

Letters to the Editor

Dear Editor,

Re: The Chinese Juvenile Victimization Questionnaire:
A Validation Fallacy

Chan et al tried to ascertain the validity and usefulness of a Chinese version of the Juvenile Victimization Questionnaire (JVQ)¹ and we expressed our doubt on the validity and quality of the results; naturally the authors contested our honest opinion vehemently.² Now let the fact speak for itself.

Our readers are referred to the statistics on homicide from the Hong Kong Police Department; Figures³ that had been validated and considered robust and reliable by leading Hong Kong academics.⁴ In the past 11 years (2000-2010) the police recorded a total of 470 homicide cases and 51 cases of firearms usage (real/stun guns and with/without actual shooting). During the same period the population of 15-19 years age group is 433,200.⁵ If one conservatively assumes that every single crime case should have one teenager as witness, simple arithmetic tells us that only 0.17% and 0.018% of local teenagers (15-19 years) could have actually witnessed homicide or random shooting respectively.

These police figures are a far cry from what is reported in this paper; namely 13.1% and 4.9% of teenagers have first hand experience with homicide and shooting respectively. If these data are to be trusted, then each homicide should have a staggering large crowd of 29.2 teenagers (15-19 years) and each firearm incident 720 spectators at the scene, again assuming each case has only one teenager witness and not counting those not belonging to this age group. It needs the space of the Hong Kong City Hall to accommodate such huge number of onlookers – an unlikely scenario harking back to the time of Imperial past when public beheading at the city gate was a spectacle attracting huge crowd; a picture so surreal that it borders on the fantastic. The police statistics are surely not fabrication; logically, the reported figures in this paper cannot be valid.

What is the cause of this discrepancy?? In the original JVQ that serves as a template for the Hong Kong study,

reported incidents are painstakingly verified with respondents' caretakers⁶ and subjected to Kappa test for intra-class correlation analysis,⁷ and in addition, each case is verified with the local police. None of these procedures is carried out in the present paper.

Our humble and constructive suggestion is for the authors to go back to the drawing board, to look up reliable statistics and on such basis to construct a questionnaire that is relevant to our local situation. The results must then be verified in the most stringent manner as the American colleagues did. The present questionnaire with its phantasy (fantasy) results is too misleading to be used as a standard example for similar studies in other Chinese speaking regions.

References

1. Chan KL, Fong DYT, Yan E, Chow CB, Ip P. Validation of the Chinese Juvenile Victimization Questionnaire. *HKJ Paediatr (new series)* 2011;1:17-24.
2. Chan KL, Fong DYT, Yan E, Chow CB, Ip P. Reply to letter to the Editor. *HKJ Paediatr (new series)* 2011;2:140-1.
3. Hong Kong Police Department. Crime statistics. http://www.police.gov.hk/ppp_en/09_statistics/csd.html
4. Broadhurst R. Crime Trends in Hong Kong: Another Look at the Safe City. In: Broadhurst, Roderic G. (Ed) *Crime and its Control in PR China: Proceedings of the Annual Symposium 2000-2002*. Centre for Criminology, University of Hong Kong, Hong Kong, pp.133-49.
5. Census and Statistics Department. *Hong Kong Monthly Digest of Statistics March 2011* p5 Hong Kong Government http://www.statistics.gov.hk/publication/general_stat_digest/B10100022011MM03B0100.pdf
6. Finkelhor D, Ormrod RK, Turner HA, Hamby SL. Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child Abuse Negl* 2005;29:1297-312.
7. Fung KP, Lee J. Bootstrap estimate of the variance and confidence interval of kappa. *Brit J Ind Med* 1991;48:503-4.

SP LAU
KP FUNG
Paediatrician in Private Practice
Hong Kong

Reply

Dear Editor,

Reply to Letter to Editor: The Chinese Juvenile Victimization Questionnaire (JVQ)

Lau and Fung provided the crime statistics from the Police Department¹ when expressing their doubt on the validity of the Chinese JVQ. We welcome the provision of these official data, which show that serious crimes such as homicide and firearm usage are not with zero occurrence, supporting the usefulness of the JVQ items to capture these violent scenes.

