

The Reliability Analysis for Malaysian Internet and Sexual Activities Inventory and Its Practical Implication

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DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v7-i14/3699>

Published Date: 19 December 2017

Abstract

Despite the increasing number of internet subscribers in Malaysia, parallel with the increment of social issues related with the internet, an established instrument that measure sexual activities and internet that fit with Malaysian sample is crucially needed. Thus, this paper discussed the reliability of Malaysian Internet and Sexual Activities Inventory (MISAI) established by Hassan, Ayob, Talib and Abu Bakar (2013). The MISAI contains 23 items, rated with five-point from "Never true" to "Often true", with the minimum score of 23 and maximum score of 115. The reliability of the instrument was tested into two sample groups, which are teenager aged 13 to 18 years old and university student aged between 20 to 24 years old. The Cronbach's Alpha for pre-test for the first group ($N=30$) is $\alpha = .929$, where the Cronbach's Alpha for post-test ($N=648$) is $\alpha = .906$. The reliability for the second group ($N=30$) is $\alpha = .834$. The results indicate MISAI has high reliability ($\alpha > .70$) and can be used to measure cybersex involvement among Malaysian sample. Practically, MISAI can be used by the counsellor to identify to what extend the client involved in cybersex activities.

Keywords: Cybersex, Instrument, Counselling, Reliability

Introduction

Malaysia communication and Media Commission (MCMC) reported the increasing number of penetration rate (78.7%) in internet users in the first quarter of 2016. The increasing of 8.5% in 2016 as compared to 2014, showed Malaysian more and more gained access to the internet. In 2014, MCMC reported male (58.3%) has the highest number of penetration than female (41.7%), whereas youth with age group 20 to 24 years old is the highest group age that subscribed internet, followed by group age 25 to 29 years old and 15 to 19 years old. Among school-goers, university students are the highest group (%) that subscribes internet, followed by secondary school students (%) (MCMC, 2015). From the findings, it indicates that youth is the main group aged that used internet compared to others.

The purpose of using the internet are varies. In Malaysia, 87.1% stated that they used the internet for social networking, where the number has risen by 3.3% compared to the statistics in 2011. The smartphone remains as the main device used by users to access the internet. 86.8% of the internet users have Facebook accounts. Besides Facebook, there are other popular alternative social media platforms such as Instagram (30.3%), Twitter (27.2%), and Google+ (14.2%). This is the evidence to show that connectivity is one of the main reasons why Malaysians engaged to the internet.

Despite the increasing number of internet users in Malaysia, the issues that related with internet also alarming. Cybercrime, cyber-bullying, love scams, cybersex and etc. are examples of issues related with internet users. These issues are not only surging up in Malaysia, but also around the world. The Star Online reported on March 2016 that Malaysian women loss RM1.09 billion due to love scam in the internet. Article by Mohd. Sani Badron at Institute of Islamic Understanding Malaysia's website stated PornMD recorded Malaysian on average make 22,000 searches daily, which placed Malaysia at the 19th place in the world in pornographic searching. On the other hand, Harian Metro in 2016 reported 28,671 teenagers in Malaysia addicted to pornography.

Cybersex Activities

Online sexual activities refer to the use of the internet for any activities including the using of texts, audio or graphics for sexual purposes (Cooper, Morahan-Martin, Mathy, & Maheu, 2005). According to Cooper et al. (2004), people may use the internet for sexual purposes such as for entertainment, exploration, to seek information, education, sexual trading, searching for sexual partners, sexual arousal, downloading and sharing of erotica, erotic conversation and many more. Cooper et al. (2004) cited that cybersex activities are one of the subcategories of online sexual activities where people use text, sounds, or images from software or the internet to stimulate their sexual gratification. Starcevic and Aboujaoude (2015) mentioned that cybersex is a loose term used to explain the variety of internet-mediated sexual activities and then limited the term to excessive viewing of pornographic material, typically accompanied by masturbation, or they can involve in surfing specialised bulletins for offline sexual encounters.

Daneback et al. (2005) defined cybersex as the interaction of two or more people who engage in simulated online sex talk to gain sexual pleasure, and they may or may not masturbate. Cybersex may take place by looking at pictures, engaging in sexual chats, exchanging explicit sexual emails, and sharing mutual sexual fantasies while masturbating (Cooper et al., 2004). According to Delmonico (1997), cybersex was defined into three conditions. Firstly, cybersex is done by watching or exchanging pornography. Secondly, cybersex is done through conversation and communication for face to face sexual purposes or for online relationship that progress to real affairs. Lastly, cybersex take place offline when internet users use multimedia systems to stimulate their sexual desire.

