10.2%	702 / 17.7%	350 / 26.3%	1,389 / 35%	307 / 23.1%	1,031 / 26%	444 / 33.4%	452 / 11.4%
	2.76 (1.71-4.46)*	3.5 (2.65-4.63)*	2.34 (1.58-3.47)*	2.93 (2.34-3.68)*	1.89 (1.45-2.46)*	2.07 (1.73-2.48)*	1.33 (1.06-1.66)*	1.50 (1.27-1.77)*	1	1
Euthymic	104 / 6.9%	318 / 9.6%	154 / 10.2%	627 / 18.9%	428 / 28.4%	1,187 / 35.8%	376 / 24.9%	854 / 25.7%	446 / 29.6%	331 / 10%
	2.79 (1.74-4.46)*	4.56 (3.40-6.10)*	2.26 (1.54-3.33)*	3.95 (3.11-5.00)*	2.03 (1.56-2.63)*	2.63 (2.17-3.19)*	1.51 (1.21-1.88)*	1.79 (1.50-2.13)*	1	1
Hyperthymic	72 / 6.4%	185 / 8.3%	88 / 7.9%	342 / 15.3%	281 / 25.1%	764 / 34.3%	283 / 25.2%	601 / 27%	397 / 35.4%	337 / 15.1%
	2.44 (1.48-4.01)*	2.53 (1.85-3.45)*	1.57 (1.03-2.38)*	2.12 (1.65-2.73)*	1.60 (1.21-2.11)*	1.67 (1.37-2.04)*	1.30 (1.04-1.64)*	1.24 (1.04-1.49)*	1	1
Irritable	38 / 5.3%	193 / 8.3%	57 / 7.9%	394 / 17%	173 / 24.1%	782 / 33.7%	181 / 25.2%	646 / 27.8%	270 / 37.6%	308 / 13.3%
	1.52 (0.87-2.66)	2.47 (1.81-3.37)*	1.42 (0.89-2.25)	2.70 (2.10-3.47)*	1.38 (1.01-1.88)*	1.90 (1.55-2.32)*	1.23 (0.95-1.59)	1.48 (1.23-1.78)*	1	1
Disinhibited	26 / 4.6%	75 / 5.4%	59 / 10.5%	166 / 12%	131 / 23.2%	426 / 30.9%	139 / 24.6%	428 / 31.1%	209 / 37.1%	283 / 20.5%
	1.28 (0.69-2.38)	1.12 (0.77-1.62)	1.84 (1.14-2.96)*	1.34 (1.01-1.79)*	1.32 (0.94-1.84)	1.18 (0.95-1.48)	1.18 (0.89-1.56)	1.09 (0.90-1.33)	1	1
Euphoric ^a	36 / 3.8%	113 / 5.1%	56 / 5.8%	220 / 9.9%	183 / 19.1%	640 / 28.8%	235 / 24.5%	713 / 32%	450 / 46.9%	539 / 24.2%
	1	1	1	1	1	1	1	1	1	1

Data presented as odds ratios (95%CI) calculated by multinomial logistic regression analysis, adjusted for marital status, education, ethnicity and sexual orientation. 95%CI = 95% confidence interval. Percentage of corresponding n for total of individuals in each type of temperament. Odds ratios are statistically significant ($p < 0.05$) when 1.0 is not included in the 95%CI; *statistically significant odds ratios. ^{a,b}Reference category.

Table 4. Association between of casual sex according to affective temperaments, in men and women

Affective Temperament	No		Yes ^b	
	Men	Women	Men	Women
Depressive	426 / 59.7%	1.502 / 73.2%	287 / 40.3%	550 / 26.8%
	1.52 (1.17-1.96)*	1.07 (.91-1.26)	1	1
Avoidant	655 / 58.4%	2.482 / 80.8%	467 / 41.6%	590 / 19.2%
	1.53 (1.22-1.92)*	1.29 (1.11-1.50)*	1	1
Apathetic	213 / 53.2%	531 / 71.7%	187 / 46.8%	210 / 28.3%
	1.11 (.81-1.51)	1.03 (.83-1.30)	1	1
Cyclothymic	416 / 42.4%	2.470 / 67.3%	566 / 57.6%	1.198 / 32.7%
	1.07 (.84-1.35)	1.14 (1.00-1.31)*	1	1
Dysphoric	135 / 46.4%	655 / 69.4%	156 / 53.6%	289 / 30.6%
	1.30 (.92-1.82)	1.09 (.89-1.34)	1	1
Volatile	190 / 45.2%	487 / 62.1%	230 / 54.8%	297 / 37.9%
	1.04 (.77-1.40)	.90 (.73-1.11)	1	1
Obsessive	643 / 48.3%	3.021 / 76.1%	687 / 51.7%	949 / 23.9%
	1.20 (.97-1.5)	1.33 (1.16-1.52)*	1	1
Euthymic	802 / 53.2%	2.571 / 77.5%	706 / 46.8%	746 / 22.5%
	1.40 (1.13-1.73)*	1.36 (1.17-1.57)*	1	1
Hyperthymic	514 / 45.9%	1.622 / 72.8%	607 / 54.1%	607 / 27.2%
	1.18 (.94-1.48)	1.31 (1.12-1.53)*	1	1
Irritable	329 / 45.8%	1.656 / 71.3%	390 / 54.2%	667 / 28.7%
	1.33 (1.03-1.71)*	1.12 (.96-1.30)	1	1
Disinhibited	243 / 43.1%	870 / 63.1%	321 / 56.9%	508 / 36.9%
	1.14 (.87-1.51)	1.07 (.90-1.27)	1	1
Euphoric ^a	335 / 34.9%	1.320 / 59.3%	635 / 65.1%	905 / 40.7%
	1	1	1	1

Data presented as odds ratios (95%CI) calculated by multinomial logistic regression analysis, adjusted for marital status, education, ethnicity and sexual orientation. 95%CI = 95% confidence interval. Percentage of corresponding n for total of individuals in each type of temperament. Odds ratios are statistically significant ($p < 0.05$) when 1.0 is not included in the 95%CI; *statistically significant odds ratios. ^{a,b}Reference category.

5.2 Temperamento e consumo de pornografia

Associations of Pornography Use with Sexual Behaviors in Brazilian Adults: An Anonymous Internet Survey.

Laura D. Guerim^{1*}, Rita Mattiello², Diogo R. Lara^{1,3}

4. Programa de Pós-Graduação da Faculdade de Medicina e Ciências da Saúde da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
5. Faculdade de Medicina, Pontifícia Universidade Católica do Rio Grande do Sul.
6. Faculdade de Biociências, Pontifícia Universidade Católica do Rio Grande do Sul.

* Corresponding Author:

Laura D. Guerim

Faculdade de Biociências – PUCRS

Av. Ipiranga, 6681 – Pd12A

Porto Alegre, RS

90619-900

Brazil

FAX +55 51 33203612

E-mail: lauraguerim@gmail.com

Abstract

Pornography use may have a correlation with sexual behaviors in both men and women, either positively or negatively, besides having political and social relevance. However, there is little data on large samples with methodologies that guarantee anonymity and privacy for this sensitive subject. The correlation between pornography consumption and eight sexual behaviors was analyzed in a Brazilian sample of 36.745 participants (72.5% females) via web-based survey. The results showed that around 60% of males consume pornography at least weekly, compared to around 10% in females. The most significant association was with masturbation frequency for both genders. Men and women presented a similar positive and weak correlation between pornography use and number of partners. In conclusion, our findings are in line with others studies worldwide, but more studies need to be developed in order to explore cultural characteristics that can influence pornography consumption, as well as the type of pornography consumed by this population.

Keywords: pornography; sexual behavior; masturbation; Web-survey

Introduction

Pornography can be defined as visual material that causes sexual arousal and can be presented in many forms (Diamond & Uchiyama, 1999; Carroll et al., 2008; Fisher & Barak, 1991; Perry, 2016), but Internet is the most used media for such consumption (Buzzell, Foss & Middleton, 2006; Stern & Handel, 2001). With the increased access to online pornography and its decreased label as a taboo, many researchers have been conducting analyses of its correlations with demographic variables (Buzzell, 2005; McKee, 2007; Rissel et al., 2016) and of its impact on health, sexual behaviors and aggression (Cranney, 2015).

The perspective from content analysis shows that popular pornographic internet videos may depict objectification from both sexes, situations of power in which men are portrayed as dominant and women as submissive, and violence. This gender inequality is more apparent in amateur than in professional pornography (Klaassen & Peter, 2014; McKee, 2005). On the other hand, from a self-perceived perspective, both genders report positive effects towards sex due to the consumption of pornography (Hald & Malamuth, 2008).

Pornography exposure may be correlated with other sexual behaviors. On one hand, it gives consumers a type of “permission” or “license” to explore certain sexual behaviors that are not well regarded or are considered taboo (e.g. anal sex, oral sex, group sex) (Häggström-Nordin, 2005; Hald & Malamuth, 2008; Li & Michael, 1996). On the other hand, some researchers have claimed adverse effects from exposure to pornography, although none of these studies offers evidence of causality, such as sex addiction, negative perception of women, and the normalization of different forms of exploitation and aggressive behaviors in sexual activities (Davidson & Gervais, 2015; DeKeseredy & Hall-

Sanchez, 2016; Dworkin & MacKinnon, 1988; Hald, Malamuth & Yuen, 2010; Paul, 2005; Stanley et al., 2016; Weinberg, Williams, Kleiner & Irizarry, 2010), although some researchers might disagree (Ferguson & Hartley, 2009; McKee, 2007). Pornography exposure is correlated with the frequency and intensity of the practice of several sexual behaviors (Koop, 1987; Malamuth, 1996; Mattabo et al., 2016), from simple masturbation and increased number of sex partners to engaging in group sex and practicing sadomasochism (Braun-Courville & Rojas, 2009; Böhm, Franz, Dekker & Matthiesen, 2014; Hald, 2006; Hald & Malamuth, 2010; Rogala & Tydén, 2003; Štulhofer, Buško & Landripet, 2010; Træen, Spitznogle & Beverfjord, 2004). In a large sample of Swedish girls, 39% of them copied sexual acts seen in online pornography and 30% of the consumers of pornography practiced anal sex, whereas 15% of non-consumers have practiced it (Mattebo et al., 2016).

