

Editorial

Beyond Validity and Reliability: Meaning-in-Context of Adolescents' Self-Reports of Sexual Behavior

Some years ago, my colleagues and I were pilot-testing a self-administered survey item about condom use at most recent intercourse. The item read “Was a condom used the last time you had vaginal sex?” The wording was closely adapted from widely used measures of condom use. Pilot testing went well until a research assistant showed me a form with “No” marked as the response. In reply to my query about why this was a problem, the research assistant pointed to the short sentence written beneath the item. It said “The condom was new.”

I write, read, use, and critique a lot of research questions related to adolescents' sexual behavior, and I often think of this experience while doing so. That young adolescent's response to our research inquiry expresses what I've come to consider my penultimate principle in the measurement of adolescents' sexual behavior: *this is as good as it gets*.

“As good as it gets” summarizes recognition and acceptance of an irresolvable gap between an unknowable truth and a knowable datum. The unknowable truth is whether some idealized type of sexual behavior physically occurred. I say “idealized” because we attempt to measure sex as specific individual behaviors when it is in fact an integrated and highly coordinated set of gestures, activities and feelings that only roughly correspond to our categories. The knowable datum is an adolescent's *report* on the occurrence of that sexual behavior, if it can be extracted from those complex gestures, activities and feelings and matched to some key bit or phrase in the investigator's question.

The gap between truth and datum haunts investigators and delights skeptics of the veracity of self-reports of sexual behavior. One approach to addressing this issue is to assess test–retest reliability of adolescents' self-reports. This is the approach taken by Vanable *et al.* in this issue [1]. The article adds to an existing literature that notes, in general, that measures of adolescents' self-reported sexual behaviors have imperfect but satisfactory reliability [2,3]. Moreover, the paper extends the existing literature by the provision of reliability data on several other measures relevant to understanding of human immunodeficiency virus/sexually transmitted infection risk and protection behaviors, as well as

understanding of the reliability of all of these measures within the context of an audio computer–assisted interview (ACASI) data collection format.

The results reported by Vanable *et al.* are particularly interesting in light of a paper by Palen *et al.* published in the *Journal* in 2008 [4]. The conclusions of Palen *et al.*, in contrast to those of Vanable *et al.*, were that reliability of adolescents' reports about sexual behavior were sufficiently low as to call into question inferences about their sexual behavior. One could address the differences between the Vanable *et al.* and the Palen *et al.* data by a careful analysis of issues traditional to any evidence-based journal club: the two papers differ markedly in the linguistic and sociocultural origins of the sample, in the study design, in the specific questions asked, and in the survey mode used to ask the questions.

I shall leave this type of close analysis to others. Rather, I would like to disagree with a point raised by the authors of both papers—as well as by Lucia O'Sullivan [5] in an editorial accompanying the Palen *et al.* paper—concluding that ongoing research is required to improve the reliability of adolescents' self-reports of sexual behavior. More accurately, I should say that I agree that strenuous efforts toward accuracy and precision are an explicit responsibility of each investigator. This is simply part of the rigor, discipline, and ethics of science. The larger challenge is to search for some different perspective that allows us to go forward in the face of irresolvable questions about the reliability of the data.

The perspective I find increasingly important is one that gives much less emphasis to counting adolescents' sexual behaviors and much more emphasis to understanding the personal and social contexts of their occurrence and the meanings derived from them [6].

One justification for this different perspective is that it shifts our attention away from our obsessive categorization of people as *virgins* and *unvirgins*. I use the word “unvirgin” (jocularly similar to the “undead” of vampire mythology) to highlight the way we consider a person to be profoundly “changed” on the basis of a single, typically brief, sexual event (typically coitus, but one can be “virgin” in a variety

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of ways). It also emphasizes how—well into the first decade of the 21st century—first coitus still marks the “loss” of virginity rather than the gain of any of the potential benefits of sex [7,8].

A second justification for a different perspective is the need for a new attention to *sexuality* as an integral aspect of development in adolescence through young adulthood. Our focus on sexuality has been largely lost by what I call epidemiologic synecdoche. In this process, a part of sexuality—various sexual behaviors linked to adverse consequences such as sexually transmitted infections and unintended pregnancy—has replaced the whole of adolescent sexuality. From this point of view, all of adolescent sexuality has become risky, dangerous, and life threatening. Because we have thus far failed to understand sexuality, our most coordinated and expensive public health efforts focus simply on eliminating sex from adolescence [9].

A final justification is a corollary to the first and second, and has to do with the need to better understand *agency*, *desire*, and *pleasure* as meaningful elements of young people’s sexual experience. From this perspective, we can no longer fear that adolescents are simply victims to the accidents of their sex and sexuality [10]. Rather, we need a substantial research focus on the meanings that young people give to specific sexual acts, how these are interpreted in terms of themselves and the people with whom they have sexually interacted, and how these meanings could be transformed into a sexuality that is both healthy and disease-free.

There is a joke I have heard from many people, some of whom swear it is a true story of a clinical interchange with an adolescent: *Q: Are you sexually active? A: No, I just lie there.*

Which leads me to my ultimate principle in the measurement of sexual behavior. In research on adolescent sex and sexuality, the specifics of a response to a given question are—at best—of modest interest. What is critical is a new research agenda that addresses sexuality and sexual develop-

ment, acknowledges the real health risks associated with sex, and seeks as well to understand the meaning of sex within the context of both intra- and interpersonal meaning. Imbued with this type of meaning-in-context, we can make truly useful measures of sexual behavior.

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