VIOLENT BULLYING VICTIMIZATION IN MIDDLE AND HIGH SCHOOL CONTEXTS IN THE UNITED STATES: A SOCIAL REPORT

Kenneth C. Land, Vicki L. Lamb, and Qiang Fu
Child Well-Being Index Project, Duke University, Durham, NC, USA

Child and youth bullying behaviors, especially in school contexts, have received increased attention during the past three years from the media , parents and the public, policy makers , and school administrators. While this recent spotlight on bullying behaviors is undergirded by real incidents and there has been much research on bullying , important questions remain as to whether the recent upsurge in school bullying is historically unique in recent American history. Questions also have been raised about anti-bullying efforts nationwide: Do they not only fail to change the status quo but lead to an intensification of school bullying? Without concrete evidence about historical trends in school bullying and the prevalence of bullying behaviors across demographic, social and economic groups, the wisdom behind the war against school bullies will continue to be challenged.

To address these questions, we use a nationally representative dataset to analyze trends and changes in the prevalence of **serious forms of school bullying victimization among middle and high school students** – physically threatening, violent, injurious – over time and in the differential exposure of demographic, social and economic groups to school bullying.

Data

This report is based on data from the Monitoring the Future (MTF) project, a nationally representative study conducted at the Survey Research Center of the Institute for Social Research at the University of Michigan. The objective of the MTF project is to explore trends and changes in values, behaviors and orientations of American adolescents. The survey of 12th graders was initiated in 1975 and surveys of 8th and 10th graders have been conducted since 1991. Every year, thousands of 8th, 10th, and 12th graders participate in this

(Continued from previous page.)

survey and respond to questions on a series of subjects, such as drug use, religious orientation, school performance, violence, and socio-economic status of their parents. The MTF provides five Key Indicators for the overall FCD-CWI including 12th grade trends in: smoking cigarettes, binge drinking, use of illicit drugs, attendance to religious services, and the evaluation of the importance of religion to the student. The MTF data also include responses to a number of questions about the experience of various specific forms of bullying victimization in school-related contexts that can be used to study changes over time and the influence of sociodemographic and behavioral characteristics on the relative likelihood of being bullied. These questions have been included in the MTF surveys of 12th graders since 1989 and in the surveys of 8th and 10th graders since 1991.

Measures and Analyses of Threatening, Violent, Injurious School Bullying Victimization Behaviors

Questions regarding physically threatening, violent, injurious school bullying victimization appear in the MTF questionnaire as follows:

"The next questions are about some things which may have happened TO YOU while you were at school (inside or outside or in a school-bus). During the LAST 12 MONTHS, how often …"
  1. Has an unarmed person threatened you with injury, but not actually injured you?
  2. Has someone threatened you with a weapon, but not actually injured you?
  3. Has someone injured you on purpose without using a weapon?
  4. Has someone injured you with a weapon (like a knife, gun, or club)?

These four questions are hereinafter referred as threatened without injury, threatened with a weapon, injury without a weapon and injury with a weapon, respectively. Response categories for all four questions are the same: 1) not at all; 2) once; 3) twice; 4)3-4 times; 5) 5+ times.

Trends Over Time: We first describe overall trends over the past two decades in annual data on frequency distributions of victimization experiences of the four types of bullying behavior as reported by the 8th, 10th, and 12th grade students. In addition to comparisons of prevalence rates of victimization during the 2000-2009 decade with those of the 1990s, we will examine these trends for indications of increases associated with the increasing availability of Internet-based communications and social networking sites and their facilitation of cyber-bullying in the past ten years.

Statistical Methods: The statistical procedures for estimating the trends in the MTF frequency distributions of bullying victimization behaviors

(Continued from previous page.)

are described in detail in Appendix A. Briefly, to focus on temporal trends in the data, data smoothing by application of three-point moving averages were first applied to the observed frequency distributions in each of three adjacent years centered in each focal year. Then the smoothed frequency distributions were analyzed by application of zero-inflated Poisson (ZIP) statistical models. ZIP models are appropriate for modeling data on frequency distributions that have so-called extra density or more observations than expected by conventional Poisson models at the zero frequency, which is the case for the bullying victimization frequency data. All of the figures described below show two estimated ZIP parameters for smoothed data series of the annual frequency distributions of bullying victimization for each of the four forms of bullying for the past two decades: *(1) the percent of students exposed to bullying behaviors (P), and (2) the intensity of bullying as measured by the average number (λ) of times students exposed to bullying were bullied in the past 12 months.* The left y-axis is the scale for the annual intensity of bullying (λ) and the right y-axis is the scale for the percent that were exposed to bullying for each year (P).

In the study of trends for different age groups over time, it is useful to consider whether there might be period or cohort effects associated with the trends. Period effects refer to similar effects, such as an increase in the rates, which take place during the same period of time for different age groups. One could then look to common historical experiences, such as an economic recession, which could explain similar behaviors or experiences across different age groups. Cohort effects would refer to changes in trends that are lagged such that it appears the same age group or cohort is associated with such changes. For example, if the intensity rate of bullying victimization increases for the 8th graders in a particular year, such as 1990, and then two years later increases for the 10th graders, then the change in rates may be due to characteristics of that particular age cohort.

Overall Trends in Bullying Victimization for 8th, 10th, and 12th Graders

1) Trends in Being Threatened without Injury:

8th Graders: There was increased exposure of 8th graders to being threatened without injury, as mea-

sured by the percent (P) who experienced this form of bullying, from 2002 (34.9%) to 2006 (37.4%), after which time the percent declined to 36.6% in 2009 (Figure 1). During this decline, the estimated intensity of bullying (λ) increased. Taken together, this means a smaller percent of 8th graders was being threatened, but the threats were experienced more often during the year by those who were bullied.

Concerning long-term trends, it also should be noted that the highest estimated percents of 8th graders exposed to being threatened without injury occurred during the 1990s. In 1991 41.4% of the 8th graders were exposed to this type of bullying and the rate stayed above 40% until 1998. It then declined in the years 2000 to 2002 and increased again in the 2003-2006 period, leading to the increased focus of attention on bullying in recent years.

10th Graders: Figure 2 shows trends in estimated parameters of the threatened without injury bullying frequency distributions for 10th graders. The estimated exposure values (P) move over time in a fashion similar to that of the 8th graders in that the highest rates occurred in the 1990s and the rates increased again from 2003 (32.0%) to 2006 (34.3%), but at levels slightly lower than those for the 8th graders. By contrast, the estimated intensity (λ) of bullying for those who were exposed surged upward from 1999-2003, and increased again 2006 to 2009. Both of these increased periods of intensity occurred while the overall exposure rates were in decline – that is, these were periods of declining exposure to this form of bullying, perhaps due to actions taken by parents or school officials to reduce bullying victimization, but, for those who experienced this form of bullying in these periods, the average number of bullying incidents experienced, increased.

12th Graders: Although the temporal patterns across the years for the 8th and 10th graders being threatened without injury are in the form of a period effect (in the sense defined above) with increases from 2002-2003 to 2006, the pattern for the 12th graders was different in the 2000s. As Figure 3 shows, the highest estimated rates (P) for 12th graders being threatened without injury happened in the 1990s. But, throughout the period of study, the percent of 12th graders exposed to bullying shows a long-term downward trend, that is,

(Continued from previous page.)

a long-term secular decline, from the high of 35.0% in 1989 to a low of 25.8% in 2009. In contrast, the estimated intensity (λ) of this form of bullying occurrences shows an upsurge from 2001 to 2005 such that average occurrences for those who were bullied rose from 1.14

to 1.31 incidents per year. Again, this upsurge is consistent with a heightened attention to bullying behavior by parents, school personnel, and policy makers in the years 2006 to 2011.