The studies of pornography often suffer from methodological limitations. Most studies have not addressed large population samples, have been mostly conducted in developed countries and failed to use anonymous computerized assessments, which elicit more sincere answers compared to anonymous pen-and-paper evaluations regarding sexual behavior (Turner, Ku, Rodgers & Lindberg, 1998). In this research, we analyzed the relationship between pornography consumption and the practice of certain sexual behaviors and attitudes in a large Brazilian sample.

Methods

Study design

The data collected in this research were from a large sample called Brazilian Internet Study on Temperament and Psychopathology (BRAINSTEP) (Lara et al., 2012) from January 2010 to March 2015, involving no payment to or from participants. This is a web-

based anonymous and confidential survey, presented by non-commercial, advertisement-free web site (www.temperamento.com.br). Subjects were asked to answer questions regarding personal information and personality characteristics in a After answering the validated questionnaire, volunteers received feedback about their temperament profile and possible presence of a psychiatric disorder.

To ensure and check for validity of the data, we used the following strategies: (1) at the end of the first page on demographics the question “Do you commit to answering the questions honestly?” was presented to increase the validity of answers [20]; (2) questions checking for attention within some of the instruments throughout the system (e.g. “Please mark the option ‘sometimes’ in this question”); (3) at the end of each phase there was one direct question on level of sincerity and another on attention. Only those who committed to be honest in their answers, and stated being sincere and serious throughout the study and had correct answers in the attention validity items were included in the analyses.

Participants

After validity checks (27.4% of the initial sample was excluded) and the exclusion of those > 21 (for ethical reasons) and < 50 years (due to the low number of participants above that age), the final sample consisted of 36.745 volunteers, and their complete social demographic characteristics are described in Table 1. Compared to the Brazilian general population (<http://www.ibge.gov.br/home/estatistica/populacao/censo2010/>) there is an overrepresentation of women, Caucasians and singles, with predominantly young well-educated participants.

The ethics committee of Hospital São Lucas (PUCRS) approved the protocol used for this study and all participants gave their electronic informed consent, required by the National Research Council of Brazil and the Code of Ethics of the World Association.

Measures

All participants provided basic socio-demographic data (gender, age, race, education level, marital status, religious affiliation, occupation and sexual orientation). For the evaluation of pornography consumption, the question used was “How often do you consume any pornographic material per week?” The answer options were: never; hardly ever, less than once a week, around once a week, 1 to 3 times a week, 4 to 7 times a week, and more than 7 times a week. For this study, we used four categories derived from the seven response options (ranging from Never to Very Often [4-7 times/week and more than 7 times/week]):

- Never - Never
- Sometimes - Hardly ever and less than once a week
- Often - Around once a week and 1 to 3 times a week
- Very Often - 4 to 7 times a week and more than 7 times a week

For the evaluation of the sexual behaviors, the following four questions were asked: (1) “how often have you had sex per week for the last 30 days?”; (2) “how often have you masturbated per week for the last 30 days?”; (3) how many sexual partners have you had?”; (4) “have you ever had sex with someone you met a few hours before?” (referred to in this study as ‘casual sex’).

The possible answers to all these questions, even numerical ones, were divided in categories (e.g. 2-5 times a week; 6-15 partners). The detailed answer options to each question are presented in the table and figures.

Statistical analysis

The correlations between frequency of pornography use and other variables were calculated with Spearman's test. For categorical data, the relationship between pornography consumption and sexual behaviors were analyzed using chi-square test, with $p < .01$ as the significance level. Statistical Package for the Social Sciences (SPSS Inc, Chicago, IL), version 20.0 for Windows was used.

Results

Table 2 shows the striking difference between men and women on pornography consumption ($r = -.576$; $p > .001$; $t_{14106.24} = 116.09$; $p > .001$). Most men consume pornographic material often (32.4%) or very often (29.4%), whereas in women this frequency is 8.4% and 1.3%, respectively. More than 55% of female participants never consume any kind of pornographic material, compared to 11.7% of men. There is moderate age-related decline in pornography consumption in men (Fig. 1A) ($r = -.149$, $p < .001$) and a minimal decline in women (Fig. 1B) ($r = -.017$, $p < .01$).

Fig. 2 shows the relationship between pornography consumption and frequency of sexual intercourse in men and women. Fig. 2A shows a decrease in pornography consumption related to an increase of sexual intercourse activity in men ($\chi^2(12) = 148.22$; $p < .001$; $r = -.093$). Unlike men, women presented an increase in sexual intercourse in conjunction with an increase in pornography consumption (Fig. 2B) ($\chi^2(12) = 301.84$; $p < .001$; $r = .064$).

In Fig. 3A, masturbation has a clear correlation with pornography consumption ($\chi^2(15) = 5591.53$; $p < .001$; $r = .606$), where 80% of males who masturbate more than 7 times a week being "very often" consumers of pornography. In Fig. 3B, masturbation, like

in men, also has a strong correlation with pornography consumption in women ($\chi^2(15) = 7815.17; p < .001; r = .445$).

Fig. 4 presents the relationship between pornography consumption and the number of sexual partners participants have had throughout life, where can be observed the correlation among increased number of partners and high pornography consumption in men (Fig. 4A) ($\chi^2(15) = 140.34; p < .001; r = .085$) and in women (Fig.4B) ($\chi^2(15) = 628.42; p < .001; r = .140$).

Fig. 5A shows how pornography consumption relates to casual sex in men ($\chi^2(3) = 103.61; p < .001; r = .099$). Fig. 5B shows the correlation between pornography use and casual sex in women ($\chi^2(3) = 496.09; p < .001; r = .136$).

Discussion

Our results showed significant gender differences in the consumption of pornography. About 2/3 of young males used pornography at least weekly and this frequency slightly and steadily declined with age. Even in their 40's around 20% of males watched porn >4 times a week. In contrast, around 2% of women reported such frequent use, with little change over age, and only around 10% consumed pornography weekly. Although Brazilian women are among the most frequent registered female users of Internet pornography (35% of Pornhub Brazilian consumers are women) (<http://www.pornhub.com/insights/pornhub-2015-year-in-review>), our data suggests that they consume this content much less often than men.

These differences observed between men and women concerning frequency of pornography consumption replicated previous findings (Peter & Valkenburg, 2011; Træen, Nilsen & Stigum, 2006) and may have many underlying factors. Women sometimes find pornography boring or repulsive and men consume pornography more frequently for the

practice of masturbation (Hald, 2006; Lewin, 1997; Træen, Spitznogle & Beverfjord, 2004). Women also report to feel objectified and diminished by this kind of pornographic videos (Hald & Malamuth, 2008; Weinberg, Williams, Kleiner & Irizarry, 2010). Indeed, in most mainstream videos, including the ones from the category “for women”, women are represented in subjugated positions or seen as inferior by men (Dworkin, 1981; Klaassen & Peter, 2014; Paul, 2005; Parvez, 2006). In addition, their pleasure is not observed clearly or is perceptibly fake (Ciclitira, 2004), which impairs the identification of female consumers’ with the actresses.

Some associations of pornography use with sexual behaviors were similar in both genders. Although masturbation was much more common in men, in both genders this practice was strongly associated with pornography use, as observed before (Fisher & Byrne, 1989; Janghorbani et al., 2003). Both males and females also presented similar associations of pornography use with number of partners. These results are in line with Lewin (1997), who showed a high correlation between pornography consumption and number of partners in Sweden, and with a survey study in Norway (Træen, Spitznogle & Beverfjord, 2004).

Most studies show different relations of pornography consumption with sexual satisfaction in couples. Even though pornography use has been associated to negative outcomes in couples (Bridges & Morokoff, 2011; Maddox, Rhoades & Markman, 2009), when thoroughly analyzed, the negative consequences in couples satisfaction may actually be associated with pornography use discrepancies between partners (Willoughby et al., 2015). Another study has concluded that male pornography use has a negative association with both gender’s sex life quality, whereas female pornography use has a positive association with female sex life quality (Poulsen, Busby & Galovan, 2013). Haavio-Mannila and Kontula (2003), in a Finnish population, also found that pornography consumption is especially elevated in highly sexually active participants.

This study has some important limitations. The cross-sectional design does not allow causal inferences, and possible confounding variables were not included in the analyses (e.g. sexual abuse). Plus, this is a questionnaire that has not been normed for this before. Given the strong selection biases of the sample (more Caucasian, well-educated women than in the general population), the observed prevalence of sexual behaviors should be regarded with caution, but the associations between variables (e.g. porn use with sexual behaviors) may be less affected. The major strength of this study is its large sample collected anonymously by the internet, which allows privacy and higher reporting of morally loaded issues, such as sexual behavior (Turner, Ku, Rogers & Lindberg, 1998). As there was a lack of data in Brazil and since Brazilians are intense consumers of pornography (<http://www.pornhub.com/insights/pornhub-2015-year-in-review>), this study represents an important step towards the comprehension of the expression of sexuality in this population.

In conclusion, pornography has a significant association with sexual behaviors in this large sample. The known strong association with masturbation in both men and women was confirmed (Fisher & Byrne, 1989; Haavio-Mannila & Kontula, 2003; Janghorbani et al., 2003; Lewin, 1997; Træen, Spitznogle & Beverfjord, 2004). More studies are needed to further explore the influence of pornography consumption on sexual behavior.

