



# Introduction to Biopsychosocial Approaches to Studying the Development of Aggression

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To study the development of aggression in and throughout childhood and adolescence is important because aggressive behaviours are associated with many problematic outcomes such as delinquency, substance misuse, criminal offences, and related problems of psychosocial malfunction. Being aggressive in childhood and adolescence is frequently linked with longer-term negative developmental trajectories with pessimistic prognoses for adult functioning and wellbeing. Studies on risk factors and proximal developmental processes playing a role in the aetiology of aggressive behaviours can form the basis for developing preventive and intervening strategies for reducing the likelihood of problematic developmental trajectories.

Current research in the field of aggression is characterized by manifold research approaches and methods ranging from the identification of antecedents, correlates, and consequences of aggressive behaviours to the investigation of cultural influences on aggressive behaviours or the analysis of proximal developmental processes. The Special Section of this issue of the ISSBD newsletter aims to introduce innovative approaches to research and theory development in aggressive behaviours. Thereby, findings on developmental pathways of aggressive behaviours from several famous longitudinal studies are summarized. Furthermore, special attention is given to research focussing on the biological proximal processes associated with aggressive behaviours in humans (e.g., by investigating the role of hormones), and also cultural influences of the perception and acceptance of different aggressive acts will be discussed. In this newsletter, researchers from Austria, Finland, India, Iran, Japan, Spain, and the US introduce recent findings in the area of aggression and discuss further research avenues. The methods used in the different research groups reflect the diversity of contemporary approaches, ranging from longitudinal studies to cross-cultural studies that involve samples from many countries. Additionally, experimental designs, study designs involv-

ing the investigation of biological markers, and also studies using animal models were carried out to gain a deeper insight into the development of aggression.

Additional examples of research programs focused on understanding aggression are presented within the section of the newsletter highlighting "Reports from the Lab." Narratives in this section report on scholars' everyday working conditions and collaborations within a research setting that may be unusual or challenging. In this issue, we introduce a lab in Brazil where the development of aggressive behaviours is studied within at-risk populations that are confronted with severe and multiple adversities. Another lab report from Italy highlights options and challenges of community based preventive strategies in order to reduce problem behaviours in high-risk adolescents.

Although the development of aggression is today believed to be influenced by biological, social, psychological, and cultural factors, very seldom do studies investigate and test complex models (mostly only single aspects are in focus). We hope that the studies summarized in the Special Section of this newsletter issue offer stimulating ideas for integrative and interdisciplinary approaches to research and theory advancement in the study of development of aggression by scientific teams around the globe.

## A Comparative-Developmental Account of Aggressive Behavior in *Mus musculus* and *Homo sapiens*

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The origins of aggression sometimes are assumed to reside in nature, in the individual as genes, hormones, or indelible and irreversible early experiences. The complementary assumption is that aggressive propensities are acquired in the nurturing social contexts of individuals. These two assumptions were brought into developmental perspective in recent decades as the proposition that individuals inherit a particular kind of social environment in consort with their individual physiological inheritance. This syncretic view configures nature and nurture as interweaving aspects of an evolving whole. Accordingly, two approaches to developmental study are considered in this discussion: studies with experimental designs using animal models and observational/longitudinal studies of human social development. The aim is to locate some points of similarity, to highlight distinctive aspects of each approach, and to seek some synergism in the contrasting levels of analysis and kinds of questions that arise from comparative and developmental approaches.

However, the gloomy fact is that investigators carrying out research with both animal models and humans are very few. A remarkable exception is the life work of Robert B. Cairns. In his program of comparative research, he addressed the origins and the developmental plasticity of aggressive behavior using an animal model. He also originated a landmark longitudinal study to comprehensively assess the social adaptation of aggressive children as they grew into young adulthood. We briefly touch on the Cairns studies, and we each present some of our ongoing work, aiming for the comprehensive developmental integration that Robert Cairns proposed.

### **Selective Breeding for Aggression and the Effects of Social Context**

The initial impetus for establishing a colony of selectively bred mice followed from Cairns' interest in the immediate behavioral determinants of aggressive escalation or friendly encounters in dyadic encounters. One problem with this model was that mice generally were not inclined to fight each other. Cairns utilized an ecologically sound approach to increase aggressiveness: housing each male in isolation from other mice. After three weeks of isolation housing, males became hyperreactive to touch, including

the investigatory sniffs of test partners. (Test partners had been housed in small groups.) These mild levels of social stimulation set off volleys of attacks in some isolation-housed males, while others responded with tonic immobility (freezing). Some males showed both reactions in the 10-minute observation. To obtain reliably aggressive mice for use as subjects, Cairns and colleagues carried out a program of selective breeding, producing within 3 generations a line of mice that would fight reliably after isolation housing, and a line of mice that would almost never fight, but would freeze in the dyadic test.

The analysis of selective breeding effects over generations revealed a process of heterochrony, changes in developmental timing over generations of selective breeding. The result was not to change the species-typical form of aggressive behavior, but to delay its appearance in ontogeny for males from the low-aggressive line (Cairns, Gariépy & Hood, 1990; also see Gariépy, Bauer & Cairns, 2001). However, selection effects were apparent only after isolation housing: group-housed males from the high-aggressive line showed little aggressive behavior in the dyadic test, and group-housed males from the low-aggressive line showed little freezing.

After 28 generations of continuous selection pressure, one might expect some spread of aggressive expression, with more fighting in the high-aggressive line under a variety of conditions, including group housing. However, Figure 1 belies that expectation, with no change over 28 generations of selective breeding in the effect of isolation and group housing on fighting. This result indicates that aggressive behavior, even extreme levels of aggressive behavior in selectively bred males, depends on social context. In this sense, context trumps genetics (Hood, 1995; 2005; also see Hood, Dreschel, & Granger, 2003, on maternal effects. See Booth, Johnson, Granger, Crouter, & McHale, 2003 for hormone/context effects in humans).

If the relatively simple implementation of social housing eliminates line differences in isolation-induced aggression in mice, even after many generations of selection pressure, might there also be strong effects of social contexts for optimizing prosocial development in other species? Some studies of children and their families support the probability that this is indeed the case, that sometimes, context trumps genetics (e.g., Caspi, McClay, Moffitt, Mill, Martin, Craig, et al., 2002).

### **The Longitudinal Study of Aggressive Children**

To characterize the peer social context and changes in individual adjustment over time for aggressive youth, Robert Cairns, along with Beverley Cairns, launched the landmark Carolina Longitudinal Study (Cairns & Cairns, 1994). A total of 695 children were recruited from suburban and rural schools of North Carolina, with 220 children first seen at age 10 (grade 4) and 475 children first seen at age 13 (grade 7). These children were followed up annually until the end of high school, and then assessed at ages 20 and 24. Remarkable retention rates were maintained throughout the study. Embedded in the total sample was a subsample of children designated by teachers as highly aggressive (physically) and matched controls ( $n = 80$ ). Aggressive encounters of these aggressive and control children at

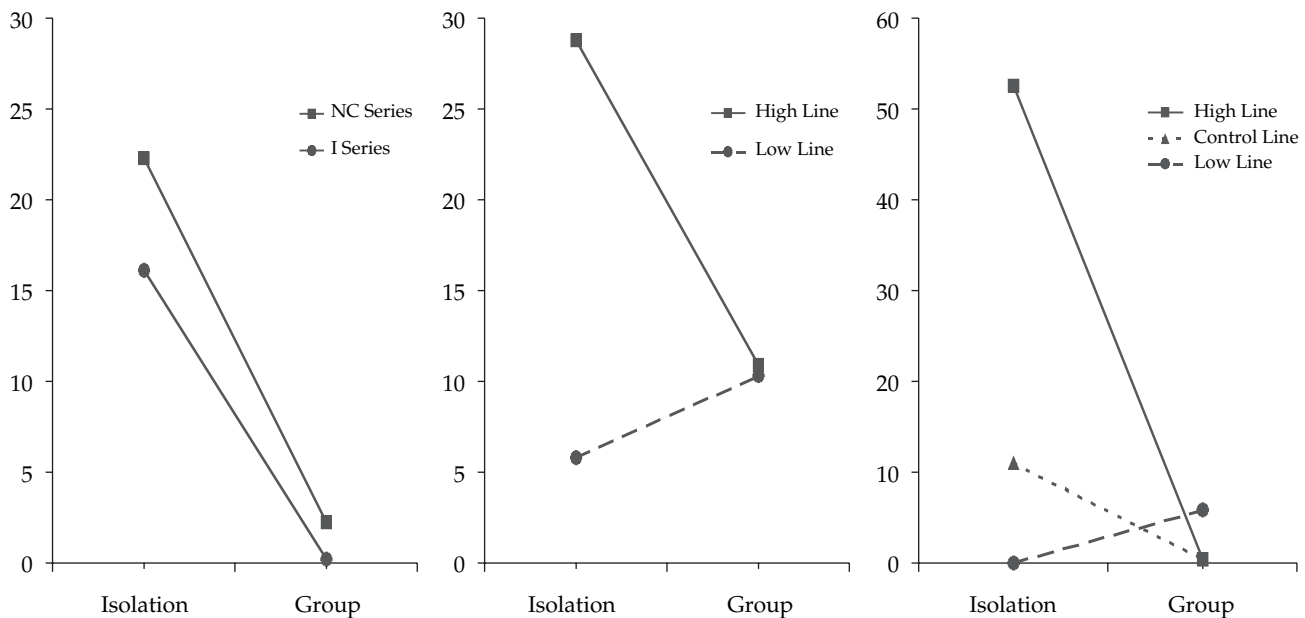


Figure 1. Context (isolation or group housing) trumps selective breeding for attack frequency in a 10 min test. At left are two groups of male mice from the foundation strain, ICR (CD-1), under isolation or group housing. The center panel shows line differences in attack frequency in selectively bred males from the 6th generation of selection. The right panel shows line differences in attacks in the 26th generation with three lines: high-aggressive, low-aggressive and a control line bred without selection pressure.

school were observed in seconds and minutes, and their individual adjustment was assessed for more than a decade. In microanalyses of the observed interactional patterns of this subsample, Cairns and colleagues found that aggressive youth had a lower threshold to respond aggressively towards a provocation, and were more likely to be provoked by their peers in school (Cairns & Cairns, 1994).

Transcending the limits of direct observation, Cairns developed a procedure in which children identify members of peer social groups (Cairns & Cairns, 1994). The procedure has shown reliable correspondence with observed interactions among members of a network (Cairns, Perrin, & Cairns, 1985; Gest, Farmer, Cairns, & Xie, 2003). This methodological advance has yielded solid evidence that physically aggressive children are as likely as non-aggressive children to be included in a peer group, and aggressive youth may be popular or highly prominent in their networks (e.g., Rodkin, Farmer, Pearl, & Van Acker, 2000; Xie, Cairns, & Cairns, 1999). However, the kind of peer group a child inhabits can make a difference in their subsequent adjustment. Negative peer characteristics (e.g., aggression, low academic competence) increase the risk for maladjustment (e.g., Xie, Cairns, & Cairns, 2001), while positive peer characteristics (e.g., participation in extracurricular activities) increase the child's protection from subsequent maladjustment (Mahoney, 2000).

Substantial fluidity is evident in the adjustment of aggressive youth, despite the robust risk associated with physical aggression. Even among the most aggressive youth who later in life experienced multiple maladjustments, some periods of positive adjustment can be identified along their developmental pathways. Cairns and Cairns called it the phenomenon of "one good year" (Cairns & Cairns, 1994). In the annual assessments from

childhood to early adulthood, a year with adequate adjustment could be identified for virtually every aggressive youth. Most of the time, the good year was associated with a significant adult in the youth's life, such as an engaging and caring teacher. The fluidity of adjustment shown in the prevalence of "one good year" in aggressive youths' experience underscores the potential for intervention and redirected pathways among aggressive youth, if sustained lifelines are provided.

Little attention had been directed to girls' aggression when Cairns and colleagues published their report of gendered developmental patterns in social aggression (Cairns, Cairns, Neckerman, Ferguson, & Gariépy, 1989). At some time in middle childhood, as social contexts change and children become more advanced in social cognitive skills, a sophisticated form of aggression, social aggression (e.g., gossip, alienation, isolation) emerges as a strategy in conflicts among girls. Social aggression appears later in the developmental trajectory of boys. Compared to physically aggressive youths, the perpetrators of social aggression are less likely to be identified, thus avoiding retaliation and punishment (Xie, Cairns, & Cairns, 2002). Peers as confederates and co-conspirators in social networks play an indispensable role in the effective use of social aggression, and those who are skilled in social aggression are often popular and central in peer social networks (e.g., Cillessen & Mayeux, 2004; Lease, Kennedy, & Axelrod, 2002; Xie, et al., 2002).

### Comparative Considerations

To consider more broadly the impact of social contexts on aggressive interactions, the findings presented in these two programs of study can be compared as functionally similar or formally equivalent. Two parallel outcomes are of

interest, with aspects of nature and nurture in each: changes in developmental timing of the onset of aggressive expression, and the power of social contexts to alter the quality of social development.

Alterations in the timing of developmental change, or heterochrony, is evident in the delayed expression of two forms of aggression. In the animal model, selective breeding over generations produced a delay in the expression of aggression in the low-aggressive line. In addition, sex differences in aggression show a pattern of heterochrony. Female mice increase in aggressiveness at midlife, much later than the male peak in early adulthood (Hood & Cairns, 1988; Hood, 1992). By comparison, in the Carolina Longitudinal Study, boys are delayed in their use of the strategies of social aggression. This delay may be due to socially structured contexts with culturally proscribed values about masculinity, or to later development of social cognitive skills among boys, or both.

Social isolation and restrictive or competitive social contexts promote aggressive behaviors in both animal and human studies. In the animal model, social isolation produced hyperreactive mice, and some were likely to attack in social settings. A functional similarity in the Carolina Longitudinal Study is the finding that aggressive children are hyperreactive to provocation, but most have "one good year" with improved adjustment, most often in relationship with a supportive teacher. A question that follows is whether aggressive behavior in children is motivated by the pain of social isolation, exclusion, or alienation (Eisenberger, Lieberman, & Williams, 2003). Pain increases aggression in animals and humans, but pain from social isolation or bullying might be ameliorated by socially inclusive practices and structures implemented by teachers, peers and families. Just such a recommendation was key among responses to the increase in lethal school shootings in the US, where unusually high rates of violence obtain (Moore, Petrie, Braga, & McLaughlin, 2003; also see Klein, 2006; Kuperminc, Leadbeater, & Blatt, 2001). Moves are afoot to deliberately construct schools in the US to promote positive and inclusive social contexts (Jimerson & Furlong, 2006).

From a comparative perspective, naturally living groups and unplanned events can serve to highlight the potential for long-term cultural change. Such an occurrence was observed by Robert Sapolsky (2006), when a group of free-living savanna baboons under study in Kenya lost their most aggressive males, which were accidentally poisoned while competing for contaminated food. Subsequently in the new troop social structure, threats and attacks were markedly reduced and the rate of affiliative behaviors increased substantially. Twenty-some years and several generations later, young in-migrating males continue to adopt the distinctive low-aggressive culture of this particular troop, despite their early experience in other more typically aggressive troops. This anomalous innovation in troop social relations seems to be continuously engendered across generations by a context of intense socialization provided by females, which welcome young males with high rates of grooming and acceptance behaviors. These particular females also may be selectively breeding for lower levels of aggressive behavior by accepting some males into the troop, and not others.

This finding exemplifies a fundamental proposition

from Bob Cairns: that lasting change may depend on coordination at multiple levels. From a syncretic point of view, fresh adaptations in individuals and institutions may occur at multiple levels, as nature/nurture novelties, accidental events and relationships expanding the capability for supporting much more than one good year. Imagine shimmering possibilities arising from fluid co-adaptations of individual and cultural change, springing from nature to nurturing contexts, reflecting the promise of positive transformation.

## References

- Booth, A., Johnson, D.R., Granger, D.A., Crouter, A.C., & McHale, S.M. (2003). Testosterone and child and adolescent adjustment: The moderating role of parent-child relationships. *Developmental Psychology, 39*, 85–98.
- Cairns, R.B., & Cairns, B.D. (1994). *Lifelines and Risks: Pathways of Youth in Our Time*. New York: Cambridge University Press.
- Cairns, R.B., Cairns, B.D., Neckerman, H.J., Ferguson, L.L., & Gariépy, J.-L. (1989). Growth and aggression: I. Childhood to early adolescence. *Developmental Psychology, 25*, 320–330.
- Cairns, R.B., Gariépy, J.-L., & Hood, K.E. (1990). Development, microevolution, and social behavior. *Psychological Review, 97*, 49–65.
- Cairns, R.B., Perrin, J.E., & Cairns, B.D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence, 5*, 339–355.
- Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I. W., Taylor, A., & Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. *Science, 297*, 851–854.
- Cillessen, A.H.N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in association between aggression and social status. *Child Development, 75*, 147–163.
- Eisenberger, N.I., Lieberman, M.D., & Williams, K.D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science, 302*, 290–292.
- Gariépy, J.-L., Bauer, D.J., & Cairns, R.B. (2001). Selective breeding for differential aggression in mice provides evidence for heterochrony in social behaviours. *Animal Behaviour, 61*, 933–947.
- Gest, S.D., Farmer, T.W., Cairns, B.D., & Xie, H. (2003). Identifying children's peer social networks in school classrooms: Links between peer reports and observed interactions. *Social Development, 12*, 513–530.
- Hood, K.E. (2005). Toward an integrative account of the development of aggressive behavior. In D. M. Stoff & E.J. Susman (Eds.), *Developmental psychobiology of aggression* (pp. 225–251). New York, NY: Cambridge University Press.
- Hood, K.E. (1995). Dialectical and dynamical systems of approach and withdrawal: Is fighting a fractal form? In K. Hood, G. Greenberg, & E. Tobach (Eds.), *Behavioral development: Concepts of approach-withdrawal and integrative levels. The T. C. Schneirla Conference Series, Vol. 5* (Ch. 2, pp. 19–76). New York: Garland Press.
- Hood, K.E. (1992). Female aggression in mice: Developmental, genetic, and contextual factors. In K. Björkquist



- & P. Niemelä (Eds.), *Of mice and women: Aspects of female aggression* (pp. 395–402). Academic Press.
- Hood, K.E., & Cairns, R.B. (1988). A developmental-genetic analysis of aggressive behavior in mice: II. Cross-sex inheritance. *Behavior Genetics*, 18, 605–619.
- Hood, K.E., Dreschel, N.A., & Granger, D.A. (2003). Maternal behavior changes after immune challenge of neonates with developmental effects on adult social behavior. *Developmental Psychobiology*, 42, 17–34.
- Jimerson, S.R., & Furlong, M. (Eds.) (2006). *Handbook of school violence and school safety: From research to practice*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Klein, J. (2006). An invisible problem: Everyday violence against girls in schools. *Theoretical Criminology*, 10, 147–177.
- Kuperminc, G.P., Leadbeater, B.J., & Blatt, S.J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology: Special Issue: Schooling and Mental Health Issues*, 39, 141–159.
- Lease, A.M., Kennedy, C.A., & Axelrod, J.L. (2002). Children's social constructions of popularity. *Social Development*, 11, 87–109.
- Mahoney, J.L. (2000). School extracurricular activity participation as a moderator in the development of antisocial patterns. *Child Development*, 71, 502–516.
- Moore, M.H., Petrie, C., Braga, A., & McLaughlin, B.L. (Eds.) (2003). *Deadly lessons: Understanding lethal school violence*. National Research Council Institute of Medicine of the National Academies. Washington D.C.: The National Academies Press
- Rodkin, P.C., Farmer, T.W., Pearl, R., & Van Acker, R. (2000). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology*, 36, 14–24.
- Sapolsky, R.M. (2006). Social cultures among nonhuman primates. *Current Anthropology*, 47, 641–656. Also see: A natural history of peace. *Foreign Affairs*, January/February, 104–120. [www.foreignaffairs.org/20060101faessay85110/robert-m-sapolsky/a-natural-history-of-peace.html](http://www.foreignaffairs.org/20060101faessay85110/robert-m-sapolsky/a-natural-history-of-peace.html). Reprinted (revised) in Harper's Magazine, April 2006.
- Xie, H., Cairns, B.D., & Cairns, R.B. (2001). Predicting teen motherhood and teen fatherhood: Individual characteristics and peer affiliations. *Social Development*, 10, 488–511.
- Xie, H., Cairns, R.B., & Cairns, B.D. (1999). Social networks and configurations in inner-city schools: Aggression, popularity, and implications for students with EBD. *Journal of Emotional & Behavioral Disorders*, 7, 147–156.
- Xie, H., Swift, D.J., Cairns, B.D., & Cairns, R.B. (2002). Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescents. *Social Development*, 11, 205–224.

## Psychobiology of Aggressive Behavior: Gonadal and Stress Hormones

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The 21st century has brought with it a surge of interest in the neuroscience of hormones and behavior. This interest was facilitated by two decades of empirical studies on the connectedness of hormones and behavior in species that range from invertebrates to humans. The metamodels that guide this recent trend have evolved primarily from increasing recognition of the inherent integration of biological and behavioral systems in human development (Lerner, 1998; Magnusson, 1999; Susman & Rogol, 2004). These perspectives propose that the best way to understand aggressive behavior is to identify the dialectical nature of the interactions between biological, psychological and contextual processes. Thus, research in the psychobiology of aggression considers multiple levels of biological processes: hormones, neurotransmitters, genes. The discussion that follows reviews research from my own lab, Biobehavioral Transitions, and the labs of others who have contributed to this new and burgeoning area of hormones, social neuroscience, and development. It will focus primarily on reproductive hormones of gonadal origin and stress-related hormones.

