

<b>Institution: BRUNEL UNIVERSITY (H0113)</b>
<b>Unit of Assessment: 4 – Psychology, Psychiatry and Neuroscience</b>
<b>Title of case study: Interventions to promote sexual health amongst adolescents in the Georgian Republic</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>HIV infection rose dramatically in the Former Soviet Union (FSU) in the decade following the fall of Communism. A sustained series of EU and Soros Foundation research projects in the FSU led to an EU sponsored intervention project conducted across Georgia, with demonstrable impact on HIV awareness, knowledge and risk taking behaviours amongst adolescents in schools participating in the project. Campaign materials based on the research were further used in the first ever national television and internet campaign in this country (video downloaded more than 35,000 times), published in a popular book aimed at adolescents (distributed to 98 schools across the country), and adopted for use in nurse training and school curricula across the country. The BPS Impact Peer Review panel highlighted this work as an example of high quality applied research.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>HIV infection increased 20-fold in the Former Soviet Union between 1995 and 2005 (<a href="http://www.unaids.org/en/">http://www.unaids.org/en/</a>), but little was known about the cultural and social psychological factors underpinning the behaviours associated with this increase. Building on developments in social representations theory and Schwartz' value theory, two research grants to Goodwin (PI of both, Reader / Professor of Psychology, Brunel University since 1999) from the Soros Foundation [G1, below] and the EU [G2] funded the first systematic study of the representations and values predicting high risk sexual behaviour and illicit drug use in Central/ Eastern Europe. The first project (1998-2000), with Realo (University of Tartu), Kozlova (St Petersburg State University), Nguyen Luu (Eotvos Lorand University, Budapest), Kwaitkowska (SWPS, Warsaw) and Nizharadze (Georgian Academy of Sciences, Tbilisi State University), established cultural representations of risk across five countries, using questionnaires and interviews, free associations, media analyses and sorting tasks [P1-P3, below]. The second project, with Kozlova (Russia), Georgia (Nizharadze) and Polyakova (Ukraine) and Allen (Surrey University) and Buysse (Ghent) (2001-2004), questioned 1,500 school children and homeless children in three Eastern European countries [P4, P5]. Findings, based on questionnaires, interviews, focus groups and media analyses, demonstrated significant cultural and respondent group (school vs. homeless child) differences in knowledge and representations of HIV/AIDS and risk behaviours. In particular, school children in Georgia were not only more ignorant about risks of drug use and the role of condoms in HIV prevention, but were more sexually active than school children in the other countries, and more likely to inject drugs. School children in Georgia were also more likely to hold misleading representations of HIV (e.g. that you could tell by 'looking at someone' if they were infected). In addition, individual and cultural values and beliefs (e.g. fatalism) were further significant predictors of risk taking behaviour. This stressed particular cultural aspects of Georgian risk taking that required further research and intervention</p> <p>Building on our enhanced understandings of representations about HIV, the role of values in sexual risk behaviour, and new knowledge on group dynamics and drug from our interviews and focus groups, an 'intervention' grant from the INTAS (EU) (2006-2008) allowed for the production of a DVD, leaflets and posters for use in Georgian television and schools [G3]. Goodwin worked with a professional scriptwriter throughout the DVD production in Georgia and the UK, outlining material to be presented on the basis of the above project findings. The DVD, which featured major Georgian media figures, addressed specific cultural myths, and presented educational material addressed at the key values of adolescents predicting high risk behaviour. At the same time two associated national studies funded by the EurAsia Foundation and led by Prof Kachkachishvili (Tbilisi, Georgia) gathered further national data on sexual risk taking amongst 2,880 Georgian school children from across the country (2007-2011: U\$121k). Goodwin was named consultant on these projects, designing the study questionnaire and leading dissemination of findings [G4, P6]. Findings of these provided the important opportunity for estimating the impact of our interventions on HIV-related knowledge and risk behaviours.</p>

## Impact case study (REF3b)

### 3. References to the research (indicative maximum of six references)

#### Publications [P]

[P1] Goodwin, R., Kozlova, A., Kwiatkowska, A., Nguyen Luu, L.A., Nizharadze, G., Realo, A., Kulvet, A., & Rammer, A. (2003) Social representations of HIV/AIDS in Central and Eastern Europe. *Social Science and Medicine*, 56, 1373-1384.