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Table 1. Demographic characteristics of the sample (n=36.745).

	Men (n=10.099)	Women (n=26.646)
Age	30.7 ± 7.5	30.8 ± 7.6
Ethnicity (% white)	72.7	73.9
Marital status (% single/married)	32/36.1	27.4/39.8
High school/ University degree (%)	46.1/30.5	40.6/33.2

Table 2. Pornography consumption differences* in men and women (n=36.745).

Pornography consumption	Men (n=10.099) (n / %)	Women (n=26.646) (n / %)
Never	1182 / 11.7%	15062 / 56.5%
Sometimes	2672 / 26.5%	9002 / 33.8%
Often	3275 / 32.4%	2236 / 8.4%
Very often	2970 / 29.4%	346 / 1.3%

*Pearson's correlation and student's t test were used ($r = -.576$; $p > .001$; $t_{14106.24} = 116.09$; $p > .001$).

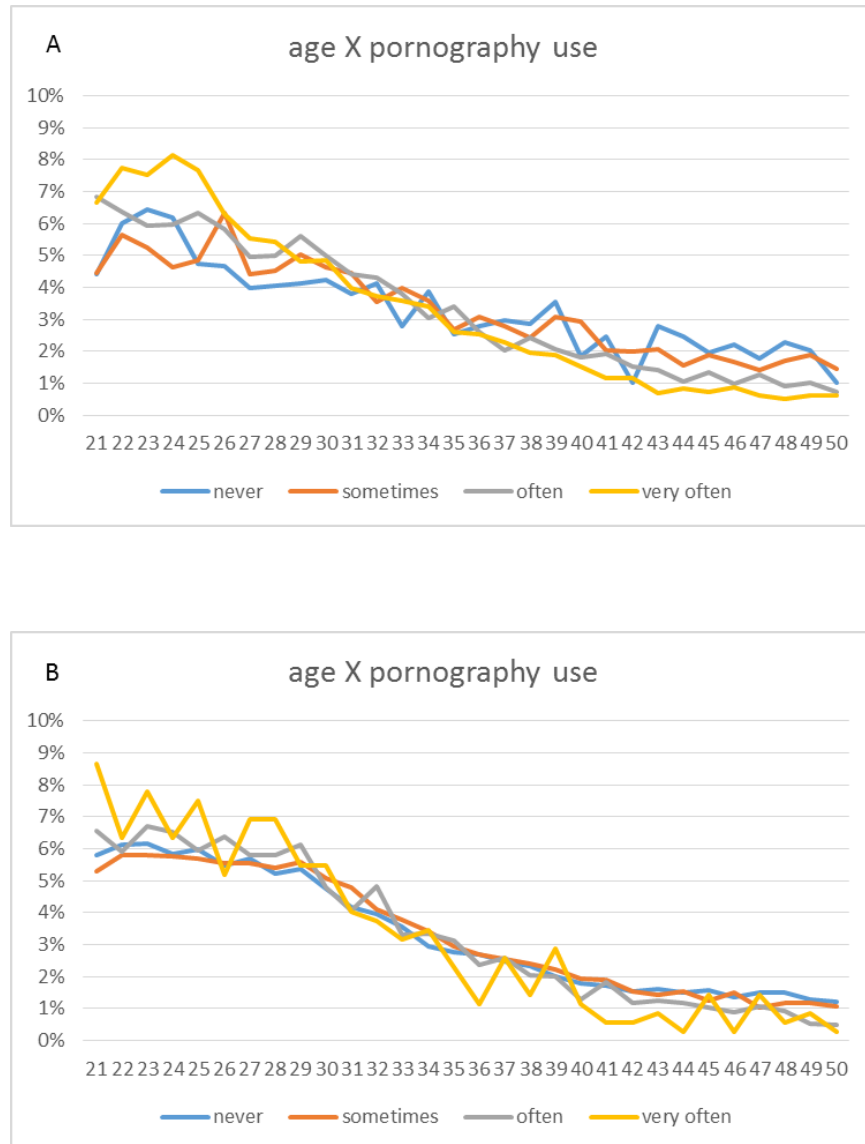


Figure 1. Frequency of pornography consumption according to age in males (A) and females (B).

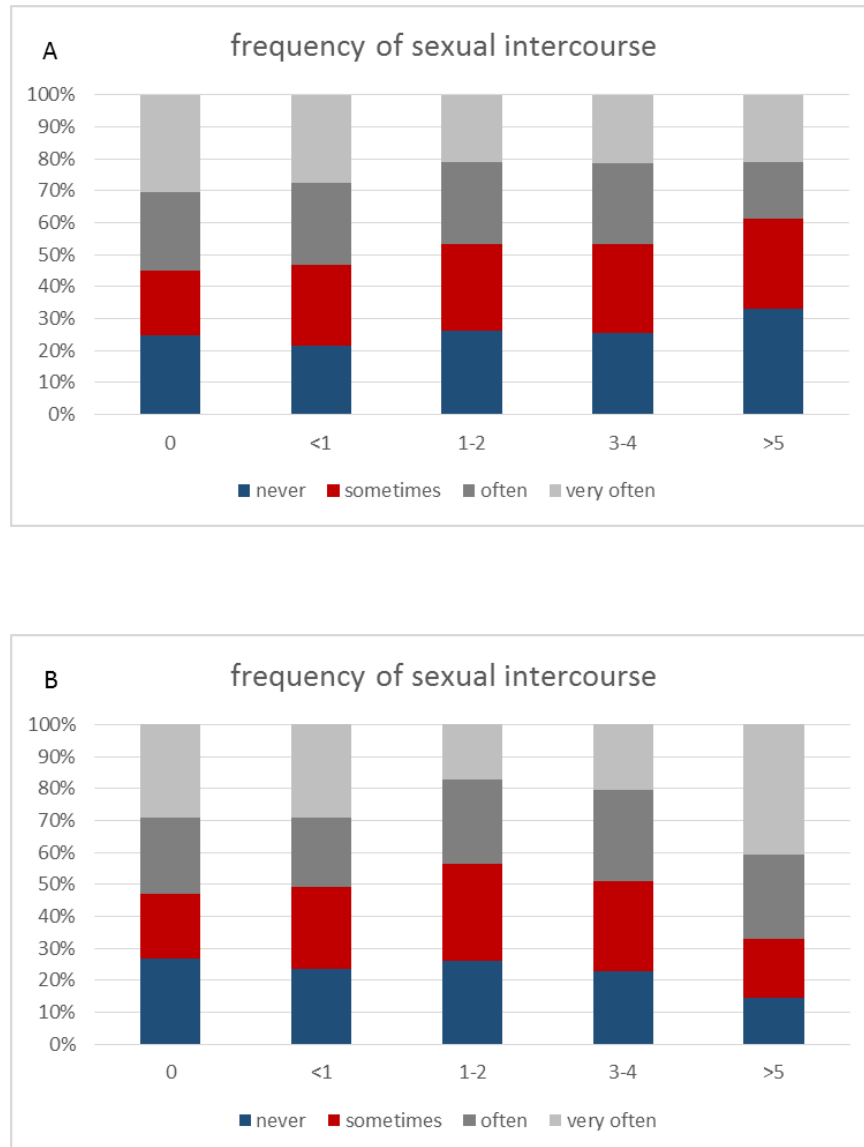


Figure 2. Frequency of sexual intercourse according to pornography consumption males (A) and females (B).

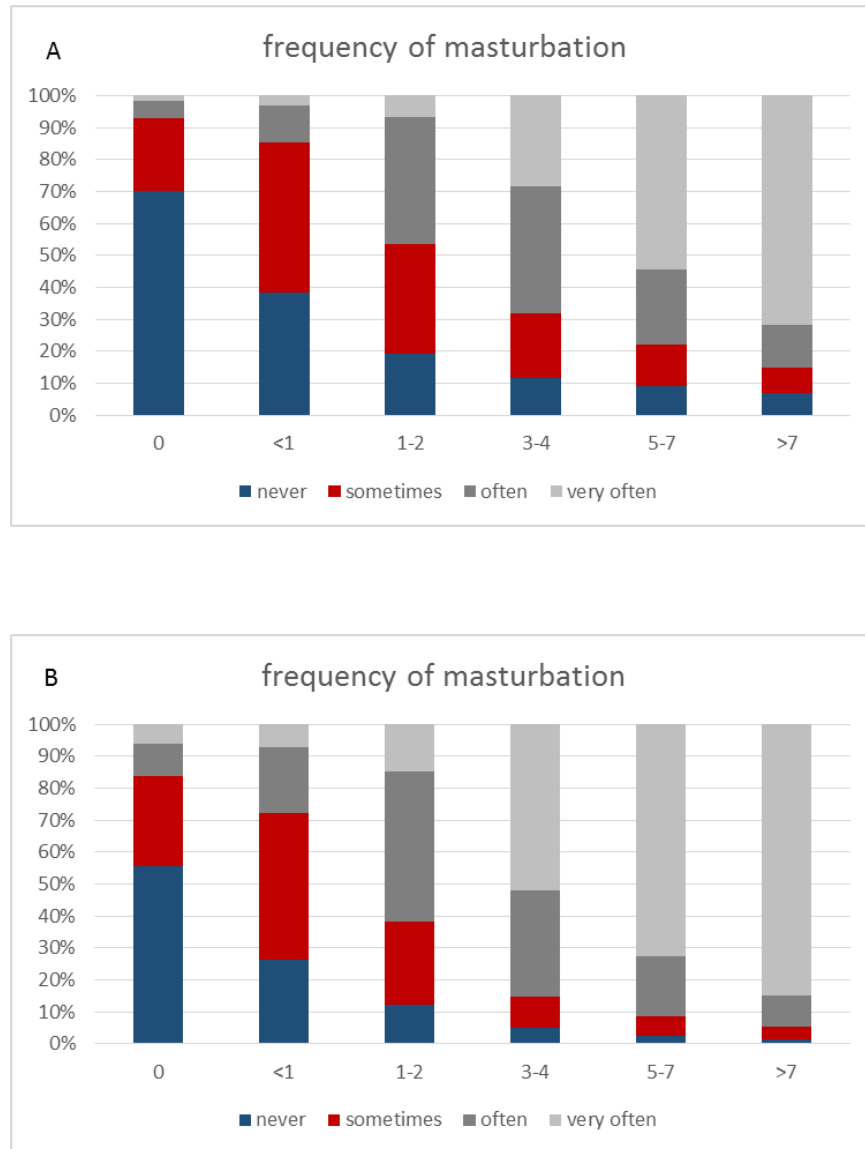


Figure 3. Frequency of masturbation according to pornography consumption males (A) and females (B).