### Why Hormones and Aggressive Behavior?

The first question to be addressed in my line of research is why consider hormones in the genesis of aggressive behavior. First, it is important to note that hormones have primarily a regulatory function and exert their influence in multiple domains: metabolism, sexual reproduction, growth, and behavior. Second, hormones regulate their effects via neuroendocrine pathways, that is, peripherally circulating hormones and brain neurotransmitters act together to influence behavior. Third, it is important to point out that hormones do not have a one-to-one co-ordinate relationship with aggressive behavior. That is, multiple hormones and other factors act together to influence behavior. Fourth, hormones do not cause behavior; rather they change the probability and intensity of a behavior. Verbal and physical acts of aggressive and antisocial behavior will occur in certain situations in individuals with specific developmental experiences (Brain & Susman, 1997). Thus, the function of hormones should not be viewed as causal but as probabilistic.

When beginning this line of research my colleagues and I considered, of course, testosterone and aggressive behavior given that androgens, like testosterone, are the hormones historically linked to human aggression. The studies linking testosterone and aggression are abundant, with reviews of this literature perhaps more abundant than the actual empirical studies. Across vertebrates and non-vertebrates, androgens are putatively elevated within minutes of being exposed to aggressive or reproductive stimuli.

Our first testosterone—aggressive—behavior study was based on hypotheses derived from studies of adult males that were based primarily on male, animal model studies showing a positive correlation between aggressive behavior and testosterone levels. We found that testosterone was infrequently related to aggressive behavior in young adolescents and when it was related, the associations tended to be negative (Susman, et al., 1985, 1987). But the relationships between testosterone and estradiol, in some cases, were moderated by pubertal stage (Nottelmann et al, 1987). Specifically, antisocial adolescents with lower testosterone tended to be later maturers based on Tanner stage criteria. Our interpretation of these findings was that later timing of puberty may be a stressful situation that suppresses reproductive hormones, which has a known interaction with stress hormones. In the same study, when we directly observed adolescents interacting with their parents, dominance and conflict in interactions with parents (Inoff-Germain et al., 1988) were characteristic of adolescents with higher concentrations of testosterone and estradiol. Of note is that young adolescent *girls* with higher concentrations of estradiol were likely to exhibit dominance while interacting with their parents compared to lower estradiol girls or boys (Inoff-Germain et al., 1988). Thus, sex differences are critical considerations when assessing hormone-aggressive behavior relations (Susman, Dorn & Chrousos, 1991). The findings relating dominance to estradiol support Mazur and Booth's (1998) later suggestion that dominance may increase the probability of aggression.

Given that sex steroids (i.e., testosterone and estrogen) are inconsistently linked to antisocial behavior in correlational, observational studies, the causal influence of sex steroid levels on antisocial behavior cannot be inferred from these studies. An experimental study is the only method for establishing cause-effect relationships between hormones and aggressive behavior. To examine causal influences, we designed a placebo-control, randomized, double blind, crossover design study wherein we administered physiological doses of testosterone (boys) or estrogen (premarin) (girls) to delayed puberty boys and girls, respectively (Finkelstein et al., 1997; Kulin et al., 1997; Liben et al., 2002; Schwab et al., 2001; Susman et al., 1998). Each 3-month treatment period was preceded and followed by a 3-month placebo period. The doses of gonadal steroids were designed to simulate concentrations in blood in healthy early (low dose), middle (middle dose) and late (high dose) pubertal age adolescents. A major finding was that significant increases in self-reported aggressive impulses and in physical aggression against both peers and adults were reported in girls at the low and middle dose but not at the high dose of estrogen (Finkelstein et al., 1997). In contrast, in boys, significant increases in aggressive impulses and physical aggression against peers and adults were seen but only at the middle dose of testosterone. Sexual activity also was affected by administering testosterone (Finkelstein et al., 1998). Administering mid-pubertal levels of testosterone to hypogonadal boys resulted in significantly increased self-reports by these boys of nocturnal emissions, touching girls and being touched by girls (Finkelstein et al., 1998). Estrogen administered to girls had no effects on sexual functioning. Significant is that treatment with estrogen resulted in increases in

adolescents' reports of aggressive behavior in girls at lower doses than was required for testosterone doses in boys. This dose-response pattern suggests that girls are more sensitive to the increase in estrogen than boys are to the rise in testosterone during puberty. In contrast, parent reported behavior problems were not as sensitive to experimental changes in hormones as was aggression. There were no effects for testosterone treatment on behavior problems in boys but increases in estrogen were paralleled by increases in withdrawal behavior in girls (Susman et al., 1998). This lack of findings can be explained by the fact that parents were the reporters and they may not be as sensitive to changes in emotions and subtle behavior as the adolescents themselves.

With regard to the effects of estrogen, given that it is an aromatized (converted) metabolite of testosterone, it may have a facilitatory effect on male aggressive behavior as has been shown in mice. In addition, given that the brain has receptors for estrogen, estrogen rather than testosterone may be the active substance in the brain. No current method exists for establishing the functional significance of testosterone and estrogen on brain neurotransmitters and social behavior in humans.

There is very little work on how hormones affect cognition and, in turn, aggression. But in one study we did show that testosterone and estrogen are related to spatial abilities in adolescents. Higher concentrations of testosterone were related to better spatial abilities in healthy young adolescents (Davison & Susman, 2001). The findings supported earlier untested hypotheses regarding the role of gonadal steroids and sex differences in cognition. Furthermore, individual differences in hormone concentrations appeared to be more highly implicated in cognitive abilities than the actual increases in testosterone and estrogen at puberty. However, experimental treatment with increasing levels of testosterone or estrogen, as described in the study above, showed little influence on cognition in delayed puberty adolescents (Liben et al., 2002). The absence of seemingly causal influences of *rising* gonadal steroids on cognition suggest that the activational influences of hormones at puberty may not play a major role in cognition and concomitant aggression in adolescents.

Prenatal hormone influence on aggressive behavior is a notion that has been around for some time but there is little research in this area. Thus, we examined profiles of hormone levels in pregnant young mothers and the temperamental qualities of the children. Prenatal maternal hormones were related to aggressive behavior in their three-year-old children. Specifically, verbal aggression and nonverbal aggression were significantly higher in children of mothers in the relatively low prenatal hormone (testosterone, estradiol and androstenedione) cluster of mothers compared to the high prenatal hormone cluster. In addition, children of mothers in the postpartum low testosterone, estradiol, and androstenedione cluster (mainly low hormone cluster) exhibited significantly more physical aggression than children of mothers in the medium hormone level cluster (Susman et al., 2001). These findings are a reminder of the early roots of aggressive behavior. The mechanisms whereby prenatal hormone exposure affects aggressive behavior are unknown. In animal model studies, variations in exposure to testosterone in utero affects the physical structure of the brain, but the degree to which these effects



are true for humans is unknown. The early relationship between hormone exposure and aggressive behavior may also reflect genetic influences. This area of research needs much more extensive research.

### **Stress, the Endocrine System, and Aggressive Behavior**

Major advances were made in the last two decades in understanding the links between stress and aggressive behavior. But prior to discussing this issue, a brief introduction to the stress system is in order. In a now classic paper, Chrousos and Gold (1992) laid out the structural anatomical and neuroendocrine aspects of the central and peripheral neuroendocrine stress systems. Briefly, the systems involved in the regulation of stress are the neuroendocrine, hypothalamic pituitary adrenal (HPA) axis, and the psychophysiological autonomic nervous system (ANS), specifically, the adrenal medullary system (SAM). Briefly, following a stressor, corticotropin releasing hormone (CRH) is secreted by the hypothalamus, followed by adrenocorticotropin hormone (ACTH) from the pituitary and cortisol from the adrenal glands. Stress reactions are evaluated by assessing cortisol concentrations (in blood, urine or saliva), the neuroendocrine component, or by measuring changes in cardiovascular (heart rate, PEP, or systolic blood pressure) and psychophysiological SAM system responses to novelty and challenge. For reviews of the SNS and aggressive behavior, see Raine (2002). The conceptual link is based on the notion that aggressive individuals have difficulty in regulating their emotions, behavior and biological systems in novel and challenging environmental circumstances. My lab has examined various aspects of the stress response from the prenatal period to older adulthood.

In general, antisocial or aggressive behavior is associated with atypical HPA axis functioning (Pajer, Gardner, Rubin, Perel, & Neal, 2001; Ramirez, 2003; Susman, 2006). An unusual and seemingly paradoxical relationship between the major stress hormone, cortisol, and aggressive behavior has been identified. Specifically, we (Susman et al., 1997) and others have shown that a low basal or unstimulated cortisol concentration, that is, hypoarousal of the HPA axis, is related to antisocial and aggressive behavior. The finding of low cortisol in more aggressive adolescents prior to a stressor, a phlebotomy procedure, was interpreted as suggesting an inability to anticipate a stressful situation.

We have also noted that hypoarousal of the stress system and antisocial behavior are related even during pregnancy. Peripherally circulating CRH in pregnant adolescents was related to antisocial behavior in early pregnancy and in the postpartum period (Susman et al., 2001). CRH is the hormone that stimulates the cascade of hormones following a stressor. In addition, CRH is implicated in healthy lung maturation in the neonate. Therefore, if CRH is lower in aggressive girls, then this becomes an additional risk for delivering a healthy, on time, gestational age infant. The hypoarousal described above in the case of CRH and cortisol and antisocial behavior also is evident in the SAM arm of the stress system during pregnancy. Specifically, low resting heart rate or low heart rate variability in children appeared to have its origin in the fetal period

(Ponirakis, Susman & Stifter, 1998). Mothers of three-year-olds with lower resting heart rate were more emotionally distressed during pregnancy. As noted above, individual differences in aggressive behavior may have early roots in prenatal development.

The link between low basal cortisol concentrations following a stressor and antisocial behavior is well established. However, there is some evidence that antisocial children are hyperreactive following a stressor. Young adolescents characterized by low basal cortisol levels that increased following a stressor were significantly more aggressive one year later than adolescents who did not change in cortisol levels or who decreased post stressor (Susman et al., 1997). That is, in our studies, reactive cortisol levels post stressor were exaggerated compared to the reactivity of nonaggressive adolescents. However, other studies showed that stress-induced increase in saliva cortisol observed in a healthy group was absent in a disruptive group of adolescents (Pompaa et al., 2006; Van Goozen et al., 2000). These differences across studies can be explained by both differences in the behavior under consideration (aggressive versus disruptive behavior) and the nature of the stressor. In brief, we and others have shown that low cortisol is a predictable biomarker of antisocial and aggressive behavior in children, adolescents and adults, and may reflect compromised neuroendocrine functioning and a fearless, stimulation-seeking temperament.

Based on the accumulation of findings, aggressive individuals are considered to have an elevated threshold for stress: they are easily bored and are not stimulated by situations that most individuals find exciting, stressful or dangerous. In humans, a hypoarousal driven aggression model is proposed. The theoretical perspective is that early adversities and inherited vulnerabilities predispose some children toward attenuation of arousal and these patterns are stable aspects of the psychobiology of antisocial behavior (Susman, 2006). The stress system is viewed as the mediator of early adverse experiences and later regulation of emotions and behavior.

### **And what is the Future of Research on Hormones and Behavior?**

Even before the future of research in this area is discussed, there is an important consideration to ponder: how should the concept of aggressive behavior be defined in relation to biological systems? Definitional issues are critical to establishing consistency across studies that include biological markers of aggression. Evolutionary theorists have told us that different situations evoke different reactions: fear, anger, dominance and violence; therefore, these situations will affect the secretion of different biomarkers. The problem is that scholars variously define aggression as reactive and proactive aggression, relational and physical aggression, dominance, and disruptive behavior. These varying concepts of aggression likely have contributed to the inconsistent findings regarding the biological aspects of aggressive behavior. Perhaps we should aspire to link the concept of aggression and its biological components to particular contexts. For example, the notion of hurtful dominance in interpersonal interactions as opposed to aggression may help to formulate hypotheses regarding the nature of aggression and hormones in situ. This line of

reasoning has been supported in a study of adolescents in which we show that testosterone levels were associated with social success rather than with physical aggression in peer interactions (Schaal et al., 1996). The merging perspective that aggressive behavior is not a unitary behavior but is part of a constellation of dominance, social success, social stress and contextual processes is likely to lead to more comprehensive and meaningful models of hormones and behavior.

With regard to stress physiology and aggressive behavior, it is clear that experiences affect stress hormone concentrations, but rather than being causal, stress hormones change probabilities and intensity of emotions and likely aggressive behavior. The concept of stress and its social roots has suggested clues to understanding how deprived and chaotic experiences and environments may influence later behavior. The study of mechanisms whereby emotions of fear and anger evoke and regulate aggressive behavior is an area where neuroscientists now have the tools for advancing understanding of brain-aggression interactions. But the extent to which emotions and behavior are regulated by hormones remains to be evaluated in different contexts. A central question with regard to regulation is whether sexual desires would be present in the absence of certain hormones. Would crying, a process in which only humans engage, occur in the absence of certain levels of neurotransmitters and hormones? The answer is, no, crying without a background of a dynamic hormonal and social milieu is not part of the human condition.

My perspective has been to believe in "big integrative models" but to work with smaller, hypothesis driven models when examining hormones and aggression. As the work in my lab continues, we are looking forward to working with our collaborators in validating new biomarkers of aggression and both reproductive and stress system hormones. Specifically, we are now incorporating into ongoing studies saliva alpha amylase as a noninvasive biomarker of the sympathetic nervous system. We will continue to use specific biomarkers to identify potential mechanisms whereby the varied experiences and contexts of development become incorporated within the self to affect development. In the words of an esteemed mentor and friend, Robert Cairns, our aim has been to "get to know the territory" wherein hormone and context lead to aggressive behavior.

## References

- Brain, P., & Susman, E.J. (1997). Hormonal aspects of antisocial behavior and violence. In D.M. Stoff, J. Breiling, & J. Maser (Eds.), *Handbook of Antisocial Behavior* (pp. 314–323). New York: John Wiley & Sons.
- Chrousos, G.P., & Gold, P.W. (1992). The concepts of stress and stress system disorders. *Journal of the American Medical Association*, *267*, 1244–1252.
- Davison, K., & Susman, E.J. (2001). Are hormone levels and cognitive ability related during early adolescence? *International Journal of Behavioral Development*, *25*, 416–428.
- Finkelstein, J.W., Susman, E.J., Chinchilli, V.M., Kunselman, S.J., D'Arcangelo, M.R., Schwab, J., Demers, M., Liben, L.S., Lookingbill, G., & Kulin, H.E. (1997). Estrogen or testosterone increases self-reported aggressive behaviors in hypogonadal adolescents. *Journal of Clinical Endocrinology and Metabolism*, *82*, 2423–2438.
- Finkelstein, J.W., Susman, E.J., D'Arcangelo, M.R., Kunselman, S.J., Schwab, J., Demers, L.M., Liben, L.S., Lookingbill, G., & Kulin, H.A. (1998). Effects of estrogen or testosterone on self-reported sexual responses and behaviors in hypogonadal adolescents. *Journal of Clinical Endocrinology and Metabolism*, *83*, 2281–2285.
- Inoff-Germain, G.E., Arnold, G.S., Nottelmann, E.D., Susman, E.J., Cutler, G.B., Jr., & Chrousos, G.P. (1988). Relations between hormone levels and observational measures of aggressive behavior of early adolescents in family interactions. *Developmental Psychology*, *24*, 129–139.
- Kulin, H.E., Finkelstein, J.W., D'Arcangelo, R., Susman, E.J., Chinchilli, V., Kunselman, S., Schwab, J., Demers, L., & Lookingbill, G. (1997). Diversity of pubertal testosterone changes in boys with constitutional delay in growth and/or adolescence. *Journal of Child Clinical Endocrinology*, *10*, 1–6.
- Lerner, R. (1998). Theories of human development: Contemporary perspectives. In W. Damon (Ed.), *Handbook of child psychology* (pp. 1–24). New York: John Wiley & Sons, Inc.
- Liben, L.S., Susman, E.J., Krogh, H.R., Chinchilli, V.M., Kunselman, S., D'Arcangelo, R., Schwab, J., Schwab, J., Finkelstein, J.W., Demers, L.M., Lookingbill, G., & Kulin, H.E. (2002). The effects of sex steroids on spatial cognition during induced puberty. *Developmental Psychology*, *38*, 236–253.
- Magnusson, D. (1999). Holistic interactionism: A perspective for research on personality development. In L.A. Pervin & O.P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 219–247). New York, NY: The Guilford Press.
- Mazur, A., & Booth, A. (1998). Testosterone and dominance in men. *Behavioral and Brain Sciences*, *21*(3), 353–397.
- Nottelmann, E.D., Susman, E.J., Blue, J.H., Inoff, G.E., Dorn, L.D., Chrousos, G.P., Cutler, G.B., & Loriaux, D.L. (1987). Gonadal and adrenal correlates of adjustment during early adolescence. In R. Lerner & T. Foch (Eds.), *Biological and psychological interactions in early adolescence* (pp. 246–260). New York: Lawrence Erlbaum Publishers.
- Pajer, K., Gardner, W., Rubin, R.T., Perel, J., & Neal, S. (2001). Decreased morning cortisol levels in adolescent girls with conduct disorder. *Archives of General Psychiatry*, *58*, 297–302.
- Popmaa, A., Jansen, L.M.C., Vermeiren, R., Steiner, H., Raine, A., Van Goozen, S.H.M., van Engeland, H., & Doreleijers, T.A.H. (2006). Hypothalamus pituitary adrenal axis and autonomic activity during stress in delinquent male adolescents and controls. *Psychoneuroendocrinology*, *31*, 948–957.
- Ponirakis, A., Susman, E.J., & Stifter, C.A. (1998). Negative emotionality and cortisol during adolescent pregnancy and its effects on infant health and autonomic nervous system reactivity. *Developmental Psychobiology*, *33*, 163–174.
- Ramirez, J.M. (2003). Hormones and aggression in childhood and adolescence. *Aggression & Violent Behavior*, *8*(6), 621–644.
- Raine, A. (2002). Biosocial studies of antisocial and violent





- behavior in children and adults: A review. *Journal of Abnormal Child Psychology*, 30(4), 311–326.
- Schaal, B., Tremblay, R.E., Soussignan, R., & Susman, E.J. (1996). Male pubertal testosterone linked to high social dominance but low physical aggression: A 7 year longitudinal study. *Journal of the American Academy of Child Psychiatry*, 34, 1322–1330.
- Schwab, J., Susman, E.J., Finkelstein, J.W., Chinchilli, V.M., Kunselman, S.J., D'Arcangelo, R.M., Demers, L.M., Lookingbill, G., & Kulin, H.E. (2001). The role of sex hormone replacement therapy on self-perceived competence in adolescents with delayed puberty. *Child Development*, 72, 1439–1450.
- Susman, E.J. (2006). Psychobiology of Persistent Antisocial Behavior: Stress, Early Vulnerabilities and the Attenuation Hypothesis. *Neuroscience and Biobehavioral Reviews*, 30, 376–389.
- Susman, E.J., Finkelstein, J.W., Chinchilli, V.M., Schwab, J., Liben, L.S., D'Arcangelo, M.R., Meinke, M.S., Demers, L.M., Lookingbill, G., & Kulin, H.E. (1998). The Effect of Sex Hormone Replacement Therapy on Behavior Problems and Moods in Adolescents with Delayed Puberty. *Journal of Pediatrics*, 33, 521–525.
- Susman, E.J., Dorn, L.D., & Chrousos, G.P. (1991). Negative affect and hormone levels in young adolescents: Concurrent and longitudinal perspectives. *Journal of Youth and Adolescence*, 20, 167–190.
- Susman, E.J., Nottelmann, E.D., Inoff, G.E., Dorn, L.D., Cutler, G.B., Loriaux, D.L., & Chrousos, G.P. (1985). The relation of relative hormonal levels and social-emotional behavior in young adolescents. *Journal of Youth and Adolescence*, 14, 245–252. [Reprinted in C.N. Jacklin, *The Psychology of Gender* (1991)].
- Susman, E.J., Inoff-Germain, G.E., Nottelmann, E.D., Cutler, G.B., Loriaux, D.L., & Chrousos, G.P. (1987). Hormones, emotional dispositions and aggressive attributes in young adolescents. *Child Development*, 58, 1114–1134. [Reprinted in C.N. Jacklin, *The Psychology of Gender* (1990)].
- Susman, E.J., Dorn, L.D., Inoff-Germain, G., Nottelmann, E.D., & Chrousos, G.P. (1997). Cortisol reactivity, distress behavior, behavior problems, and emotionality in young adolescents: A longitudinal perspective. *Journal of Research on Adolescence*, 7, 81–105.
- Susman, E.J., Schmeelk, K.H., Ponirakis, A., & Garipey, J.L. (2001). Maternal prenatal, postpartum, and concurrent stressors and temperament in three-year-olds: A person and variable analysis. *Development and Psychopathology*, 13, 629–52.
- Susman, E.J., & Rogol, A. (2004). Puberty and Psychological Development. In R.M. Lerner & L. Steinberg (Eds.) *The Handbook of Adolescent Psychology* (pp. 15–44). New York: Wiley.
- van Goozen, S.H.M., Matthys, W., Cohen-Kettenis, P.T., Buitelaar, J.K., van Engeland, H. (2000). Hypothalamic-pituitary-adrenal axis and autonomic nervous system activity in disruptive children and matched controls. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(11), 1438–1445.

## Justification of Aggression in Several Asian and European Countries with Different Religious and Cultural Backgrounds

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Problems of aggression and violence are one of the largest categories of childhood disorders, and plague people's interpersonal, inter-group, and social interactions. This explains the interest of investigators from a broad range of disciplines, including developmental psychology, in understanding which individuals engage in different kinds of aggression, and when and why they do so.

This article reviews and compares the patterns of moral approval of aggressive acts in different circumstances as revealed in studies conducted with different national samples. Although there are many studies that make comparisons among a small (usually two) number of nations, our purpose is to offer a broader comparison in the hope that a more global approach can reveal even deeper insights about similarities and differences across different national groups. We expected to see similar, but not identical features in the overall patterns of justification of aggression in the different countries. To a certain extent their justification would be presumed to correspond to rules based on common sense: mild acts, such as verbal aggression, would be more acceptable than stronger ones involving physical aggression; gross provocation would permit greater approval than unprovoked aggression; and people would be more likely to approve of acts motivated by altruism than by selfishness.