2) Trends in Being Threatened with a Weapon:

8th Graders: As shown in Figure 4, 8th graders experienced higher levels of exposure (P) to being threatened with a weapon from 2003 (26.1%) to 2009 (28.3%). For those at risk of being threatened, the intensity of occurrences (λ) of being threatened with a weapon also increased during this period. As with being threatened without injury, the trend for 8th graders exposed to being threatened with a weapon (P) was highest during the 1990s, declined in the early 2000s, and then increased after 2002-2003. However, among those at risk of being so threatened, the rapid rise in the average number of times threatened (λ) after 2003 is particularly striking – and it takes the annual estimates of this parameter to higher levels than observed for the 1990s.

10th Graders: Figure 5 presents estimates of the trends in the percent of 10th graders being threatened with a weapon. Again, a period effect is evidence in that the 10th grade pattern of increased exposure (P) is similar to that of 8th graders – it begins in 2003 (21.9%) and continues through 2009 (25.7%) and reaches the levels of the 1990s in the most recent years. In contrast, the estimates of the intensity of bullying parameter (λ) show a decline during the 2003-2009 period. Thus, for 10th graders, the period from 2003 to 2009 was one of an increased likelihood of being threatened with a weapon, but, for those at risk of being threatened, the average number of threats per year decreased.

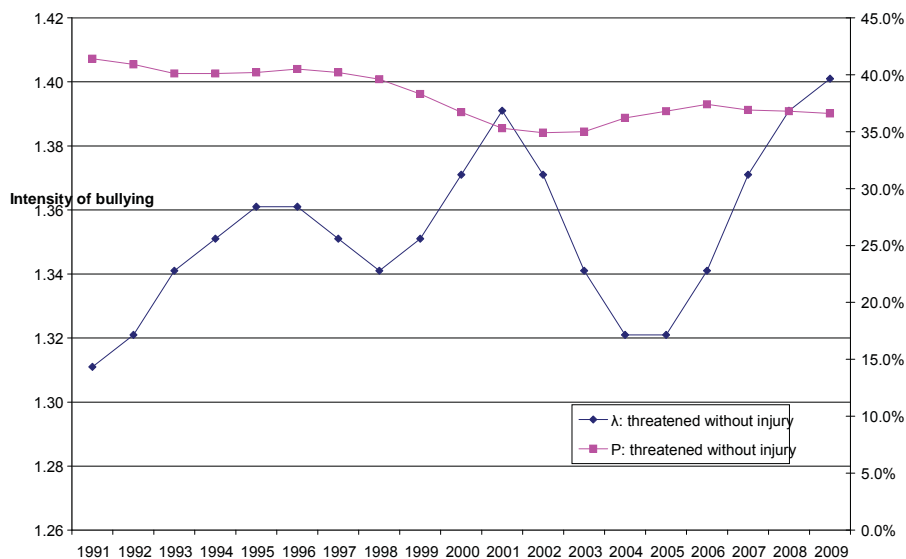Figure 1. 8th Grade Trends in Parameter Estimates for Threatened without Injury: 1991-2009

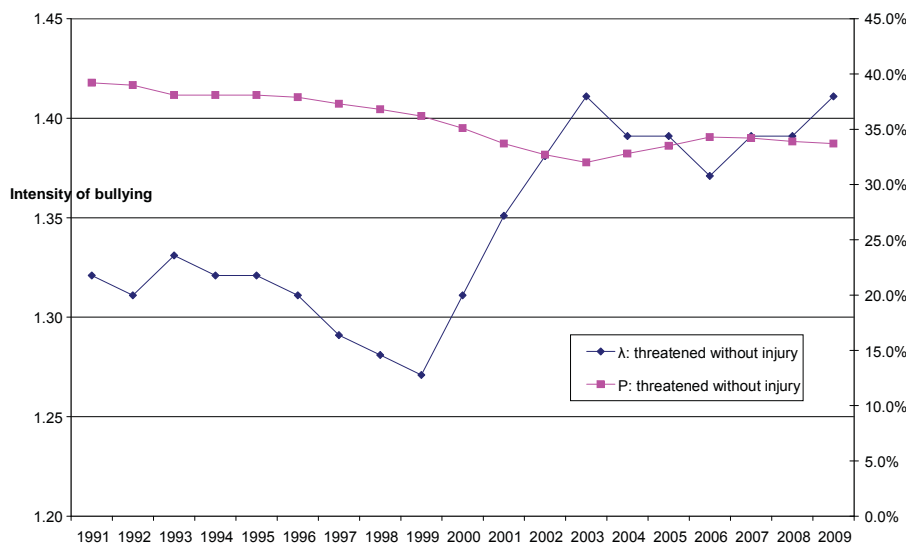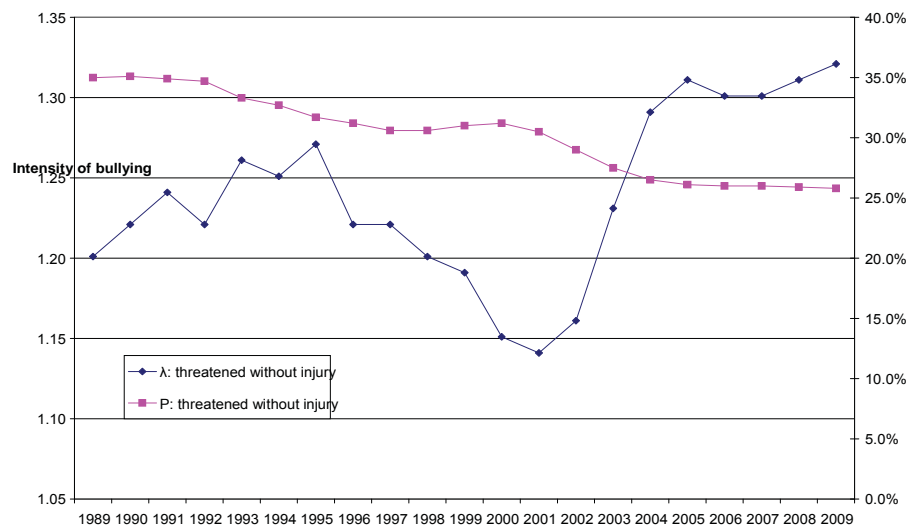Figure 2. 10th Grade Trends in Estimated Parameters for Threatened without Injury: 1991-2009

Figure 3. 12th Grade Trends of Estimated Parameters for Threatened without Injury: 1989-2009

4

It will be seen throughout these analyses that estimates of these two parameters tend to move in opposite directions. That is, when the likelihood of exposure (P) of a particular threat goes up (goes down), this implies that a larger and broader (smaller and narrower) array of youths are being exposed to the threat, including some who are less likely (more likely) to be exposed to repeated threats, thus reducing (increasing) the average numbers of threats (λ) experienced by those who are threatened.

12th Graders: Figure 6 shows that the estimates of the percents (P) of 12th grade students being exposed to threats with a weapon generally were lower in the early 2000s than in the late-1980s and early-to-mid-1990s. The high levels of these percents in the earlier years likely were related to the crack cocaine fueled violence of those years. In the 2000-2009 decade, the estimates in Figure 6 do exhibit an upward trend of 12th grade students being exposed (P) to threats with a weapon that commenced in 2006. This is two to three years later than the trend for the 8th and 10th graders and is indicative of a cohort effect in that the 12th grade trend increased in 2006 when the 2003-2004 10th graders had moved up to the 12th grade.

When comparing the years of peak intensity rates (λ) of occurrences of being threatened with a weapon across the three grades, a surge of occurrences occurred in 2001-2002 for the 8th graders, in 2003-2004 for the 10th graders, and in 2006 for the 12th graders. This pattern also is indicative of a cohort effect in the intensity of being threatened with a weapon that took place as the cohort of 8th graders in 2001-2002 were promoted to 10th and 12th grades.