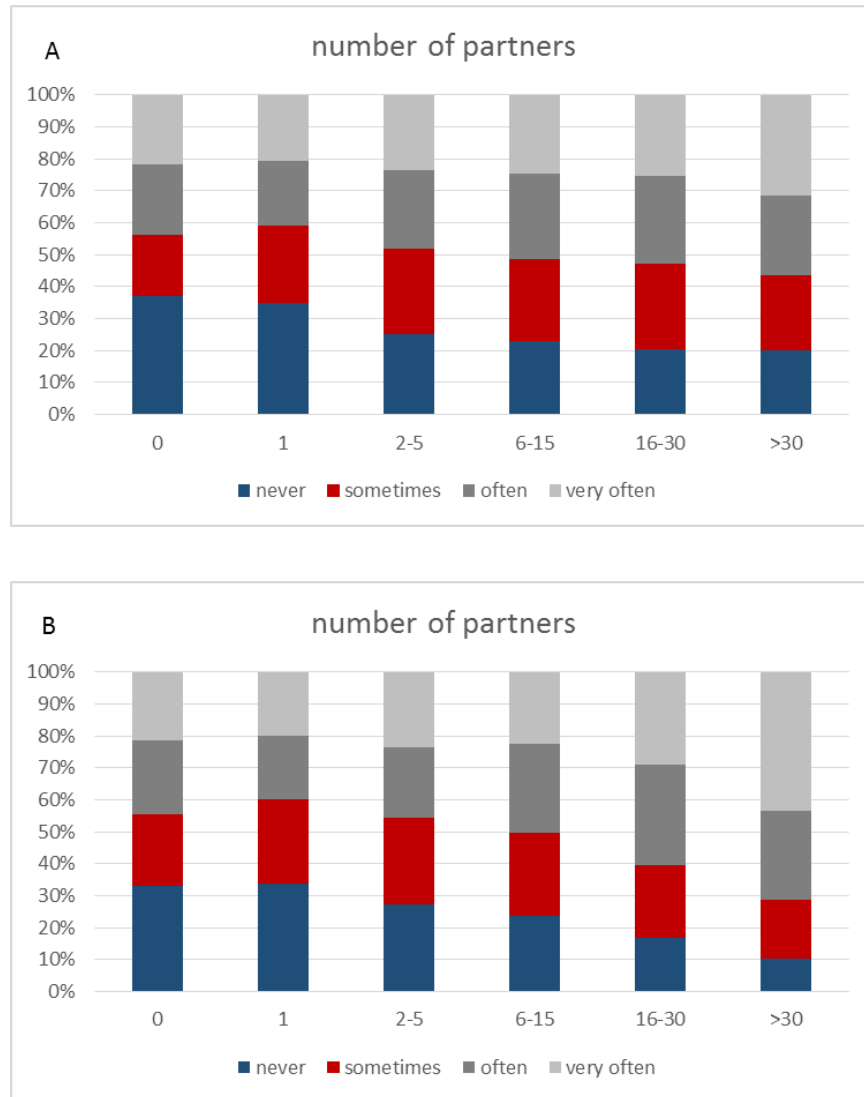


Figure 4. Number of partners according to pornography consumption males (A) and females (B).



Figure 5. Casual sex according to pornography consumption males (A) and females (B).

6. CONCLUSÕES

Os resultados desta tese indicam que:

- Existe uma relação entre o temperamento afetivo e determinados comportamentos sexuais;
- Indivíduos de temperamentos externalizantes praticam mais intensamente atividades sexuais – e o contrário é observado em indivíduos de temperamentos internalizantes;
- Homens e mulheres apresentam fortes diferenças no consumo de pornografia;
- O consumo mais ou menos intenso possui relação com a prática de alguns comportamentos sexuais.

Esses dados trazem novas considerações sobre os comportamentos sexuais de um perfil específico de brasileiros e brasileiras. Não podemos esquecer que a nossa amostra não representa a maior parte da população do Brasil, mas isso de forma alguma diminui o valor das análises e das contribuições para pesquisas futuras.

Essa pesquisa demonstra, também, a importância de um trabalho interdisciplinar para dar conta de um assunto diverso e influenciado por aspectos tanto biológicos quanto culturais. O desejo e a busca por prazer são constantemente moldados pelo que aprendemos no nosso meio, bem como pelas experiências e descobertas que fazemos ao longo da vida. Pesquisas futuras precisam levar isso em consideração.

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ANEXOS

Anexo A – questionário para categorização dos tipos de temperamento do modelo AFECT, coletado através do site www.temperamento.com.br

Protocolo AFFECTS – participantes deveriam marcar a opção entre muito e pouco sobre as seguintes características:

- Medroso/Ousado
- Inibido/Desinibido
- Prudente/Imprudente
- Penso antes de agir/Impulsivo, ajo sem pensar
- Preocupado/Despreocupado
- Fico paralisado frente ao perigo/Reajo rapidamente ao perigo
- Cauteloso/Descuidado
- Evito correr riscos/Gosto de correr riscos
- Pessimista/Otimista
- Fico indiferente a novas atividades/Fico entusiasmado com novas atividades
- É difícil eu sentir prazer/É fácil eu sentir prazer
- Desmotivado e desinteressado/Motivado e interessado
- Triste e desanimado/Alegre e animado
- Minha autoestima é baixa/Minha autoestima é alta
- Faltam-se objetivos e falta de vontade/Tenho objetivos e força de vontade
- Parado e sem energia/Ativo e energético
- Indisciplinado/Disciplinado
- Desorganizado/Organizado
- Desatento/Atento
- Dispersivo/Focado
- Não concluo tarefas que eu começo/ Concluo as tarefas, mesmo as longas e difíceis
- Irresponsável/Responsável
- Planejo mal as minhas atividades/Planejo bem as minhas atividades
- Displicente/Perfeccionista
- Tranquilo/Apressado e imediatista
- Ponderado/Sou de extremos, sou do tipo 8 ou 80
- Calmo/Irritado
- Flexível/Teimoso

- Pacífico/Agressivo
- Controlado/Explosivo
- Confio nas pessoas/Desconfiado
- Paciente/Impaciente
- Eu me culpo facilmente/É raro eu me sentir culpado
- Lido mal com a rejeição/Lido bem com a rejeição
- Tenho dificuldades em superar traumas/Tenho facilidade em superar traumas
- Sou sensível ao estresse/Resisto bem ao estresse
- Lido mal com situações de pressão/Lido bem com situações de pressão
- Sou sensível a críticas/Suporto bem críticas
- Eu fico magoado facilmente/Difícilmente fico magoado
- Tenho baixa tolerância à frustração/Tenho alta tolerância à frustração
- Tento me esquivar dos meus problemas/Enfrento meus problemas de frente
- Tenho dificuldades em encontrar soluções/Tenho facilidade em encontrar soluções
- Tenho dificuldades em resolver meus conflitos com pessoas/Tenho facilidade em resolver meus conflitos com pessoas
- Tendo a repetir meus erros/Aprendo com meus erros
- Sofrer me tornou mais frágil/Sofrer me tornou mais forte
- Espero que meus problemas se resolvam sozinhos/Procuro resolver meus problemas
- Deixo meus problemas pessoais se acumularem/Resolvo meus problemas pessoais assim que posso
- Jogo a culpa dos meus erros nos outros/Assumo a culpa pelos meus erros
- Tenho dificuldade de aprender coisas novas/Tenho facilidade de aprender coisas novas
- Meus impulsos do desejo são leves/Meus impulsos do desejo são fortes
- Sou moderado no que eu gosto/Exagero no que eu gosto
- Sei me conter na busca por prazer/Me rendo facilmente à busca por prazer
- Mantenho juízo quando quero algo/Faço loucuras quando quero algo
- Difícilmente fico entediado/Fico entediado com facilidade
- Demoro para enjoar das coisas/Enjoo rápido de quase tudo
- Em paz/Ansioso
- Relaxado/Tenso
- Sereno/Apreensivo

- Dificilmente me angustio/Eu me angustio com facilidade
- Estável/Instável
- Previsível/Imprevisível
- Regular/Oscilante
- Equilibrado/Turbulento
- Sou pouco ágil/Sou muito ágil
- Seguro/Inseguro
- Contraído/Solto
- Eu me assusto com facilidade/ Dificilmente eu me assusto
- Eu me envergonho com facilidade/Dificilmente eu me envergonho
- Sou sensível a perdas/Conseguo lidar com perdas
- Eu me permito sentir mesmo o que é desagradável/Eu evito sentir o que é desagradável
- Tolero bem desconfortos/Não tolero desconfortos
- Raramente fico de “saco cheio”/Frequentemente fico de “saco cheio”
- Tolero sofrimentos necessários/Evito qualquer sofrimento
- Eu dou espaço aos meus sentimentos negativos/Não dou espaço aos meus sentimentos negativos
- Suporto ser contrariado/Não suporto ser contrariado
- Conseguo fazer o que não gosto/Não conseguo fazer o que não gosto
- Suporto bem sofrimentos/Não gosto de sofrer
- Dificilmente fico incomodado/Facilmente fico incomodado
- Tolero as coisas como elas são/As coisas têm que ser do meu jeito
- Frequentemente me sinto ameaçado/Raramente me sinto ameaçado
- Receoso/Destemido
- Contido/Espontâneo
- Escolho o caminho melhor/Escolho o caminho mais fácil