There is good reason to assume that societies have some moral rules under which some forms of aggression become acceptable under particular circumstances. Are these codes unique to each society? Or, on the contrary, is there a certain universality of norms and beliefs? Although it is likely that the influence of the psychosocial environment on behavior cannot be disentangled from the biological one, cross-cultural studies can help us understand which biosocial processes are involved in aggression. One way of understanding human aggression therefore is viewing it from a cross-cultural perspective (Segall, 1988). Such a comparison may lead to interesting conclusions, allowing us to consider the extent to which beliefs about the morality of particular

aggressive acts might be universal, perhaps embedded in our biology, or the degree to which they may be affected by culture or specific circumstances.

I started by asking students from four different Spanish regions how they would accept several categories of aggressive acts of different levels of intensity and quality in different types of justifying situations. Only minor differences among them were reported (Ramirez, 1986a, 1993). Later the same questionnaire was applied to students from other European countries (Poland and Finland), investigating not only whether the situation affected a person's attitude towards aggression but also whether one's culture and environment had a significant effect on the acceptance of aggressive acts. The degree of acceptance of interpersonal aggression was very similar in these two populations and was also very similar to the level of acceptance discovered in the four Spanish regions (Ramirez, 1991).

This consistency in moral judgments by people of such different societies would suggest the existence of a universal moral code. All the countries studied however, were European and, although each had its own culture, language, and customs, to some extent they shared a common Christian background. Before making a more general statement, applicable to all of humanity, it would be advisable to make further comparisons with other cultures of quite different cultural and religious backgrounds.

### Strategies of our Cross-cultural Studies

For this purpose, our cross-cultural studies followed two different strategies. The first was to analyze justifications of aggression in several societies in Asia and the Middle East with different cultures and religious backgrounds: Japan (with a Xintoist background), India (predominantly Hindu), Iran (Shiite Muslims), Bangladesh (Sunni Muslims), Philippines (predominantly Christian), and China, with a mix of Buddhism and Marxist atheism (Ramirez, 2001). Here we present the results of three countries: Iran, Japan, and India; research in other Asian cultures is still in progress. The second strategy was to compare justifications of aggression in countries comprising several cultures living within the same society, such as South Africa (Theron et al, 2001; Delapuenta, 2006) and Canada (Ramirez et al., 2005), where multiculturalism has become a basic value. Only the results of the first strategy are presented here.

The moral justification of several aggressive acts of different quality and intensity was analyzed in the context of different social circumstances. Undergraduate students between the ages of 18 and 21 assessed their personal degree of approval of aggression in particular circumstances. All were born in the country studied and had grown up in an urban environment (to minimize the effect of other cultural variables). Although data were collected from both sexes, here only the combined data are examined.

A questionnaire originally constructed by Lagerspetz and Westman (1980) and subsequently revised by Ramirez (1986a) was applied. Since the degree of approval would depend on the qualities of the behavior observed, its items described different types of aggressive acts in combination

with diverse situations in which they may occur. The eight categories of aggressive acts were: hitting, killing, shouting angrily, being ironic, using torture, having a fit of rage, threatening, and hindering another person from doing something. Each category of acts was accompanied by a list of six different circumstances in which the aggressive behavior may be justified, namely: in self-defense, in protecting another person, as a consequence of emotional agitation, in defense of one's property, as a punishment, or as a way of overcoming communication difficulties. No examples of the behaviors or extra information were given; the particular meanings of each of the categories were left to the respondents.

The response scale for the questionnaire varied across versions: a two-point scale (acceptable vs. not acceptable), a three-point scale (always, sometimes, never), and a four-point scale (usually, in some cases, in extreme cases, never). The questionnaire has been used in Finland (Lagerspetz & Westman, 1980; Lagerspetz et al., 1988), Britain (Benton, Kumari, & Brain, 1982), Poland (Fraczek, 1985; Fraczek, Ramirez, & Torchalska, 1987), Spain (Ramirez, 1986a; 1991; 1993), Japan and the U.S.A. (Ramirez & Fujihara, 1997; Fujihara, Kohyama, Andreu & Ramirez, 1999), Iran (Musazadeh, 1999), India (Sunni, 2005), and South Africa. Its application in other Asian countries (Bangladesh, China, and Philippines) is still in progress. Because the response scales differed, the relative rank orders of the acts are examined here.

### Acts and Situations are Justified According to their Specific Quality and Intensity

Tables 1 and 2 summarize the ranking of the justification of acts and situations in the different samples, giving us an idea of the extent to which there is consistency across cultures or differences by culture and by situation.

#### With regard to specific acts:

- It is not surprising to discover that in all populations mildly aggressive acts were more acceptable than stronger and more drastic acts (e.g., striking or shouting met with more approval than killing).
- Being ironic was the most justified act, on average, except in Finland, where it was unexpectedly ranked 5th among six.
- Verbal aggression (shouting, being ironic, rage) was considered more acceptable than physically aggressive acts in all cultures; the three different kinds of verbal aggression had a similar degree of approval.
- Passive aggression (hindering) was the most accepted act in the European average and in Iran, but rated only 4th in India and Japan.
- Threat received a higher approval rating than physical aggression, but rated lower than verbal aggression; it is interesting to point out, though, that threat was one of the most highly justified acts in Poland (1st) and in Finland (2nd), whereas it ranked the 5th in Spain and in the Asian samples.
- Physical aggression (hitting, killing, torture) was the least justified in all samples; hitting was always more approved than killing and torturing, with no notable differences between these last two.



**Table 1. Rank of Approval for Aggressive Acts in Urban Students from Several European and Asian Countries**

Country	Finland	Poland	Spain	Europe	Iran	Japan	India	Asia	Total
Year	1980	1985	1999		1999	1999	2005		
N	83	64	210		492	242	145		
Rank				Average				Average	Average
1st	hd	th	ir	hd	hd	ra	ra	ra	ir = 2.3
2nd	th	ir	ra	ir	ir	ir	ir	ir	hd = 2.7
3rd	ht	hd	hd	th	ra	sh	sh	hd	ra = 3.0
4th	sh	sh	sh	sh	sh	hd	hd	sh	sh = 3.7
5th	ir	ra	th	ra	th	th	th	th	th = 3.8
6th	ra	ht	ht	ht	ht	ki	ht	ht	ht = 4.3
7th	ki	to	ki	ki	to	ht	to	to	ki = 7.3
8th	to	ki	to	to	ki	to	ki	ki	to = 7.5

Notes. hd = hindering; ir = being ironic; sh = shouting; ra = rage; th = threatening; ht = hitting; ki = killing; to = torturing

**Table 2. Rank of Approval for Justifying Situations in Urban Students from Several European and Asian Countries**

Country	Finland	Poland	Spain	Europe	Iran	Japan	India	Asia	Total
Year	1980	1985	1999		1999	1999	2005		
N	83	64	210		492	242	145		
Rank				Average				Average	Average
1st	DO	DO	DO	SD	PU	SD	SD	SD	SD = 1.5
2nd	SD	SD	SD	DO	DP	DO	DO	DO	DO = 2.0
3rd	DP	DP	DP	DP	SD	DP	PU	PU	DP = 3.2
4th	NC	NC	EM	EM	EM	PU	EM	DP	PU = 3.8
5th	PU	PU	PU	NC	DO	EM	DP	EM	EM = 4.8
6th	EM	EM	NC	PU	NC	NC	NC	NC	NC = 5.3

Notes. DO = defense of others; SD = self defense; DP = defense of property; PU = punishment; EM = emotional reaction; NC = problems of communication.

#### With regard to situations:

- Gross provocation led to more approval of retaliation than unprovoked aggression.
- Socially justified aggressive acts, such as those conducted in protection of self or other, were clearly more accepted than ones with no such justification.
- Defensive situations—of self, property, or another person—were generally seen as more morally justified; within them, defending others and self-defense received more moral approval than defending property did. Two intriguing exceptions occurred in the Iranian sample, in which defending others was only the 5th among six, and the Indian sample, with defense of property also ranking 5th.
- Punishment and emotional reaction had a very low level of justification among Europeans, the 5th among six in all of them; but Iranians rated punishment as the most justified explanation.
- Using aggression in an attempt to resolve communication problems was seen as the least justified, especially among Asians and Spaniards, for whom this situation was absolutely unjustifiable.

A comparison of the results shows a high consistency in the level of approval of interpersonal aggression in all of the samples studied. For instance, certain acts were never justified, regardless of cultural context, and serious aggression was always less accepted than mild aggression (Wann et al., 2003). The similarity of trends among people of such contrasting cultures points to the existence of universal rules of "common sense."

These overall similarities in the hierarchy of moral approval for aggression by people of such different societies suggest a sharing of similar standards of approval, as if there were some common moral code ruling their justification. Depending upon the situation, some behaviors appear to be considered admissible by most people. If certain acts of aggression are sanctioned by their society, people may engage in these aggressive acts more frequently and with greater intensity than in societies in which the same acts commonly meet with disapproval (Ramirez, 1996). Social rules, disapproving a behavior, might inhibit whatever aggression an individual is tempted to display (Berkowitz, 1989); and the violation of a norm can foster justification or approval of aggressive retaliation.

## Biological Roots of Morality

An unsolved but unavoidable question is whether the moderating role of moral norms common to most human beings (and perhaps universal) might have a common 'natural law' basis, in terms of biological roots common to the human species, or even partially shared with other animal species. Human beings are not alone in their ability to use tools, to communicate in sophisticated ways, to have a conception of mind, and to manipulate others through aggression or reconciliation. *Homo sapiens* may not be the only species to construct a moral order. Empathy, sympathy, cooperation, a sense of justice, and perhaps even moral systems are not unique to human beings; we share them with other animal species (Ramirez, 1986b).

Empathy (the feeling of what another is feeling) is seen in chimpanzees. Cooperation is common to many animals; they know one another well enough to synchronize their behavior, and they can predict the outcome of a common effort. Wolves regularly coordinate their hunts and then share the meal; vampire bats share blood by regurgitating it for their offspring; ants, termites and bees are social insects which cooperate; dolphins and whales quickly close ranks when faced with danger and protect the most vulnerable members of the pod, or beach themselves rather than abandon a sick mate; elephants prop up a sick relative and keep a vigil until death is obvious and fondle the bones of their dead.

It is possible that moral systems grow not from some lofty sense of equality and righteousness but from the simple need to get along; they are rules to deal with internal competition in a group. From this point of view, what motivates animals to do right or wrong are the necessities and burdens of social living, a constraint we all share; for example, when resources are in short supply, fights break out. Primates combine high intelligence with intense social interaction, forming long-lasting friendships with non-relatives maintained in a tit-for-tat manner. The basis for conscious human thought about morality can be found in the behavior of other animals, which suggests a long evolutionary history for the human approach to social life. Our moral rules can be viewed as part of our biological—that is, evolutionary—heritage, something that connects us with other animals. The forces of natural selection have molded all animals. If morality is a product of natural selection, an unavoidable outcome of social living, then there is nothing so special about our particular brand of right and wrong (De Waal, 1996). Like people, other animals are organized into networks of rank and status, in which members apply force or respond to coercion; they also make calculated decisions about whom to intimidate and whom to harm. There is a deep connection between people and apes in tendencies toward aggression and violence (Ramirez, 2000).

## Cultural Influences on Moral Norms

The idea that morality is rooted in biology, however, does not preclude the influence of culture on judgments about aggression. Prevailing cultural norms and role expectations in any given society influence what is judged to be healthy self-assertion. Each society has a code, written or not, about acceptance or justification of different forms of aggression

in specific circumstances. This may explain some striking differences among the countries studied in relation to the rank orders of the acceptability of both the severity of aggressive behavior and the kinds of justification given for it, as follows:

- Irony, which was considered a quite serious offense in Finland, was one of the less harmful behaviors in the rest of the samples. This rather 'odd' finding may be due to problems of translation: the Finnish word for 'irony' is not as mild as the English word; it would perhaps be better translated as mockery, ridicule, or derision.
- Aggressive behavior as a means of punishment had very low acceptance in Europe, but relatively high approval in Asia, and was the most justified action in Iran. A possible explanation, aside from possible problems of translation, is that in Muslim countries punishment is seen as a correct way of treating somebody who has inflicted injury on others.
- The level of approval of rage was high in all countries except Finland and Poland. This is consistent with the training of Nordic children, who are expected to express themselves in 'a more reasonable way,' instead of in what is regarded in their culture as a rather juvenile, emotional way (e.g., Nordic parents often share decision-making about family issues with their children, wherein the children are expected to behave in a rational rather than emotional manner). These children are thus taught that the expression of emotion and anger is a consequence of a lack of skills.
- Nordic European countries and Japan justified emotionality less than Iran, India and Spain. This may be partially explained by the typical 'emotional' warmth of 'Mediterranean' countries, among which, sociologically speaking, these three cultures might be included.
- The unexpectedly low justification of defense of others in Iran, and of defense of property in the Indian sample, ranking only the 5th among six in both cases, could be partially explained by following arguments: 1) The low rank of defense of others by Iranian participants may be because they fear such action may be misinterpreted and result in corporal punishment. An illustrative anecdote in this context is that, in Iran, if you run over somebody, you are liable for the death penalty unless you make financial redress to the family of the person killed; this may mean, by extension, that a third party would not intervene in any dispute for fear of being implicated and punished. 2) Defense of property may rank low in India due to their conceptions of the self (as an expression of consciousness) and of karma (action/reaction); one would not want to incur reactive karma for defending something that is impermanent, such as property.

According to Bandura's social learning theory (1971), predominant attitudes in a society are an important factor in the expression of aggression: violent acts tend to be more frequent and intense in a social environment which condones violence. Although there are cases of violence that clearly cannot be tolerated in any civilized society, such as murder and torture, other behaviors may be labeled as dangerous or socially unacceptable merely because they are



offensive to group sensibilities or because they challenge or upset an immoral or unjust status quo. Judgments of aggressiveness reflect the values and interests of those doing the judging. People prevented from reaching a desired goal may become aggressive when the interference is thought illegitimate or arbitrary. Some people become aggressive even when faced with justified, reasonable, and legitimate frustrations "for which excusable reasons exist" (Dollard et al. 1939; Berkowitz, 1989). Violence is usually condoned in cases of a personal attack, such as self-defense and defense of others, as shown in the present research.

Behaviors vary depending upon the characteristics of the person confronted and the nature of the particular situation. According to the Ajzen's theory of planned behavior (1991), broad fundamental life values can influence behavior indirectly through their impact on beliefs and attitudes; and following his previous theory of reasoned action (Fishbein & Ajzen, 1975), personal attitudes act as mediating variables influencing behavior to the extent that they influence intentions to engage in that behavior (Schreurs et al., 2005). We should not dismiss the significant effect of culture on the acceptance of aggressive acts. Changes in a culture can effect changes in attitudes toward aggression, although some attitudes resist change.

Some differences in culture may be linked to differences in the way the self is conceived. Markus and Kitayama (1991) pointed out that there are strikingly different construals of the self, of others, and of the independence of the self in different cultures; and that varying views of the self influence cognition, emotion and motivation. Asian cultures, such as Japan, have an interdependent construal of the self, they are socially oriented, and they are concerned with fitting in, belonging, promoting others' goals, and being indirect. On the contrary, Europeans typically have an independent view of the self and seek independence from others. Although Markus and Kitayama did not examine the consequences of such differences on aggression, these differences are expected to affect aggression too: Japanese may be more repressed than Westerners. Furthermore, laws concerned with activities related to aggression differ in both countries (e.g., having guns is illegal in Japan but legal in America). These differences may also be linked to different degrees of justification of interpersonal aggression.

Hofstede's uncertainty avoidance dimension would lead to a different prediction. According to him (Hofstede, 1991), in high uncertainty avoidance cultures, aggressive behavior of the self and others is acceptable; however, individuals prefer to contain aggression by avoiding conflict and competition (Gudykunst & Antonio, 1993). He also points out that Japan and Spain are high in uncertainty avoidance, while Nordic countries have a low avoidance culture.

### Some Limitations

I acknowledge that the results of our analysis are limited in a number of ways. The most important limitation perhaps is that differences across age groups are not the focus of this study, although we have used samples from a large range of ages. We are aware of the importance of studies of childhood based on a developmental approach. Characteristics found in childhood may persist into adolescence and

adulthood (Coie et al., 1990). Space limitations also precluded the inclusion of developmental differences in this paper. Clearly, we need more research to clarify the role of age in the development of attitudes towards aggression.

There is a caveat related to the 'generalizability' of the present results. As in much other research, the participants were undergraduate students. Overt expressions of anger are clearly not something observed very often in normal university students; they score low on questionnaires dealing with the frequency of overt aggression and angry and aggressive attitudes.

Another limitation of the present essay is that the studies on which these comparisons were made are not fully comparable from a methodological point of view. We have different samples, different times of collecting data, and a different number of alternatives offered. Also there may be significant distortion due to difficulties with translation. Some of the 'odd' or unexpected results found in the present comparison may be explained in terms of the different meanings of a term applied in each language. Finding words that correspond well in all languages is one persistent dilemma in all cross-cultural research that depends on verbal measures.

Finally, another important question for future research is to analyze attitudes toward different kinds of aggression. For instance, Wann and colleagues (1998) observed a higher willingness to engage in instrumental aggression than hostile aggression. It will be quite appropriate therefore to develop instruments that distinguish between them. In this direction, we have recently done a new version of CAMA that distinguishes between hostile-reactive and instrumental-proactive aggression (Ramirez & Andreu, 2006; Andreu, Ramirez, & Raine, 2006).

### Conclusions

In conclusion, the present review suggests that an interaction of both biological traits and psychosocial environments impacts views of aggression: results from the six countries shows similar but not identical rankings of justification of aggressive acts in different situations, with some cultural differences. In all populations: a) mild aggressive acts were more acceptable than serious aggression; b) provoked aggression was approved more than unprovoked aggression; and c) people of all cultures were more likely to approve acts motivated by altruism than by selfishness. Our overall results suggest a certain universal moral code, although with minor differences based on sex, culture, education, and professional background. Civilizations as geographically dispersed as the Mayas of Central America, and the Asian cultures of Iran, India, and Japan share similar beliefs, practices, and signals, and deep common patterns in human development. Acceptance of aggression is a deeply rooted attitude that transcends cultural or national borders (Ramírez, 1991; Ramírez & Fujihara, 1997). Thus it can be concluded that: 1) the moral code (averaged over all combinations of situations and acts of aggression) does not favor aggressive behavior as a means of resolving conflicts, except in 'extreme cases' (Ramirez, 2000); and 2) patterns of moral approval of aggressive acts are relatively common in the contemporary world. What we have in common—the principles and values that unify us, the common roots of humanity—seems more important than

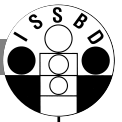
what divides us. As Bertrand Russell and Albert Einstein wrote exactly half a century ago, in their 1957 Manifesto, we should "Remember our Humanity!"

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### References

- Andreu, J.M., Ramirez, J.M., & Raine, A. (2006). Un modelo dicotómico de agresión y su evaluación mediante dos autoinformes: el CAMA y el RPQ. *Psicopatología Clínica, Legal y Forense*, 5, 25-42.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, Prentice Hill.
- Benton, D., Kumari, N., & Brain, P.F. (1982). Mild hypoglycaemia and questionnaire measures of aggression. *Biological Psychology*, 14, 129-135.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: examination and reformulation. *Psychological Bulletin*, 14, 59-73.
- Coie, J., & Dodge, K. et al. (1990). Peer group behavior and social status. In S.R. Asher & J.D. Coie, *Peer rejection in childhood* (pp. 17-59). New York: Cambridge University Press.
- De Waal, F. (1996). *Good natured: The origins of right and wrong in humans and other animals*. Cambridge: Harvard University Press.
- Delapue, C. (2006). *Agresión en Sudafrica*. Diploma de Estudios Avanzados, Universidad Complutense Madrid.
- Dollard, J., & Doob, L. et al. (1939). *Frustration and aggression*. New Haven: Yale University Press.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fraçzek, A., (1985). Moral approval of aggressive acts: a Polish-Finish comparative study. *Journal of Cross-Cultural Psychology*, 16, 41-54.
- Fraçzek, A., Ramirez, J.M., & Torchalska, B. (1987). Attitudes toward interpersonal aggression. In F. Le Moli (ed.), *Multidisciplinary approach to conflict and appeasement in animals and men* (p. 187). Parma: Istituto di Zoologia.
- Fujihara, T., Kohyama, T., Andreu, J.M., & Ramirez, J.M. (1999). Justification of interpersonal aggression in Japanese, American, and Spanish students. *Aggressive Behavior*, 25, 185-195.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw-Hill.
- Gudykunst, W., & Antonio, P. (1993). Approaches to the study of communication in Japan and the United States. In W. Gudykunst, *Communication in Japan and the United States* (pp. 18-48). New York: State University of New York.
- Lagerspetz, K., & Björkqvist, K. (1985). The moral approval of aggression inventory—revised version (unpublished).
- Lagerspetz, K.M.J., Björkqvist, K., Björkqvist, H., & Lundman, H. (1988). Moral approval of aggression and sex role identity in officer trainees, conscientious objectors to military service, and in a female reference group. *Aggressive Behavior*, 303-313.
- Lagerspetz K., & Westman, M. (1980). Moral approval of aggressive acts. A preliminary investigation. *Aggressive Behavior*, 6, 119-130.
- Markus, H., & Kitiyama, S. (1991). Culture and the self: implications for cognition, emotion and motivation. *Psychological Review*, 98, 224-253.
- Musazadeh, Z. (1999). *Agresión y su Justificación: un estudio comparado de estudiantes iraníes y españoles*. Universidad Complutense, Madrid, PhD Thesis.
- Peña, M.E., Andreu, J.M., & Muñoz-Rivas, M.J. (1997). Diferencias sexuales en el comportamiento agresivo humano. *Revista Española de Psiquiatría Forense y Criminología*, 3, 41-47.
- Ramirez, J.M. (1986a). Comparison of the degree to which aggression is acceptable in four Spanish regions. Paper presented at the 7th Biennial Meeting of ISRA, Chicago.
- Ramirez, J.M. (1986b). *Biología y Personalidad*. Barcelona: Científico-Médica.
- Ramirez, J.M. (1991). Similarities in attitudes toward interpersonal aggression in Finland, Poland and Spain. *Journal of Social Psychology*, 131, 737-739.
- Ramirez, J.M. (1993). Acceptability of aggression in four Spanish regions and a comparison with other European countries. *Aggressive Behavior*, 19, 185-197.
- Ramirez, J.M. (2000). *Agresión: Un enfoque psicobiológico*. Valencia: Promolibros.
- Ramirez, J.M. (2001). Moral approval of aggressive acts by urban students (A cross-national study in four continents). In J. Martin Ramirez & Deborah R. Richardson (Eds.), *Cross-cultural Approaches to Aggression and Reconciliation* (pp. 61-71). Huntington: NovaScience.
- Ramirez, J.M., & Andreu, J.M. (2003). Aggression's typologies. *International Review of Social Psychology*, 16(3), 125-141.
- Ramirez, J.M., & Andreu, J.M. (2006). Aggression, and some related psychological constructs (anger, hostility, and impulsivity)—Some comments from a research project. *Neuroscience and Biobehavioural Reviews*, 30(3), 276-291.
- Ramirez, J.M., Bonniot-Cabanac, M.-C., & Cabanac, M. (2005). Can aggression provide pleasure? *European Psychologist*, 10(2), 136-145.
- Ramirez, J.M., & Fujihara, T. (1997). Cross-cultural study of attitudes toward interpersonal aggression (in Japanese, with a summary in English). *Kwansei Gakuin Sociology Studies*, 78, 97-103.
- Schreurs, B., & Dereus, E. et al. (2005). Attracting potential applicants to the military: the effect of initial face-to-face contacts. *Human Performance*, 18(2), 105-122.