Figure 4. 8th Grade Trends in Parameter Estimates for Threatened with a Weapon: 1991-2009

Figure 5. 10th Grade Trends in Estimated Parameters for Threatened with a Weapon: 1991-2009

Figure 6. 12th Grade Trends of Estimated Parameters for Threatened with a Weapon: 1989-2009

(Continued on next page.)

3) Trends in Injury without a Weapon:

8th Graders: Figure 7 shows the trends for 8th graders of the estimated parameters for *being injured without a weapon. The highest rates of exposure (P) to such bullying occurred from 2005 to 2009.* This was during an upward trend that started in 2003. The intensity of being injured without a weapon (λ) increased markedly from 1996 to 2002 and then dropped afterwards from 2002 to 2005 even though the exposure rate was increasing during this period. This is consistent with the often-observed inverse movements of these two parameters noted above. After 2005, by contrast, estimates for both the rate of exposure and the intensity of occurrences increased to the end of the period of study.

10th Graders: *The patterns of estimated probabilities of exposure (P) and rates of occurrences (λ) for being injured without a weapon for 10th graders in Figure 8 are almost identical to those of the 8th graders in Figure 7,* although both sets of rates are higher for the 8th graders. The intensity rate for both began to rise around 1997, as the probabilities of exposure declined in the late-1990s and peaked in 2002, which is the same year the exposure rate began an increase for both grades. The 8th grade exposure rate then rose from 27.5% in 2002 to 40.3% in 2008 and 2009. The 10th grade exposure rate rose from 19.9% to 31.3% during the same time frame.

12th Graders: As shown in Figure 9, *the intensity rate (λ)*

(Continued on next page.)

Figure 7. 8th Grade Trends in Parameter Estimates for Injury without a Weapon: 1991-2009

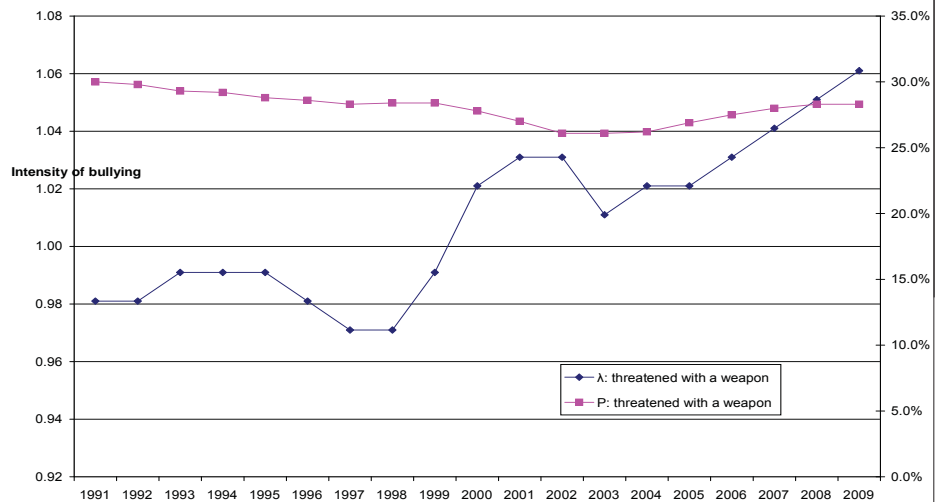

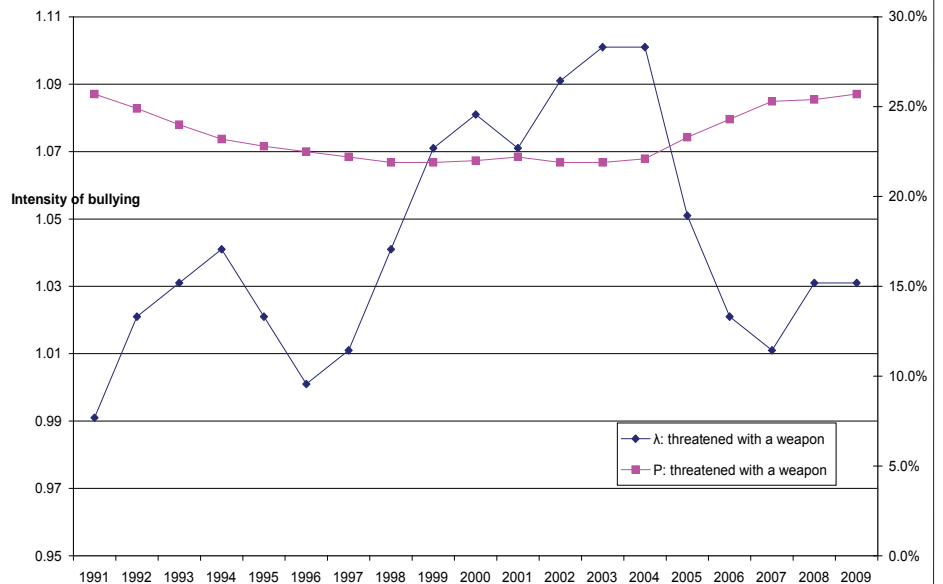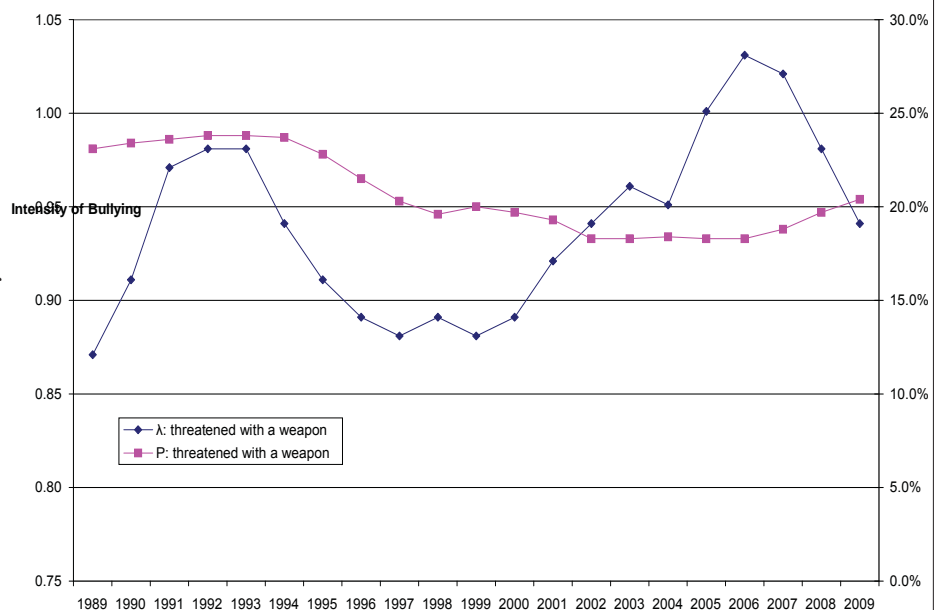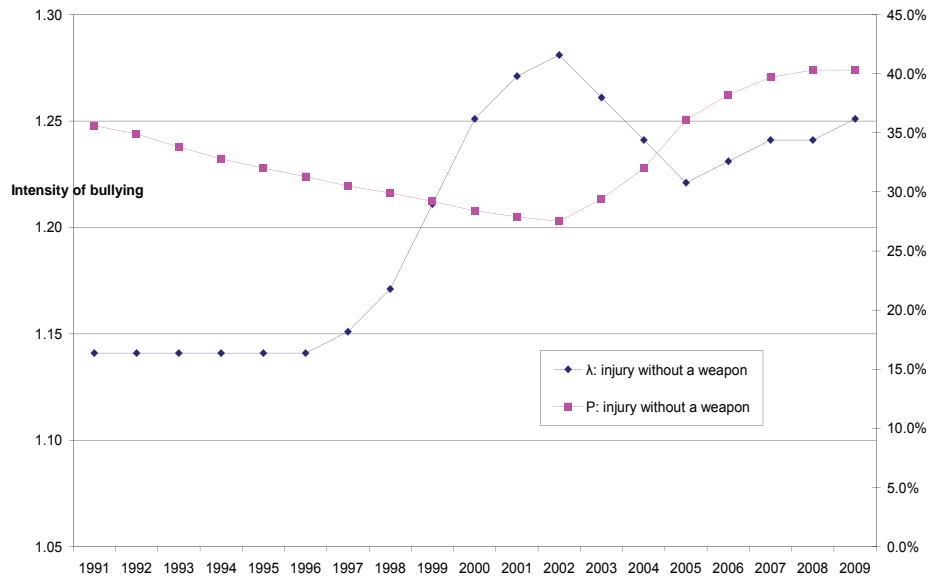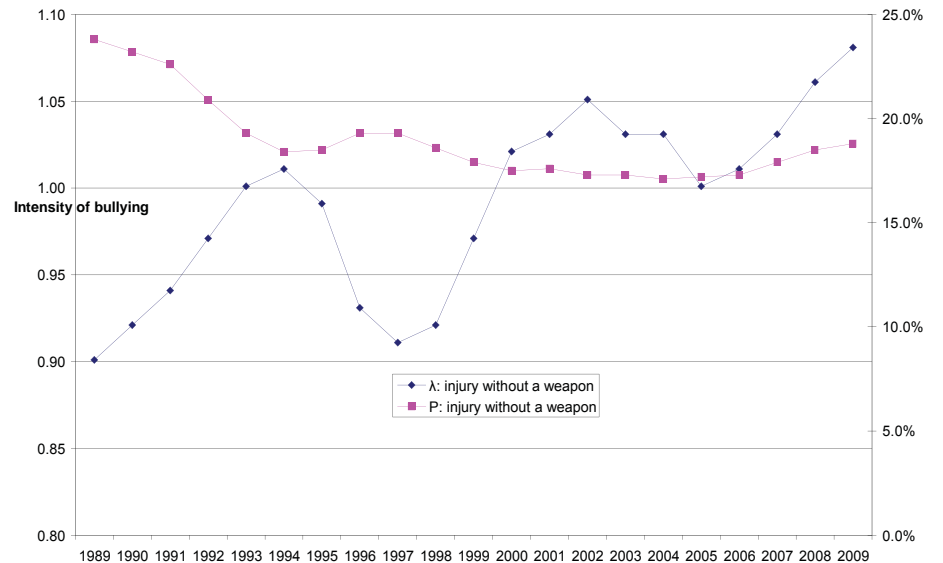Figure 6. 12th Grade Trends of Estimated Parameters for Threatened with a Weapon: 1989-2009