Protocolo AFFECTS – participantes deveriam marcar a opção entre “nada” e “tudo a ver comigo” sobre as seguintes afirmações:

- Tenho tendência à tristeza e à melancolia; vejo pouca graça nas coisas
- Sou muito preocupado e cuidadoso; frequentemente me sinto inseguro e apreensivo; tenho medo de que coisas ruins aconteçam; tento evitar situações de risco; estou sempre alerta e vigilante.
- Tenho pouca iniciativa; com frequência me desligo do que os outros estão dizendo ou fazendo; muitas vezes não concluo o que comecei; tendo à passividade e sou um pouco lento.
- Sou exigente, dedicado, perfeccionista, detalhista e rígido; preciso ter o controle das coisas; não lido bem com incertezas e erros.
- Meu humor é imprevisível e instável (altos e baixos), muda rapidamente ou de maneira desproporcional aos fatos; tenho fases de grande energia, entusiasmo e agilidade que se alternam com outras fases de lentidão, perda de interesse e desânimo.
- Tenho uma forte tendência a me sentir agitado, tenso, ansioso e irritado ao mesmo tempo.
- Meu humor é equilibrado e previsível, costuma mudar só quando há um motivo claro; tenho boa disposição e, em geral, me sinto bem comigo mesmo.
- Sou muito sincero, direto e determinado, mas também irritado, explosivo e desconfiado.
- Sou dispersivo, inquieto, desligado e desorganizado; às vezes sou precipitado ou inconveniente e só me dou conta mais tarde; mudo de interesse rapidamente; tenho dificuldade em concluir tarefas e fazer o que deveria.
- Sou inquieto, ativo, espontâneo e distraído; muitas vezes ajo de maneira precipitada e inconsequente; é muito comum eu deixar para fazer as coisas na última hora; quando me irrito, logo fico bem de novo.
- Estou sempre de bom humor, sou muito confiante e me divirto facilmente; adoro novidades; faço várias coisas sem me cansar; vou atrás do que quero até conquistar; tenho forte tendência à liderança.
- Sou expansivo, rápido, falante e intenso; tenho muitas ideias e me distraio facilmente; sou imediatista, explosivo e impaciente; me exponho a riscos por excesso de confiança ou empolgação; exagero no que me dá prazer; não gosto de rotina e de regras.

Protocolo AFFECTS – participantes deveriam marcar a opção, também apresentada na questão anterior, que mais se aproximaria do seu próprio perfil:

- Tenho tendência à tristeza e à melancolia; vejo pouca graça nas coisas
- Sou muito preocupado e cuidadoso; frequentemente me sinto inseguro e apreensivo; tenho medo de que coisas ruins aconteçam; tento evitar situações de risco; estou sempre alerta e vigilante.
- Tenho pouca iniciativa; com frequência me desligo do que os outros estão dizendo ou fazendo; muitas vezes não concluo o que comecei; tendo à passividade e sou um pouco lento.
- Sou exigente, dedicado, perfeccionista, detalhista e rígido; preciso ter o controle das coisas; não lido bem com incertezas e erros.
- Meu humor é imprevisível e instável (altos e baixos), muda rapidamente ou de maneira desproporcional aos fatos; tenho fases de grande energia, entusiasmo e agilidade que se alternam com outras fases de lentidão, perda de interesse e desânimo.
- Tenho uma forte tendência a me sentir agitado, tenso, ansioso e irritado ao mesmo tempo.
- Meu humor é equilibrado e previsível, costuma mudar só quando há um motivo claro; tenho boa disposição e, em geral, me sinto bem comigo mesmo.
- Sou muito sincero, direto e determinado, mas também irritado, explosivo e desconfiado.
- Sou dispersivo, inquieto, desligado e desorganizado; às vezes sou precipitado ou inconveniente e só me dou conta mais tarde; mudo de interesse rapidamente; tenho dificuldade em concluir tarefas e fazer o que deveria.
- Sou inquieto, ativo, espontâneo e distraído; muitas vezes ajo de maneira precipitada e inconsequente; é muito comum eu deixar para fazer as coisas na última hora; quando me irrito, logo fico bem de novo.
- Estou sempre de bom humor, sou muito confiante e me divirto facilmente; adoro novidades; faço várias coisas sem me cansar; vou atrás do que quero até conquistar; tenho forte tendência à liderança.

- Sou expansivo, rápido, falante e intenso; tenho muitas ideias e me distraio facilmente; sou imediatista, explosivo e impaciente; me exponho a riscos por excesso de confiança ou empolgação; exagero no que me dá prazer; não gosto de rotina e de regras.

Protocolo AFFECTS – participantes deveriam responder às seguintes questões com opções de resposta entre “nenhum problema” e “muitos problemas”:

- Em que medida você tem ou já teve problemas ou prejuízos pessoais em função do seu jeito de ser, do seu comportamento e do seu padrão de humor?
- Em que medida você tem ou já teve vantagens ou benefícios pessoais em função do seu jeito de ser, do seu comportamento e do seu padrão de humor?

Anexo B – Comprovação de submissão do artigo “Associations of Pornography Use with Sexual Behaviors in Brazilian Adults: An Anonymous Internet Survey.”, para a Archives of Sexual Behavior (Qualis B1).



Submission Confirmation



Entrada x

06/10/2017 ☆

 Archives of Sexual Behavior (ASEB) <em@editorialmanager.com>
para mim ▾

 inglês ▾ > português ▾ Traduzir mensagem Desativar para: inglês x

Dear Ms D. Guerim,

We acknowledge, with thanks, receipt of the revised version of your manuscript, "Associations of Pornography Use with Sexual Behaviors in Brazilian Adults: An Anonymous Internet Survey.", submitted to Archives of Sexual Behavior

The manuscript number is ASEB-D-16-00030R2.

You may check the status of your manuscript at any time by accessing the journal's website.

Your username is: lauraguerim

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We will inform you of the Editor's decision as soon as possible.

Thank you very much.

With best regards,
Springer Journals Editorial Office

Anexo C – Aprovação do Comitê de Ética em Pesquisa.

PONTIFÍCIA UNIVERSIDADE
CATÓLICA DO RIO GRANDE
DO SUL - PUC/RS



PARECER CONSUBSTANCIADO DO CEP

DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: Caracterização comportamental, psicológica e psiquiátrica baseada no temperamento emocional e afetivo.

Pesquisador: Diogo Rizzato Lara

Área Temática:

Versão: 4

CAAE: 24907813.1.0000.5336

Instituição Proponente: UNIAO BRASILEIRA DE EDUCACAO E ASSISTENCIA

Patrocinador Principal: MINISTERIO DA CIENCIA, TECNOLOGIA E INOVACAO

DADOS DO PARECER

Número do Parecer: 1.383.300

Apresentação do Projeto:

O pesquisador principal do estudo "Caracterização comportamental, psicológica e psiquiátrica baseada no temperamento emocional e afetivo." encaminhou para apreciação do CEP-PUCRS a emenda para dois subprojetos:

1) projeto de doutorado de Laura Guerim pelo PPG Medicina e Ciências da Saúde "Sexo, pornografia e temperamento", aprovado no SIPESQ sob o número 6491;

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_601333E2.pdf	04/01/2016 00:01:11		Aceito
Outros	Carta_de_Aprovacao_da_Comissao_Cientifica_1434973489755.pdf	03/01/2016 23:59:17	Diogo Rizzato Lara	Aceito
Outros	Carta_de_Aprovacao_da_Comissao_Cientifica_1434974390650.pdf	03/01/2016 23:58:41	Diogo Rizzato Lara	Aceito
Projeto Detalhado / Brochura Investigador	Documento_Unificado_do_Projeto_de_Pesquisa_1434974390650.pdf	03/01/2016 23:57:59	Diogo Rizzato Lara	Aceito
Outros	Encaminhamento.pdf	03/01/2016 23:57:08	Diogo Rizzato Lara	Aceito
Projeto Detalhado / Brochura Investigador	Documento_Unificado_do_Projeto_de_Pesquisa_1434973489755.pdf	03/01/2016 23:56:32	Diogo Rizzato Lara	Aceito
Outros	Emenda_Sabrina_Laura.docx	30/09/2015 19:41:13	Diogo Rizzato Lara	Aceito
Outros	Emenda uso de dados para 3 mestrados 2014.pdf	24/11/2014 12:30:02		Aceito
Outros	Documento Unificado do Projeto de Pesquisa_1407776394162.pdf.pdf	24/11/2014 12:28:33		Aceito
Outros	Documento Unificado do Projeto de Pesquisa_1414600618853.pdf.pdf	24/11/2014 12:28:22		Aceito
Outros	Documento Unificado do Projeto de Pesquisa_1411063103264.pdf.pdf	24/11/2014 12:28:12		Aceito
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Situação do Parecer:

Aprovado

Anexo D - Artigo publicado na revista *Dissertatio* (Qualis A2 – Ciências Humanas).

