

Beliefs about cybersex and Internet-mediated sex of Latino men who have Internet sex with men: relationships with sexual practices in cybersex and in real life

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Abstract *Cybersex (engaging in sexual self-stimulation while online with another person) and meeting partners for sex are commonly reported among men who have Internet sex with men (MISM). We studied 1,026 Latino MISM in the US and constructed a scale to measure beliefs about cybersex. Respondents were recruited to an online Internet study and compensated for their effort. Factor analysis indicated that there were three dimensions: (1) liking cybersex: perceived anonymity and safety of cybersex; (2) potential for greater IRL interaction in seeking partners on the Internet; and (3) a dimension of negative beliefs about Internet contacts which was not psychometrically stable. Safety referred to physical and HIV-related safety. We formed two scales to describe the first two dimensions. Respondents who were high on the 'liking cybersex: perceived anonymity and safety' scale were more likely than low scorers to use chat-rooms and webcams. They were also more likely than low scorers to have had cybersex and phone sex before meeting. Those who were high on the 'IRL interaction' scale were more likely than low scorers to use e-mail, bulletin boards and paid websites. However, there was significantly less disclosure about HIV status and discussion about safer sex by those higher on the 'IRL interaction scale', and when sex in real life did occur, those higher on the 'IRL interaction' scale were more likely to have receptive oral or anal sex, whereas those high on the 'liking cybersex: perceived anonymity/safety' scale were less likely to have insertive sex or be drunk/high. MISM scoring high on the 'IRL interaction' scale were significantly more likely than low scorers to prefer to meet partners on the Internet. We discuss the implications of the Internet for MSM and for sexual IRL interactions in the Internet age.*

Introduction

There has been considerable debate on the relationship between cybersex and subsequent sex 'in real life' (IRL). Cybersex refers to engaging in sexual self-stimulation while online with another person. While Ross *et al.* (2000) have argued that cybersex may provide an

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opportunity to rehearse and consolidate a script for behavior that if enacted in real life would be unsafe, they also note that the Internet might also have the opposite effect: it may be easier to discuss difficult or stigmatizing issues such as HIV status or safer sex than in person. Safety can refer to safety from HIV/STD infection, or physical safety.

It is possible that the beliefs about use of the Internet for cybersex might differentiate the subsequent safety of sexual behavior. People might use the Internet with very different beliefs about it, and such beliefs might provide a more refined understanding of risks associated with the Internet and sexual behavior in men who have Internet sex with men (MISM). As an analogy, people may go into bars with very different intentions and the safety of their sexual behavior, and the unfolding of the sexual scenario, may depend not on the meeting place but on more general beliefs about the venue. Research on MSM in a different context by Gold *et al.* (1994), for example, demonstrated that lack of sexual safety was dependent not so much on the alcohol and drug use during the evening of the sexual encounter as the intention at the beginning of the evening, with alcohol or drug use facilitating this intention.

There is little evidence on the variation in Internet beliefs that may differentiate sexual outcomes. Sproull and Kiesler (1991) suggest that there are two levels of consequence of new technologies, and that the second-level effects are usually the more important. First-level effects are the efficiency effects of the technology. Second-level effects are unanticipated deviance-amplifying changes in the social and organizational systems of users of the technology. They argue that the important effects of a new technology may be not to let people do old things more efficiently but instead do new things that were not possible or feasible with old technology. People may thus pay attention to different things, have contact with different people and depend on one another differently (p. 4). Beliefs about Internet sexuality are a new second-level outcome of the use of the Internet for sexual purposes.

A significant advantage of the Internet is based on the Quin-A engine: Cooper (2000) have referred to the factors of *accessibility*, *affordability* and *anonymity* as driving the Internet's popularity for sexual IRL interactions. The first two factors are first-level efficiency factors, the latter is a second-level outcome. King (1999) added the high *acceptability* of the Internet, and Ross and Kauth (2002) and Tikkanen and Ross (2003) have added the ability of people using the Internet to *approximate*, or experiment with, different aspects of sexuality or sexual practices online rather than in person. This latter element could be considered a second-level effect, changing the social use of the Internet. Similarly, the advantage of anonymity on the Internet has been associated with a greater availability of sexual partners. MSM networks have traditionally made allowance for anonymous sex, and the Internet has added efficiency to this.