According to Daneback et al. (2005) and Cooper et al. (2004), cybersex involves the interaction between two persons or more for sexual pleasure. However, Delmonico (1997) viewed cybersex activities as not limited to the usage of internet for sexual engagement. As mentioned before, cybersex can, in fact, take place offline when users are using any multimedia tools such as CD to seek sexual pleasure. Sourthen (2008) explained that the term cybersex refers to an array of online sexual activities associated with internet usage including

watching pornographic material online, exposing explicit details of one's sex life by uploading or forwarding images or text to oneself or others, interacting with sex workers, communicating with anonymous partners, meeting sexual partners during offline contact, and violating interpersonal boundaries by engaging in unwanted sexually-oriented contacts. Döring (2009) highlighted six categories of online sexuality which include pornography on the internet, sex shops on the internet, sex work on the internet, sex education on the internet, sex contacts on the internet and sexual subculture. The category of 'sex contact' is the only one that is used to define cybersex compared to the other five categories. Sex contacts consist of online sex and offline sex. When an individual uses the internet to seek a partner and have stimulated one another's sexual arousal by exchanging sexual texts followed by masturbation, they are involved in online sex. In contrast, when someone uses the internet to find a partner online for offline sexual purposes, they are considered as being involved in offline sex.

The definitions of cybersex based on previous reviews have a similar pattern (Cooper, Delmonico, & Burg, 2000; Delmonico, 1997; Daneback et al., 2005; Döring, 2009). First, the term cybersex is used to explain the sexual activities that take place online. It includes exchanging sexual photos, being involved in sexual chatting, pornographic viewing, searching for sexual partners, and interacting with sex workers. Later, as time progressed, the term cybersex includes contacting sexual partners for offline sexual activities (Döring, 2009).

Studies found youth, especially teenagers and university students involved in cybersex activities. A study by Mitchell, Finkelhor and Wolak (2003) found teenagers aged between 15 to 17 years old accidentally watched pornography during online. Lo and Wei (2005) indicates that teenagers aged between 14 to 17 years old are exposed to pornography. In Malaysia, Johari and Raja Shahrina (2012) revealed 10.2% of teenagers in Johor Bahru accessing pornography during online. For university or colleges students, Droin and Landgraff (2012) found 7.7% of the respondents admit they often send sext text and 5.4% often send sex pictures. Park and Kang (2013) found 9.3% of the university students have moderate addiction to pornography. Ballester-Arnal, Calvo, Gil-Llario and Gil-Julia (2016) found 8.6% of the college students have compulsive involvement in cybersex.

Objectives

The objectives of this paper are two-fold:

1. To analyse the reliability of MISAI.
2. To propose practical implementations of MISAI.

Internet and Sexual Activities Inventory (MISAI; Hassan, Ayob, Abu Talib & Abu Bakar, 2013)

MISAI is a tool to measure the level of online sexual activities and offline sexual behaviour as the result of online contact. The instrument was first developed by Hassan (2013) and was copy right under number CRLY00000325. A chapter of book on the original version of this instrument was published in Hassan and Mikhail (2008). MISAI consists of 23 items, scored from on 5 points from "Never true" to "Often true". The items in MISAI include online contact, offline contact, sexual behaviours and cybersex. The minimum score of MISAI is 23, while the maximum score is 115. The scoring of MISAI is as below:

Table 1:
Total Score of MISAI

Total score	Explanation	Description
23-53	Low	Cybersex activities may or may not interfere with their lives
54-84	At-risk	Certain area of their lives had been interfered with cybersex activities
85-115	Hyperactive-Compulsive	cybersex activities had interfered and jeopardize some areas of their lives.

Method

The reliability analysis of MISAI was examined in terms of internal consistency. This method was used to ensure each item in the MISAI measuring the same construct. To test the reliability of MISAI, we conducted the reliability test onto two different sample groups. First, we conducted the reliability to the teenager sample aged 13 to 18 years old. Second, the reliability test was conducted among university student samples aged between 22 to 24 years old. Due to ethical consideration, the permission from the selected schools and university were accessed. All the samples are Malaysian, with majority of Malay ethnic. The instrument was administered through paper and pencil. The collected data then were analysed by using SPSS 22.0.

Based on the reliability analysis for pre-test ($N=30$) and post-test ($N=648$) for teenager samples, the overall Cronbach's Alpha for MISAI pre-test is $\alpha = .929$ and post-test is $\alpha = .906$. According to Hassan and Ghazali (2012), the minimum Cronbach's Alpha for reliability is more than .70. Based on the result, it shows MISAI has high reliability to be used for Malaysian teenagers.