Sexual Identity and Neurosexism: A critique of reductivist approaches of sexual behavior and gender

Laura Dick Guerim
Fabrício Pontin
Camila Palhares Barbosa
Bruna Fernandes Ternus

Abstract

This paper will unfold in two different critiques, first dealing with how neuroscience has sexed the brain, disconsidering cultural elements of gender formation, and further focusing on the masculine bias of neuroscience research, which, we claim, adopts male physiological and social patterns as “normal”. In order to do so, we will start our investigation with some insights on the sex/gender debate and how it is of consequence for research on neurosciences of sexuality. Secondly, we will criticise the way studies are focusing on differences rather than similarities between genders, and how such strategy re-enforces gender biases. Finally, we use contributions from social cognitivist theory and feminism to support a more complex view of body, identity and gender performance.

Introduction

We claim that a large part of cognitive neuroscience has been ignoring cultural elements in identity formation, assuming over-innatist perspectives of gender identity and even sexual practices, establishing stereotypical patterns of sexed behaviors as allegedly natural and determined by biology alone. Our hypothesis is that a neuroscientific perspective of sexual behavior and gender identity is better understood through a social-cognitivist approach, integrating both anthropological and neurological aspects - thus allowing a more complex view of body, identity and gender performances as well as sexual-social practices.

The question of whether or not brain is sexed, that is, searching for biological markers distinguishing a female and a male brain, has been studied for a very long time and yet, especially in neuroscientific studies, the "gender" and "sex" terminology has not been clearly

defined, though there is an unwritten convention among neuroscientists that "sex" differences relate to reproduction and "gender" differences relate to cognition. Due to those conceptual disagreements, we adopted the combined term sex/gender (Bluhm, 2013) in order to maintain both biological and social approach to the subject.

Researches in neuroscience regarding sex differences, as found in Tranel, Damásio, Denburg and Bechara (2005), often take a stereotypical background of gender roles, which are then taken to be confirmed by the data analysis, and thus confirming gender asymmetries and behaviors. The problem here is that quantitative evidence rarely confirms anything related to gender roles in these researches, and often presents no statistical difference between the genders. As Cordelia Fine (2011) argues, "such claims, quite independently of their scientific validity, have scope to sustain the very sex difference they seek to explain". As Catharine MacKinnon (1987) has pointed, the gender treatment is considered truly as a matter of difference, instead of treating these differences as gender role markers.

The differences we attribute to sex are lines inequality draws, not any kind of basis for it. Social and political inequality are, I think, basically indifferent to sameness in difference. Differences are inequality's post-hoc excuse, its conclusory artifact, its outcome presented as its origin, the damage that is pointed to as the justification for doing the damage after the damage has been done, the distinctions that perception is socially organized to notice because inequality gives them consequences for social power. Distinctions of body or mind or behavior are pointed to as cause rather than effect, without realising that they are so deeply effect rather than cause that pointing to them at all is an effect. (MACKINNON, 1987, p. 8)

Even with a "sexed brain" consideration, neuroscientific findings concerning the basics on sexual orientation (including hormonal features) for instance, are, by no means, conclusive. For example, Swaab (2005) argued that "not only our gender identity (the feeling of being a man or a woman) but also our sexual orientation is programmed into our brain structures when we are still in the womb", however in his reading, the questions of a more complex view into sexual identity and aspects of cultural impact for our comprehension of Self are ignored.

Affirming that gender, sex and sexual orientation are defined *in utero* and are not influenced by cultural impositions contradicts one of the most important characteristics of the

brain: neural plasticity, which is the ability of the human brain to morphologically and functionally change and adapt when in contact with environmental influences. Therefore, one could argue that continuous impositions of certain behaviors just because you are a woman or a man, will make your brain adapt and change to fit in this 'proper' behavior of gender. Having said that, it is imperative to consider socialization and culture in the formation of women and men's brains and how their respective roles, decision-making processes and moral intuitions develop. That is, the difference observed as biologically materialized can be the result of a socialization process.

Sexed brain in neuroscience: how mainstream neuroscience is ignoring culture

There are many researches looking for sexed brain evidences, take, for example, Tranel and Bechara et al. in "Does gender play a role in functional asymmetry of ventromedial prefrontal cortex?" (2005) and "Sex-related functional asymmetry of the amygdala" (2009). Through these analyses, the aforementioned researchers claim that morphological aspects of the female brain (its smaller size, for example), or functional aspects of women's brains (their inter-hemispheric function, as opposed to a male intra-hemispheric function) explain sufficiently the different strategies and preferences taken by different individuals because of their sexual and biological constitution. For these researchers, such intrinsic neurobiological characteristics trump socio-cultural explanations regarding social practices such as career, child caring and relationship dynamics (Gilligan, 1993).

Tranel and Bechara (2005) seem to suggest that distinctions in decision making between men and women are a reflection of brain anatomy and morphology alone. Initially, Bechara suggested this in the context of a comparative study between subjects, in Iowa, that have suffered similar dorsolateral strokes. Because these individuals vary their behavior post-trauma, but go through the same "biological" incident, Tranel and Bechara concluded that the distinct

behavior between these individuals should be understood in terms of morphological distinctions in the brain. That is, because there are different neural correlates for action in men and women after the same biological incident, the changes in behavior must be an effect of the distinctive characteristic of the “male” and the “female” brain. This first analysis taken by authors in the context of dorsolateral strokes was recently taken by Bechara in an attempt to explain distinct strategies and behavior between men and women without any apparent brain injury.

Bechara has concluded that women are more “in tune” with the sentimental side of the brain, and are therefore more prone to conducts that are reflective, less aggressive and are generally more patient. He has also suggested that the “normal” female brain will have these characteristics, meaning that women are prone to have mental representations that are more reflective, affective and social. Men, on the other hand, are more “in tune” with instinctive and short-term aspects of action. The “normal” male brain will therefore be prone to maximization of immediate gain, instinctive behavior, and individualistic action. It is important to note that Bechara himself never deal with these questions of sexuality or gender behavior as anything but innate. Women behave like women and decide like women because they have a certain kind of structure of the ventromedial prefrontal cortex that, on its turn, determines the kind of social and moral intuitions women will have. Men behave like men for the same reasons. Intuitions of any sort are different for men and women not because of the way they are socialized, but because of the kind of brain they have.

Moreover, when Bechara and Tranel (2009) claim that the simple biological fact that women bear children and men do not, means that there are sex-related differences when it comes to how they “apprehend, process and execute emotional information and solve social problems”. It seems that the fact that women and men have different parental abilities (or responsibilities) is exclusively biological.

This view finds further support in many evolutionary psychologists researchers who have pointed out that those differences presented in the male and female brain supports the evolutionary way that women and men developed their abilities with cognitive and emotional situations. Pinker (2003), for example, argues that male sexual behavior is correlated with their evolutionary strategies for reproduction. The “instinctive” sexual behavior of the sexes, therefore, would depend on several characteristics, such as reproductive age and mating strategies. When Pinker argues that forced copulation is a reproductive strategy used by men in the past - and still today by some species of flies - he is rationalizing male sexual acts in order to explain them instead of actually question the cultural aspects that influence our behaviors in society (e.g. rape culture).

Cahill (2006), argues that sex differences has an important impact in neuroscience studies, since “the picture of brain organization that emerges is of two complex mosaics — one male and one female — that are similar in many respects but very different in others”. In this sense, for Cahill, the differences presented by this sexed brain cannot be ignored or neglected by neuroscience, because sex influences the function of the brain and, therefore, represents different social behavior in males and females.

Regardless of the ultimate evolutionary explanations, it seems incontrovertible that males and females evolved under some similar, and some very different pressures. We should therefore expect a priori that their brain organization will be both similar in some respects, and markedly different in others. This is precisely the situation suggested by the sex difference literature. (CAHILL, 2006, p. 4).

It is important to address that these researches have an actual and immediate social impact. Many reactionary perspectives seeking to naturalize gender roles and access to the job market have claimed that such research revalidates essentialist positions about sexual differences. Bechara, for example, has recently argued in a similar manner, regarding sexual practices and perceptions - men are more aggressive and need more sex because of testosterone, women like flowers and cuddling because of estrogen.

Sexual behavior and the way we learn it, when we do it alone or with someone else, is also shaped by culture and previous sexual experiences. From tantric sex to sadomasochistic practices, sexual pleasure can be found in all kinds of forms and intensity, and can also be negative, which is something that may explain different types of dysfunctions and other sexual difficulties. Georgiadis et al. (2012) found, after an extensive review about mechanisms and cortical areas involved in sexual arousal, that vmPFC is substantially coupled to such phenomenon. Actually, several cortical areas are linked to sexual related phenomena, like the posterior insula and the striate. Therefore, sex is not entirely primitive and can also be learned, changed and controlled by prefrontal socio-moral templates of what is and what is not sexually allowed. In another study conducted by Georgiadis (2012a), a gender (as the author puts) difference was found in the stronger activity among men of ventral occipito temporal cortex (visual cortex), and a stronger activity of left dorsal fronto parietal areas among women; a difference that might be explained by "the building of a different mental representation that women make of sex", and not necessarily a biological predisposition to not like sex (when in comparison with men).

A relevant aspect of the current gender and sexual analysis in the neuroscientific field is the fact that the referential standards are always the male structure, function and psychology. For example, when Swaab (2010) argues that the male brain suffer an effect of intrauterine testosterone and the female brain suffer from the absence of such hormone, he is considering this hormone as standard, and, consequently, the other is identified by the absence of that. Through his argument, therefore, girls will never be similar to boys because they miss the hormone that defines men's manhood.

The narrative of the sexed brain in neuroscientific researches seems to be looking for confirmations of stereotypical gender behavior instead of questioning this heteronormative and a priori biological conceptions. In what follows, we will focus on the research of

neuroscientists, who are, interestingly, women, and who have called attention to the sexism within the aforementioned researches in the neuroscientific field. We support their claim that this neurosexism has been misleading data and suffering from several biases. Because of that, neuroscience is still looking for differences when it should be looking for similarities that would bring science closer to real life social problems, and might diminish the gender asymmetry we see in all realms of society.