Figure 9. 12th Grade Trends of Estimated Parameters for Injury without a Weapon: 1989-2009

(Continued from previous page.)

of occurrences of being injured without a weapon for 12th graders follows a similar pattern of an upward surge from 1997 to 2002.

By comparison, the pattern of increased exposure (P) of 12th graders to such bullying did not begin until 2004, two years after the 8th and 10th grade surges – again indicative of cohort effects. The increased percent of 12th graders exposed to being injured without a weapon only rose slightly from 17.1% in 2004 to 18.8% in 2009. And, as noted above for the two previous categories of bullying behavior, the long-term trend in the estimates of P in Figure 9 is down for the 2000-2009 decade as compared to the 1990s.

4) Trends in Injury with a Weapon:

8th Graders: As with the three previous 8th grade bullying behavior trends, there was an increase in the percent exposed (P) to injury with a weapon since 2003, as shown in Figure 10. The rate rose from 10.7 percent in 2003 to 12.3 percent in 2008 and 2009. The 8th grade intensity rate (λ) of occurrences of injury with a weapon differs from the previous three bullying behaviors in that it is highest in 1996-1997, and again in 2001, then declines from 2003 to 2006, becomes stable from 2006 to 2008 and increases a bit in 2009.

10th Graders: The trend of exposure (P) to injury with a weapon for 10th graders shown in Figure 11 is somewhat different than the trend for 8th graders. That is, similarly to the long-term patterns noted above, Figure 11 indicates that the percent of 10th graders exposed to injury with a weapon

followed an overall decline from 1991 to 2009. The intensity (λ) of occurrences of such behavior was highest between 1997 and 2003 followed by a decline until 2007 after which time the rate began to increase.

12th Graders: Twelfth graders also exhibited a long-term downward trend from 1989 to 2009 in the estimated probabilities (P) of exposure to injury with a weapon (Figure 12). The mid-1990s and the early-2000s were periods in which the intensity rate (λ) was high for 12th graders; however, a steep increase in intensity rates occurs from 2006 to 2009 as the probabilities of exposure decline.

For all three grades, the highest trends of percent exposed to being injured with a weapon took place in the 1990s. The exposure rates were highest in 1991 with 14.5 percent for 8th graders, 12.6% for 10th graders, and 10.5% for 12th graders.

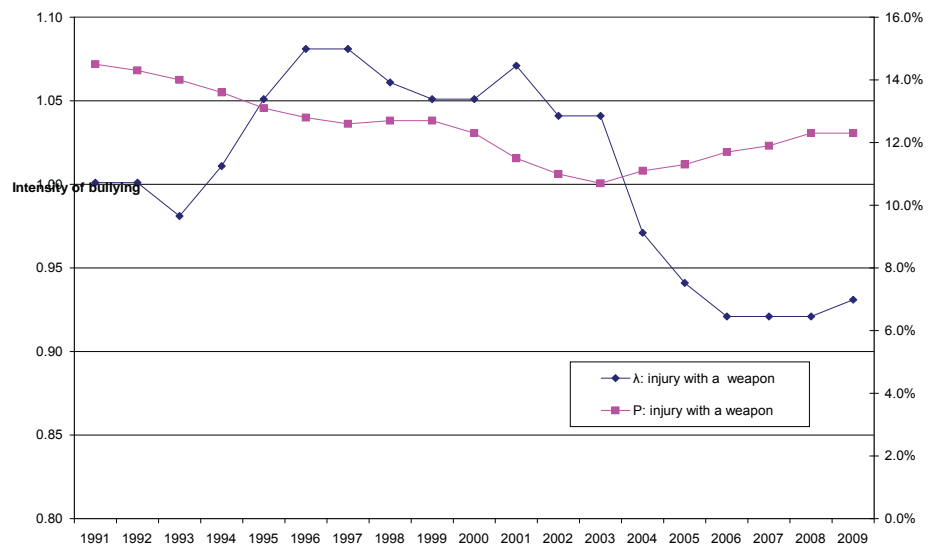**Figure 10. 8th Grade Trends in Estimated Parameters for Injury with a Weapon: 1991-2009**