- Segall, M. (1988). *Cultural roots of aggressive behavior. The cross-cultural Challenge to Social Psychology* (pp. 208–217). M. Bond, Newbury Park: Sage.
- Theron, W.H., Matthee, D.D., Steel, H.R., & Ramirez, J.M. (2001). Direct and indirect aggression in women: a comparison between South Africa and Spain. In: J. Martin Ramirez & Deborah R. Richardson (Eds.), *Cross-cultural Approaches to Aggression and Reconciliation* (pp. 99–109). Huntington: NovaScience.
- Wann, D., & Carlson, J. et al. (1999). The impact of team identification on the hostile and instrumental verbal aggression of sport spectators. *Journal of Social Behavior and Personality*, 14, 279–286.
- Wann, D., & Haynes, G. et al. (2003). Sport team identification and willingness to consider anonymous acts of hostile aggression. *Aggressive Behavior*, 29, 406–413.

### COMMENTARY: *Aggressive Behavior in a Life Span Perspective*

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It was fascinating to read the three articles in this newsletter that dealt with aggressive behavior from different points of view: Hood and Xie describe results based on animal studies and human longitudinal studies, showing that both heredity and social context play a role in the development of aggressive behavior. Susman's goes further into biological processes by focusing on hormones in relation to aggression. Ramirez, in collaboration with his colleagues, investigates the justification of aggression in several Asian and European countries, and indicates that in addition to similarities between countries, there are also some interesting cultural differences. Although the papers examine aggressive behavior from such different perspectives, from basic biological processes to the cultural level, they share a common theme: namely, the complexity of the phenomenon in question. This complexity is evident not only in the different levels of factors influencing aggressive behavior; but also in the manifestation of that behavior (e.g., whether physical or verbal or social, unprovoked or provoked in nature), and in the role of gender and age in aggressive behavior.

In the following article, I will discuss some of these issues in greater detail, in the light of our findings based on the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS; Pitkänen, 1969; Pulkkinen, 2006), conducted in Finland since 1968, and other relevant research. In their excellent account of complementary viewpoints, i.e. nature and nurture, Hood and Xie suggest that "even extreme levels of aggressive behavior in selectively bred males, depends on social context". They also cite the Caspi et al. (2002) study that shows that in humans as well, context can have a stronger effect than genes. However, our findings based on the JYLS, where a cohort of randomly selected individuals has been followed from age 8 to 42, indicate that there is significant continuity in aggressive behavior from school age to middle adulthood (Kokko & Pulkkinen, 2005). A latent factor for aggression at school age was formed on the basis of teacher rated and peer nominated

aggression at ages 8 and 14, whereas a latent factor for aggression in adulthood was formed by self-rated aggression at ages 36 and 42. At each age, aggression was composed of bullying behavior; physical and verbal aggression, and low self-control of emotions. The stability estimate from the latent factor for school-age aggression to a latent factor for adult aggression was .42 in both females and males, showing that 18% of the adult aggression was explained by earlier aggression.

Considering the long time span of the study (about 30 years) and the fact that there was a change in the informant of aggression from childhood and adolescence (teachers and peers) to adulthood (self), the explained variance of adult aggression on the basis of earlier aggression can be seen as meaningful, and not just statistically significant. It is possible that part of this continuity is explained by stable individual differences in using aggression as a conflict-resolution strategy, but there can also be continuity in the social contexts that further maintain or even promote aggressive behavior. In line with Caspi, Elder and Bem's (1987) suggestion of cumulative continuity, we have observed in the JYLS that child physical aggression is linked to adolescent school maladjustment, which is further related to alcohol problems in young adulthood and subsequent long-term unemployment (Kokko & Pulkkinen, 2000). It would be interesting to examine whether these problems in social contexts such as school and work further increase the level of aggression.

Although there was significant continuity in aggression from childhood to adulthood, it is notable that about 82% of adult aggression was not explained by earlier aggression. Part of this unexplained variance may be related to the measurement issues: Aggressive behavior in childhood and adulthood cannot be measured using exactly the same items. Items such as "keeps sneering and making faces at other children" and "kicks pieces of furniture or other objects when angry about something" (see Kokko & Pulkkinen, 2005, p. 489) are not relevant for adults drawn from a representative longitudinal sample. Consequently, although conceptually similar items have been selected at different age points, slight changes in the wordings and meanings of aggression items may affect any discontinuity observed in aggression over the years. For this same reason, it makes no sense to compare absolute change in aggression scores from childhood to adulthood.

In addition to the measurement issue, discontinuity in aggressive behavior may be explained by so-called 'protective factors' against the continuity of aggression and its harmful cumulative effects. These protective factors can reside either in the individual, or in his or her social context. We found in the JYLS sample that both prosocial behavior (composed of constructive behavior; high self-control of emotions, good coping capacity, prosocial strategies, and coping with social expectations) and received child-centered parenting (composed of good parental relationship, good father-child relationship, maternal support and supervision, and no physical punishment) protected some physically aggressive children against a cycle of maladaptation that included school maladjustment, alcohol problems, and long-term unemployment (Kokko & Pulkkinen, 2000). Hood and Xie also highlight the importance of the fluidity of adjustment among the aggressive and the importance of this fluidity for targeting interventions. In the future, it would be interesting to study factors that may moderate the continuity of aggressive behavior over a long time-span, from childhood to adulthood.

We are currently analyzing (Kokko, Pulkkinen, Huesmann,

Dubow, & Boxer, 2006) the links between *general* aggression in childhood and adolescence and different forms of aggression in adulthood, such as physical and verbal aggression and low self-control of anger. These analyses are based on the comparisons of the JYLS and the American Columbia County Longitudinal Study (CCLS; Eron, Banta, Walder, & Laulich, 1971; Huesmann, Dubow, Eron, & Boxer, 2006). Due to the coding used in these studies, we were unable to draw comparable measures of different forms of child and adolescent aggression in the two studies and thus, unable to investigate the associations between different forms of child and adolescent aggression and different forms of adult aggression. Although subtypes of aggression are more highly correlated in childhood than in adulthood, it would be interesting to examine the continuity of different forms of aggression. To my knowledge, there are no studies—extending from childhood to adulthood—where this issue has drawn focus.

However, it can be expected that physical aggression, as a more extreme form of aggression than non-physical forms of aggressive behavior, shows most continuity from childhood to adulthood. One reason for this may be its stronger biological basis, as shown by twin-studies. Brendgen et al. (2005) found a greater genetic contribution for physical aggression than for social aggression. Social aggression tended to be more controlled by environmental factors. Furthermore, physical aggression is “ontogenetically” prior to non-physical forms of aggression (Tremblay, 2000). Although the order of appearance of different forms of aggression was similar in females and males, there may exist gender differences in the timing of appearance. Hood and Xie mention that social aggression appears later in boys’ than in girls’ development. This is an interesting gender difference and the authors discuss whether it may be related to cultural context or differences in the development of social cognitive skills, or both. This gender difference deserves further research.

The timing of the development of aggressive behavior in females and males in general is an intriguing research question. In line with Hood and Xie’s notion that aggression shows a later peak in adulthood among female than male mice, we found in the JYLS study with humans that boys’ general aggression at ages 8 and 14 was associated with adult general aggression, whereas only age 14 aggression in girls was linked to adult aggression (Kokko & Pulkkinen, 2005). This result implies that individual differences in aggression became stable earlier in boys than in girls. Unfortunately, pubertal status and hormonal levels of the JYLS participants were not measured in adolescence, but in accordance with the Susman paper, one could speculate that the adolescent hormone levels interacted with situational factors, in order to produce aggression in some adolescent girls. Certainly, hormones may explain gender differences in the developmental timing of aggressive behavior: It would be interesting to gain further understanding of the interactions between gender, age, hormonal levels, and aggressive behavior. Susman’s paper is an excellent review of mediating and moderating factors between hormonal levels and the appearance of aggressive behavior. The author also raises an important question related to the definition of aggressive behavior; namely, that the inconsistent findings related to the biological aspects of aggressive behavior may be explained by the inconsistent definitions of aggressive behavior: All too often aggression is used synonymously with, for example, antisocial behavior, which is a much broader construct.

Aggressive behavior and its expression are embedded in the cultural context in question. Different societies have differ-

ent tolerance levels for the expression of aggression. One way to convey the societal perspective is through the legislation. For example, in Finland, physical aggression towards children in schools was forbidden by the legislation in the early 1920s, and physical punishment of children at home was forbidden by the legislation 20 years ago. Furthermore, there are differences in violent crimes, carrying weapons etc., between the countries in question, and these differences may be reflected in the acceptance and expression of aggressive behavior. Along these lines, Ramirez and his colleagues studied the justifications individuals gave for different types of aggressive acts in six countries from Europe and Asia. Although Ramirez’ group found considerable similarities between the countries, such that mild aggression was more acceptable than more extreme forms of aggression, they also observed cultural differences. As an example of these differences, irony was considered as a much more serious aggressive act in Finland than in the other countries examined by Ramirez et al. The authors discuss whether this finding might be due to the translation problems. However, one plausible explanation for this phenomenon could be the culture of Finnish child-rearing and communication. This issue alone would merit further research.

Generally, if any cultural differences are observed, it is an open question whether the differences are “real” cultural differences or whether they are related to the differences in the measures. Another challenge is to distinguish cultural differences from cohort differences and differences among sub-cultures. It would be very important to gain further understanding of the role of cultural differences in aggressive behavior and other psychological processes. Considering the challenges faced in cross-cultural comparisons, it is amazing how consistent the results that we obtained from comparison of the JYLS with the American and Swedish longitudinal studies are. In all three cases, parental socioeconomic status, child social behavior (e.g., aggressive behavior) and childhood academic functioning predicted, via young adult occupational education, young adult long-term unemployment (Kokko, Bergman, & Pulkkinen, 2003) and middle-age occupational status (Dubow, Huesmann, Boxer, Pulkkinen, & Kokko, 2006).

I will end this commentary by citing Hood and Xie: “In the annual assessments from childhood to early adulthood, a year with adequate adjustment could be identified for virtually every aggressive youth.” The good year was often associated with having a significant and caring adult. According to another investigation, about one fifth of even the highly aggressive children also manifested prosocial behavior (Kokko, Tremblay, Lacourse, Nagin, & Vitaro, 2006). For preventive and intervention purposes, it would be extremely important to identify as early as possible the children at risk for persistent aggressive behavior and, particularly, any strengths in themselves and their environment that might help to break the cycle of cumulative maladaptation, and channel their development into more favorable directions.

## References

- Brendgen, M., Dionne, G., Girard, A., Boivin, M., Vitaro, F., & Pérusse, D. (2005). Examining genetic and environmental effects on social aggression: A study of 6-year-old twins. *Child Development, 76*, 930–946.
- Caspi, A., Elder, G.H., Jr., & Bem, D.J. (1987). Moving against the world: Life-course patterns of explosive children. *Developmental Psychology, 23*, 308–313.





- Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I.W., Taylor, A., & Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. *Science*, 297, 851–854.
- Dubow, E.F., Huesmann, L.R., Boxer, P., Pulkkinen, L., & Kokko, K. (2006). Middle childhood and adolescent contextual and personal predictors of adult educational and occupational outcomes: A mediational model in two countries. *Developmental Psychology*, 42, 937–949.
- Eron, L.D., Banta, T., Walder, L.O., & Laulicht, J. (1961). Comparisons of data obtained from mothers and fathers on child-rearing practices and their relation to child aggression. *Child Development*, 34, 849–867.
- Huesmann, L.R., Dubow, E.F., Eron, L.D., & Boxer, P. (2006). Middle childhood family-contextual and personal factors as predictors of adult outcomes. In A.C. Huston & M.N. Ripke (Eds.), *Developmental contexts in middle childhood: Bridges to adolescence and adulthood* (pp. 62–86). New York: Cambridge University Press.
- Kokko, K., Bergman, L.R., & Pulkkinen, L. (2003). Child personality characteristics and selection into long-term unemployment in Finnish and Swedish longitudinal samples. *International Journal of Behavioral Development*, 27, 134–144.
- Kokko, K., & Pulkkinen, L. (2000). Aggression in childhood and long-term unemployment in adulthood: A cycle of maladaptation and some protective factors. *Developmental Psychology*, 36, 463–472.
- Kokko, K., & Pulkkinen, L. (2005). Stability of aggressive behavior from childhood to middle age in women and men. *Aggressive Behavior*, 31, 485–497.
- Kokko, K., Pulkkinen, L., Huesmann, L.R., Dubow, E.F., & Boxer, P. (2006). *Intensity of aggression in childhood as a predictor of different forms of adult aggression: A two-country (Finland and United States) analysis*. Manuscript in revision in *Journal of Research on Adolescence*.
- Kokko, K., Tremblay, R.E., Lacourse, E., Nagin, D.S., & Vitaro, F. (2006). Trajectories of prosocial behavior and physical aggression in middle childhood: Links to adolescent school dropout and physical violence. *Journal of Research on Adolescence*, 16, 403–428.
- Pitkänen, L. (1969). *A descriptive model of aggression and nonaggression with applications to children's behaviour*. Jyväskylä Studies in Education, Psychology and Social Research, Whole Nr. 19: University of Jyväskylä, Finland.
- Pulkkinen, L. (2006). The Jyväskylä Longitudinal Study of Personality and Social Development. In L. Pulkkinen, J. Kaprio, & R.J. Rose (Eds.), *Socioemotional development and health from adolescence to adulthood* (pp. 29–55). New York: Cambridge University Press.
- Tremblay, R.E. (2000). The development of aggressive behaviour during childhood: What have we learned in the past century? *International Journal of Behavioral Development*, 24, 129–141.

## COMMENTARY: *Aggressive Behavior: The Major Challenges are Prevention and Intervention*

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In countries all over the world, a substantial number of children are engaged in or suffer from aggressive behavior. In the school context, bullying and victimization are major issues, as about 10% of the pupils at secondary level either bully their peers on a regular basis or are frequently victimized by them (e.g., Smith, 2003). Thus, getting a clear picture of the nature of aggressive behavior and its subtypes (e.g., bullying), understanding underlying mechanisms, and developing and implementing effective strategies for prevention and intervention are major goals of most of the research conducted in this field.

In the feature articles of this newsletter, three perspectives in the study of aggressive behavior are presented: a cultural comparative, a psychobiological, and a developmental approach. These three articles present excellent examples of the richness of research perspectives dealing with human aggression. The paper by Ramirez and colleagues investigates moral approval of aggressive acts in different countries, utilizing a cultural comparative design. Susman's article examines the psychobiology of aggressive behavior by focusing on hormones, neurotransmitters and genes. Finally, Hood and Xie summarize studies dealing with the complex interplay of nature and nurture in the development of aggressive behaviour in animals and humans. Thus, these papers deal with the impact of culture, biological processes and context on aggressive behaviour. Despite these different key aspects, all three approaches share the common understanding that human aggression is elicited by the complex interplay of biological, psychological and contextual processes.

In the school context, bullying—a subcategory of aggressive behaviour—is most often studied. Because my own research area lies in this field, I will discuss selected ideas presented in the feature papers followed by insights on bullying. First, I will reflect on the nature of aggressive behavior and bullying. Second, I will consider underlying mechanisms of aggressive behavior and bullying. To conclude, I will offer suggestions for prevention and intervention.

### The Nature of Aggressive Behavior and Bullying

According to the studies summarized by Ramirez and colleagues, there seems to be a universal human understanding that severe aggressive acts like killing are less acceptable than mild ones like being ironic. Humans living in different European and Asian countries share a kind of common moral understanding regarding particular behavior patterns, especially concerning extreme ones. Despite these consistencies, the cultural comparative studies reviewed by Ramirez et al. also revealed substantial variation in judgments of behavior patterns depending on situational and national context. This indicates that moral approval of particular behavior patterns is also a fluid phenomenon. From a theoretical perspective, I think this variation in judgements is most insightful. These results indicate that the range of behaviors which are considered aggressive is conditioned by the particular societal, national, cultural or

situational context. Thus, to define aggressive behavior via a number of concrete behavior patterns seems to work well only at the extreme poles. In between these poles, the same behaviour patterns are judged differently depending on context. Thus, I think it is wise to consider the definition of aggressive behavior to be a context (or culture) specific phenomenon.

Bullying—as a subcategory of aggressive behaviour—is considered to be a complex relationship problem (e.g., Pepler, 2006) including (1) intention, (2) repetition and (3) imbalance of power (e.g., Olweus, 1991, p. 413; Roland, 1989, p. 143). Bullying is also often seen as a group phenomenon determined not only by characteristics of bullies and victims but also by social relationships within the group where pupils take different roles (e.g., Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). In general, bullying includes a variety of negative acts, which can be delivered face-to-face or by indirect means. Thus, it is also not possible to define the nature of bullying by a definite list of negative behavior clusters. Rather, bullying is characterized by an intentional misuse of power on a regular basis. As a consequence, bullying occurs in permanent groups and is always embedded in a concrete relational context. Comparative cultural studies have shown that bullying in schools is a pervasive problem both in Eastern and Western countries, although its characteristics vary considerably between East and West. In Western countries, usually the dyadic nature of *bullying* is emphasized and direct forms of behavior (e.g. physical attacks, verbal insults) are found to be most prevalent. In Japan, as one example of Eastern countries, *ijime* (the Japanese term for bullying) is described as a group interaction process where subtle or indirect forms of behavior (e.g., social exclusion, ostracism) are most important (e.g., Kanetsuna, Smith & Morita, 2006).

To sum up, bullying can be defined as a subcategory of aggressive behavior including intention, power imbalance and repetition in both Western and Eastern countries. However, on the concrete behavioral and relational level, remarkable differences depending on cultural context were found indicating that the type of bullying practiced is also a context (or culture) specific phenomenon.

### The underlying mechanisms of aggressive behavior and bullying

On the level of the individual, biological and psychological processes are most often studied as underlying mechanisms of aggressive behavior. Because Susman's article focuses on biological processes, I will reflect on some results reported there. To start with the most important message first: Biology is not destiny. Hormones do not cause behavior; rather, they change the probability and intensity of behavior. Concerning hormones, the most prominent suspect with respect to aggressive behavior is testosterone. Interestingly, Susman's review suggests that sex steroids (both testosterone and estrogen) are inconsistently linked with aggressive behavior and that a causal impact cannot be inferred. Moreover, a substantial body of research focuses on the relation between stress hormones (e.g., cortisol) and aggressive behavior. In brief, results show a paradoxical relationship, namely that *low* cortisol is a predictable biomarker of aggressive behavior in children, adolescents and adults. Thus, from a psychobiological perspective, boredom and a stimulation-seeking temperament, rather than agitation, impulsiveness or over-arousal are linked with aggressive behavior. This is an interesting finding and it reminds me of the two most

important psychological mechanisms underlying aggressive behavior: reactive and proactive aggressiveness (e.g. Dodge & Coie, 1987; Vitaro & Brendgen, 2005). These results seem to indicate that stress hormones tend to induce proactive, not reactive aggressiveness. Interestingly, bullying is also considered to be a proactive form of aggression by several researchers (e.g., Sutton, Smith, & Swettenham, 1999). The concept of proactive aggression is based on social learning theory and is described as a planned behavior to reach a particular goal by using aggressive means. The dominant emotions involved with this type of aggression are pleasure and stimulation. Synonyms for this type of aggression are "cold-blooded," "instrumental" or "offensive" aggression. The studies which empirically investigated the associations between reactive and proactive aggression and bullying (e.g., Roland & Ildsoe, 2001) found an interesting developmental trend: Older pupils are most likely to bully their peers to reach a particular goal; in younger pupils the pattern is mixed. They also bully their peers as a consequence of a (perceived) provocation, threat or frustration and because of emotion regulation deficits.

In the case of proactive aggressiveness which is really an effort to achieve a social goal, a clear strategy can be formulated for prevention and intervention: Create a learning context where children and adolescents are able to get stimulation and approval via positive, pro-social behavior.

### Consequences for Prevention and Intervention

The first feature article summarizes studies which impressively demonstrate that social context makes a difference for acting out aggressively. After reviewing a series of animal studies conducted with selectively bred male mice, Hood and Xie conclude that context trumps genetics. In addition, the review of the Carolina Longitudinal Study conducted with children over more than a decade highlights the importance of social context for acting out aggressive behavior. Depending on peer group characteristics and the quality of relationships with significant adults, children previously identified as aggressive were found to be at greater or lesser risk for maladjustment in subsequent years. Change of social context led to a substantial fluidity in the adjustment of aggressive youth; even in high-risk adolescents, some periods of positive adjustment ("one good year") could be identified. Clearly, these studies have tremendous implications for prevention and intervention.