If we consider the first- and second-level effects of the Internet on MISM (Table 1), it is apparent that the Internet has led to a number of new developments in male–male sexual systems In Real Life (IRL) interaction. Further, one could postulate a third level of effect. This is a sociological shift in the *location* of sex (Internet), and the *realm of sexual possibilities* (the possibility of cybersex, as positioned midway between viewing erotica for arousal and having real sex) in male–male sexual behavior that goes beyond the system effects. Our question in this study relates to the beliefs about the pros and cons of the second-level effects, specifically, cybersex by MISM, and the safety issues associated with such beliefs.

This study has three aims: first, to determine if beliefs about cybersex and Internet-mediated sex in MISM are measurable and differentiable into psychometric scales; second, to see if there are demographic differences associated with such scales; and third, to determine if there are different patterns of cybersex and IRL sex associated with such dimensions.

Table 1. *First-, second- and third-level effects of the Internet on male–male sexual contact*

 First-level effects

- Greater accessibility (from home, office, broader timeframes)
- More affordable (cheap)
- Greater speed of access to sexual pool (within seconds/minutes; lower threshold for impulsive or compulsive access)
- Much larger sexual pool (potentially thousands at any given moment)
- Asynchronous contact (contact may be in real time or delayed)

Second-level effects

- Cybersex becomes possible (sexual arousal and orgasm through textual IRL interaction)
- Approximation of new sexual behaviors (can try new or stigmatized sexual behaviors without having to risk exposure)
- Increased perception of liking cybersex: perceived anonymity (can break off contact without being traceable)
- IRL interaction without social cues (impoverished/absent social cues reduce the power of ‘attitude’ and situational demand characteristics)
- Sexual contacts accessed and engaged in from home (reduction of geographical distance and increase in privacy)
- Acting (people can maintain multiple personas and characters)
- Safety (cybersex is safe; can facilitate HIV ‘sero-sorting’)
- Matching (greater possibility of closely matching desires or fantasies)
- Verbalization and emotionalization (linguistic medium encourages and enhances communication about fantasies and interests)

Third-level effects

- Emphasis on communication before chemistry (privileging the verbal)
 - Stigma-reduction through distancing
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Methods

As part of a larger study of HIV-risk behavior among Latino MSM, we studied the demographic and Internet characteristics of 1,026 Latino MSM. A full description of the methods appears elsewhere (see Ross *et al.*, in press). To summarize, in November–December 2002, over a 47-day period, we posted 47,495,771 banner advertisements for a university-based study of sex and the Internet for Latino men who have sex with men on Gay.com, the largest gay-themed website in the US. Banner advertisements were placed on three types of site within Gay.com: chat-rooms (where participants can textually interact, meet online partners, including negotiating sex), personals (where participants can advertise for personal and sexual contacts) and Run of Service (ROS; a broad category where advertisements are randomly placed throughout the website). This yielded 33,024 clicks onto our website, 1,742 enrollees and 1,026 completed surveys which were deemed ‘unique completers’. All study materials were prepared in English, then forward- and back-translated into Spanish. All subjects had to choose to answer in either English or Spanish. Subjects were given four options for \$20 compensation, traditional money (requiring name and addresses), e-money (solely requiring an e-mail address), donation to a named charity, or the option to decline compensation. To assess language preferred, a language scale was composed of five Likert-type items (language you read, language you use at home, language you think in, language you use with friends; 1 = Spanish only, 2 = Spanish > English, 3 = both equally, 4 = English > Spanish, 5 = only English). The fifth item was a similar five-point scale on how well the respondent speaks Spanish (1 = fluent, 5 = not at all). The study was approved by the relevant university committee for the protection of human subjects and all respondents provided informed consent.

The items (Table 3) measuring beliefs about Internet sex were constructed by taking beliefs about Internet sexuality from current reports in the scientific and popular literature and constructing items. These were checked for readability and clarity in a small sample of MISM.