Figure 11. 10th Grade Trends in Estimated Parameters for Injury with a Weapon: 1991-2009
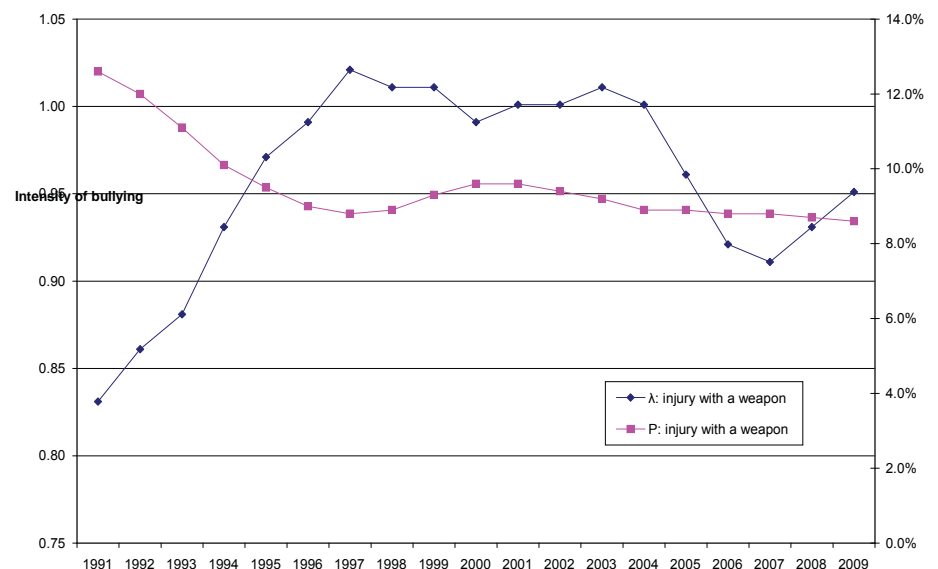
Figure 12. 12th Grade Trends of Parameter Estimates for Injury with a Weapon: 1989-2009

Discussion and Implications

Using annual MTF data on 8th, 10th and 12th graders, this study has focused on historical trends across the past two decades in four specific forms of physically threatening, violent, injurious school bullying victimization and the prevalence of these victimizations across demographic, social and economic groups. To be sure, there are other forms of bullying behaviors and students with personal characteristics that often are targets of bullying for which these data do not provide information. The MTF data also do not explicitly address the extent to which the bullying behaviors studied were cyber-mediated. And the methods of analysis applied here are tuned to the detection of general trends, but do not address the interplay of individual-level attributes of the students with period and cohort contexts. These are the limitations of this study.

Nonetheless, all of the foregoing analyses point to an upturn in physically threatening, violent, injurious forms of school bullying victimization for middle and high school students that began in 2002-2003 and extended through the 2000-2009 decade. There also is substantial evidence that these forms of bullying behavior emerged for 8th and 10th graders in 2002-2003 and did not extend to 12th graders until the 8th and 10th graders were themselves in the 12th grade. In a two-decade long historical perspective, this recent upturn in school bullying echoes an upturn that occurred in the late-1980s and early-1990s. That is, there indeed was an upturn in

5) Summary – Overall Trends

Overall, the trends over the past two decades in the estimated exposure (P) and intensity (λ) of the four types of bullying behaviors lead to the following conclusions:

➢ The 8th graders had the highest percentages exposed to each of the four bullying behaviors, followed by 10th graders, with the 12th grade having the lowest rates of exposure.

➢ The percent of 8th graders exposed to the four specific types of bullying behavior all began an upward trend starting around 2002-2003.

➢ In 2002-2003, a period effect occurred for 8th and 10th graders towards increases in percents exposed to three of the four bullying behaviors: threatened without injury, threatened with a weapon, and injury without a weapon.

➢ For all three grades, there were higher rates of being exposed to bullying behavior during the 1990s, with the exception of being injured without a weapon. The highest exposure rates for the latter type of bullying occurred in the 2000-2009 decade.

➢ There was a cohort effect from 10th to 12th grade for increases in the percent exposed (P) to being threatened with a weapon – as they aged into the 12th grade, the 10th graders brought with them their higher prevalence of this form of bullying.

➢ A longer cohort effect was shown from 8th to 10th to 12th grade in the increased intensity (λ) of occurrences of being threatened with a weapon.

➢ There was less similarity among the three grades in the patterns of exposure to injury with a weapon than in these patterns for the other three types of bullying behaviors.

school bullying in the mid-to-late-2000s, but this is not unique in recent U.S. history, and the peaks of exposures to bullying behaviors in the most recent upturn generally were lower than those that occurred in the previous peak years.

Implications for parents, school teachers and administrators, community leaders, and policy makers are clear: Vigilance against bullying behavior must be ever present, as new cohorts of children age into the adolescent and teenage years every decade or so. Winning the war against bullying in the sense of reducing it to low levels in one decade, accordingly, is not predictive of a continued period of low levels in a subsequent decade. Children must continually be socialized into acceptable forms of interpersonal behaviors. And policies that have strong impacts on reducing bullying behaviors in the middle and early high school years should be particularly sought.

APPENDIX A
Statistical Methodology for Estimating
Trends in Parameters of Truncated Frequency Distributions of Bullying Victimization

The research for this Special Report is based on the Monitoring the Future (MTF) project, a nationally representative study designed to explore trends and changes in values, behaviors and orientations of American adolescents. The survey of 12th graders was initiated in 1975 and surveys of 8th and 10th graders have been conducted since 1991. Every year, thousands of 8th, 10th, and 12th graders participate in this survey and respond to questions on a series of subjects, such as drug use, religious orientation, school performance, violence, and socio-economic status of their parents.

Measures of Bullying Behaviors

Questions regarding school bullying appear in the questionnaire as follows:

"The next questions are about some things which may have happened TO YOU while you were at school (inside or outside or in a school-bus). During the LAST 12 MONTHS, how often …"
1. Has an unarmed person threatened you with injury, but not actually injured you?
2. Has someone threatened you with a weapon, but not actually injured you?
3. Has someone injured you on purpose without using a weapon?
4. Has someone injured you with a weapon (like a knife, gun, or club)?

These four questions are hereinafter referred as threatened without injury, threatened with a weapon, injury without a weapon and injury with a weapon, respectively. Response categories for all four questions are the same: 1) not at all; 2) once; 3) twice; 4) 3-4 times; and 5) 5+ times. For each of the four questions for each year from 1991 to 2009 for 8th and 10th graders and from 1989 to 2009 for 12th graders, the frequency distributions of the total samples were obtained from MTF codebooks. Frequency distributions of certain demographic, economic, and social groups were retrieved and computed from individual MTF datasets for the years under study.

Due to relative small sample sizes of some single socio-economic groups in the individual years, data smoothing via application of three-point moving averages was applied to the observed frequency distributions in each of three adjacent years centered on each focal year in order to facilitate the detection of temporal trends.

Covariates include six dummy variables denoting demographic background, family structure, and average grades of the 8th, 10th and 12th graders: sex (male vs. female), residency (on a farm or in the country vs. in a city), parental structure (single-parent and no-parent families vs. two-parent families), father's educational attainment (secondary education and below vs. tertiary education), race (African American vs. non-African American), and GPA (B+ and below vs. A- and above).

Classic statistical models for analyzing frequency distributions of rare events (such as school bullying) are built on the Poisson distribution (see, e.g., Fox 2008: 383; Long and Freese 2006: 394-396). The Poisson distribution has the restrictive property that its expected value (mean) and variance are equal. Empirical frequency distributions of rare events often do not satisfy this constraint, and, indeed, these distributions often have variances that exceed their means, i.e., they are overdispersed. The source of overdispersion in empirical frequency distributions often is an excess of observations with zero events, i.e., an excess of zeroes. Exploratory data analyses showed that this is the

case for the MTF bullying count data. Accordingly, we applied zero-inflated Poisson (ZIP) models (Lambert 1992) to the MTF time series of frequency distributions of the four types of bullying behavior. The ZIP model has two components: (1) A binary logistic probability model for membership in the latent class of individuals for whom the response or outcome variable is necessarily 0, and (2) a Poisson probability model for the latent class of individuals for whom the response variable may be 0 or a positive count.

Applied to the MTF data on the numbers of incidents of the four types of bullying that MTF respondents experience in the past year, the ZIP model incorporates the idea that some adolescent and teenager students are not at any risk of school-based bullying – perhaps because they attend schools in highly protected environments (e.g., very small suburban or religious schools) where bullying behaviors do not occur. According to the ZIP model, these individuals are in the first latent class for whom bullying processes are not operative, and they account for the excess density in the empirical frequency distributions on zero bullying events. For other students, the ZIP model specifies that the frequency of the bullying incidents is distributed as a Poisson random variable.