<http://www.sciencedirect.com/science/article/pii/S0277953602001351>

[P2] Goodwin, R., Kwiatkowska, A., Realo, A., Kozlova, A., Nguyen Luu, LA., Nizharadze, G, Social representations of HIV/AIDS in five Central European and Eastern European countries: a multidimensional analysis. *AIDS Care* 16(6):669-80

<http://dx.doi.org/10.1080/09540120412331269521>

[P3] Goodwin, R., Realo, A., Kwiatkowska, A., Kozlova, A. (2002). Values and sexual behaviour in Central and Eastern Europe. *Journal of Health Psychology*, 7(1) 45-56.

<http://dx.doi.org/10.1177/1359105302007001651>

[P4] Goodwin, R., Kozlova, A., Nizharadze, G., & Polyakova, G. (2004). High risk behaviours and beliefs and knowledge about HIV transmission among school and shelter children in Eastern Europe. *Sexually Transmitted Diseases*, 31, 670-675.

<http://dx.doi.org/10.1097/01.olq.0000143092.56513.32>

[P5] Goodwin, R., Kozlova, A., Nizharadze, G., & Polyakova, G. (2004). HIV/AIDS among adolescents in Eastern Europe: Knowledge of HIV/AIDS, social representations of risk and sexual activity amongst school children and homeless adolescents in Russia, Georgia and the Ukraine. *Journal of Health Psychology*, 9, 381-396. <http://dx.doi.org/10.1177/1359105304042348>

[P6] Goodwin, R., Kachkachishvili, I., Nizharadze, G., & Cramer, D (2010). Psychological Predictors of High Risk Sexual Behaviour and Drug Use among Adolescents in Georgia. *Current HIV Research*, 8, 207-11. <http://dx.doi.org/10.2174/157016210791111115>

#### Competitive grants [G]

[G1] Goodwin (PI), Kozlova, Kwiatkowska, Nguyen Luu, Nizharadze, Realo (1998-2000) Soros Foundation, "Social representations of HIV in five Central/Eastern European states" (£45,000). Report available: <http://www.heart-intl.net/HEART/Internat/Comp/AIDSinCentralandEa1.htm>.

[G2] Goodwin (PI) Polyakova, Buysse, Nizharadze, Kozlova, Allen, Realo (2001-2004). European Union (INTAS) "Social psychological predictors of adolescent sexual behaviour in the NIS" (€90,000). (report at [http://cordis.europa.eu/projects/rcn/65359\\_en.html](http://cordis.europa.eu/projects/rcn/65359_en.html)).

[G3] Goodwin (PI). (2006-2008). European Union (INTAS) Intervention grant "Promoting safer sex behaviour amongst Georgian adolescents: An innovative, multi-strategy approach" (€25,000).(Corroborating Source [S] A)

[G4] Kachkachishvili, I., et al (2009-11) EurAsia Foundation project "Changing Youth's Attitude Towards HIV/AIDS, Safe Sex and Reproductive Health". (US\$44,398)

### 4. Details of the impact (indicative maximum 750 words)

#### Impact on Agency policies, policy development and advice:

Our Brunel-led research programme demonstrated the importance of identifying an impact strategy tailor-made to Georgian culture. We therefore developed interventions aiming at producing broad and significant change within that context. Our strategy took two forms: (1) a national campaign in Georgia targeted at nationwide changes in sexual behaviour of young people, educational practice and training. This involved a TV campaign and the widespread distribution of a book written for the project, leaflets and posters (2) a targeted school seminar campaign aimed at producing demonstrable changes in attitudes and beliefs about HIV/AIDS and in behavioural intentions amongst Georgian school children.

#### A: National campaign

We produced a professional 22-minute video (Source B) with the aid of a major TV 'soap opera' screen writer (Andro Chiaureli) and involving well known Georgian media figures. The video was shown twice on national TV channels (TV channel 'Maestro', the Private Channel Caucasia, both in 2007) and several times subsequently on regional television channels. In addition the video movie was downloaded more than 35,000 times on youth websites [www.gol.ge](http://www.gol.ge), [www.bude.ge](http://www.bude.ge), [www.myvideo.ge](http://www.myvideo.ge), [www.hop.ge](http://www.hop.ge), [www.allfilmebi.com](http://www.allfilmebi.com); no download figures available for other

**Impact case study (REF3b)**

featured sites ([www.avoe.ge](http://www.avoe.ge), [www.2fun.ge](http://www.2fun.ge), [www.vest.ge](http://www.vest.ge)).

Between 2007 and 2009 we distributed the above DVD, and produced 6,000 colour leaflets and posters for national distribution to schools and other educational centres based on our research findings (Source C). Leaflets were distributed to 96 public schools in the 9 regions of Georgia, reaching an estimated 5,760 pupils. A book ('Heroes of Aids': Source C) was written on the basis of our findings to accompany the video produced for the TV, with more than 1,000 copies distributed to 98 schools in 11 regions. The book uses an innovative design: on the left side of the page is a fictional story on HIV/AIDS based by a well-known Georgian writer (Kote Jandieri); on the other is the provision of relevant scientific information and materials based on our survey findings. The book was launched at a public presentation at the Hotel Marriott, attended by 50 NGO representatives and members of national AIDS Centres.