Analysis

Data were analyzed using SPSS version 11.5. For variables that were categorical, the χ^2 test with Yates correction for discontinuity where appropriate was used: for interval or ratio level data, t -tests (with separate variance estimates where Levene's F indicated significant inequality of variance) were used. The 18 items from the Beliefs about Cybersex and Internet Sex scale (scored from 'strongly disagree' to 'strongly agree' on a five-point Likert scale) were subjected to factor analysis (principal components analysis followed by Varimax rotation to simple structure). We used Walkey and McCormick's (1985) decision rule for factor decisions. The resulting factors were scored by multiplying the score by the loading to construct factor scores. Pearson correlation coefficients were calculated between scale scores, and Cronbach's coefficient alphas were also calculated to assess internal consistency. For the first two factors, scores were split at the median to create low- and high-scorer groups. To assess factor stability, a random 50% sample was drawn and factor analysis carried out, repeated for the remaining 50% of the sample, and the factor structures compared. Data on demographics, Internet usage, sexual behavior during cybersex, on the phone, when they met in person, and when they had sex, as well as preference for sexual contact on the Internet, in real life, and no preference, were also collected (see Table 5). A 'lie' scale was constructed by adding 'yes' responses for the six items on which the subject could misrepresent themselves (name/phone number, some aspect of the body, e.g. age, shape), genital size, what was wanted (casual sex, relationship), what was liked sexually (e.g. top, bottom) or HIV status. Analysis was by t -test for continuous data and χ^2 test (with Yates correction for discontinuity where appropriate) for categorical data. Simes' (1986) correction was carried out to account for multiple tests: this is preferable to Bonferroni adjustment, which assumes uncorrelated data. All significance levels were subsequently set at $p < 0.01$ (two-tailed).

Results

Results are presented in Tables 1 to 5. Data from Table 1 suggest that the geographical dispersion of the Internet sample approximates that of the distribution, race and ethnicity of Latinos in the US population.

Three dimensions emerged from the rotated principal components analysis of the beliefs, which accounted for over 50% of variance (Table 3). The first two dimensions were robust and described: first, the attractions of cybersexuality as being perceived as both anonymous and safe with regard to HIV transmission ('Liking cybersex: perceived anonymity/safety', eight items (four cybersex anonymity, four cybersex safety: $\alpha = 0.87$); and second, the Internet as providing better opportunities for meeting, IRL interaction and discussion, particularly relating to sexual safety ('IRL interaction', seven items: $\alpha = 0.73$). The third factor described negative views of people who use the Internet and contained three items ($\alpha = 0.47$). Because of the small number of items, relatively low variance and low alpha, it was not further considered. Comparison of the factor analysis of the two random 50% samples revealed two almost identical structures: only one item was transposed between Factors 2 and 3, and with two exceptions, all items were within one position of their rank on all three factors.

Table 2. Demographic Characteristics of Internet sample as compared with Hispanics living in the US (US Census, 2000)

	Internet			US Census Hispanic population		
	(N=1,026)			(N=35,300,000)		
	<i>n</i>	%	Rank	<i>n</i> *	%	Rank
1. Top 20 states of residence						
a. California	234	22.8	1	10,966,556	31.1	1
b. Texas	142	13.8	2	6,669,666	18.9	2
c. New York	51	5.0	3	2,867,583	8.1	3
d. Florida	77	7.5	4	2,682,715	7.6	4
e. Illinois	40	3.9	5	1,530,262	4.3	5
f. Arizona	28	2.8	6	1,295,617	3.7	6
g. Michigan	26	2.5	7	323,877	0.9	17
h. Washington	26	2.5	7	441,509	1.3	10
i. Ohio	26	2.5	7	217,123	0.6	21
j. Pennsylvania	24	2.3	10	394,088	1.1	13
k. New Mexico	20	1.9	11	765,386	2.2	8
l. Colorado	20	1.9	11	735,601	2.1	9
m. Massachusetts	19	1.9	14	428,7291	1.2	12
n. New Jersey	18	1.8	15	1,117,191	3.2	7
o. Georgia	18	1.8	15	435,227	1.2	11
p. Wisconsin	18	1.8	15	192,921	0.5	24
q. Virginia	17	1.7	18	329,540	0.9	16
r. North Carolina	13	1.3	19	378,963	1.1	15
s. Oregon	11	1.1	20	275,314	0.7	19
t. Missouri	11	1.1	20	118,592	0.3	29
u. Louisiana	11	1.1	20	107,738	0.3	30
Puerto Rico**	20	NA	11	3,808,610	NA	3
2. Region of residence						
Northeast	125	12.4		5,254,087	14.8	
Midwest	171	17.0		3,124,532	8.8	
South	328	32.7		11,586,696	32.8	
West	379	37.7		15,340,503	43.4	
Puerto Rico + Military**	23	NA				
3. Latino ethnicity						
Mexican,	570	55.9		21,607,506	62.6	
Puerto Rican	146	14.3		3,465,784	10.1	
Cuban	47	4.6		1,236,511	3.6	
Other	253	24.8		8,164,639	28.4	
Central American					4.8	
South American					3.8	
Dominican					2.2	
Spaniard					0.3	
All other Hispanic					17.3	
4. Race						
One race	733	89.1		33,081	93.7	
White	347	42.5		16,907	47.9	
American Indian	30	3.7		407	1.2	
Asian American	7	0.9		120	0.3	
Black or African American	17	2.1		710	2.0	
Native Hawaiian or other Pacific Islander	2	0.2		45	0.1	
Other	330	40.4		14,891	42.2	
Biracial or multiracial	83	10.2		2,224	6.3	