The probability mass function of the ZIP model is given by:

$$\begin{cases} P(x=0 \mid P,\lambda) = (1-P) + P*Poisson(\lambda) = (1-P) + P*\exp(-\lambda) \\ P(x \mid P,\lambda) = P*Poisson(\lambda) = P*\dfrac{\exp(-\lambda)*\lambda^x}{x!} \quad\quad when \;\; x>0 \end{cases}$$

where the two parameters of the model are (1) the proportion, P, from the logistic component of the model, of individuals exposed to bullying behaviors, i.e, a member of the latent class of individuals for whom bullying processes are operative, and (2) the mean number, λ, of occurrences (average number of school bullying incidents) in a year, for an individual in the second latent class, i.e., at risk of being bullied. These are the two ZIP model parameters that we estimated for the combined ZIP model processes for each year of MTF data on the 8th, 10th, and 12th graders for each of the four types of bullying behaviors.

The reported numbers of bullying behaviors in the MTF data are combined (3-4 times) and right-censored (5+ times) in response categories, which mean that no existing statistical software package can be readily applied to analyze such data. To overcome the challenge imposed by this data structure, an R program was written to estimate the parameters of the zero-inflated Poisson distributions over observed frequencies by minimizing mean absolute deviations in each year (Gelman and Hill 2007; Zeileis, Kleiber, and Jackman 2008).

References

Fox, John. 2008. Applied Regression Analysis and Generalized Linear Models. Los Angeles: Sage.

Gelman, Andrew and Jennifer Hill. 2007. Data Analysis Using Regression and Multilevel/Hierarchical Models. New York: Cambridge University Press

Lambert, D. 1992. "Zero-Inflated Poisson Regression, with an Application to Defects in Manufacturing." Technometrics 34: 1-14.

Long, J. Scott and Jeremy Freese. 2006. Regression Models for Categorical Dependent Variables Using Stata. College Station: Stata Press.

Zeileis, Achim, Christian Kleiber, and Simon Jackman. 2008. "Regression Models for Count Data in R." Journal of Statistical Software 27:1–25.

(Continued from previous page.)

Endnotes

1. For instance, from January 2000 through September 2011, there were 196 articles in The New York Times, including news about bullies and bullying incidents, commentary, and archival articles. See http://topics.nytimes.com/top/reference/timestopics/subjects/b/bullies/index.html?offset=15&s=newest.

2. See The Myths About Bullying, Secretary Arne Duncan's Remarks at the Bullying Prevention Summit, August 11, 2010. U.S. Department of Education. http://www.ed.gov/news/speeches/myths-about-bullying-secretary-arne-duncans-remarks-bullying-prevention-summit.

3. See, e.g., Espelage DL, Swearer SM (2003) "Research on school bullying and victimization: What have we learned and where do we go from here?" School Psychology Review 32:365-383; Srabstein, J. (2008) "Deaths Linked to Bullying and Hazing." International Journal of Adolescent Medicine and Health 20:235-239; Swearer, S. M; Espelage, D.L; Vaillancourt, T.; Hymel, S. (2010) "What Can Be Done About School Bullying? Linking Research to Educational Practice" Educational Researcher 39: 38-47; Ttofi Maria M.; Farrington David P.; Loesel Friedrich; et al. (2011) "The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies." Criminal Behaviour And Mental Health 21:80-89.

4. See Winnie Hu, "Bullying Law Puts New Jersey Schools on Spot." The New York Times, August 30, 2011.

http://www.nytimes.com/2011/08/31/nyregion/bullying-law-puts-new-jersey-schools-on-spot.html?pagewanted=all

5. The estimate of the percent, P, of students in a particular grade exposed to a form of bullying in any particular year may not correspond to the observed proportion of students who report zero bullying incidents of that form due to 1) the data smoothing and 2) the fact that the observed proportion of zero incidents includes both the estimate P of exposure plus the expected proportion of zero events from the Poisson model with the mean number of bullying incidents for those experiencing that form of bullying. Rather, the estimated P parameters approximate the underlying trends in percentages of students in latent classes for whom that form of bullying process is operative in the years studied and thus are more stable.

6. A full-scale age-period-cohort analysis of the repeated cross-section MTF surveys could be conducted by application of statistical models developed by Yang Yang and Kenneth C. Land 2006 "A Mixed Models Approach to the Age-Period-Cohort Analysis of Repeated Cross-Section Surveys, With an Application to Data on Trends in Verbal Test Scores." Sociological Methodology, 36:75-98. Given the size of the MTF surveys and the many annual surveys, such an analysis would be a massive undertaking.

SOCIAL INDICATORS RESEARCH
SPECIAL ISSUE

"The Road Out of the Economic Crisis:
Towards Wellbeing and Social Progress"

All papers presented in the XVI Encuentro de Economía Aplicada (XVI Applied Economics Meeting) in Granada in June 2013, will be considered for publication in a special issue of Social Indicators Research, providing that the corresponding authors indicate in the submission to the Meeting that they agree to postulate their research for the special issue. Manuscripts should not be under review in another journal. The special issue will contain about ten papers of normal length, so strong competition in terms of quality is expected.

The guest editors of the special issue (Professor Mariano Rojas, UPAEP and FLACSO-México -mariano.rojas.h@gmail.com-, Professor Andrés J. Picazo-Tadeo, Universidad de Valencia -andres.j.picazo@uv.es- and Associate Professor Jorge Guardiola, Universidad de Granada -jguardiola@ugr.es-) will make a pre-selection of the papers on the basis of their originality, quality, and relevance to the theme of the special issue. All papers will then follow a blind-review process. Accepted papers must comply with the Social Indicators Research's submission guidelines in order to be published.

The Meeting's Theme

There are multiple intertwined facets in a human life, and societies are not simply made up of a collection of out-of-context individuals. Economic activities such as production, consumption and employment should not be interpreted as final aims but as means to creating people's wellbeing. The recent economic crisis creates an opportunity to enrich the vision that economists have of prosperity. The time seems to be right for reflecting on the possible roads to prosperity and social progress, as well as to choosing that path that could lead us towards greater wellbeing and the preservation of the ecosystem. In this vein, this special issue would be especially appropriate for the following branches in economics:

- Philosophical economics and ethics economics: these disciplines can analyse the pros and cons of the different roads to prosperity and wellbeing after the crisis.

- Economic history: through rigorous analysis that allows learning from the past and proposing roads to prosperity.

- Economics of happiness, as well as new methodologies and theoretical frameworks that build, for instance, indexes that convey a more accurate picture of human wellbeing than Gross Domestic Product alone.

- The interaction of economics with other social sciences in order to better describe human behaviour and propose alternatives for social progress.

- Ecological economics and other proposals that ensure material wellbeing without exceeding the biophysical limits of the biosphere.

- Behavioural economics: to propose different roads to prosperity through a better knowledge of human beings.

Further information about the XVI Applied Economics Meeting can be found here: http://www.alde.es/encuentros/

Call For Papers
Applied Research in Quality of Life

The Official Journal of the International Society for Quality-of-Life Studies

The aim of this journal is to publish conceptual, methodological and empirical papers dealing with quality-of-life studies in the applied areas of the natural and social sciences. As the official journal of ISQOLS, it is designed to attract papers that have some direct implications for or impact on practical applications of research on the quality-of-life. We welcome papers crafted from inter-disciplinary, inter-professional and international perspectives. This research should guide decision making in a variety of professions, industries, nonprofit, and government sectors such as healthcare, travel and tourism, marketing, corporate management, community planning, social work, public administration, human resource management, among others. The goal is to help decision makers apply performance measures and outcome assessment techniques based on concepts such as well-being, human satisfaction, human development, happiness, wellness and quality of life. The Editorial Review Board is divided into specific sections indicating the broad scope of practice covered by the journal, and the section editors are distinguished scholars from many countries across the globe.