Neurosexism: misleading empirical data through gender differences perspectives and the search for similarities

Why does the neurobiological approach to gender issues is always considered through the matrix of difference? In “Gender Similarities Hypothesis”, Hyde (2005) argued that it was misleading to consider only differences when approaching gender and sex in neuroscientific studies. Therefore, it is time to consider our similarities, or intra-gender group differences, in order to find answers to these sexed conundrums.

According to Cordelia Fine (2013) "scientific claims reinforce and legitimate gender roles in ways that are not scientifically justified", therefore supporting essentialist perspectives. Similarly, Hyde (2005) argues that gender analysis depend on context, as “gender differences can be created, erased, or reversed, depending on the context”. In this sense, it seems that biological markers and ideas of natural standards can also be related to influences from culture and social context, as Bluhm (2013) suggests: “the structure and the function of the brain can change so much in response to experience, differences in the brain may well be the product of culture (that is, gender differences), despite being biological”.

In that matter, Anelis Keiser et al. (2009) bring what they call the "right tool for the job". Neuronal plasticity, they say

is a crucial factor in elucidating the question of sex/gender differences in the brain. [...] The concept of neuronal plasticity describes the experience-driven modification of neuronal networks. [...] Based on such assumptions, sex/gender differences [...]

appear not as fixed and immutable in the cerebral organization but rather open to any kind of experience during life. [...] In other words, sex differences in the brain themselves are not evidence of a pure material dimension, but reflect gendered behavior as learned and incorporated, in social context. once incorporated into the brain, gender differences become part of our cerebral biology.(Kaiser et al., 2009, pp.56-57)

Kraus (2012) also claims that gendered behaviors are being brained by neuronal plasticity, reflecting social impositions that are not biological at all. Through the neuroplasticity argument it is impossible to ignore in researches regarding gender differences the impact that our environment has on the formation of the brain structure, sexual behavior and identity. The characteristics we see in fMRI images might be caused by socio cultural impositions, such as gender socialization. For example, when Bechara describes the decision-making processes of men and women in his research, the differences on strategy and emotional correlations between the sexes can be explained by the stereotypical social roles those individuals perpetuate. It is therefore possible, even within a cognitivist perspective, to resort to a broad, non-reductionist, account of decision-making and gender differences. Fine (2012) showed evidences that “gender stereotypes influence perception and behavior”.

We therefore argue that gender is also related to performance. The way that society teaches girls and boys to behave will certainly impact the morphological and physiological characteristics of the brain, and, consequently, the way boys and girls will have different social cognitions. Prinz argues in this direction when he writes that

the fact that women are more empathetic than men is, I suggested, a consequence of social roles that emerge under conditions of male dominance. This raises an urgent question: is the empathetic orientation in women’s morality a useful tool for liberation or does it rather serve to sustain the inequality from which it springs? There are reasons to suspect that the latter might be true to some extent. Liberation, it seems, requires outrage: total intolerance to oppression and a correspondingly aggressive pursuit of change. If 'aggression' is treated as a bad (and phallogocentric) word, and replaced by a moral stance that is predominantly empathetic, inaction may result. If the emotional response to gender inequality is to feel empathic sadness for those who are adversely affected, the resulting interventions may be limited because sadness tends to reduce motivation, rather than increasing it. If, in contrast, critics of inequality, get angry or 'uppity' (as the anger of the oppressed is called), more radical change may be actively sought. A feminist morality bent on liberation should not be an empathy-based morality if that label is meant to describe a morality that makes empathy into the primary emotional resource. An outrage-based morality might be more effective. (PRINZ J. in COPLAN, GOLDIE, 2011 p.225)

This implies that normal man-like or woman-like performance, which is constructed socially, informs our basic intuitions, which, in turn, shape the kind of strategy, emotion, cognition and personal relations that these individuals will use in decision-making, for example. These performances, can be found in researches that Fine (2012) will call “baby X studies”, that aim to point to gender behavior in infants. In such studies, different toys are offered to those infants, and based on their gender, they would choose different kind of toys. Fine argues, however, that “mothers of girls under-estimated both crawling ability and risk taking, while these were overestimated by mothers of boys”. The gendered relation infants assume towards society, seems to be stimulated by their mother and father from a very young age, which defines what will see as gendered performance.

We argue that sex distinctions taken to be natural and necessarily determined by the brain are based on gender biases that are “confirmed” by some neuroscientific researches as “innate”, These gender biases may be misleading interpretations made by some researchers regarding what is taken as innate distinctions in emotional traits between male and female individuals, explainable purely by neurological circumstances. Our point here is that we cannot differentiate a male brain from a female one by looking individually, but if you do know the sex/gender of the subject lying in your MRI machine you will attribute to him/her a whole background of sets of preference and gender-like behavior. In order to do that, Bluhm (2013) claims that

the fMRI studies resort to ad hoc explanations of data that don't fit with gender stereotypes, ignore alternative, better, explanations, of the data, or develop complex, ad hoc methods of analysis in order to find sex/gender differences in the first place. (BLUHM, 2013, p. 878).

Despite being able to correlate socialization with sex differences in the brain, Hyde (2005) shows that "men and women, as well as boys and girls, are more alike than they are different". Through a “gender meta-analysis”, Hyde demonstrate results that indicate that “78%

of gender differences are small or close to zero”. Furthermore, Hyde found that while gender differences in mathematics performance during childhood is small or non-existent, “the male advantage appeared beginning around the time of puberty”. This data, seems to support our argument that the socialization will influence the male-like and female-like behavior. One important question here, however, is why mainstream neuroscience still looking for sex differences within the brain, instead of looking for those 78% of similarities claimed by Hyde?

It seems that this is a complicated paradigm to overcome. As we mentioned before, all science regarding human behavior and physiology was build based on sex differences. With neurosexism is no different, since there are “unjustified claims furnished support for traditional gender stereotypes and roles” (FINE, 2013, p. 397). Even when Hyde talks about differences, the behaviors she is analyzing - specially the sexual ones - can also be explained from a cultural point of view. There are no biological explanations for why men masturbate more than women, for example.

António Damásio (2015) agrees with such cultural influence, but does not address how culture is gendered. He says that

[...] reward and punishment scales applied to infants, children and adolescents vary remarkably in different families, schools and social circles; the conformation of the events that constitute the past history of an individual and his anticipated future is controlled largely by the social environment; the rules and principles of behavior that govern the cultures in which the autobiographical self is developing are under the control of the social environment; the same is true of knowledge in which individuals organize their autobiography, ranging from models of individual behavior to cultural facts. (DAMÁSIO, 2015, p. 187).

We suggest that gender analysis must integrate how environmental influences compose what neuroscience claim as biological differences, since our brain's physiology and structure can be transform due to neural plasticity. When we talk about our bodies and our brains, we must include important notions, such as identity and performance, in order to fully comprehend how gender and society are constantly interacting and changing each other.

A contribution from Social Cognitive Theory shows precisely the importance of such interaction. According to this theory, psychological and cognitive sex differences can be a result of "males and females receiving different rewards and punishments for their behaviors, people's tendency to imitate same-gender models, and cognitive processes such as attention and self-efficacy" (Hyde, 2014). Through a cognitive perspective, we want to introduce the discussion of how culture impacts our mental representations, and, therefore, how it influences gender performances.

Body, identity and performance: gender stereotypes and some contributions of social cognitive theory

Through the discussion of body, identity and performance, we believe that a more complex and fruitful contribution to gender inequality can be made. Understanding the morphology of the "male brain" and "female brain" does very little to help us understand the reality of social inequality between genders and the very material hardships that an essentialization of gender differences brings to the table. It seems that a neuroscientific narrative that does not look at social reality will, in fact, give a scientific permission to establish and maintain social distance and discrimination, but we want to insist that such perspective is basically bad science, or, as we showed above, neurosexism.

There can be no understanding of sexual differences without an understanding of how mental representations (as first level intuitions) are resignified, semantically, in everyday practices that allow us to really attach meaning to these representations. So, whatever is being chemically constituted as an intuition, this is only understood in terms of normative/meaning-like action and behavior in socialization. There are no evidences to sustain a narrative of gender or sex, or gender practices and sexual practices as in the brain, alone. As a matter of fact, several practices of appropriation and resignification of gender roles and even of biological constitution seem to point that though we do have a sexual biology this sexual biology is meaningless and

thin without socialization - and is, ultimately, the result of very concrete political and social interactions in everyday life.

Prinz (2012) argues that cognitive science is concerned with how perception of concepts and principles can be acquired through experience rather than being present at birth, as a way to overcome the nativist presuppositions. Through these experiences, the mental representations are perceptions of representations caused by environmental stimuli, so “our ability to represent things contributes to an explanation of our ability to behave in ways that are sensitive to those things” (PRINZ, 2004, p. 4). Elsewhere, Prinz suggests that

what we consider masculine or feminine seems to be partially determined by culture. In Western culture, femininity is associated with such arbitrary symptoms as dresses, love of flowers, manicured nails, and the color pink. More disturbingly, femininity has been associated with submissiveness, manners, and frivolity. Being feminine is being placed under a label that carries with it a set of characteristics, appearances, and behaviors. Femininity is a role. Its players don't always realize that they are playing out culturally ordained behaviors, but they are. Gender roles require choices that are not rendered obligatory by biology. (PRINZ, 2004b, p.132)

For a similar effect, and using moral emotions as an example, Moll et al. (2002) argue that there is a connection between mental representation of a certain moral action X with a homeostatic state of the body Y. The event that connects a moral intuition X to a psychological state Y, shapes a certain moral valuation of that specific event. Moll qualifies these visual stimuli normatively and qualitatively, which means that to an specific scene there is a normal behavior to be expected.