* × 1,000; **Puerto Rico, as a US territory, does not appear in the ranking of states but is treated in the US Census as a separate geographic entity.

Intercorrelation between the 'liking cybersex: perceived anonymity/safety' scale and the 'IRL interaction' scale was 0.37, with correlations, respectively, between these two scales and the inadequacy scale 0.21 and 0.29 (all $p < 0.001$).

The scales constructed from the first two dimensions, divided into high and low scorers (Table 4), show that there were differences between high and low scorers. High scorers on the 'liking cybersex: perceived anonymity/safety' scale were more likely to use chat-rooms and webcams. High 'IRL interaction' scorers were more likely to view explicit pictures, and also use e-mail, chat-rooms and bulletin-boards more, view websites for relationships and sex and explicit pictures more, and use personal advertisements more. Table 5 indicates that significantly more of the high 'liking cybersex: perceived anonymity/safety' scorers had both cybersex and phone sex before meeting in real life (IRL), whereas the high 'IRL interaction' scorers were more likely to just have cybersex. On the phone, the high 'IRL interaction' scorers, were more likely to say they had discussed unprotected sex. When they met in person, however, there were no significant differences in what was discussed between those high and low on the two scales. Sexual behavior in person also illustrated differences: the high 'IRL interaction' scorers were more likely to have receptive anal sex, whereas the high 'liking cybersex: perceived anonymity' scorers were less likely to have insertive anal sex. High scorers on both scales were significantly more likely to report needing sex badly. Table 6 illustrates that high 'IRL interaction' scorers had a significantly higher preference for meeting partners on the Internet, and lower preference for meeting partners IRL: there was no significant difference in proportions for the high and low scorers on the 'liking cybersex: perceived anonymity' scale.

Table 3. *Factor structure of beliefs about cybersex and Internet-mediated sex*

Variable	
Factor 1: Liking cybersex: perceived anonymity and safety	
Loading	
I like cybersex because I can be anonymous	0.84
I like cybersex because you can be anyone you want to be	0.83
I enjoy cybersex because I don't have to worry about HIV	0.83
Cybersex is easier and less hassle than meeting men in real life	0.72
I like cybersex because I don't have to worry about being rejected if my body isn't perfect	0.76
Cybersex allows me to be more truthful with other men about what turns me on and what I like	0.65
Cybersex means not having to worry about safer sex or condoms	0.57
Cybersex is safer than meeting someone in real life for sex (24.5% of total variance)	0.56
Factor 2: Better IRL interaction	
On the Internet you meet more attractive men than in bars	0.72
I am more likely to talk to a man before we have sex if I meet him on the Internet than if I met him in a bar	0.65
On the Internet men are more honest than in bars about what they are looking for	0.64
I am more likely to talk about our HIV status if I meet a man over the Internet than if I meet a man somewhere else	0.57
Cruising the Internet to meet men is safer than meeting them in bars	0.56
Men in bars have more attitude than men on the Internet	0.53
Seeking sex over the Internet is a turn-on for me (15.5% of total variance)	0.53
Factor 3: Internet attracts the inadequate	
People who engage in cybersex are scared of real intimacy	0.67
Most men seeking sex on the Internet lie about themselves	0.62
Cybersex is just a stage: most people try it for a while then go back to meeting partners in other ways (10.8% of total variance)	0.61

Table 4. Differences in sexually-related Internet use between those with high and low beliefs about cybersex and Internet-mediated sex