Authors interested in submitting manuscripts for publication should consult the website http://ariq.edmgr.com. Further information may be obtained by contacting one of the journal's Co-Editors: Richard Estes, University of Pennsylvania (USA), restes@sp2.upenn.edu; Alex C. Michalos, University of Northern British Columbia (Canada), michalos@unbc.ca; M. Joseph Sirgy, Virginia Polytechnic Institute & State University (USA), sirgy@vt.edu.

Call for Submissions to a Special Issue of Social Indicators Research

Theme: Manufacturing Happiness: Work, Employment and Well-being in

Contemporary Asia continue to move forward in upgrading technologies, and some countries have arrived at a "post-industrial" phase that the value-added productions depend on innovation rather than manufacturing activities. Yet Asia indeed is a diverse region in terms of wealth, productive regime, and well-being. Japan is characterized by its achievements in high technology as well as enviable quality of life. In China, a substantial proportion of companies, domestic or foreign, adopt management techniques that have operated against the well-being of numerous employees. A vast group of workers in India's fast growing industries are largely separated from the benefits of economic growth and therefore are not able to access a decent standard of living. The Southeast Asian countries are currently gaining a growth momentum from foreign investments, and corporate life seems to be promising a better career and life chances for the middle sector of these societies. Given these divergent paths of social and technological changes, how Asia societies are "manufacturing" happiness among people across sexes, ages, classes or other social categories is an important phenomenon for quality of life researchers to explore.

This special issue particularly stresses the domain of work—how life opportunities, dignity and well-being in broad sense are enhanced or impacted by work ethic, career patterns, shopfloor experiences, team collaborations, factory regimes, corporate management, labor market institutions, etc. Most welcome are submissions that conduct a comparative study of critical cases or large populations either across Asian countries or between Asia and other regions.

Please send your proposal of intent (no more than 1000 words) to the quest editor Ming-Chang Tsai (National Taipei University, Taiwan; mtsai@mail.ntpu.edu.tw) by December 1, 2012; Once a proposal is accepted, the final manuscript is due by May 30, 2013.

Manuscripts are subject to review before acceptance to publish in a special issue of Social Indicators Research. For further information about this journal published by the Springer, please visit: www.springer.com/social+sciences/journal/11205.

SINET WORLD WIDE WEB HOMEPAGE

SINET has a homepage entry on the World Wide Web. It is located on the homepage of the Department of Sociology at Duke University and thus can be accessed by clicking on Department Publications on the address of that page, namely, http://www.soc.duke.edu or by typing in the full address http://www.soc.duke.edu/resources/sinet/index.html. The homepage for SINET contains a description of the Contents of the Current Issue as well as of Previous Issues. In addition, it has Subscription Information, Editorial Information, Issue-Related Links, and a link to the homepage of ISQOLS, the International Society for Quality-of-Life Studies. The Issue-Related Links button has links to World Wide Web locations of data for the construction, study, and analysis of social and quality-of-life indicators that have been identified in previous issues of SINET. When you are surfing the Web, surf on in to our homepage.

Call for Papers
CCFR-SIR Special Issue Conference on Consumer Finance and Social Indicators in China

China Center for Financial Research, Tsinghua University
Social Indicators Research

Beijing, China
June 29-30, 2013

Overview:
This conference aims to bring together researchers and policymakers to discuss consumer finance development and its impacts on economic development and quality of life in China, an emerging market. This conference welcomes both theoretical and empirical papers on a variety of topics associated with consumer finance related social indicators, such as consumer incomes, expenditures, debts, assets, and financial satisfaction, and these factors' impacts on quality of life. The selected papers will be published in a special issue of Social Indicators Research after the conference. Topics that would be appropriate for this special issue include, but are not limited to:

- Consumer finance and household wealth
- Consumer financial behavior and welfare
- Financial innovations and consumer welfare
- Financial literacy
- Household finance institutions and household welfare
- Household saving and investing/portfolio-choice decisions
- Housing wealth, financial distress and indebtedness
- Consumer financial laws, regulations, and public policies and consumer protection
- Life cycle asset allocation and debt behavior
- Portfolio choice and risk attitudes
- Saving, consumption and financial capability
- Financial satisfaction
- Consumer finance and community development
- Consumer finance and quality of life

Conference coordinators:
Li Liao, Tsinghua University
Jing Jian Xiao, University of Rhode Island

Conference Submissions:
By submitting a paper, authors are certifying (a) that the submission is original, unpublished work, and in English only, (b) that in whole or material part it is not simultaneously under consideration elsewhere, (c) that in electronic format (only PDF is accepted). Hard copies will not be accepted.

Papers will be externally blind reviewed according to standard journal policy, following which authors will be invited to present their papers at a special issue conference. Interested authors should submit their papers in two PDF files: one with the name, affiliation, and contact information of the authors and one anonymous copy for blind review. The first page of the manuscript must contain the paper's title and an abstract of 300 words, a set of key words and JEL codes. Please put "CCFR-SIR Special Issue Conference on Consumer Finance and Social Indicators in China " as the subject heading of the email.

Papers are to be submitted to:
Zhe Song
Email: CCFR@sem.tsinghua.edu.cn

Submission Deadline: Feb. 28, 2013

Conference Costs:
The conference does not charge any registration fee, and will cover accommodation expenses for one presenter of each accepted paper.

About CCFR:
Founded in 2002, China Center for Financial Research, Tsinghua University (CCFR) is dedicated to high quality research in finance. It aims at providing a first-class open research platform to support and promote research on China's financial system, including the development and regulation of financial markets and financial institutions, the governance of corporations, and government financial policies.

RICHARD EASTERLIN'S IMPACT ON THE GROWTH DEBATE

Summary of a special newspaper article "The limits to growth: The logic of the more and more." (In German: Grenzen des Wachstums. Die Logik des Immer Mehr", from Patrick Bernau, in the "Frankfurter Allgemeine Sonntagszeitung" from March 4th, 2012, page 41-42.)

By Jennifer Gulyas, Research assistant of Wolfgang Glatzer, Goethe University Frankfurt am Main

An article published in the popular German newspaper "Frankfurter Allgemeine Sonntagszeitung" concerns the discussion about "economic growth," references the "Limits to Growth Report" published 40 years ago in 1972, and the search for the answer to the question, if money makes people happy. Of course, Richard Easterlin, our ISQOLS colleague, plays a significant role. The article is part of the special section "The limits to growth" and it continues with an Interview with Dennis Meadows. After that, different people recount what the Meadows book has meant in their lives, and the special section ends with articles about decreasing oil resources and the popular game Ecopolicy. In the following, you may read more to get an impression of what the article -"The logic of the more and more"- is about.

The article "The logic of the more and more" recalls the report "The Limits to Growth" from the MIT-Researcher Dennis Meadows. Today it is about 40 years since the report was published with his thesis that: "If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years." (Meadows 1972)

We are running into a population trap, like Thomas Malthus prophesied at the end of the 18th century. The dark prophecy of Meadows fitted well to the problems of the time because the post-1968 generation had initiated a value change and more and more people were thinking about environmental problems and there were more and more reports about worse famine in the third world, caused by population growth. So, the report became very famous and scientists, as well as politicians, were discussing whether the report was right or wrong. The customer of the report "The Club of Rome" was awarded the Peace Prize of the German book trade. As of today, 30 million copies of the report have been published and it was translated into 30 languages.