In one of our own studies (Atria, Strohmeier & Spiel, in press) we were interested in the school class as a relevant social unit for the occurrence of bullying and victimization. Having in mind the idea that classroom culture probably makes a difference for prevalence rates, we first investigated whether bullying and victimization are constant phenomena which occur in almost every school-class, or whether bullying and victimization vary from class to class. Prevalence rates of bullies and victims were analyzed separately for 86 school classes from grades 4, 6, 7, 8 and 9. Our results demonstrate a very high variability of bullying and victimization between school-classes (between 0% and 54.5%), while overall estimates on a whole-sample level were found to be consistent with numbers reported in the literature (between 5.4% and 12.8%). We interpret this variability between school-classes as a very important aspect of bullying and victimization and suggest that this point be included in the bullying debate. We think that our findings give reason: (1) to acknowledge that the class is an important social context for the occurrence of bullying and victimization, and (2) to



systematically investigate factors on a class level in order to explain these differences in future research.

The challenge of future research is to identify and to thoroughly investigate risk factors at both the group (e.g., class) and individual level for the occurrence of bullying and victimization. On a group level, factors like group cohesion or competitiveness (De Rosier et al., 1994) have been found to have an impact on aggressive behavior in experimental play groups; however, they have not been investigated in natural groups. Furthermore, many studies show the importance of teachers' behaviors in relation to the incidence of bullying and victimization (e.g., Roland & Galloway, 2002). However, there are potentially many more factors on the class level which may also impact the occurrence of bullying and victimization, including socioeconomic composition of the cohort, classroom management, occurrence of critical incidents during the school year, and teacher-parent relationships.

To sum up, these findings have enormous consequences for prevention and intervention programs. If there is such a high variability between classes, class-based intervention strategies should be the predominant method, beginning with a very careful diagnosis on both the class and individual levels. Although many programs already examine elements of the class level, adaptive approaches which keep in mind the heterogeneity between classes are lacking. An attempt to design such a class-based intervention program has been undertaken by Atria and Spiel (2007). Furthermore, the evaluation of such intervention strategies must also focus on mechanisms at the classroom level, because it is conceivable that differences between classrooms differentially impact the quality of implementation and, thus, the effectiveness of the programs. Such approaches imply that classes, in addition to individuals, should be the evaluation units.

To conclude, I believe that addressing aggressive behavior and bullying as a social phenomenon may lead to promising directions for future interventions.

## References

- Atria, M., & Spiel, C. (2007). The Viennese Social Competence (VISC) Training for pupils: Program and evaluation. In J.E. Zins, M.J. Elias, & C.A. Maher (Eds.), *Bullying, victimization and peer harassment: A handbook of prevention and intervention* (pp. 179–197). New York: Haworth Press.
- Atria, M., Strohmeier, D., & Spiel, C. (in press). The relevance of the school-class as social unit for the prevalence of bullying and victimization. *European Journal of Developmental Psychology*.
- De Rosier, M.E., Cillessen, A.H.N., Coie, J.D., & Dodge, K.A. (1994). Group social context and children's aggressive behavior. *Child Development, 65*, 1068–1079.
- Dodge, K.A., & Coie, J.D. (1987). Social information processing factors in reactive and proactive aggression in children's playgroups. *Journal of Personality and Social Psychology, 53*, 1146–1158.
- Kanetsuna, T., Smith, P.K., & Morita, Y. (2006). Coping with bullying at school: Children's recommended strategies and attitudes to school-based interventions in England and Japan. *Aggressive Behavior, 32*(6), 570–580.
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 411–448). Hillsdale: Erlbaum.
- Pepler, D. (2006). Bullying Interventions: A binocular perspective. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 15*(1), 16–20.
- Roland, E. (1989). A system oriented strategy against bullying. In E. Roland & E. Munthe (Eds.), *Bullying: An international perspective*. London: David Fulton.
- Roland, E., & Galloway, D. (2002). Classroom influences on bullying. *Educational Research, 44*(3), 299–312.
- Roland, E., & Idsoe, T. (2001). Aggression and bullying. *Aggressive Behavior, 27*(6), 446–462.
- Salmivalli, C., Lagerspetz, K.M., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1–15.
- Smith, P.K. (Ed.) (2003). *Violence in schools: The response in Europe*. London: RoutledgeFalmer.
- Sutton, J., Smith, P.K., & Swettenham, J. (1999). Bullying and "theory of mind": A critique of the "social skills deficit" view of anti-social behaviour. *Social Development, 8*(1), 117–127.
- Vitaro, F., & Brendgen, M. (2005). Proactive and reactive aggression: A developmental perspective. In R.E. Tremblay, W.W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 178–201). New York: The Guilford Press.

# Reports from the Lab

## Researching Aggressive Behavior of At Risk Children in Brazil

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For almost fifteen years, the Center for Psychological Studies on At-Risk Populations (CEP-RUA) at the Federal University of Rio Grande do Sul, has conducted teaching, research, and outreach to improve the lives of at-risk populations. The Center's activities have included elaborating a conceptual approach, gathering empirical data, and figuring out how to address methodological and ethical challenges of informing practice and policy to improve the lives of people victimized by poverty, street life, sexual abuse, and community and intrafamilial violence. One of the Center's major themes in recent years has been the study of aggressive behavior.

### Studying Aggressive Behavior: Conceptual Considerations

Our approach to the study of aggressive behavior draws on several key perspectives in the developmental literature. To define aggression, we drew on the studies of Bukowski (2003), Little et al. (2003), and others, who emphasized different forms of expression (whats) and functions (whys) and a possibly less "dark" side of this complex variable. Aggression may be expressed by verbal and physical *direct* behavior, or *indirectly*, through actions that affect other people's relations. It may be classified as *reactive* (self-defense impulse or desire of protection) and *proactive* (instrumental moving forward to reach the person's goals). Research findings and observational methodology have taught us also that aggressive behavior might be considered as an adaptive response, or an essential human quality that also has a "communicative" function. In some cases, children who face stressful situations may act aggressively, aiming to express themselves and, mainly, to adapt to the "new" environment. Nevertheless, this aggressive behavior will not always be an adaptive and successful response.

Bronfenbrenner's bioecological theory (1979, 2005; Bronfenbrenner & Morris, 1998) guides the selection of variables for studies on human development by the Center. The adaptive value of any resource depends on the extent to which it promotes a person's effective functioning in critical environments. Different forms and functions of aggressive behavior should be considered, depending on the context, as a risk or a protective factor (Rutter, Quinton,

& Hill, 1990). Prior research with aggressive children has typically focused on the deleterious influence of negative life events on children's behavior (Bukowski, 2003; Hawley, 2003; Little et al., 2003). However, others have considered the possibility of positive outcomes (e.g., Rutter, Quinton, & Hill, 1990). This view fits with the Center's larger emphasis on positive adaptation in the face of unfavorable circumstances. This dynamic process of adaptation, which emerges from interactions between the developing person and the environment, is termed *resilience* (Luthar et al., 2000). The possibility of finding a "bright" side of aggressive behavior attracted us, as it allowed us to value the positive potential of individuals and to consider whether a certain level of aggression might be a protective factor.

### Methodological Challenges of Research on Aggressive Behavior

A number of methodological challenges were confronted in our investigations of aggressive behavior. Accurate information and methods are needed to produce better findings and inform the decisions taken by practitioners and policy makers. The lack of standardized measures in Brazil and the need to focus on the "cultural" appropriateness of measures are key issues of concern. Moreover, in addition



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to preserving methodological rigor, our major aim has been to make data collection attractive, playful, and recreational for the children we study, as they commonly have a history of violence and we do not want data collection to be another abusive interaction for them.

Over the years, we have developed methodological approaches and assessment tools, including observations, adaptation of existing measures, and creation of new instruments. A new research methodology, named ecological engagement, was developed by Ceconello and Koller (2003) and is an example of a participatory approach based on criteria for evaluating proximal processes (Bronfenbrenner & Morris, 1998). Investigators and participants interact and are mutually engaged in the tasks, structuring an atmosphere of reciprocal collaboration. The interaction occurs in an ongoing fashion, during visits to research settings, informal conversations, and formal data collection. To be effective, the activities should be progressively more complex (from informal contacts to rigorous methodology). The research team needs to become part of the landscape in order to acquire ecological authenticity in the research context (Ceconello & Koller, 2003; Lisboa & Koller, in press).

In some studies, new measures, such as incomplete sentences tasks, drawings, and board games, were developed in recognition of the challenge of eliciting information without "leading" study participants through direct questions. Completely structured interviews were considered undesirable as they were not appropriate for some at-risk participants, especially when dealing with aggression issues. The new tasks tend not to resemble the questions children are usually asked, and thus are less likely to generate "well-rehearsed" answers. Moreover, researchers have reported the need for contextualization to youngsters' lives that are frequently overlooked in "mainstream" research tools (Koller & Raffaelli, in press). In past research, the combination of observational and more unstructured approaches has yielded rich information on children's lives, while also addressing concerns regarding data quality and ecological validity.

### **Examples of Research on Aggression Conducted at the Center**

The following studies exemplify investigations on aggressive behaviors conducted at our Center, using ecological engagement methodology along with more traditional tools. In one study, Lisboa and Koller (2001) investigated the role of hierarchical relations (teachers, peers) in the coping strategies and aggressive behavior adopted by low-income children and/or those who were victims of domestic violence. The total sample ( $n = 87$ ) reported emotional distress caused by teachers' verbal aggression and frequent conflicts faced with classmates. Victims of domestic violence ( $n = 49$ ) reported that they used physical aggression to deal with peer conflicts, reproducing the learned pattern used by their parents at home. The non-victimized children looked for others' support to cope with peer conflicts. Based on the literature and on observational data gathered during ecological engagement at school, Center researchers constructed the *Teacher's Perception of School Children's Aggressive Behavior Scale*, composed by a total of 41 items, 22 of aggressive behavior, 15 of positive,

and four new items suggested by the content analysis judges. The scale may be used for scientific research purposes, to evaluate the perception of elementary school teachers about school children's aggressive behaviors (Cronbach's  $\alpha = .97$ ).

A second study, also developed by Lisboa (2005) examined aggressive behavior, peer characteristics and bullying among Brazilian low-SES elementary school students using self report, teacher's report, and peer assessments. Individual aggressive behavior was a strong predictor that the aggressive child would face bullying and ostracism by the group. However, no differences in aggressive behavior (intensity, forms, and functions) were found between bullies and victims, which is contradictory to previous studies (Salmivalli & Voeten, 2004). Although correlations among all instruments were found, teachers' reports and peer assessment were more strongly related with each other than with children's self-reported behavior. Teachers and peers may better depict others' behavior than do the children themselves. Nevertheless, children tended to be honest in describing their own behaviors. Self report showed no gender differences in aggressive behavior; however, teachers' and peers' reports showed that boys are perceived to be more aggressive than girls. During the ecological engagement, we clearly confirmed that children acted in a nasty way during their interactions with peers. They often shifted from one position to another, being bullies or victims, depending on contextual factors, such as gender, age, or presence/absence of adults. Girls showed more indirect aggressive behavior, gossiping and disrupting others' relationships, and boys aggressed in a more direct verbal and physical way. Thus, although being more discreet, girls may be as aggressive as boys.

The study provided a context for intervening with teachers and children. The intervention aimed to promote resilience, through the strengthening of individuals' positive skills and competencies. Teachers did not seem prepared to deal with children's conflicts, and throughout the research process were given specialized support and orientation on those issues. When the study was completed, the research team gave the school feedback about the research findings and offered an updated training course. Groups were organized for discussion, reflection and the presentation of key themes and results. Special attention was given to bullying and conflict mediation during collective exercises with the children; during these exercises, values such as empathy, solidarity, and friendship were stimulated. The children also listened to stories and watched movies. Teachers and children were given the opportunity to criticize their own actions and prejudices. A summary of developmental psychology principles was also included for teachers. (see also Lisboa & Koller, 2004).

### **Working With at Risk Populations**

In an effort to understand at-risk populations and the levels of positive and negative outcomes, the Center researchers have examined a variety of developmentally-relevant factors, including individual and social characteristics. However, this kind of research encounters many methodological and ethical challenges. Because many children

never developed the self-discipline that formal schooling provides, they become bored and restless when participating in data collection activities. Literacy levels are typically low, so measures must be administered by an interviewer. Because surviving on the street or in abusive environments requires constant vigilance to potential dangers, their attention tends to wander.

Data collection frequently occurs in diverse and noisy settings where distractions and interruptions may occur. Over the years, researchers affiliated with CEP-RUA have developed methodologies to address these challenges. For example, it is virtually impossible to obtain random samples of hidden and mobile populations. Instead, researchers have developed approaches that allow identification of a "representative" or "scientifically sound" sample. It is standard practice at CEP-RUA to offer only non-material incentives to research participants. Instead of providing material incentives, researchers at the CEP-RUA are trained to provide such non-material incentives to youth as information about free services or referrals to appropriate care agencies.

The outreach mission of CEP-RUA also stipulates that study findings be used to improve services provided to youth, ultimately benefiting the population. Moreover, many children and youth find the opportunity to talk to an attentive adult intrinsically rewarding, and study procedures are designed to be enjoyable for them. In their daily lives, they are frequently the targets of hostility and neglect; thus, they value positive interactions with caring adults. In past studies, researchers from CEP-RUA have noted that these children and youths will often interrupt their activities in order to take part in an interview; others have attempted to participate in the same study repeatedly despite the lack of material incentives. They also report feeling proud that their experiences are being valued.

## Conclusions

Children and adolescents growing up in diverse violent settings and learning to express themselves in an aggressive way face tremendous challenges in their daily lives. High-quality research is needed to inform interventions, social policy, and practitioners attempting to help them. Developmental research, with its explicit focus on change and adjustment across time, has the potential to illuminate the long-term impact of aggressive behavior in their lives. Immediate attention has to be given to the amelioration of conditions that impel children to behave aggressively. Although this article draws on our Center's experiences in Brazil, many of the identified issues are relevant to other populations around the world. There is a clear need to ensure that research with aggressive and bullying children is sensitive to the specific context, respects their dignity and rights, and generates high-quality information that is of value to practitioners and policy makers.

As we hope is evident from the few examples we provided here, use of an ecological perspective allowed us to identify the factors that promote resilience, both in theory and in practice. Our experience reaffirms the importance and richness of this methodology, and we want to extend the invitation to other researchers to engage ecologically in their research contexts, taking into account

the richness and constant dynamic between person and environment, with a view to promoting the health potential of all individuals.

## References

- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (2005). *Making human beings human: bioecological perspectives on human development*. London: Sage.
- Bronfenbrenner, U., & Morris, P.A. (1998). The ecology of developmental processes. In W. Damon (Series Ed.) & R.M. Lerner (Volume Ed.), *Handbook of child psychology: Theoretical models of human development* (Vol. 1, pp. 993–1027). New York: Wiley.
- Bukowski, W.M. (2003). What does it mean to say that aggressive children are competent or incompetent? *Merrill-Palmer Quarterly*, 49(3), 390–400.
- Cecconello, A.M., & Koller, S.H. (2003). Inserção ecológica na comunidade: Uma proposta metodológica para o estudo de famílias em situação de risco. *Psicologia: Reflexão e Crítica*, 16, 515–524.
- Compas, B.E., Howell, D.C., Phares, V., Williams, R.A., & Giunta, C.T. (1989). Risk factors for emotional/behavioral problems in young adolescents: A prospective analysis of adolescent and parental stress and symptoms. *Journal of Consulting and Clinical Psychology*, 57, 732–740.
- Hawley, P.H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly*, 49(3), 310–342.
- Koller, S.H., & Raffaelli, M. (in press). Improving the lives of street youth in Latin America: Towards the construction of a new agenda for developmental research, practice, and policy. In Y. Ronen, C. Greenbaum, & S. Erlich (Eds.), *The case for the child: Towards the construction of a new agenda*. Antwerp: Intersentia.
- Lisboa, C.S.M. (2005). *Comportamento agressivo, relações de amizade e vitimização em crianças em idade escolar: fatores de risco e proteção*. Unpublished PhD. Dissertation. Universidade Federal do RS, Porto Alegre, Brazil. Available at [www.psicologia.ufrgs.br/cep\\_rua](http://www.psicologia.ufrgs.br/cep_rua)
- Lisboa, C.S.M., & Koller, S.H. (2001). Construção e validação de conteúdo da Escala de Percepção de Professores dos Comportamentos Agressivos de Crianças na Escola. *Psicologia em Estudo*, 6, 59–69.
- Lisboa, C.S.M., & Koller, S.H. (2004). O microsistema escolar e os processos proximais: exemplos de investigações científicas e intervenções práticas. In S.H. Koller (Ed.), *A ecologia do desenvolvimento humano: pesquisa e intervenção no Brasil* (pp. 267–292). Porto Alegre: Casa do Psicólogo.
- Lisboa, C.S.M., & Koller, S.H. (in press). Brazilian approaches to understanding and building resilience in at-risk populations. *Child and Adolescent Psychiatric Clinics of North America*.
- Little, T.D., Jones, S.M., Henrich, C.C., & Hawley, P.H. (2003). Disentangling the 'whys' from the 'whats' of aggressive behavior. *International Journal of Behavioral Development*, 27, 122–133.
- Luthar, S.S., Cicchetti, D., & Becker, B. (2000). The construct



of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543–562.

- Rutter, M., Quinton, D., & Hill, J. (1990). Adult outcomes of institution-reared children: Males and females compared. In L. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 135–157). New York: Cambridge University Press.
- Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development*, 28(3), 246–258.

## Adolescents in their Communities: Challenges for Research and Intervention

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One of the aims of the Laboratory of Community Psychology of the Faculty of Psychology of the University of Bologna is to conduct research and develop intervention projects for health risk prevention and promotion of well being among adolescents and young adults. Consistently with Community Psychology approaches, most of our intervention projects, starting from the mid-nineties (e.g., Zani & Cicognani, 1995; Cicognani, Zani & Bonini, 1997), are conducted upon request, and in collaboration with other partners in the community, like Local Health Services and other associations and centers working with young people in school and community contexts. As collaborative projects, they attempt to take into account the perspectives and needs of the different research partners, instead of adopting a “top-down” (researcher-led) perspective. In this context we would like to illustrate some challenges involved in working with this approach.

Over the years, theoretical perspectives guiding our research on determinants of risk behaviors shifted from social cognitive models focusing on intra-individual cognitive processes as the basis of risk behavior (e.g., Zani & Cicognani, 1998), to more “ecological” models (Bronfenbrenner, 1979), emphasizing the role of the different contexts (cf. Silbereisen & Todt, 1994) in which adolescents are embedded (e.g., the family, the peer group, the school, other community contexts; Zani & Cicognani, 2002b) and their complex interconnection as both risky and protective factors. Moreover, in working with community members in a collaborative way, we experienced the need to negotiate theoretical models, to incorporate other research partners’ (and target members’) perspectives.

As we shifted our attention in preventive interventions from the relatively more “controlled” school context to other community contexts in order to target the minority of adolescents that do not attend school (often belonging to specific at-risk groups), we realized that traditional methods of prevention and health promotion were not applicable or did not work. We clearly experienced this problem when we attempted to devise preventive interventions for HIV and other health risk behaviors (smoking,

drinking alcohol, substance abuse) in a population of “out-of-school” adolescents and young adults (aged 14 to 25 years) in the province of Bologna, that is, adolescents/young adults who only completed compulsory schooling or dropped out of school early—estimated at about 7000 in this area (cf. Cerchierini, Cicognani & Zani, 2001; Cicognani, Baldazzi, Cerchierini, 2003; Zani & Cicognani, 2002a).

Our Intervention project was conducted in conjunction with Local Health Services of Bologna and LILA, an anti-HIV association, and with the collaboration of several other partners in specific phases of the project. With the aim of the preventing of HIV in young people, we first tried to adopt established and well-known methods of risk prevention and health promotion (for example, peer education, life skills education). These methods were shown to be effective with high school students. We soon realized, however, that these intervention methods were not applicable to high-risk, out-of-school youth. From the very early phases of the research project we had to adjust our research instruments (e.g., content areas, length and complexity of the items) to the characteristics of this population. These adolescents are difficult to reach, and less willing to collaborate than students, unless the topics of the questionnaire were perceived as relevant and its layout attractive. Moreover, they had difficulties in understanding the content. We soon realized that a traditional research intervention approach would only be realistic for a minority of them, because we would be unable to evaluate the intervention via a pre-post-design.

Our project had to be redefined, and we decided that we needed to try different ways to reach our targets, and to include other community organizations in an active and collaborative way. We approached over 150 community settings to find high-risk participants, and finally we ended up with a sample of 458 out-of-school adolescents who showed higher risk as compared to students. In order to reach (directly or indirectly) this particular target group we developed a range of interventions aimed at targeting youth in different community contexts, including investigation of their sexual risk behaviors. These different strategies involved the production of CDs, a quiz in a commercial center, courses for significant adults in these young peoples’ lives, and sessions for the adolescents themselves in which they were confronted with a person infected by the HIV virus.

Since our research stressed the important role of the peer group in promoting and sustaining risk behaviors, some interventions tried to target group norms. One such intervention was addressed to a group of out-of-school adolescents attending a “Youthstart” training course offered by the municipality of Bologna, called “music laboratory.” We reasoned that a possible way to reach our target audience was using the medium of music. These youngsters, who agreed to devote part of their instruction time to the project, were actively involved in the production of a music CD including five songs aimed at spreading preventive messages to their peers. During this process, they were under the supervision of a psychologist and members of an anti-HIV association, who were members of the research team. At the end of the project, over three thousand CDs were produced and distributed in different parts of the city frequented by young people belonging to the target audience, and the songs were also played by local



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radio stations. This intervention was inspired by peer education principles, and tried to promote the active involvement of young people in the production of prevention messages for their peers.