	Liking cybersex: perceived anonymity/safety		IRL interaction	
	Low (<i>n</i> = 536) %	High (<i>n</i> = 536) ⁺ %	Low (<i>n</i> = 550) %	High (<i>n</i> = 549) ⁺ %
Using e-mail	62.7	62.7	57.8	66.9*
Using chat-rooms	92.3	95.9*	91.8	96.7*
Using bulletin boards	25.9	28.0	22.8	30.5*
Using instant messaging	79.0	80.7	79.5	80.3
Viewing websites for relationships and sex	70.9	75.7	69.0	76.9*
Viewing explicit pictures	63.5	62.3	62.3	70.7*
Using sites with web-cameras	30.0	36.9*	30.4	35.8
Viewing paid websites	18.5	20.3	16.9	22.5
Using personal advertisements	46.5	52.5	45.0	53.0*

⁺ numbers less than sample total due to missing data in scale construction; **p* < 0.01.

Table 5. Differences in meeting men for sex via the Internet between those with high and low beliefs about cybersex and Internet-mediated sex

	Liking cybersex: perceived anonymity/safety		IRL interaction	
	Low (<i>n</i> = 536) %	High (<i>n</i> = 536) %	Low (<i>n</i> = 550) %	High (<i>n</i> = 549) %
We had cybersex before we met	10.8	27.8*	15.6	22.1*
We had phone sex before we met	12.1	23.7*	15.5	19.5
On the phone				
I found out about his HIV status	50.7	46.7	52.9	45.8
I revealed my HIV status	52.6	46.3	50.9	46.2
We talked about safer sex	49.3	52.9	55.9	48.0
We talked about using condoms	54.0	52.7	57.3	50.3
We were going to have unprotected sex	15.1	16.4	11.9	19.0*
When we met in person				
We discussed the kind of sexual things we like	64.0	69.2	65.8	67.7
I found out about his HIV status	47.0	46.3	50.2	44.5
I revealed my HIV status	47.4	46.7	50.6	45.1
We talked about safer sex	47.9	49.9	52.5	46.3
We were going to have unprotected sex	18.4	18.5	15.8	21.2
When we had sex				
I had receptive oral sex	48.8	50.6	44.4	51.5
I had receptive anal sex	49.8	51.0	46.1	56.3*
I had insertive anal sex	53.9	44.4*	49.9	50.6
I was drunk or high	51.6	42.7	50.2	49.0
I needed sex badly	46.8	59.1*	46.1	61.1*

**p* < 0.01.

Table 6. Preferences for mode of meeting sexual partners (%)

'If you want to meet a man physically for sex, which do you prefer: meeting him first via the Internet or meeting him first in real life?'

	Liking cybersex: perceived anonymity/safety		IRL interaction	
	Low (<i>n</i> = 536) %	High (<i>n</i> = 536) %	Low (<i>n</i> = 550) %	High (<i>n</i> = 549) % on
The Internet	31.2	31.6	19.4	43.0
In real life	47.1	49.7	61.4	35.6
No preference	21.7	18.7 NS	19.2	21.4*

**p* < 0.01.

Mean age of first reported sex with another male was significantly different for those men reporting a low score on the 'liking cybersex: perceived anonymity/safety' scale (15.6 ± 4.7) compared with those with high scores (16.5 ± 5.0), $t = 2.86$, $p = 0.004$: there were no equivalent differences on the 'IRL interaction' scale. Similarly, on the 'lie' scale, those scoring lower on the 'liking cybersex: perceived anonymity/safety' scale had a significantly lower score (2.5 ± 2.0 versus 2.9 ± 1.8 for higher scorers), $t = 1.46$, $p = 0.003$.

Discussion

These data should be interpreted with the caution that this sample is non-random and composed of volunteers to a gay website questionnaire which recompensed respondents for their time. As Ross *et al.* (in press) indicate, response rate can be variously calculated, from almost 47.5 million banners being displayed, which resulted in 0.7% of clicks on the link, and of these, only 5% believed that they were eligible and wanted to enter the study. While this is a low rate, the fact that the study was advertised as being for Latinos, who comprise about 13% of the US population, mitigates this slightly. We have no reason to anticipate that this low response rate is different to other Internet studies, and this illustrates the selective nature of Internet samples. However, the geographical dispersion of the Internet sample approximates that of the distribution of Latinos, and the race and ethnicity of Latinos in the US population. Ross *et al.* (2004) analyzed the biases associated with dropout in this sample, and report that while there are no differences between English and Spanish language sub-samples, dropouts are more likely to reject compensation, not to have met a man for sex on the Internet and to be in a monogamous seroconcordant relationship.

