

The science of environmental influence

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The collection of articles in this edition of *Paediatrics & Child Health* concerning information in society absorbed by our children and youth presents us with oft-repeated dilemmas. Are the authors being too restrictive by searching for general rules in a single domain of development rather than trying to take into account all forces by which the child may be influenced? Are the authors stating that there is a hierarchy of environmental influences and that the media is a dominant player? My reading is that there is an effort to highlight these particular formative influences on child and adolescent development without explicitly or implicitly ignoring genetic, familial and emotional influences.

It has become a "canon of developmental science" (personal communication, Dr Tom Boyce) that behaviour is expressed after biology-context interactions at many different levels. We thus cannot assume that all children will react in the same way to the same television show, Internet program or newspaper article. Children have different levels of biological reactivity, and thus, different sensitivities to various social contexts. We like to speculate also that the results of the interchange may become embedded in the neural circuitry of the brain. However, we cannot begin to understand these behaviours unless we start the process of examining the intricacies of the interaction. The results are never self-evident and often are much more complicated and seemingly contradictory than we could imagine. This is the basis for the fervor and intense curiosity of the researchers in this domain of psychosocial development.

The hope is that the data in these articles will inform the clinician about the weight of the media's influence, its pervasiveness and its universal reach. Swift and Taylor write on "the digital divide" between children and youth and their parents (pages 275-278). They note that whereas parents believe that they are supplying adequate supervision for their children and know what their children are doing and learning on the

Internet, the younger generation in fact has embraced the Internet as their own world separate from their parents' reach and knowledge. Thus, there is an urgent need for parents to examine what 'supervision' means. It does not mean simply organizing equal time online for various family members, but it does mean that there needs to be detailed attention paid to the content of the time spent on the computer. Grant examines the relationship between teens' sexual behaviour and the media (pages 285-286). While asking the difficult question about which comes first, the sexually active adolescent seeking sexual content in the media or the sexual content of present entertainment leading adolescents to increased sexual activity, there is nevertheless a reference to the clear establishment of media violence's effect on behaviours and attitudes as a possible model to answer the question. Paquette reviews for us the important literature substantiating the influence of media violence on the behaviour of children and adolescents, but then worries that we may begin to accept psychological violence as an appropriate and desired substitute for physical violence (pages 293-295).

Throughout these articles, there are constant reminders that we must be clear in our science and that caretakers must keep track of the big picture: maintenance of values, primacy of respect for others, and the constant imperative to maintain one's own emotional and physical health. The tools to accomplish these tasks in the context of media influence seem to revolve around exploring different and transparent ways of communicating with our children and youth. Specific suggestions for this, and for further research, are contained in the advocacy article by Davidson et al (pages 265-266), and in the psychosocial committee's recommendations for parents and physicians (pages 311-317). The inquisitive physician is thus satisfied by a thought-provoking exploration of this domain, and can subsequently spring into action by following these active interventions.