Evidence of Impact of the National Campaign

**A1. The work has significantly impacted on practitioners and services by changing educational practices.** The book and video are currently part of the school curriculum in several schools in Tbilisi (e.g. schools #6, #53) and other regions of Georgia (Kakheti, Ajara) and produced strong positive feedback from teachers, students and their parents. The National Resource Centre (Ministry of Education) provided positive feedback on the use of these materials. In a supportive letter the Director of the National Centre for Teacher Professional Development in the Ministry of Education and Science of Georgia noted how materials produced by the project "have been used successfully in different public schools of Georgia to raise the awareness of students and teachers on the topic of HIV/AIDS" (Source D). In a further letter from the Head Mistress of Telavi Public School in Kakheti region (Source E) she states "The Heroes of Aids...is presented like a story in a very clear language.... Since 2008 it has been systematically used during the education process". In a Telavi school a theatrical performance was designed by students on the basis of this work and performed to a larger school audience.

**A2. Further impact on practitioners and services is evident via nurse training.** Both the film and book are included in the recommended literature for nurse trainees in Georgia. In a support letter (Source F) the President of the Georgian Nurses Association states "The project as well as the publications and other outputs that followed it have provided important training materials for nurse training across Georgia, particularly with respect to dealing with risky sexual practices amongst young people. In the past 3 years we have used the research materials they produced in their work as part of our training courses on these topics".

**A3. Health and welfare** has been impacted via enhanced awareness of health risks. While national sexual behaviour change cannot be directly attributed to any one campaign, applications for testing at the HIV centre in Tbilisi rose from 9738 cases in 2007 to 11649 (2008), 13984 (2009) and 17015 (2010; latest available figures)(Source G).

*B: Targeted intervention: seminar campaign*

Additional educational seminars were held in 44 schools reaching 1800 students in total, in which the Brunel-led team's videos were shown and the research findings discussed. These seminars were also attended by school directors and administrators (180 people).

Evidence of Impact of Targeted Intervention

**Impacts on health and welfare** of the Brunel-led research have been evidenced through reductions in high-risk behaviour and attitudes. Impact of the seminars was demonstrated in a comparative survey using data collected from the national survey of 2880 adolescents [Paper 6]. This analysis compared data collected 1) before the educational intervention (June 2007) with 2) data collected one year later in schools where the educational materials had been shown (June 2008; N=552), and 3) a control group of schools, where material had not been shown (June 2008; N=648). This allowed us to exclude extraneous factors that might have been occurred during this year. Data showed that, compared to the year before and to the control group, in the intervention schools there was a significant increase in a) awareness about the seriousness of the HIV problem (e.g. that AIDS was an incurable disease) b) knowledge about relative risks (e.g. risks of shaking hands with a person with AIDS) c) appropriate behavioural change (e.g. willingness to have sex

## Impact case study (REF3b)

with someone)(all  $p < .001$ ). (Source H)

This research and its impact was peer reviewed by the British Psychological Society Impact Peer Review Panel and selected as a "clear illustration of the extremely high quality contributions that psychological research is able to make". As a result it will be included on their new impact web portal. (Source I)

### 5. Sources to corroborate the impact (indicative maximum of 10 references)

Source A: Intas Research grant competition: evidence of competitive nature and evaluation materials from the EU sponsor. Available from Brunel

Source B: "These single use items". 22 minute DVD used in national TV broadcasts and in schools (in English and Georgian). Available from Brunel

Source C: National campaign materials: research Leaflet for (in Georgian) and "Heroes of AIDS" book. (In Georgian)

Source D: Letter from Director, National Centre for Teacher Professional Development, Ministry of Education and Science, Georgia (Georgian, English).

Source E: Letter from Head Mistress of Telavi Public School in Kakheti region (Georgian, English)

Source F: Letter from the President, Georgian Nurses Association (Georgian, English)(2012)

Source G: HIV testing figures received from a statistician at the AIDS and Clinical Immunology Centre, Georgia.

Source H: Initial report for the *Eurasian Partnership Fund*. Grant #G07-0035 (English). Data set, detailed output and fuller statistical summary (English). Further corroborating material on the fund is available from Director of the EurAsia Foundation.

Source I: Letter from Lead Policy Advisor, British Psychological Society.