A second intervention was aimed at spreading correct information on HIV and its transmission to the highest number of adolescents belonging to our target group, since research indicated that their level of knowledge on HIV and its transmission was low and their informative sources (i.e., peers) were not highly reliable. We selected a community setting (a commercial center) which attracted large numbers of youngsters. The medium for disseminating this information was a questionnaire formulated to provide correct information, since we did not have a chance to meet the same adolescents again to correct their answers (e.g., the format was "Did you know that ... HIV does not spread through saliva?"). In order to encourage youngsters to read it, a competition was devised so that every adolescent of our target group who read and filled out the questionnaire had a chance to win a prize (offered by shops of the commercial center). About 800 questionnaires were filled out. The prizes were delivered during a special event in which adolescents from the group involved in the CD project were invited to play the songs they wrote.

A third intervention was a training course targeted at some of the significant adults for our target population (e.g., educators working in youth centers, sports trainers). These people have the chance to encounter adolescents in their leisure time contexts, and planned ways to spread preventive information during their typical activities. The course covered different issues, from information on risk behaviors and preventive strategies, to methods of dealing with affective relationships. This intervention tried to reach adolescents indirectly, through the involvement of adults whom they can encounter in community contexts associated with leisure activities.

The last intervention targeted two youth centers attended by both students and out-of-school youngsters, some of whom were deemed to be at risk. The aim was to try to actively involve the whole youth population; in particular, one aim was to reduce prejudice toward HIV+ individuals (which was evident from the research) by arranging encounters between non-HIV+ adolescents and HIV+ individuals. The second aim was to actively involve adolescents in prevention efforts, both for themselves and for their peers. Adolescents and their referent adults first had the opportunity to visit institutions that take care of HIV+ people, and learn about their activities. Further, they participated in a meeting organized in the two participating centers where they could listen to (and discuss) the life stories of some individuals who had contracted the virus. The experience aroused strong emotions and most of the youngsters were deeply affected by the stories. The second step of the intervention involved constructing a web page where youngsters could include information and preventive messages for their peers. To this end, they were given instruction in web page construction by an expert. They were then asked to choose the contents (and this required them to look for information and materials). They worked in groups to prepare the web page (under the supervision of a member of the research team). They were totally responsible for the final result, which can be considered a useful instrument both for consultation and as a set of materials that can be used in future prevention interventions. In this project, which was inspired by peer education principles, the whole setting of the youth centers was involved, both as target and as active participant. The underlying principle is that by empowering groups and community organizations (i.e., helping them to become aware of their needs and problems, and of their potential resources and competencies for facing them) they will become more motivated and capable of looking for possible solutions. This perspective is strongly pursued within prevention and well being promotion efforts inspired by Community psychology approaches.

Support for these principles also comes from the youngsters who have been actively involved in these projects (e.g., authors of the music CD and of the web page), who were invited to the final conference where results were presented; they were asked to describe their experience from their own perspective. Other information on the effectiveness of the interventions (besides the numbers of materials distributed and the assessments of satisfaction for the participation) was unavailable, owing to the difficulties in adopting more structured research designs because the interventions were conducted in community contexts. This point indicates that in such conditions, an intervention approach inspired by community development approaches, aimed at strengthening individuals' competences in assessing their own needs and in collaborating in the search for possible solutions (as well as in the evaluation of their effectiveness) is the most viable solution.

Today, at least in the Italian context, HIV/AIDS is no longer a priority issue, socially or culturally. Other issues (e.g., female bullying, "well-educated" adolescents from "good" families that are increasingly involved in aggressive and deviant actions; deaths of youngsters due to traffic accidents on Saturday evenings, etc.) are considered to be





more worrying for our society and require explanation and intervention. New generations of adolescents feel very distant from the HIV issue and are less cautious. It is important to keep this issue on top of the research and prevention agenda, and at the same time, our instruments and theoretical models should take into account the influence of life contexts, culture and values on young people. In order to approach the younger generations, some practitioners will need to learn languages other than Italian to better communicate with the increasingly diverse population of young people. In Italy, risk behaviors among second-generation immigrant adolescents are of growing concern (Zani, Cicognani & Marmocchi, 2006). Practitioners and social workers are currently experiencing the urgency of doing preventive interventions for such populations, who are the most strongly involved in risky lifestyles. For such populations, traditional intervention approaches and methods used with Italian adolescents are not helpful. Again, we need to think of interventions involving community settings where such youngsters might be approached, through the involvement of other significant adult figures. Considering trends in immigrant population growth in Italy, this is undoubtedly one of the main challenges for future research and intervention programs.

## References

- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge University Press, Cambridge.
- Cerchierini, L., Cicognani, E., & Zani, B. (2001). *L'HIV non va a scuola*. Clueb, Bologna.
- Cicognani, E., Zani, B., & Bonini, M.C. (1997). Gli adolescenti e le campagne informative sull'AIDS: una ricerca intervento, in B. Zani & M.L. Pombeni (Eds.) *L'adolescenza: bisogni soggettivi e risorse sociali*. Cesena, Il Ponte Vecchio.
- Silbereisen, R.K., & Todt, E. (1994). *Adolescence in context*. Berlin: Springer-Verlag.
- Zani, B., & Cicognani, E. (1995). Il problema dell'AIDS nei giovani: credenze, percezione del rischio e strategie di "coping", *Giornale Italiano di Psicologia*, 5, 827-852.
- Zani, B., & Cicognani, E. (1998). Adolescenti e precauzioni nei confronti dell'AIDS: un'applicazione della teoria del comportamento pianificato, *Psicologia della Salute*, 2-3, 81-98.
- Zani, B., & Cicognani, E. (2002a). I non studenti e l'AIDS: comportamenti a rischio e strategie di prevenzione, *Psicologia della Salute*, 1, 67-83.
- Zani, B., & Cicognani, E. (2002b). Peer group relationships and risk behaviours in adolescence, *Revista de psihologie aplicata*, 4, 1, 29-42.
- Zani, B., Cicognani, E., & Marmocchi, P. (2006). *Health risk behaviors in adolescence: the protective role of sense of community, social involvement and self-efficacy*, paper presented at the Xth Biennial Conference of the EARA (Antalya, 5-8 May).

## Notes from The President

### "This is Your ISSBD!"

Greetings from sunny California! (It's been rather painful to watch the weather reports – and hear from loved ones – the reports of hazardous snowy/icy driving conditions and incredibly cold temperatures in the Midwest of the US! But I'm glad I'm not in it!) Nice weather has been one benefit of easing the transition into a new job and this new role with ISSBD. As developmental scientists, we know all about the stresses of transitions!

ISSBD has also been experiencing some of the stresses of transition with the move to SAGE for our publications and membership. We thank all of you for your understanding and patience while we work out the rough spots of this move. And I'm grateful to Kerry Barner and her colleagues at SAGE Publications for responding promptly to address the problems.

What I've been especially grateful for is all of you who spoke up when you didn't see your journal, or couldn't renew your membership online. Your information helped us to identify problems and get them addressed. It provided good evidence for your investment in ISSBD! Thanks!

One of our former leaders of ISSBD made significant investments to the organization and was prepared to do more. Unfortunately, he died before being able to further invest in ISSBD. We inserted a small box as we were going to press with the Fall *Newsletter* about Paul Baltes' death. In this issue, John Nesselroade has written a lovely poem in Paul's honor.

Investing in ISSBD is the theme of this message. As I said in the last *Newsletter*, I really value what ISSBD stands for. It's one of the few organizations that link us around the world. Because there are so many members in North America and Europe, I'm sure that many of you elsewhere have moments of feeling left out, or marginalized. If we let those feelings persist, we have failed as an organization. Each of you is essential to this organization. And we want to do more to engage more scholars of human development around the world. In all our partnerships,

within ISSBD and without, I urge us to reflect on and observe partnership principles that Walter Kamba, distinguished Zimbabwean judge, taught me: Effective partnerships involve mutual respect, mutual interest, mutual benefit, and mutual responsibility.

ISSBD has used regional coordinators and workshops to help provide a focus for regional interests and members. To learn whether these are meeting your needs, Suman Verma and Catherine Cooper are surveying some of you to get feedback on what your needs are, and how ISSBD might better serve you, so you can make more contributions to developmental science (which is similarly enriched by the diverse communities around the globe.) We welcome any involvement with this effort.

You may have other ideas of what ISSBD should be doing. Let us know, and more importantly, figure out how it could get started, and do that! Our officers and committee chairs are committed to working on your behalf, but you can also work for the advancement of development of our field. Developmental science has advanced greatly since the founding of ISSBD but we still have not effectively integrated the important information about how development proceeds, and what influences it, around the world. We know that there are urgent areas of need globally; which of these require more effective attention by developmental science? Each of you has important information to impart. Should we be organizing some cross-national collaborative studies? If so, on which topics? Are there important scientific or social issues or frameworks that we are missing? I welcome your ideas and your actions! We need the active participation of every one of you!

Anne Petersen

Center for Advanced Study in the Behavioral Sciences  
Stanford, California, USA

E-mail: apetersen@casbs.stanford.edu

## MEMORIAL TO PAUL BALTES

Eagles

An eagle mounts, we watch with wond'ring eyes,

When mountains that constrain us, it glides o'er,

To test its limits in the farthest skies,

While we meet ours in valleys we deplore.

An eagle falls to earth and leaves a void

That won't be filled. It preys upon the mind.

So we proclaim in sorrow how we care

And, not of tears devoid,

We muse of why it is those left behind,

Can only envy feats that eagles dare.

—John R. Nesselroade  
January, 2007

# Workshop Report

## Report on the 7th Africa Regional ISSBD Workshop, Johannesburg, South Africa, November 27th–29th, 2006

*Kazuwira R. H. Veii*

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and

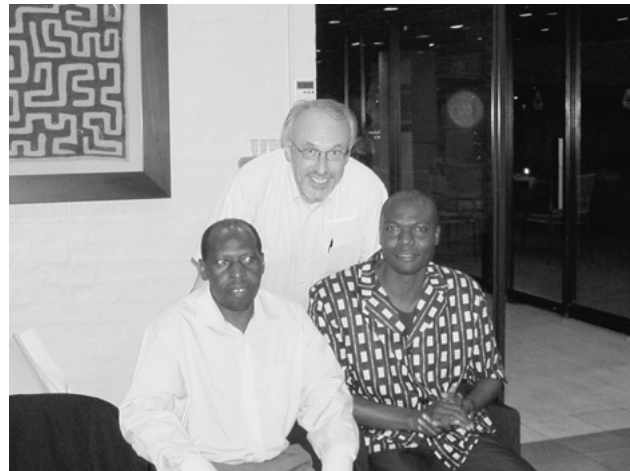
*Peace Kiguwa*

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The 7th Africa Regional ISSBD workshop was hosted in South Africa and addressed an increasingly pertinent issue in human development both within the SADAC region and Africa as a whole – research capacity building. The theme “Enhancing research capacity in Human Development” was intended to enable scholars within the social sciences in the region to reflect on some of the basic concepts and methods in developmental research. Efforts to articulate both local and global approaches to research were emphasized and the overriding agenda of the presentations was on a critical engagement with current methodological approaches in human development research.

The theme of the workshop was a reflection of the Society’s aim to enhance the research capacity of middle-level academics and researchers. Candidates in the process of completing their doctoral studies and those who have completed their masters’ degrees were also part of the group whose research capacities in human development the Society aimed to develop and enhance. Furthermore, the workshop aimed at enabling scholars in the field of human development in the region (Africa) to reflect on the basic concepts and methods in developmental research, with emphasis having been placed on the articulation of both local and global approaches. It is also worth mentioning that the Society enabled most of the delegates, if not all, to attend the workshop by sponsoring their airfares, room



and board. About twenty-four posters were presented and seven keynote addresses delivered. About thirty membership applications and renewals were also received by the end of the three-day workshop.

Welcoming addresses were delivered by Professor Mayekiso, Deputy Dean of the Faculty of Humanities at the University of Witwatersrand, and Anne Petersen, the new ISSBD President. In the first keynote address, Roderick Zimba of the University of Namibia touched on the issues pertaining to the building of research capacity in human development in African institutions of higher learning. In his address, amongst a number of other issues, Prof. Zimba proposed that African institutions of higher learning use non-linear and divergent pathways to develop sustainable programs in human development research.

The workshop was discussion-oriented with the keynote lectures addressing various issues in human developmental research such as children’s well-being, sex and gender and HIV/AIDS, orphans and AIDS/HIV, globalization and human development, and the psychosocial impact of HIV/AIDS. Every address was followed by summaries, comments and reflections by discussants. Through these presentations, the workshop attempted to outline the current state of knowledge as well as gaps that currently prevail in local and global aspects of human developmental research. Pertinent issues concerning a monitoring tool for child rights and well-being (keynote address by Andy Dawes of the Human Science Research Council, South Africa) were discussed, and touched on some of the difficult areas of research on the well-being of children in South Africa. Tamara Shefer (South Africa) raised equally critical issues relating to the politics of representation of HIV mothers in the public domain. Her presentation drew interesting discussion on the often neglected and intricate ethical issue of representation amongst researchers and the researched. Prof. Nsamenang’s lecture on an Afrocentric indigenous psychology and its utility in research on human development facilitated stimulating dialogue on the ethics of representation in research between global and localized forms of knowledge production.





The theme of globalization and human development was further explored in outgoing ISSBD president Rainer Silbereisen's lecture on a large case example of the effects of German unification on both social and personality development. The afternoon session was devoted to the theme of the psychosocial impact of HIV/AIDS within the society. Peter Baguma presented a case study of psychosocial issues impacting AIDS orphans in Uganda, while Norman Duncan presented collaborative work on psychosocial development and HIV/AIDS in South Africa. Due to a cancellation of one of the keynote speeches, it is somewhat unfortunate that a comparison on psychosocial impact of the epidemic was not more fully explored.

Nonetheless, as became evident in the ensuing discussions, the importance of psychosocial investigations and conceptualization within HIV research (particularly within Africa) is crucial in addressing the full impact of the epidemic within communities as a whole.

At the end of the workshop the delegates convened for an informal discussion on publishing and research. It was at this meeting that the Society provided information to the young scholars on how to publish scientific articles, particularly in the Society's international journal, and how to solicit funds for research. Elias Mpofu of Penn State University and editor of the *Journal of Psychology in Africa* (JPA) seized this opportunity to encourage scholars, especially young ones, to publish in his journal. His encouragement was based on the fact that the JPA mentors young scholars in how to write articles for publication. Also, at the business meeting, Kenya was proposed and discussed as a possible venue for the next workshop. Frank Kessel from the USA presented the summary of the workshop.

The end of the two-day workshop was further marked by a dance entertainment. A local (South African) traditional, cultural dance troupe performed for the delegates, who responded enthusiastically to the performance. The last day of the workshop was marked by a visit to the Psychology Department of the Wits University. At this occasion, Prof. Norman Duncan introduced his colleagues to the workshop delegates. Two of his colleagues outlined the research profile of the department, which is predominantly in the areas of Cognitive Neuropsychology and Intergroup Relations. They answered delegates' questions, and discussed potential collaborations.

The workshop was indeed an excellent learning experience for the participating young scholars, and they will be looking forward to the next workshop and any other gathering of the ISSBD. On a personal note, we found the overall tone and thrust of the workshop to be thought-provoking and insightful in its exploration of the status of research in development and social studies, especially within the continent, but also in the global arena. What might perhaps have been even more productive and useful (particularly for the budding scholars in attendance) would have been a more concentrated space and time provision for engagement with the poster presentations. While it is true that that such an endeavor may be rather difficult given that this was a two-day workshop, considering that the key thrust of the workshop was to foster critical research skills amongst up-and-coming academic scholars and researchers, we hope that organizers of future meetings will keep the importance of such research 'mentorship' in mind.



# Reports on EC Meetings

## Minutes of the ISSBD Executive Committee Meeting I and General Business Meeting: Melbourne, Australia, 2006

*Times:* Executive Committee Meeting (EC)  
July 2nd, 8.30–16.30,  
General Business Meeting (GBM)  
July 6th, 13.45–15.15.

*Members of the EC present:* Marcel van Aken (Acting Treasurer/ Membership Secretary), Xinyin Chen, Jari-Erik Nurmi (Secretary), Anne C. Petersen (President-elect), Rainer K. Silbereisen (President), Suman Verma.

*Editors present:* Bonnie Barber (New Newsletter editor), William Bukowski (IJBD), Xinyin Chen (Past Newsletter editor), Joan Miller (Past Newsletter editor), Karina Weichold (New Newsletter editor).

*Ad hoc advisors present:* Bame Nsamenang, Silvia Koller.

*Newly elected members of the EC present:* Joan Miller.

*Apologies for absence received from:* Avshalom Caspi, W. Andrew Collins, Patricia Greenfield, Arnold Sameroff, Abraham Sagi-Schwartz, Peter K. Smith.

*In attendance for a particular item:* Kerry Barner (SAGE), Wolfgang Schneider (XXth Meetings), Lorna McConville (SAGE), Ann Sanson (XIVth Meetings).

### 1. Opening

The President, Rainer K. Silbereisen, welcomed the EC members and ad hoc members.

### 2. Minutes of the EC meeting in 2005

The Minutes of the EC Meeting in Atlanta, U.S., 2005, published in Newsletter 2006 (1), Serial No 49, were approved unanimously.

### 3. President's Report

The President, Rainer K. Silbereisen, summarized his written report on the development of, and plans for, the Society as follows:

Since the Executive Committee meeting in Atlanta in April 2005, a lot has happened in the Society. We have a new publisher of the IJBD and the Newsletter, a new system for handling membership administration, a new website with a secure area for members, a new system for on-line submissions and manuscript handling for the Journal, a new Treasurer, new Newsletter Editors, new Guidelines for those interested in organising our Biennial Meetings, and a new Journal contract that will ensure the financial health of the Society for the foreseeable future — to mention just some of the developments. As you will know from my

previous Reports to ISSBD audiences and Notes from the President in the Newsletter, it has been one of my main aims as President to put the Society in as strong a position as possible with which to meet the increasingly difficult world facing academia in general and scholarly societies such as ours in particular. Indeed, I was already convinced long before I took over as President that only by reducing the workload of our officers (who give their services on a voluntary basis) and thereby decreasing our expenditures, whilst increasing the level and scope of activities undertaken by ISSBD, would the Society not just be able to survive but actually to be strengthened. I was also very aware that to do this, the ISSBD needed to be on a strong financial footing, and that our main asset in this direction (IJBD, the International Journal of Behavioral Development) had been seriously undervalued for much of its existence: This is evident when one looks at the regular income generated by the Journal when I took over as President in 2002 (around US\$61k per annum, and already a significant increase on earlier revenue due to the contract with Psychology Press having been renegotiated in 1999 when I was Editor of the IJBD and when Ken Rubin was President) and the revenue it generated in 2006 (around US\$154k) following our new deal with SAGE Publications. I should add that the main reason I am so happy to be able to report such financial success is because of what this means for the work of the Society, if not for the Society itself. At a time when many similar Societies and their journals are struggling to stay afloat in precarious financial waters, ISSBD seems set for a pretty secure future. Healthy finances also mean we can continue and even increase our support of projects such as regional workshops, our Biennial Meetings and pre-conference workshop, the Journal Donation Project and other such endeavours – all of which are prone to rising financial demands as general costs, such as travel, increase.

To turn to more routine issues. I have been as busy as ever keeping in regular contact with members of the Steering Committee to maintain the smooth running of the Society. I have also consulted the Executive Committee on various issues throughout the year. In particular, my office and I have been busy working with SAGE following the transfer of the IJBD and the Newsletter and their take-over of several important administrative tasks of the Society. Related to this I have had regular contact with our Acting Treasurer and Membership Secretary, Marcel van Aken, who took over from Fred Vondracek at the beginning of this year. Coinciding with the take-over by SAGE of some of the more routine tasks, such as the collection of membership dues, Marcel has been busy familiarising himself with his duties and helping SAGE become accustomed to the intricacies of the Society's dues system – not an easy task. My thanks go to Marcel for his conscientious handling of all such matters.

On the subject of the Society and SAGE, as I have already mentioned, the intention behind my looking for a new deal related to the IJBD was primarily to improve the financial state of the Society. I was more than delighted,

therefore, to hear that the ISSBD coffers are currently standing at around US\$750k and that this magnificent state of affairs is due in no small part to the deal we were able to negotiate with SAGE rather than to the more mercurial profits related to savings and investments. This not only gave us a very generous one-off signing fee (equivalent to 50% of the total revenue of the Society in 2004) but, as already noted, also guarantees ISSBD a significantly better annual income than the previous arrangement. It would also seem that the marketing strategies of SAGE are already resulting in a higher annual return than predicted; the first advance royalty payment from SAGE (£75k – approximately US\$135k) exceeded the guaranteed base amount by almost 10%. I should therefore like to take this opportunity to thank all those at SAGE and ISSBD who have been involved in this venture for making it such a success so far.

I should here like to turn to the other side of the financial coin – the expenditures of the Society. As I noted at the beginning of this report, my aim was not just to increase the income of ISSBD but also to see that the income was put to the best possible use, namely helping the Society to fulfil its mission in supporting the study of behavioural development and those who study it, especially to help those in areas beyond the more financially comfortable ‘West’. With this in mind, and because of our new contract with SAGE, which was designed to relieve some of the more burdensome administrative tasks of some offices, stipends to these officers could very well be reduced. Stipends paid to officers were last changed in 2000. From this time onward, the President’s office has received US\$2k per annum; the Secretary General’s office US\$2k; the Treasurer and Membership Secretary’s office US\$15k; the Editor IJBD US\$15k; and the Newsletter Editors, US\$4k.

On a related financial issue, I have tried to encourage financial support given to regional workshops to be met, at least in part, by locally raised funds. I think this is particularly important in that whenever ISSBD offers financial support it should be conditional on the willingness of the parties involved to raise either matching funds or at least a reasonable proportion of the funds being requested. We have done this successfully with all workshops that have happened under my Presidency. I should also like to record here that the sums requested by workshops have risen steadily over the last few years and that consequently ISSBD support has also increased. Accounts for 1994 show that support from ISSBD was typically an advance of US\$3k per workshop. In 1999, workshop advances were US\$3.8k; US\$4.7k in 2000; and US\$9.5k in 2001. The Society now typically offers between US\$25k and US\$40k per workshop with varying levels of external support found by the workshop organizers themselves from local rather than international sources. I feel that this upper limit of ISSBD funding should not be exceeded for the foreseeable future and I recommend that workshop proposers be made aware immediately of the need to raise funds themselves, either locally or from further afield in collaboration with ISSBD. It is important that they also be made aware that to secure such funds takes time.