The influence of the report was tremendous, stimulating people to rethink, and the idea in the people's minds grew that economic growth is risky. In order that an economy can grow, it is necessary to use resources, everything gets fatter and in the end the creation dies. Claus Leggewie, a German political scientist, says that "qualitative Growth" is the current motto, this means that growth still is worthwhile, but everything should be done to make growth sustainable:"The reconciliation of ecology and economy." But the hierarchy of values has changed and now even economists question if economic growth is really the first goal to achieve. Aren't there more important goals and values which are worthy to strive for?

Nicolas Sarkozy recognized this trend very early and he initiated the initiative "Beyond GDP". The report was released in 2009.

The German government followed with the Enquete Commission "Growth, Prosperity and Quality of Life". And now the debate about qualitative economic growth is also up to date in politics. This is that money should not be the focus, but rather happiness, environmental protection, and justice. Besides, money doesn't make us happy, as the saying goes.

And - as we all know – empirical evidence for this thesis has been especially provided by Richard Easterlin: In fact, people in rich countries are mostly happier than the poor ones, but rich countries as a whole are hardly happier than poor countries. At least from the moment when basic needs are satisfied, the wellbeing of people grows slowly or not at all, although the growth of the economy continues. So why do we cause this environmentally damaging growth effort, if the happiness of people isn't increasing, too? In other words: If somebody earns more than 60,000 Euro, economic growth doesn't influence his happiness, even if he earns more and more. In the Easterlin World, all that people can achieve with growth is the "hedonistic treadmill". People are happy, as far as they have more money than before or more than their neighbors, so they make an effort to achieve more, but they won't get really happy, because money creates only short term happiness. According to the author, the treadmill shows how striving for happiness automatically creates growth. And people have improved the economic world as a side effect of this treadmill. An American economist Tyler Cowen thinks that a lack of ideas is the reason for the recent economic weakness and not a lack of resources. According to his thesis, the last few years may have shown that Easterlin could be wrong and growth makes people happier. This alternative thesis was initiated in 2008 by Betsey Stevenson and Justin Wolfers (S-W). They studied the data and showed a positive link between average levels of subjective well-being and GDP per capita across countries. The author of the newspaper article doesn't mention Easterlin's response to the critique of S-W, which was released in 2010. He states that Stevenson and Wolfers estimation of a positive short-term relationship between life satisfaction and GDP is correct. But the long-term relationship which is nil, tells another story.

The conclusion of the newspaper article is that on the one hand growth makes people happy, but on the other hand the pursuit of happiness brings growth. Many researchers are still engaged in this continuing discussion; this is a challenge for quality of life research and not just for Richard Easterlin.

References

Easterlin, R., et al. (2010): The happiness-income paradox revisited. http://www.pnas.org/content/107/52/22463.full, 30.03.2012.

Stevensond, B./ Wolfers, J. (2008): Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox. Brookings Papers on Economic Activity. http://bpp.wharton.upenn.edu/betseys/papers/Happiness.pdf, 30.03.2012.

ENCYCLOPEDIA OF QUALITY OF LIFE RESEARCH PROGRESSES

On July 30, 2012 all of the Encyclopedia's Editorial Board Members and authors received the following update of progress. Although exact numbers change daily as some new topics and authors come in, others go out, essays are submitted, revised and approved, progress may be briefly summarized thus.

1. We have 156 Editorial Board Members.

2. We have identified 2475 topics for inclusion.

3. 2475 (100%) of the 2475 topics have been selected by a Board Member.

4. 2218 (90%) of the 2475 selected topics have been connected to authors by a Board Member.

5. 1648 (67%) of the 2475 topics have essays submitted.

6. 1380 (84%) of the 1648 essays submitted have been approved (56% of the 2475).

Compared to our last update, we have made good progress in every case.

There has been about a month delay getting production started at the press. However, I am glad to say that once production of essays in DOI form begins, it will deliver about 200 essays per week. These peer reviewed essays will be online just as articles published in Springer's journals appear online in Online First prior to hard copy publication.

It has become clear that some editors were not aware that they should follow up with their authors to make sure they deliver as promised and some authors are not responding to emails from editors who have followed up. Machine reminders stop at 3 and in any case are a weak substitute for the expression of concern coming from an editor.

Shortly after Board Members get this update, the Associate Editor, Maurine Kahlke, will send each editor a list of his or her own topics. It is important for editors to respond to Maurine's email even if there are no problems and an editor's essays are all in. We need to know exactly where we are with respect to all topics in order to know where we have to put our resources to push the project forward.

Our deadline for getting essays into the ebook and hard copy versions is still November 1, 2012. We still have 44% of assigned essays to be approved. Therefore, all Editors are urged to get as many as possible of their essays submitted and approved before November 1, 2012.

We still expect publication of the ebook and hard copy in the spring of 2013, but we will have to continue to work hard to make this happen. Thanks again for all your help. Let me or Maurine (pmhatch@shaw.ca) know if you have any questions or comments.

~ Alex C. Michalos

THE 11TH ISQOLS CONFERENCE "DISCOVERING NEW FRONTIERS IN QUALITY OF LIFE RESEARCH" VENICE, ITALY, NOVEMBER 1 TO 4,

Dear Members of ISQOLS and readers of SINET,

As already announced, after Florence, where the 9th ISQOLS conference took place in 2009, the 2012 ISQOLS Conference is back to Italy. In fact, the 11th Conference will take place in another extraordinary Italian city, Venice, considered one of the most beautiful cities in the world. The venue is located at San Giobbe Campus, where the Economics Department of the University of Venice Ca' Foscari" is housed.

The organization of the Conference is well along. More than 280 abstracts have been submitted to more than 70 chairs and co-chairs of the proposed tracks. The Local Organizing Committee is now busy in arranging the program, which will include more than 55 parallel sessions. The presentations will concern quality of life with reference to different issues (World Regions and International Comparisons, Population Segments, Demographic Issues, Life Domains Issues, Territorial Issues, Social Capital Issues, Conceptual Issues, and Methodological and Technical Issues).

The Conference Program Committee soon will define special events (such as roundtables, special lecturers, etc.). All these lead to the expectation of a very successful conference in Venice. The registration opened on August 1, 2012. Those who prefer can take advantage of that procedure and also book a suitable accommodation.

More information on location, registration procedure, accommodations, and other issues are published at the conference website (www.aiquav.it/isqols2012/).

We are looking forward to seeing many of you at Venezia's Laguna!

With best wishes,

Filomena Maggino

Conference Chair and President of ISQOLS

THE INTERNATIONAL SOCIETY FOR QUALITY-OF-LIFE STUDIES:

HEADQUARTERS AND WWW

The International Society for Quality-of-Life Studies (ISQOLS) was formed in the mid-1990s. The objectives of ISQOLS are: 1) to stimulate interdisciplinary research in quality-of-life (QOL) studies within the managerial (policy), behavioral, social, medical, and environmental sciences; 2) to provide an organization which all academic, business, nonprofit, and government researchers who are interested in QOL studies can coordinate their efforts to advance the knowledge base and to create positive social change; and 3) to encourage closer cooperation among scholars engaged in QOL research to develop better theory, methods, measures, and intervention programs.

Denis Huschka recently has taken over the Executive Director and Treasurer for ISQOLS from Joe Sirgy, and the ISQOLS Central Office has moved from Blacksburg, Virginia, USA to Berlin, Germany. Denis's contact information: Denis Huschka, Executive Director, ISQOLS, Mohrenstrasse 58 10117 Berlin, Germany; Fax: +49-(0)3089789-263 E-Mail: ed@isqols.org

The year 2012 membership fees are US$75 for regular members and $50 for students or retired persons. Anyone interested in knowing more about ISQOLS should contact Denis.

E-mail: office@isqols.org

Website: www.isqols.org

SINET

Subscription Information

SINET

Kenneth C. Land, Editor
Department of Sociology
Box 90088, Duke University
Durham, NC 27708-0088 USA
151-1057-6936-22940