These data indicate that we can distinguish at least two major dimensions of beliefs about cybersex and Internet sex in this population of MSM: those who like cybersex and see it as providing greater anonymity and safety, and those who see the Internet's benefits as including the opportunity of greater interaction before IRL contact. These dimensions are moderately correlated, with about 10% of variance in common. It is important to note that the first dimension refers primarily to cybersex, whereas the second dimension refers primarily to contacting partners via the Internet without specific reference to cybersex—suggesting that the two dimensions may primarily differentiate beliefs about cybersex (sex online) and Internet partner seeking (including IRL).

The IRL interaction dimension is apparently associated with those who appreciate the Internet for its greater possibility for IRL interaction using e-mail, chat-rooms, bulletin-

boards, and viewing paid websites more, viewing explicit erotica more and using personal advertisements more than those who score lower on this dimension. Those liking cybersex more are more likely to use webcams and chat-rooms than those scoring lower on this dimension. These data suggest that those who appreciate the Internet for its IRL interaction potential are more likely to use sites that promote such IRL interaction significantly more. In general, those scoring high on the 'IRL interaction' scale were more likely to use many more sites than those scoring low. As a measure of validity, Table 6 confirms that those valuing the Internet for its possibilities for IRL interaction were significantly more likely to prefer to meet men on the Internet than IRL.

Sexual behavior and sexual safety issues between high and low scorers on the two scales offered some validity for the differentiation of MISM into the two dimensions. Those valuing the Internet more for its opportunities for cybersex, including its perceived anonymity and safety, were significantly more likely to have had both cybersex and phone sex before meeting IRL. Those valuing IRL interaction more, when they had phone sex, were less likely to talk about issues of HIV status and safety, and significantly more likely to talk about having unprotected sex. And, in the real encounter, those scoring high on the 'IRL interaction' scale were more likely to report having receptive oral or anal sex, whereas those valuing the Internet for the opportunity for cybersex and perceived anonymity and safety were less likely to report being drunk or high, or having insertive anal sex. Taken together, these data suggest that there may be less discussion of safety issues, and more discussion of intention to have unprotected sex, in those who are attracted to the IRL interaction, in contrast to those who are attracted to the cybersex opportunities and perceived anonymity and safety of the Internet.

It is interesting that the safety items formed part of the 'liking cybersex: perceived anonymity/safety' scale, rather than the 'IRL interaction' scale (although this is confounded by the safety items all referring to cybersex). This, along with the reports of phone and IRL sex, suggests that high scorers on the 'IRL interaction' scale are associated with lower levels of safety. Illustrating this, when meeting in person, those who valued the interactive aspects of the Internet more were less likely to talk about safer sex, compared with a trend in the opposite direction for those who valued safety. One possible explanation may be the role of accelerated intimacy in safety. While the Internet may provide an opportunity for those interested in safety to discuss this, for those interested in IRL interaction, such discussion is significantly *less* likely. And, at the point of real sex, they are more likely to have receptive sex. Where IRL interaction may provide a sense of intimacy, people may feel that there is less risk and that they know the person better. This illusion of intimacy may be accelerated by more, and more intimate, discussion.

These data indicate that beliefs about cybersex and the Internet as a venue for contacting sexual partners are measurable. More important, they also demonstrate that they may have different outcomes for the reported conduct and safety of sexual contacts IRL. It is important to note that rather than just seeing MISM as a group solely defined by their venue of partner contact, these data suggest that the second-level effects of the Internet include different uses (cybersex, and using the Internet to contact IRL partners) and different paths to establishing the safety of sexual contact. For the first dimension obtained, the medium is the means to sex, whereas for the second dimension, the medium is the means to obtaining partners IRL for sex. Future research on MISM needs to take account of the development of differing beliefs about Internet-mediated sexuality, which may be associated with different levels of HIV/STD risk behaviors or different safer sex negotiation paths, rather than just seeing the Internet as a risk environment.

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