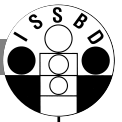
With regard to ensuring the continued good health of the Society, the most important single factor, of course, is the strength of its membership. Here I have also tried my utmost to be effective. Besides working with the Treasurer to devise membership packages that would support

continued regular membership, and that would promote membership in the poorer regions of the world, I also encouraged the re-formation of a Membership Committee with the specific aim of finding ways to entice new members from all regions. I also spent a considerable amount of time writing personally at the end of last year to many people who had not renewed their membership despite repeated reminders. This was successful and brought quite a few ‘lost sheep’ back into the fold. However, one of the major recruiting bases for membership is the Biennial Meetings. For example, in November 2005 we had 1040 paid-up ISSBD members — an excellent figure given that 2005 was an off-congress year and bearing in mind that membership had reportedly fallen to just shy of 800 in 2003. A large part of this rise in membership can be related to the hugely successful 2004 Biennial Meetings in Ghent, organized by Leni Verhofstad-Deneve and her team, which resulted in membership rising to 1139, the highest since 1996. Clearly, our policy of giving incentives (a combination of congress dues and membership) resulted in an actual increase. I should like to recommend, therefore, that the policy of offering membership incentives linked to our Biennial Meetings be developed further and that such incentives become ISSBD policy.

Related to the issue of incentives and membership, I can also report that I have been in contact with the organisers of the IUPsyS World Congress in Berlin in 2008 concerning a possibly mutually advantageous arrangement that would allow participants of the World Congress and the 2008 Biennial Meetings in Wuerzburg to take part in both meetings with reduced fees. This has to be discussed in detail with Wolfgang Schneider and his fellow organizers but it would, I feel, be highly beneficial to ISSBD in attracting participants and thereby potential new members. Note that the Wuerzburg meetings already have the official status of a satellite meeting of the World Congress

We should also press ahead in encouraging greater diversity in our membership, especially from the less economically secure regions. Here our policy of diversified membership fees according to geographical location has helped but I have tried to assist further, for example, by encouraging the regional workshops in Africa (one still to come later this year in South Africa) to include membership for the participants as part of the workshop package. I am also happy to note that there is no intention to raise membership fees at present and that during my Presidency they have, in fact, even decreased for some regions of Africa.

In terms of everyday activities, my office has worked closely with the SAGE team on many issues arising since they took over in January; in particular, Verona Christmas-Best has worked with me on negotiations with SAGE since these discussions began in 2003. We have also been involved in matters relating to the marketing of the IJBD (also with Bill Bukowski), the new website, the membership directory (also with Marcel van Aken), arrangements for various meetings and receptions here in Melbourne, and many other issues. In general, interactions with SAGE have gone according to plan and I am more than happy with their response to our needs. As might be expected with such a vast undertaking, however, there have been one or two hiccups primarily regarding the collection of membership dues, but I am confident that once the individual members of the SAGE team learn more about the way in which ISSBD



is organized, these few problems will be resolved. The system of regional offices in various parts of the world is particularly difficult to grasp unless one knows their history. At any rate, we should stay with whatever organizational arrangement for collecting membership dues encourages ISSBD membership in the less well-off areas of the world.

To facilitate SAGE and ISSBD getting to know one another better, a meeting between members of the SAGE team (Michael Carmichael and Kerry Barner) was arranged for March 2006. The meeting took place at the Jena office and we were joined by Marcel van Aken (as our new Treasurer and Membership Secretary) and by Karina Weichold as one of our two new Newsletter Editors. Verona Christmas-Best and Katrin Müller of the Jena office also attended. Although the meeting was primarily intended to introduce the various new members to one another, it was also very business-like and many important issues were discussed.

One area that featured strongly in the Jena meeting was the Society's website. I had long wished that ISSBD should make better use of internet access and outreach, and the transfer to SAGE was an ideal opportunity to move towards achieving this. The new website went live on January 4th, 2006 and members were sent instructions on how to access the newly designed secure area on the site, where personal details can be checked and changed or updated. The idea of the secure site is also to allow on-line voting in future elections. Apart from streamlining the election process, the aim is also to encourage greater membership participation in nominations and elections and in ISSBD matters in general. It is important therefore that members have access to the secure area via a working email account.

Following the meeting in Jena I was able to meet with both new Newsletter editors on the occasion of the SRA meetings in San Francisco, where we discussed strategies for their editorship in general, and for the Fall Newsletter in particular. They have lots of ideas and I am very happy with their plans and progress to date. I was also able to meet Anne Petersen to discuss issues related to her taking over as President, and with Jari-Erik Nurmi, our Secretary General, and with Bill Bukowski, Editor of the IJBD.

In January, the first issue of the new-look IJBD (developed by SAGE in collaboration with the Editor, Bill Bukowski, and my office) was published and made available on-line. The facilities offered to ISSBD members by SAGE Journals Online via the members-only portal on the ISSBD web site are also a good development for members. Here articles from the current and back issues of the IJBD can be retrieved, as well as articles searched for, and many other facilities that I cannot detail here. One innovative function I find particularly useful, however, is Cite Track Alerts. This provides the ability to find citations to an article and to be alerted via email when new articles matching a given search criterion are published in the IJBD or when particular IJBD articles are cited in any journal from a designated set of 888 journals (see <http://jbd.sagepub.com/help/ijlinks.dtl> for participating journals).

As you know, the IJBD is sent free to selected institutions in regions of the world that have economic challenges which severely restrict their access to scientific journals. This program, the Journal Donation Project, is

supported by ISSBD. Through SAGE, however, the IJBD will also participate in the PERI initiative. This is run by the INASP (International Network for the Availability of Scientific Publications) and has the aim of making academic journals available to academic, health and governmental libraries in the developing world (see [www.inasp.info](http://www.inasp.info)). For a very small fee it provides a qualifying institution in one of the specified countries with electronic access to all SAGE journals included in the program. Although royalties earned from the program will be negligible, it will increase dissemination of the IJBD in the developing world, which should lead to increased usage and submissions. As I have already mentioned, economics should not always be the ISSBD's principal consideration. I feel strongly that involvement in such projects is part of ISSBD's mission to expand the outreach of its work to include as many people as possible and that it reflects well on the Society.

Related to the Society's mission and its outreach, I have been extremely busy in furthering our workshop program. In particular, I have worked with Mambwe Kasese-Hara on the proposal to hold a seventh regional workshop in Africa later this year. As you can see from the number "seven," we have a long tradition of going to Africa, and in this regard I want to mention Bame Nsameng of Cameroon, who was always very helpful, and our Past President Lea Pulkkinen, to whose legacy I feel especially devoted (and not only with regard to ISSBD's workshop program). The main theme of the upcoming workshop, located at the University of the Witwatersrand, Johannesburg, South Africa, is "Developing Research Capacity in Human Development." It aims to bring African scholars from as many African countries as possible together with experts from a broad international community to exchange ideas and to reflect on some of the basic concepts and methods in development research in our times of rapid social change. The workshop will also be an opportunity for ISSBD membership in South Africa to grow by attracting new members from the huge pool of psychologists working in various academic institutions in South Africa. The workshop proposal, which has been extensively and repeatedly revised, has now been accepted by the EC so that I am happy to report the workshop will take place in November this year. There is also the possibility that one day ISSBD will have its Biennial Meetings in South Africa, which is something I would see as a very positive move for the Society and its work (the World Congress of Psychology will be in South Africa in 2012).

A proposal was also recently received from Brett Laursen and Sylvia Koller for a second workshop in South America. Entitled "Advancing Inter-American Collaboration in Human Development Research, Methodology, and Training," the workshop is planned for July 2007 and will be hosted by the Federal University of Rio Grande do Sul, Porto Alegre, Brazil. The proposed workshop is intended to provide opportunities for international discourse on theories, methods, and training designed to foster international collaboration on research that promotes successful development among the children and youth of the region. The draft proposal and budget were put before the EC and have received approval in principle.

Finally, with regard to workshops in planning, I have also maintained contact with John Schulenberg over the workshop "Developmental Transitions as Turning Points:

An International Workshop on Theoretical and Methodological Perspectives" (organized together with Jari-Erik Nurmi and Lisa Crocket) proposed for spring 2007. (Originally scheduled for 2006, it was moved to 2007 primarily to avoid a clash with the 2006 ISSBD Biennial Meetings in Melbourne.) This workshop has been under discussion for some time now and the slow progress has been due to various reasons beyond my control.

In addition to being occupied with the various workshops, I have also been working on the 2007 Biennial Meetings. At this congress we have, for the first time, a clear agreement about the sharing of potential profits and losses related to Biennial Meetings. To remind you, the formula agreed with Ann Sanson and her committee was that the maximum ISSBD is ready to pay if there is a loss after the congress is the amount provided as a start-up loan. More specifically, if there is a loss, the Society would pay half of the total, not exceeding this maximum. Any profit would be distributed so that of the first AUS\$20,000, 20% would go to ISSBD and 80% to the organizers. Of there is any profit above that, 50% goes to the ISSBD and 50% to the organizers. In any case, we will see that the lion's share of what ISSBD might earn will be invested in activities for our membership, in particular that 50% of any profit will be used in Australia for activities related to human development capacity building

Once again, the organizers and ISSBD together have been able to secure funding from the Jacobs Foundation. We have also received a grant from the Kellogg Foundation to enable young scholars (especially those from countries where the local financial situation makes participation in high-ranking international conferences very difficult) to attend the pre-conference workshop on "Development in context: Making best use of existing longitudinal data" and to take part in the Meetings themselves.

We were also made aware that some members of the EC (regular and associated) who were also heavily involved in other activities related to the Melbourne Meetings were having difficulties due to the high costs of travel to Australia. Following discussions between the Melbourne organizers and the Steering Committee, it was agreed that on this occasion ISSBD would offer some financial support, where requested. The level of support offered was proportional to the reduced membership fees category of the home location of the individuals concerned, whereby anyone living in a country listed as Category III (see <http://www.issbd.org/home.aspx>) was offered a higher level of support than someone living in a Category II country, etc.

On the occasion of the General Assembly, we will be presenting ISSBD Awards for the second time. I should like to thank Avi Sagi-Schwartz and his co-committee workers (Arnold Sameroff and Suman Verma) for all their hard work during the nomination and selection process. I was kept informed of progress throughout and was involved at all stages. I also wrote personally to all recipients to congratulate them as President of ISSBD on their success, and for the senior scientists among them I was also able to add my personal comments and reminiscences on their life's work.

In the context of the Society's Biennial Meetings, I have been working with Verona to put together guidelines for anyone considering undertaking organizing future

meetings. We explored the instructions and advice given by other learned societies, discussed our own experiences in the preparation of ISSBD Meetings, and sought the advice of those in our own Society who have been involved recently in such planning (many thanks to Leni Verhofs-tadt-Denève for her excellent notes and comments). In particular, we asked Ann Sanson for her thoughts and are grateful to her for finding time from an undoubtedly very busy schedule to get back to us with some very useful points and corrections. She has also promised to come back to us again following the Meetings with more ideas and helpful advice to would-be organizers. The already updated version is now available via the ISSBD home page and is open for comment.

Finally, as already mentioned, I am very happy to report that, after a longer-than-expected search, we have two new editors for the Newsletter. They are Bonnie Barber of Murdoch University, Perth, Australia, and Karina Weichold, of the University of Jena, Jena, Germany.

It only remains now for me to thank my fellow officers on the Steering Committee and the entire Executive Committee for all their help and support during my time as President. I also want to use this last occasion to thank my dear staff and friends, Verona and Katrin, and Annett Weise (my personal assistant and overall organizer) for their splendid service and great responsibility. Without the generous support by my university and its provost, Klaus Kuebel, and the travel grants given by the German Research Foundations, I would not have been able to work effectively for ISSBD, but their support of course was related to all my activities beyond being a research professor proper. Fred Vondracek supported both me and the Society generously in a difficult time. Over the years I was very much influenced by my predecessor Presidents, particularly Lea Pulkkinen, Paul Baltes, and Ken Rubin. I owe them a lot, and have tried, although I am not sure I was always successful, to match their excellent example. I close by wishing Anne all the very best for the coming four years of her Presidency.

The President's report was enthusiastically approved by the EC and GBM.

## 4. Secretary's Report

### 4.1. The Organization and Activities of the Executive Committee and the ISSBD 2004–2006

The Secretary's report on the organization and activities of the EC and the ISSBD 2004–2006 was distributed in both the Executive Committee I and General Business Meetings, and is available from the Secretary. The summary of the report follows:

This summary is given during the 19th Biennial Meetings of the ISSBD, held in Melbourne, July, 2006. The chair of the meeting is Ann Sanson. The 20th Biennial Meetings of the ISSBD will be held in Wuerzburg, July 12–16, 2008, under the chairmanship of Wolfgang Schneider.

During the last two years, a lot has happened within the ISSBD. In part because the Society has a new publisher, SAGE Publications, it also has a new system for handling membership administration, a new website with a secure area for members, and a new system for on-line





submissions and manuscript handling for the journal. The Society also has new Newsletter editors. Following the tenure of Joan Miller and Xinyin Chen as Newsletter editors for several years, two new editors, Karina Weichold and Bonnie Barber, started their job at the beginning of 2006.

During the period 2004–2006, Fred Vondracek served as the Acting Membership Secretary of the Society until end of the 2005, after which Marcel van Aken took the office (as Acting Membership Secretary). The membership of the Society has increased continuously during recent years. Membership was 998 in 2002, 783 in 2003, 1139 in 2004, and 1265 in 2005. The result for 2005 was particularly good for a non-congress year. The new members of the Society during the past year have come on board mainly via regional offices. Membership in North American and European countries has, however, remained stable. The membership fees have remained the same for some time. The one-year rates (two-year rates in parentheses) are \$95 for full members (\$160), \$47 for student, spouse and emeritus categories (\$80). There are three categories for reduced membership fees: I for \$10, II for \$15 and III for \$5. Dues categories are based on World Bank rankings for lending eligibility. There is no plan to raise membership fees at present.

During the period 2004–2006 Fred Vondracek served as the Acting Treasurer of the Society until end of the 2005. As of January 1, 2006 Financial management was transferred to the new Acting Treasurer, Marcel van Aken. The highest proportion of the Society's income consists of royalties from the publisher, followed by membership dues and investments. Different foundations (Jacobs Foundation and Kellogg Foundation) have supported different ISSBD workshops. Major expenses of the Society consist of financial support to workshop organizers. Other expenses include stipends to editors and officers.

The editor of the IJBD is William Bukowski. The past year has been one of many changes for the IJBD. These changes include (a) moving to a new publisher, (b) introducing a completely on-line manuscript tracking system, (c) welcoming two new Associate Editors, (d) receiving more than 25% more papers than in previous years, and (e) using a newly designed cover. A search for the new editor of the IJBD is in progress.

The ISSBD awards were started in 2004 at the 18th Biennial meetings in Ghent. This time in Melbourne, four ISSBD Awards will be given to three distinguished developmental scientists. The Awards Committee has been chaired by Avi Sagi-Schwarz and his co-committee workers have been Arnord Sameroff and Suman Verma.

The Secretary's office has been involved in many activities in running the Society, such as preparing agendas and minutes of the Executive Committee meetings and General Business meetings, administering the contents of the Society's web-pages, answering a variety of questions from Society members, disseminating information about the Society to other societies and international journals, providing the organizers of biennial meetings, summer schools and workshops with information about the Society, and furnishing the President and other officers with information concerning the Society's by-laws, previous decisions and other organizational matters.

In addition, the Secretary has: 1) arranged the nomination of candidates for the election of new Executive

Committee members for 2006 – 2012, and 2) arranged the election of new Executive Committee members. These activities have been conducted in concert with the chair of the Nominations Committee, Anne Petersen.

The election of Executive Committee members for 2006 – 2012 was conducted by the Secretary together with President-elect Anne Petersen. The Call for Nominations was announced in the 2004 Fall issue of the ISSBD Newsletter. Overall, a total of 55 nominations (for 47 people) were received. The results of nominations were discussed in the meeting of the Nomination Committee chaired by Anne Petersen, and two names for each vacancy were selected for the ballot. They were Margarita Azmitia, Serdar Degirmencioglu, Silvia H. Koller, Mary Luszcz, Joan G. Miller, and Bame Nsameng.

The ballot was announced in the 2005 Fall issue of the ISSBD Newsletter. The number of ballots received was 85. Seventy-three of them were valid. The votes were counted using the O'Hare system. The candidates elected to serve on the Executive Committee for 2006 – 2012 were Margarita Azmitia, Serdar Degirmencioglu, and Joan Miller.

In Fall 2006, there will be a particularly important Call for Nominations that includes: President (President-elect 2008–2010, President 2010–2014, Past-President 2014–2016); Membership Secretary/Treasurer 2008–2014, Secretary 2008–2014, and EC members 2008–2014. In Fall 2007, ballots for the nominated candidates will be disseminated. The new officers and EC members will start their term in Wuerzburg, 2008.

All this work would not have been possible without support from the University of Jyväskylä and its Department of Psychology, and the hard work done by Anne-Riitta Vanhala, the Secretary and international coordinator of the department.

The EC unanimously approved Secretary's report.

## **5. Report from the Treasurer/ Membership Secretary**

### **5.1. Membership Secretary' Report**

The Acting Membership Secretary Marcel van Aken reported the following developments:

The number of members for 2003, 2004 and 2005 are 783, 1139 and 1265, respectively. Membership figures for 2003 are not as complete and reliable because the previous Acting Membership Secretary was not in charge during all of 2002 and the first half of 2003 (see earlier reports). Particularly noteworthy, however, is the fact that the total membership in 2005 is the highest recorded in recent years. This increase in membership (+127) is due particularly to increases in Belarus (+7), China (+59), India (+8), Lithuania (+5), and Russia (+16) as well as Israel, Turkey and Australia (each +4). Membership in North American and European countries remains stable. In none of the countries has a net loss of members occurred. The Society is fortunate to have a number of excellent Regional Coordinators, notably Belarus (Yuri N. Karandashev); China (Huichang Chen); India (Suman Verma); Russia (Tatiana Ryabova); and Lithuania (Rita Zukauskienė); the status of the coordinator for West and Central Africa (Jean Tano) remains unclear.

The membership of the Society has grown. Reasons for this are probably the Ghent meeting serving as a stimulant for attracting new members, and certainly the success of some of the Regional Coordinators. For the Melbourne meeting, again a combined registration/membership offer has been made, which will likely lead to an increase in membership.

As of January 1, 2006, most duties of the membership secretary have been taken over by SAGE. Those duties include distributing membership renewals, conducting most of the correspondence with members and prospective members regarding membership issues, maintaining the membership data base, providing assistance to the Membership Committee, supporting Regional Offices in their membership efforts, and providing the publisher with up-to-date membership information.

Special thanks are due to the Faculty of Social Sciences (dean: Willem Koops) of Utrecht University for providing space, infrastructure, and staff support for the work of the Acting Membership Secretary. Thanks to Anke Rispen for her assistance, and to Fred Vondracek for his help in the transition of the office of membership secretary. Thanks also to Kerry Barner, of SAGE, for her help in identifying the membership numbers for 2005.

The EC and GBM enthusiastically approved the report of the Membership Secretary.

### 5.2. Treasurer' Report

The Acting Treasure Marcel van Aken reported EC and GBM as follows:

The main duty of the Treasurer is to manage all the Society's financial assets. ISSBD has considerable financial assets in investment accounts and maintains several cash accounts to fund the operations and activities of the Society and its officers. The Treasurer collects monthly statements on all accounts and prepares an annual report detailing the performance of all financial assets. In addition, the Treasurer collects and records the Society's income and is responsible for all disbursements from Society accounts, both regular and extraordinary, as directed by the Executive Committee. The Treasurer also maintains all current and historical financial records of the Society, provides data for the preparation of tax documents, and arranges for the completion of tax returns by a properly qualified accountant.

As and when required, the Treasurer receives grant income and oversees its disbursement in accordance with the grantor's directives (augmented, as appropriate by the Executive Committee). The Treasurer also assists conference and workshop organizers in the planning and execution of conference and workshop budgets, as needed (subject to approval by the Executive Committee).

The Treasurer communicates with SAGE Publications (who handle routine membership administration as of April 2005) and with the membership, as necessary, regarding issues concerning payment of annual dues. The Treasurer periodically reviews the dues structure and makes recommendations for changes to the Executive Committee.

As of January 1, 2006, the financial management of ISSBD has been transferred from Fred Vondracek (at Penn

State, USA) to Marcel van Aken (at Utrecht University, The Netherlands). This transition has been very efficient and smooth. No changes were made in the number and type of ISSBD accounts.

ISSBD now has three categories of reduced regional membership fees. Basically, the earlier categories I (\$10) and II (\$15) remained the same, but, following a decision of the EC, a new category III (\$5) was added, comprising the Eastern, Western, and Central regions of Africa. The income, reimbursement, and current financial position are summarized in Table 1.

Professional liability insurance is necessary to protect the officers of the Society from liability regarding their fiduciary responsibilities. The previous insurance coverage was allowed to lapse in early 2003. Consequently, the Acting Treasurer purchased a new "Non-Profit Organization, Director & Officer Liability Policy" underwritten by the Cincinnati Insurance Company. The policy covers three years, from 2-20-04 to 2-20-07, with an annual premium of \$949.00. It must be noted that this policy is a "claims made" policy, which covers only wrongful acts reported to the insurer during the policy period.

Thanks to the dedication of Fred Vondracek, the Society's finances are in excellent shape.

Member dues should remain at the current level at least for the next couple of years, partly because the finances of the Society are solid, and partly to attract a larger membership in the years to come. The regional dues have now been structured into three categories.