Table 2:
The Pre-Test and Post-Test of MISAI for Teenager Sample

Item no.	Items	Pre-test (N=30)		Post-test (N=648)	
		Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.	...having boyfriend/girlfriend	.423	.930	.533	.902
2.	.... Contacting through short messages services (SMS)	.309	.934	.567	.902
3.	... contacting through phone	.661	.926	.605	.901
4.	...contacting through social media	.635	.925	.569	.901
5.	...web camera	.659	.925	.565	.901
6.	... communication network	.560	.927	.508	.903
7.	...dating	.734	.923	.650	.899
8.	...watching pornography	.494	.927	.386	.905
9.	...hugging	.809	.921	.676	.898
10.	...kissing	.805	.922	.623	.900
11.	...masturbation	.421	.928	.621	.901
12.	...oral sex	.745	.923	.602	.901
13.	...sexual intercourse	.714	.925	.576	.902
14.	...sodomy	.753	.924	.402	.905
15.	...teased	.759	.923	.643	.900
16.	..being raped	-.014	.931	.389	.905
17.	...threatened after ravished	.507	.927	.417	.904
18.	....time spent for cybersex	.631	.926	.531	.902
19.	....the influence of cybersex	.704	.924	.479	.903
20.	...ID for sexual chats	.649	.925	.477	.903
21.	....x-rated website	.299	.930	.455	.905
22.	...unable to access internet, I feel angry, anxious or depressed	.663	.925	.395	.905
23.	...romantic purpose	.655	.925	.591	.901

*The overall Cronbach's Alpha for MISAI pre-test is **.929**

*The Cronbach's Alpha of overall MISAI post-test is **.906**

Next, we conducted an online survey to university students sample (N=30). The reliability analysis of Cronbach's Alpha is $\alpha = .834$, which is high in reliability. It is show that MISAI has high reliability to be used for university students sample.

Table 3:

The Reliability Analysis for Each Item in University Students Sample

No. Of items	Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.	...having boyfriend/girlfriend	.695	.810
2.	.... contacting through short messages services (SMS)	.517	.822
3.	... contacting through phone	.583	.818
4.	...contatcting through social media	.764	.806
5.	...web camera	.418	.827
6.	... communication network	.639	.814
7.	...dating	.635	.814
8.	...watching pornography	.226	.834
9.	...hugging	.470	.827
10.	...kissing	.387	.829
11.	...masturbation	.308	.832
12.	...oral sex	.333	.831
13.	...sexual intercourse	.138	.835
14.	...sodomy	.086	.836
15.	...teased	.456	.825
16.	..being raped	.086	.836
17.	...threatened after ravished	.086	.836
18.	....time spent for cybersex	.287	.832
19.	....the influence of cybersex	.372	.829
20.	...ID for sexual chats	.100	.836
21.	....x-rated website	.086	.836
22.	...unable to access internet, I feel angry, anxious or depressed	.166	.840
23.	...romantic purpose	.460	.825

*The overall Cronbach's Alpha for MISAI is **.834**

Implication and Discussion

The results of reliability between two samples group showed high reliability ($\alpha > .70$). Thus, MISAI is reliable to be used as a tool to measure online sexual activities and offline sexual activities as a result of online contact (Hassan, Ayob, Talib, Bakar, Hawafi & Ghoroghi, 2015).

A study by Acier & Kern (2011) to study the perception of addiction counsellors for problematic internet use found the clients with problematic internet used are mostly young, they are inhibited, introvert, withdrawn and have problem in expressing their needs and emotions. In addition, sex is still a taboo to be discussed among Asian family. It is proved by Kim & Wad (2007) stated parents from Asian American provide little information on sexuality with their children and they used implicit and nonverbal ways to communicate their sexual values. Because of the cultural barrier, sexual is not easy to be discussed during the counselling session.

Thus, MISAI can be a tool to assess the degree of cybersex among clients as an early step in counselling session. Corey, Corey and Callanan (2007) stated that some practitioners consider assessment as a part of process in counselling session that leads to formal diagnosis, which they view it is essential to plan a treatment for the clients. By using MISAI, a proper treatment and intervention can be planned by counsellors especially on problem that related with cybersex. Besides, assessment is widely accepted in many counselling theories as a tool to get more understanding about clients presenting problems (Corey, Corey & Callanan, 2007). Apart of counselling, MISAI also help other mental health practitioner to plan prevention and recovery program on cybersex among clients in Malaysia.

Conclusion

The reliability of MISAI is high for both, teenager and university student samples. Despite the lack of instruments to measure cybersex in Malaysian sample, MISAI can be a tool to measure the degree of online sexual activities and offline sexual activities as a result of online contact. MISAI can be used in a counselling session, as a tool for client's assessment in cybersex. Besides, MISAI is relevant to be used in other mental health field for prevention and recovery programs.

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