According to the Police statistics,¹ there were 480 homicide cases and 51 *robbery cases involving firearms/pistol-like objects* (not ALL incidents of firearm usage) between 2000 and 2010 in Hong Kong. In their letter, Lau and Fung applied "simple arithmetic" and found that only 0.018% of children could have witnessed shooting. Based on their calculations, Lau and Fung made the conclusion that "logically, the reported figures in this paper cannot be valid," which we find too dangerous to agree without further factual, concrete evidence.

In our study,² we found a *lifetime prevalence rate* of having witnessed random shooting, terrorism and riots of 13.1%, which is, of course, not comparable to the 0.018% rate as computed from the *10-year incidence rate* of robbery involving firearms from Police record. Not to mention the difference between the definitions of prevalence rates and incidence rates³ as well as the discrepancy in the violent act described, it is reasonable to expect a higher rate of the former than the latter as it has been consistently found that official data of child victimization and other family violence are often (seriously) underreported.⁴⁻⁶

Lau and Fung also pointed out that there were procedures to verify each reported case with the child's caretaker and the Police in the original JVQ study.⁷ However, as far as we understand, the use of Kappa tests in the original studies⁷⁻⁸ was to assess the test-retest reliability of the JVQ. The original studies did compare the proxy reports (for children aged 8-9) to the child reports (of children aged 10-11), but the primary purpose was to ensure the reliability of proxy reports which are likely to underreport. Even in the original studies and other JVQ studies,⁷⁻⁹ the authors did not conduct interviews with caretakers of children aged 10 or above, not to say to verify each child report with the caretaker report. In our study, we replicated the procedure of the original study and obtained only self reports of children who were aged 12 or above.

As shown by the Police data,¹ serious crimes such as homicide and firearm usage do occur in Hong Kong. One cannot simply assume that no children could have witnessed these crimes based on the rare occurrence. With reference to the likelihood of underreporting of official data, we have sufficient reasons to include items assessing the witnessing of such crimes in the Chinese JVQ as well as to believe that the Chinese JVQ is "a questionnaire that is relevant to our local situation."

References

1. Hong Kong Police Department. Crime statistics http://www.police.gov.hk/ppp_en/09_statistics/csd.html
2. Chan KL, Fong DYT, Yan E, Chow CB, Ip P. Validation of the Chinese Juvenile Victimization Questionnaire. *HKJ Paediatr* (new series) 2011;1:17-24.
3. Brownridge DA, Halli SS. Measuring family violence: The conceptualization and utilization of prevalence and incidence rates. *J Fam Violence* 1999;14:333-50.
4. Finkelhor D, Ormrod RK. Factors in the underreporting of crimes against juveniles. *Child Maltreat* 2001;6:219-29.
5. Lau JTF, Liu JLY, Yu A, Wong CK. Conceptualization, reporting and underreporting of child abuse in Hong Kong. *Child Abuse Negl* 1999;23:1159-74.
6. Davis JQ, Parks SN, Kaups KL, Bennink LD, Bilello JF. Victims of domestic violence on the trauma service: Unrecognized and underreported. *J Trauma* 2003;54:352-5.
7. Finkelhor D, Hamby SL, Ormrod R, Turner HA. The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse Negl* 2005;29:383-412.
8. Finkelhor D, Ormrod RK, Turner HA, Hamby SL. Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child Abuse Negl* 2005;29:1297-312.
9. Finkelhor D, Ormrod RK, Turner HA. Lifetime assessment of poly-victimization in a national sample of children and youth. *Child Abuse Negl* 2009;33:403-11.

KL CHAN

E YAN

Department of Social Work and Social Administration,
The University of Hong Kong, Hong Kong

DYT FONG

Department of Nursing Studies,
Li Ka Shing Faculty of Medicine,
The University of Hong Kong, Hong Kong

CB CHOW

P IP

Department of Paediatrics & Adolescent Medicine,
Li Ka Shing Faculty of Medicine,
The University of Hong Kong, Hong Kong