Special thanks are due to the Faculty of Social Sciences (dean: Willem Koops) of Utrecht University for providing space, infrastructure, and staff support for the work of the Acting Treasurer. Thanks to Anke Rispen for her assistance, and to Fred Vondracek for his help in the transition of the office of Treasurer.

Table 1. 2002-2004 Financial Report

	2003	2004	2005
Opening balance	\$524,838	\$588,232	\$673,912
Revenues	\$148,371	\$184,053	\$293,676
Disbursements and other changes in assets	\$ 84,977	\$ 98,199	\$211,781
Closing Balance	\$588,232	\$673,912	\$742,559

The report of the Treasurer and the accounts were approved unanimously by the EC and GBM.

## 6. Membership Committee

W. Andrew Collins reported as the Chair of the Membership Committee.

The Membership Committee consists of Huichang Chen (China), Mary Louise Claux (Peru), Debora Dalbosco Dell'Aglio (Brazil), Jeanette Lawrence (Australia), Seong-Yeon Park (Korea), Marcel Van Aken (The Netherlands), *ex officio*, and Karina Weichold (Germany).

As its membership composition implies, the committee's strategy has generally been a regional one,



with committee members serving as regional membership representatives. The present committee members have been reliable partners in making developmental scientists in their countries aware of the organization and the benefits of membership. The efforts of the Australian/New Zealand, South American, Chinese, and Korean members are especially important to this strategy, and the representatives from those regions have been assiduous in their attention to the task.

Efforts in the Pacific Rim nations might be re-doubled during and in the aftermath of the Melbourne meetings. Similarly, new efforts in South America and in Africa in connection with forthcoming workshops in those regions might be fruitful in making developmental scholars in those regions aware of the Society and the benefits of membership. The chair recommends that the Executive Committee and the Membership Committee give attention to these possibilities in the next biennium.

Current membership figures suggest some problems in a few regions. For example, the percentages of delinquent members in the three areas from which most of the Society's members come warrant immediate attention. The chair recommends that the Membership Committee work toward encouraging renewals as earnestly as it seeks to bring new first-time members into the organization.

The chair appreciates the dedication of the committee members, as well as the cooperation and support of the President, the President-elect, the Secretary, and the Membership Secretary in carrying out the work of the committee.

The EC unanimously approved the report of the Membership Committee, and express its gratitude to the Chair of the committee, Andrew Collins, for his marvelous work for the Society.

## 7. Awards of the Society

Since the Chair of the Awards Committee (Avi Sagi-Schwarz) was unable to attend the meeting, President Rainer K. Silbereisen summarized the report of the Awards Committee.

Four kinds of awards were announced in the Fall 2005 Newsletter: 1) The ISSBD Distinguished Scientific Contribution Award, 2) The ISSBD Distinguished Scientific Award for the Applications of Behavioral Development Theory and Research, 3) the ISSBD Award for Distinguished Contributions to the International Advancement of Research and Theory in Behavioral Development, and 4) the ISSBD Young Scientist Award.

A total of 11 nominations for the 4 Awards were received. Based on the discussions of the Awards Committee (Avi Sagi-Schwartz, Arnold Sameroff, Suman Verma), it was decided that one person will be given an award in each category.

In the General Business Meeting of the ISSBD, July 6, 2006, the following awards were given.

1. The ISSBD Distinguished Scientific Contribution Award was given to professor Jack Block.
2. The ISSBD Distinguished Scientific Award for the Applications of Behavioral Development Theory and Research was given to professor Lea Pulkkinen.

3. The ISSBD Award for Distinguished Contributions to the International Advancement of Research and Theory in Behavioral Development was given to professor Cornelis (Kees) van Lieshout.
4. The ISSBD Young Scientist Award was given to Dr. Qi Wang.

## 8. Past Workshops

The EC discussed the reports of two past workshops: 1. "Chronic exposure to catastrophic war experiences and political violence: Links to the well-being of children and their families" (organized by Avi Sagi-Schwarz), held in Israel, 2005; and 2. "Self-regulation and social change" (organized by Tatjana Yermolova), held in Moscow, Russia, 2005.

## 9. Workshops Accepted

The plans of two previously accepted workshops were reported to the EC:

1. The Seventh African Regional Workshop of the ISSBD entitled "Developing Research Capacity in Human Development." The workshop, to be held at the University of Witwaterstrand, South Africa, November 27-29, 2006, is being organized by Prof. Mambwe Kasese-Hara.
2. A workshop entitled "Advancing Inter-American Collaboration in Human Development." This workshop is planned for July 2007 and will be hosted by the Federal University of Rio Grande do Sul, Porto Alegre, Brazil, by Brett Laursen and Sylvia Koller.

## 10. Workshops Planned

A revised proposal of the workshop entitled "Developmental transitions as turning points: An international workshop on theoretical and methodological perspectives," proposed by John Schulerberg, Lisa Crockett and Jari-Erik Nurmi, was discussed. Since the organizers of the workshop suggested several, and somewhat different, ideas of the possible time, site and actual form of the workshop, the EC suggested that they continue the discussions concerning the workshop with upcoming President Anne C. Petersen.

## 11. Publications

### 11.1. International Journal of Behavioral Development

The Editor, William Bukowski, reported the following developments:

The past year has been one of many changes for the IJBD. The IJBD's long-standing association with Psychology Press ended on December 31, 2005 when SAGE Publications became our publisher. From our point of view, this change was handled in a very professional and efficient manner by both organizations. A strong working relationship has been developed with the staff at SAGE in London, especially with Michael Carmichael (Senior Editor), Kerry Barner (Publishing Editor), and Danielle Ray (Group Editor). Aside from changes in the day-to-day interaction between our office and the publisher, the transition is

apparent in a newly designed cover and color scheme, new forms of advertising and promotion of the journal, and procedures for accessing the IJBD archive of articles.

During the Autumn of 2005, we began working with SAGE on the development and implementation of a manuscript management system. This new system, called "SAGETrack," was introduced in late winter and "went live" in mid-May. Based on the *Manuscript Central* platform produced by ScholarOne, SAGETrack is a comprehensive web-based manuscript tracking system in which submission of articles and the review of them can be handled completely via the internet. It replaces the e-mail based system we had been using for the past five years. Adapting ourselves to this new system has been, and to some extent continues to be, expensive for us in terms of the time spent by associate editors and our authors in practice and tutorials. It is expected the new system will, in time, increase efficiency.

Dr. David Forman and Dr. Silvia Koller joined the editorial board as Associate Editors about a year ago. Silvia Koller will cover papers in the area of social development, especially those from authors in Latin America. David Forman will handle papers on parent-child interaction and competence, particularly during early childhood.

During the first four years of our editorial term we received approximately 120 papers per year. During the past year we received over 160 papers. This number does not include papers intended for special issues or special sections. One result of this increase is that we now receive about four times as many papers as we can handle. This ratio assumes that we publish about 60 papers per year and that 20 of these papers are in special sections and issues. This increase has, of course, added to the work load of the editorial office. Currently, the time required for the review process averages about 80 days, a bit slower than it has been at other times. Our gratitude to our many reviewers cannot be exaggerated.

There are 40 members of the editorial board from over a dozen countries from four continents. I believe we have the most international representation of any editorial board of a developmental journal.

The IJBD considers papers in any area of developmental psychology. It is clear that we publish more papers on diversity in development than any other journal. It is also clear that we have been receiving very few papers on the upper part of the age span. We are happy that we have been receiving more review papers. During the next year we may publish a few commentary pieces that follow particularly notable papers.

At least three special sections are expected in the next year. One on social identity and intergroup attitudes in children and adolescents is being edited by Adam Rutland, Sheri Levy and Dominic Abrams. Noel Card and Todd Little are editing a special section on recent advances in the study of change. And Joann Montepare is editing a special section on subjective age identification across the life span.

The term of the current editorial board ends in one year. Aside from continuing to review and edit papers submitted to the IJBD for publication, our goals for this final year follow. First, we look forward to continuing our work with our new friends at SAGE on establishing new means of promoting the journal and increasing the journal's profile and our efficiency. Second, we plan to introduce a few new

features into the journal such as occasional commentaries, and we hope to publish more review papers. Our third goal is to ensure that there will be a successful transition from us to the next editorial board in June 2007.

The office of the IJBD remains for one more year in space provided by the Centre for Research in Human Development at Concordia University. The CRDH gives us space, Internet access, technical support, phone service and other forms of infrastructure at no charge. The personnel costs for the IJBD are roughly \$9,000 (CDN) per year, paid by the stipend from the association and by an account of the Editor. The remaining funds from the ISSBD stipend are used to provide an honorarium to the Associate Editors and to cover other expenses. The stipend from the ISSBD is \$15,000 US.

During the past five years the IJBD has enjoyed the unconditional support of the ISSBD President and former IJBD Editor, Rainer Silbereisen. We are grateful for his gentle advice, his kind ear and his good humor. Rainer knows a thing or two and he was willing to give us wise counsel when needed. As he prepares to leave his role as ISSBD President I would like to say thank you to Rainer for his interest, enthusiasm, and help. Believe me, Rainer, we very much appreciate it.

The report of the Editor was unanimously approved by the EC.

### 11.2. Publisher's Report

Kerry Barner and Lorna McConville from SAGE Publications presented a detailed Publisher's report of the IJBD, including topics such as editorial, production, promotion, marketing, subscription and circulation services. The extensive report activated discussion concerning a variety of topics among the EC. For example, a vast array of means for improving the impact factor of the journal was discussed. Also discussed were changes in libraries' subscription policies, as well as the changing marketing strategies of SAGE and other publishers.

The EC applaud SAGE's active efforts to find the means to promote use of the IJBD.

### 11.3. Newsletter, Former Editors' Report

The former editors, Joan G. Miller and Xinyin Chen reported of their last year as Newsletter editors as follows:

Our term as Newsletter editors ended in December, 2005 with the Newsletter issue on "Longitudinal Research on Human Development: Importance, Issues and New Directions." To ease the transition to the new editorial team, however, we completed one final issue of the Newsletter, which was devoted to the topic of "Culture and the Development of Emotions" and was published by SAGE Press.

We are happy to report that the transition to SAGE has proceeded extremely smoothly. The SAGE editors, Danielle Ray and Kerry Barner, have shown valuable flexibility and responsiveness in our interactions with them and appear committed to producing a quality Newsletter.

The report of the Newsletter editors was approved unanimously, and the EC expressed its gratitude to Miller and Chen for their marvelous job for the Newsletter.



#### 11.4. Newsletter, New Editors' Report

In their report, the editors, Bonnie Barber and Karina Weichold, reported the following plans and activities:

The main challenge of this year was to get started as the new editorial team of the ISSBD newsletter. During winter and spring 2006 we had several email exchanges and personal conversations with the former co-editors Joan Miller and Xinyin Chen, and the President of the Society Rainer Silbereisen and President-elect Anne Petersen. Thereby, instructions and information on the content of the newsletter, guidelines for the publication process, important deadlines, and information about the interaction between Editors, Society, and the Publisher were conveyed. These data and suggestions were very helpful to us.

In the early stages of our editorship, as the new editorial team, we discussed possible changes in the structure of the newsletter, and also aspects that we wanted to maintain. The newsletter has upheld a very high standard under the direction of the previous editors, and we wanted to continue the idea of having a special topic for each newsletter. Because we were committed to continuing with the format for the special section and associated feature articles and commentaries, we identified an interesting topic of research that would be the title of the special section of the Autumn 2006 issue of the newsletter, which is, "Research on Interventions Targeting the Promotion of Positive Youth Development."

In March, 2006 Karina attended in a meeting with the President of the ISSBD (Rainer Silbereisen), the Society's Treasurer (Marcel van Aken), two representatives of SAGE (Michael Carmichael, Kerry Barner), and Verona Christmas-Best in Jena, Germany. On this occasion, several questions related to the newsletter and its organization and publication were clarified. For instance, new sections of the newsletter were discussed (i.e., a section entitled "Stories from the Lab," and a conference report, "From the Eyes of a Young Scholar"). Both new sections were well accepted, and we will include them from autumn onwards in the Newsletter. Associated with that, we discussed the goals of the newsletter and planned to write a short abstract which we will send out to all researchers whom we invite to write for the newsletter.

Near the end of March 2006[WU1], the new editorial team met in San Francisco at the SRA conference. We had several meetings in order to prepare our first newsletter, some of which included the current President (Rainer Silbereisen) and President-elect (Anne Petersen) of ISSBD. Finally, we took the advantage of the opportunity presented by the meeting to establish contacts with possible authors for feature articles, commentaries, and lab stories for our first newsletter. Moreover, we visited the representatives of SAGE and discussed means of ensuring the timely publication of the newsletter.

From April to June 2006, we developed concrete plans for the autumn issue of the newsletter. After drafting an abstract on the goals of the newsletter, and identifying appropriate article length and deadlines, we invited several colleagues to contribute to the first special section. We contacted most of them via email, and enlisted some others during conferences. For example, Karina had meetings

with two of the authors, and with SAGE, at the EARA meetings in Antalya, Turkey.

So far, the Autumn 2006 Newsletter will contain four feature articles written by research teams from Finland, India, Australia, and Italy. We already received these papers in their final version and they have been sent out to the commentators. Moreover, the new section "Stories from the Lab" will include an article on the WHO, and one regarding a research group working in Omsk, Siberia. Finally, a young scientist (a fellow of Jacobs Foundation) has accepted our invitation to write the report ("from the eyes of a young scholar") on the Melbourne conference. Tracking of the authors is ongoing, and so far we were able to meet all deadlines.

In coordination with SAGE and Jari-Erik Nurmi, we implemented an advertising banner on the ISSBD web page and had several telephone conferences with the publishers, the Society's President and the President-elect. We are currently working on ideas for the Spring 2007 Newsletter. We plan to advertise the topic of the upcoming special section at the Melbourne Conference. Moreover, the web page will be updated in this regard.

As the new editorial team, we are very satisfied with the cooperation and support of the former editorial team, the current President (Rainer Silbereisen) and upcoming President (Anne Petersen) of ISSBD, and our publisher SAGE. We are very much excited about our new task and we are looking forward to maintaining the high quality of the ISSBD newsletter, while also adding some new and fresh ideas to its format and content.

The report of the new Newsletter editors was enthusiastically approved.

## 12. Biennial meetings

### 12.1. Melbourne 2006

Ann Sanson reported that the organizing of the congress has progressed well, and she was expecting it to prove financially sound. At the time of the EC meeting, around 850 participants from 31 countries had registered. Sanson also briefly described the highlights of the congress and its media strategy. The EC thanked the Chair of the Melbourne Meetings, Ann Sanson, for her splendid work for the Meetings and the Society.

### 12.2. Wuerzburg 2008

Wolfgang Schneider reported on the recent developments of the ISSBD Wuerzburg Meetings.

The XX Meeting of the ISSBD will be held in Wuerzburg, Germany, July 12–16, 2008, in the Congress Centre of the city, which is close to the city center and major hotels. The congress agency is the INTERCONGRESS, which also takes over the financial risk of the congress. The preliminary plans for the congress structure (e.g. day schedule) has been fixed; in addition, the Local Organizing Committee and the International Program Committee have been nominated.

The EC accepted the report and budget of the organizers of the XX Biennial Meeting unanimously. It was also decided that the ISSBD will make a \$ 35,000 loan to the organizers. This is also the maximum the Society is prepared to pay if the congress sustains a loss.

### 12.3. Guidelines for future meeting organizers

The President, Rainer K. Silbereisen, had written Guidelines for Submitting a Bid to Host Biennial Meetings for the ISSBD, which he introduced to the EC. Before the report was brought to the EC, it was commented on by the members of the EC and the previous congress organizers.

The EC enthusiastically accepted the report and suggested that it will be published in the Society's webpage.

### 13. Future Congress Sites

The EC discussed various prospects for the congress site for the year 2010. Many related topics, such as geographical location, a possibility to link the congress to other international congresses and a history of the sites of previous congresses were discussed. The EC remarked that the choice of the site of the 2010 congress site should be determined soon.

### 14. Committee report on promoting international participation

Xinyin Chen, chair of the committee (other members: Patricia Greenfield, Anne Petersen & Marcel van Aken), introduced the report. After an extensive discussion the EC decided to support the following recommendations of the committee:

- I. Free membership for the first 2 years for doctoral students and post docs (+7 years) from developing countries. To

evaluate the quality of the applicant, a recommendation is required from a current member of the ISSBD for the application.

2. To provide a higher and more stable level of funding for international scholars to attend conferences, the Society will provide \$ 35,000 for this purpose for the Wuerzburg meeting. The awards may also support young scholars to make a site visit for a short period at a research laboratory of their choice in combination with an ISSBD meeting in the region.
3. The EC will consider appointing new coordinators in the areas where current ISSBD coordinators are unable to reach. The Membership Committee will maintain connections with all the regional coordinators.
4. The Steering Committee and the regional offices are encouraged to increase cooperation with local developmental societies.

The EC expressed its gratitude to Xinyin Chen and other committee members for their marvelous job in raising ideas on how to promote international participation in the ISSBD.

### 15. Other relevant business

No other topics were raised.

Jari-Erik Nurmi  
Secretary

## Minutes of the ISSBD Executive Committee Meeting II: Melbourne, Australia, 2006

*Time:* Executive Committee Meeting (EC)  
July 6nd 16.30–18.00.

*Members of the EC present:* Marcel van Aken (Acting Treasurer/ Membership Secretary), Serdar Degirmencioglu, Joan Miller, Jari-Erik Nurmi (Secretary), Anne C. Petersen (President), Rainer K. Silbereisen (Past-President).

*Editors present:* Bonnie Barber (Newsletter), Karina Weichold (Newsletter).

*Ad hoc advisors present:* Bame Nsamenang, Silvia Koller, Suman Verma.

*Apologies for absence received from:* Margarita Azmitia, Xinyin Chen, W. Andrew Collins, Arnold Sameroff, Abraham Sagi-Schwartz, Peter K. Smith.

### I. Opening and welcome

The President, Anne C. Petersen, opened the EC meeting welcomed the EC members, ad hoc members and editors. She thanked Rainer Silbereisen, Past-President, for his work on behalf of ISSBD to secure a new publisher contract and to develop clear guidelines for biennial meetings.

### 2. President's philosophy and goals for the ISSBD

The President, Anne C. Petersen, introduced her goals and plans for the future of the ISSBD. She described her vision for ISSBD to contribute to the work of each developmental scholar around the world – from new scholars to senior scholars – to advance developmental science as a field and to improve global society. Her goal for her Presidency is to achieve a big enough stable core of committed members around the world, members engaged in important and effective activities to advance the field of developmental science and to sustain ISSBD. She introduced Catherine Cooper who has agreed with work with the EC on strategic planning for effective regional participation in ISSBD activities.

Following President's introduction, several issues were discussed. The EC discussed, for example, the committees needed in the ISSBD in future, as well as who might chair these committees. President will contact the people mentioned in the discussion for asking their interest and negotiating for further details. Similarly, the Ad hoc advisors for the EC were discussed. The President will come back with a list of names within a few weeks.

The upcoming elections 2007–2008 for the President-elect (2008–2010, President: 2010–2014, Past President; 2014–2016), Treasurer/Membership secretary (2008–2014), Secretary General (2008–2014) and EC members (2008–2014) were discussed. For this purpose it was decided that Secretary and Treasurer/Membership secretary will write up a description of the major activities of their offices in early Fall.

The editors of the Newsletter, Bonnie Barber and Karina Weichold, described their recent plans for the Newsletter. Although the structure of the Newsletter remains same, some



new parts will be added. Several thematic issues for the Newsletter are under development.

### 3. Next meeting of the EC

The site and time of the next meeting of the EC was discussed. Two alternatives were under consideration. One in the context of Jena meeting of the European Society of Developmental Psychology and another in the context of SRCD meetings in Boston, both in 2007. As not all the EC members were present,

it was decided that the President will come back to the site and date after contacting other members.

### 4. Other Relevant Business

No other topics were raised.

Jari-Erik Nurmi  
Secretary

## MAJOR CONFERENCES AND WORKSHOPS OF INTEREST

### 2007 June 26–July 1

*ISSBD Workshop on Advancing Inter-American Collaboration in Human Development Research, Methodology, and Training*  
Location: Porto Alegre, Brazil  
Website: [www.issbd.org](http://www.issbd.org)

### 2007 July 3–6

*Xth European Congress of Psychology (ECP)*  
Location: Prague, Czech Republic  
Website: [www.ecp2007.com](http://www.ecp2007.com)

### 2007 July 11–13

*International Attachment Conference (IAC)*  
Location: Braga, Portugal  
Website: [www.iep.uminho.pt/iac2007](http://www.iep.uminho.pt/iac2007)

### 2007 August 16–19

*112th Annual Convention of the American Psychological Association (APA)*  
Location: San Francisco, California, USA  
Website: [www.apa.org/convention](http://www.apa.org/convention)

### 2007 August 21–25

*13th European Conference on Developmental Psychology (ECDP)*  
Location: Jena, Germany  
Website: [www.esdp2007.de](http://www.esdp2007.de)

### 2008 March 6–9

*2008 Biennial Meeting of the Society for Research on Adolescence (SRA)*  
Location: Chicago, IL, USA  
Website: [www.s-r-a.org](http://www.s-r-a.org)

### 2008 May 7–10

*Biennial Meeting of the European Society for Research on Adolescence (EARA)*  
Location: Turin, Italy  
Website: [www.eara2008torino.eu](http://www.eara2008torino.eu)

### 2008 July 6–9

*XIX International Congress of the International Association for Cross-Cultural Psychology (IACCP)*  
Location: Bremen, Germany  
Website: [www.iaccp.org](http://www.iaccp.org)

### 2008 July 13–17

*20th Biennial Meeting of the International Society for the Study of Behavioural Development (ISSBD)*  
Location: Wuerzburg, Germany  
Website: [www.issbd2008.de](http://www.issbd2008.de)

### 2008 July 20–25

*XXIX International Congress of Psychology (ICP)*  
Location: Berlin, Germany  
Website: [www.icp2008.de](http://www.icp2008.de)



## Editorial

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Karina Weichold

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ISSBD Newsletter

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