Within a cognitive perspective, both suggest that there is more to intuitions than the central nervous system, and external information and socialization are paramount to our understanding of gender differences and sexual behavior. Bandura's classic account of moral disengagement points at how important the history of one's society and upbringing are to one's understanding of the meaning of one's intuitions. The point here being that there can be no understanding of sexual differences without an understanding of how mental representations

(as first level intuitions) are resignified, semantically, in everyday practices that allow us to really attach meaning to these representations.

Bussey and Bandura's (1999) account for the gender development and differentiation states that

gendered roles and conduct involve intricate competencies, interests and valued orientations. A comprehensive theory of gender differentiation must, therefore, explain the determinants and mechanisms through which gender-linked roles and conduct are acquired. (BUSSEY AND BANDURA, 1999, p. 685).

Also, within the social cognitive theory he points that there are three main modes of influence that promote the gender development. Bussey and Bandura explains them by saying that

the first mode is through modeling. A great deal of gender-linked information is exemplified by models in one's immediate environment such as parents and peers, and significant persons in social, educational and occupational contexts. In addition, the mass media provides pervasive modeling of gendered roles and conduct. The second mode is through enactive experience. It relies on discerning the gender-linkage of conduct from the outcomes resulting from one's actions. Gender-linked behavior is heavily socially sanctioned in most societies. Therefore, evaluative social reactions are important sources of information for constructing gender conceptions. (BUSSEY AND BANDURA, 1999, p. 685).

The first and second modes seem to suggest that environmental influences will have certain impacts in gender roles since the early stages of life, by stimuli received from the parents, for example. Therefore, in order to understand the embodied perception of gender, we must also conceive how those roles provide a normative behavior of performance to manhood and womanhood. Although Butler is not a cognitivist, her approach to gender performance can endorse Bussey and Bandura's assumptions. Butler (2015) argues that these gender performances are categorized towards a body generalization - between male and female - and, moreover, this body would presupposes an inertia to receive external and cultural stimuli. For Butler, in this sense, sex and gender performance is instead a continuum process of appropriation and resignification of environmental information, through which, gendered bodies would not be presented as a consolidated concept, but as a battlefield to self-comprehension. To say that performance matters to the understanding of both body and identity,

does not mean that certain material characteristics and limits will not be correlated to sex differences, what does change is the meaning within how science perceive this gender embodiment and behavior in unequal contexts of socialization.

Bandura and Bussey (1999) introduce the third mode by saying that "people have views of what is appropriate conduct for each of the two sexes". They then states that

the third mode [...] serves as a convenient way of informing people about different styles of conduct and their linkage to gender. Moreover, it is often used to generalize the informativeness of specific modeled exemplars and particular behavioral outcome experiences. (BUSSEY AND BANDURA, 1999, p. 685).

The impact of those three modes of influence depend on the social structuring of experiences and the developmental period in which the individual lives. Moreover, Bandura and Bussey stress how these influence modes interact in a very complex way, always oriented "toward promoting the traditional forms of gendered conduct". However, since the several changing views on gender, the source of influence remarkably diverse. Therefore, according to Bandura, "gender development is straightforward under conditions of high social consensus concerning gendered conduct and roles".

Butler (2015) argues that intelligible genders are those that institute and maintain coherent and continuous associations between sex, gender, sexual practice and desire. Throughout this paper, we presented the strict notion of woman and man, but we should take in consideration all other forms that gender acquires as a continuum - transsexuality, transvestism and several other gender identities that are not being taken in consideration in any neuroscientific research.

In order to take gender and sex differences into account in neuroscientific researches, some definitions must be established, such as what does sex and gender mean, and how these two concept are different. It is also important to be cautious with sexist and heteronormative assumptions that may mislead results and reproduce notions of gender roles within a dominant and oppressive sexist dynamic.

Conclusion: enculturation, neural plasticity and feminism

In this paper we presented the works of several neuroscientists who believe that we should take culture into consideration when dealing with the brain. Enculturation, or the way we learn the traditional content of our culture and all its rules and values, influences the brain directly. It is not possible to consider our brain as an innate expression of genes that has been deciding for millenniums female and male roles and performances. Therefore, a behavioral analyses that does not take in consideration the social status of its subjects has no use, especially when focused on sexual behavior or sexuality.

Neuronal plasticity, for example, is a well established tool to explain how social and environmental influences can alter our brain's morphology and functions. It is very likely that the differences we observe between our brains are a result of social conditions and cultural pressures that ultimately categorize people as women and men. The mainstream neuroscientific field, besides ignoring other gender identities, assumes that those categories have a normative and proper women and men-like behavior.

In a way, the sex difference assumption misguides science to seek biological explanations for those differences rather than questioning stereotypes and performances associated to expected gender roles. As mentioned before, from a very young age, boys and girls are tough to be different and to perform gendered behaviors.

The sexed brain critique is mainly influenced by feminism - and the fact that most researchers who criticize it are women is not a coincidence. The very term neurosexism was developed to address another form of sexism and inequality found in our society, the one that happens in neuroscience researches. The feminist movements have questioned all forms of knowledge production and how they perpetuate oppression and domination. In a work about the feminist theory in science, Deboleena Roy (2004), argues that by “bridging feminist

critiques of science with practical transformations in science” we might be able to make things change, not only in a methodological sense, but also in an epistemological one. When Helen Longino (1987) asks if we can in practice do science as feminists, she immediately answers that no, “not until we change the social and political context in which science is done”. Here we presented an answer that includes science as tool for such social and political changes. We need to practice science as feminists, questioning our methods and our parameters in order to overthrow sexist paradigms. It is time to question gender roles and stereotypes and not look for ways to prove (or invent) its biological origin.

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Anexo E - Apresentação de trabalho na *I Conference in Justice and Levels of Social Interaction*. Bergen, Noruega.



UNIVERSITY OF BERGEN
Department of Philosophy

Bergen, 25.06.20016

To whom it may concern

I, Paola de Cuzzani, professor at the University of Bergen, Norway, certify that Laura Guerim PhD candidate at Pontifícia Universidade Católica do Rio Grande do Sul, Brasil, participated at the Conference "Justice and levels of social interaction" organized by the University of Bergen on 2nd- 4th June, 2016, with the paper: "Towards a gendered interpretation of sexual behavior: a critique of ungendered approaches to sexuality and sexual behavior."

Paola de Cuzzani
Professor
Department of Philosophy
University of Bergen
Sydensplassen 7
5007 Bergen
NORWAY
phone: -47 55583206
paola.de.cuzzani@fof.uib.no

Anexo F - Palestra intitulada “Travesti”, na Universidade de Tulane, em Nova Orleans (EUA), no dia 13 de abril de 2016.

UNIVERSITY OF MIAMI
COLLEGE of
ARTS & SCIENCES



Coral Gables, FL
28 June 2016

Department of
Modern Languages and Literatures
P.O. Box 248093
Coral Gables, FL 33124-2074

Ph: 305-284-5585
Fax: 305-284-2068
<http://www.as.miami.edu/ml>

To Whom it May Concern:

I, Steven F. Butterman, associate professor of Portuguese and Brazilian Studies at the University of Miami, Coral Gables, FL USA, certify that Laura Guerim, PhD Candidate at Pontifical Catholic University of Rio Grande do Sul, presented a brilliant, dynamic and highly interactive 2.5 hour lecture entitled “Travesti” in my advanced cultural studies seminar (Latin American Studies 6960: “Brazilian Portugays: LGBT Language and Culture in Contemporary Brazil”), at Tulane University, New Orleans, USA, on 13 April 2016. The PhD candidate also attended an anthropology department meeting on 14 April 2016.

Steven F. Butterman, Ph.D.

Richard E. Greenleaf Chair & Distinguished Visiting Professor of Latin American Studies
Scholar-in-Residence
Stone Center for Latin American Studies
Tulane University
100 Jones Hall
New Orleans, LA 70118

Dr. Steven F. Butterman
Associate Professor of Portuguese & Brazilian Studies
Director, Portuguese Program

Anexo G - Palestra intitulada “Travesti”, na Universidade de Miami, no dia 15 de novembro de 2016.

UNIVERSITY OF MIAMI
COLLEGE of
ARTS & SCIENCES



Coral Gables, FL
08 December 2016

Department of
Modern Languages and Literatures
P.O.Box 248093
Coral Gables, FL 33124-2074

Ph: 305-284-5585
Fax: 305-284-2068
<http://www.as.miami.edu/ml>

To Whom it May Concern:

I, Steven F. Buttermann, Associate professor of Portuguese and Brazilian Studies at the University of Miami, Coral Gables, FL USA, certify that Laura Guerim, PhD Candidate at Pontifical Catholic University of Rio Grande do Sul (PUCRS), presented a 75-minute lecture entitled “Travesti” in my advanced cultural studies seminar (Brazilian Portugays: Representations of LGBT Language and Culture in Contemporary Brazil), at the University of Miami, Florida, USA, on 15 November 2016. The PhD Candidate also attended and spoke at three other classes, two on November 10 and another on November 15.

A handwritten signature in purple ink, reading "Steven F. Buttermann".

Steven F. Buttermann, Ph.D.

Associate Professor of Portuguese & Brazilian Studies
Director, Portuguese Program
Department of Modern Languages and Literatures
University of Miami
Merrick Building Room 212-07
P.O. Box 248093
Coral Gables, FL 33124-2074
USA



Pontifícia Universidade Católica do Rio Grande do Sul
Pró-Reitoria de Graduação
Av. Ipiranga, 6681 - Prédio 1 - 3º. andar
Porto Alegre - RS - Brasil
Fone: (51) 3320-3500 - Fax: (51) 3339-1564
E-mail: prograd@pucrs.br
Site: www.pucrs.br