## On the Semantics and Operations of Primary Prevention and Wellness Enhancement (Or Will the Real Primary Prevention Please Stand Up?)<sup>1</sup>

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Compared two recent, major reviews of primary prevention program evaluation research (i.e., Durlak and Wells' meta-analysis of 177 such studies and the Institute of Medicine (IOM) Report's summary of research studies of preventive intervention programs) with respect to specific studies included and input sources used. Whereas the IOM Report defined the goal of primary prevention as reducing the occurrence of new cases of mental disorder, Durlak and Wells' broader definition included both that goal and the promotion of psychological wellness. Overlap in journal sources used by the two reviews was modest and overlap in the actual primary prevention program evaluation studies included was minimal ( $\cong$ 7%). These findings bespeak somewhat different views of primary prevention and suggest a need for the complementary development of both the above approaches as alternatives, individually and collectively, to mental health's past established restorative ways.

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Primary prevention in mental health has had a history of mushy, evanescent definitions. Indeed, in its early days the concept seemed to have nearly as many definitions as there were people writing about it. The broad range and idiosyncratic inclusionary ground rules of these definitions provided tongue-in-cheek observers (Cowen, 1977b; Kessler & Albee, 1975) with excellent grist for the spoofing mill. This loose early usage of the term slowed down the field's growth by creating semantic confusion mindful of the apoc-

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ryphal Tower of Babel. As the field evolved, however, a moderately well-accepted two-pronged definition of the concept began to emerge, embracing the goals of preventing psychological dysfunction and promoting wellness (Cowen, 1973, 1977a; Zax & Cowen, 1976). Indeed, this basically was the definition used in the Prevention Task Panel Report (1978) for the President's Commission on Mental Health. Since that time, the concept's definition has crystallized further.

In two recent papers commenting on current trends in the use of the term primary prevention (Cowen, 1994, 1996) I noted, with some satisfaction, that today's definitions of the concept are crisper and more operational than earlier ones. My enthusiasm about this trend, however, was tempered somewhat by differences in the scope and emphasis of these emergent definitions: a narrow, largely DSM-IV disorder-prevention notion of primary prevention, and a broader notion that includes the goal of wellness enhancement as well as disease prevention. In *de facto* ways, however, the narrower, targeted view has come increasingly to be seen as the "real" primary prevention in influential policy-setting and fund-granting offices, and has nudged the wellness enhancement notion gently toward the background.

Against this backdrop, I found it instructive to examine two recent, stock-taking documents, each of which, in its own way, helps to clarify the current status of primary prevention and considers its future needs. The first, commissioned by Congress, is the Institute of Medicine (IOM) Report of research on preventive intervention, which included recommendations for a long-term prevention research agenda. On the basis of an intensive, scholarly effort, this report was prepared in the form of a 600-page volume entitled: Reducing Risks for Mental Disorders: Frontiers for Prevention Intervention Research (Mrazek & Haggerty, 1994). Independent of this development, Durlak and Wells (1997) published a meta-analysis of the efficacy of 177 primary prevention programs for children and youth, ages 18 and younger. This analysis was based on a subset of relatively rigorous primary prevention program outcome studies (e.g., with control groups) that had reached publication as of December 1991.

Both contributions help importantly to crystallize the field of primary prevention in mental health. Each, in the authors' words, is based on research findings bearing on the efficacy of primary prevention programs in mental health. Hence, it is of interest to consider the extent to which their input materials overlap in semantics and operations, and the extent to which their findings individually or collectively, clarify the accomplishments of a uniform field called primary prevention. These questions can best be considered in the light of the definition of primary prevention that shaped the focus of each of the projects.

The IOM report (Mrazek & Haggerty, 1994) pivoted around a unidimensional definition of prevention's goals, that is, "the reduction of the occurrence of new cases of mental disorder" (p. 9), an objective also featured centrally in the resulting book's title. This goal was seen to be advancable by three types of preventive intervention that presumably shared the common feature of occurring "before the onset of full-blown disorder": (a) indicated interventions, targeted to high-risk individuals showing detectable, proximal signs of (DSM-IV type) disorders, or biological markers that suggest predisposition for mental disorder; (b) selective interventions, targeted to people with higher than average risk for disorder either currently or over the lifetime course; and (c) universal interventions, targeted to people in general, without reference to identified individual risk. Within the IOM framework, the prime goal of all prevention efforts is to reduce new cases of disorder, and the mark of their efficacy is the extent to which such achievement can be documented.

This definition, now widely espoused (e.g., Coie et al., 1993; Koretz, 1991; Muñoz, Mrazek, & Haggerty, 1996; National Advisory Mental Health Council, 1995; Reiss & Price, 1996), offers a clarity of focus that goes well beyond prior fuzzy notions of primary prevention. It has become the field's dominant definitional view in shaping policy, programming, and budgets (Cowen, 1994, 1996). The IOM report largely excluded mental health promotion activities from its purview because, in its words: "health promotion is not driven by an emphasis on illness, but rather by a focus on the enhancement of well-being" (p. 27). Value judgments associated with that decision were implicit rather than explicit.

Durlak and Wells' (1997) (DW) meta-analysis is based on a broader notion of primary prevention which, like several early definitions (Cowen, 1977a, 1980; Prevention Task Panel Report, 1978) clearly reflects health promotion goals. Specifically, DW defined primary prevention as "intervention intentionally designed to reduce the future incidence of adjustment problems in currently normal populations, as well as efforts directed at the promotion of mental health functioning" (1997, p. 117). Both accounts however purport to reflect syntheses of outstanding primary prevention program evaluation research studies.

The preceding is simply to say that there are both similarities and differences in the language (semantics) of the two sources. It does not speak to the literal operations that vivify this focus, that is, the specific bodies of knowledge on which the two contributions rest, and the conclusions reached on the basis of such input data. Given the definitions of primary prevention and the foci that guided the two reviews, one might have reasonably anticipated some major domains of overlap as well as some ar-

eas of independence between them. The present survey sought to establish, in a quasi data-based way, the extent to which that actually happened.

Although one can speculate forever about commonalities between two approaches based on abstract definitions (semantics), its another thing to explore such matters concretely (operationally). One way to do that is to compare the specific research bases (data sources and specific studies) on which the two contributions rest. That step presented several minor complications. Durlak and Wells's (1997) reference list was relatively straightforward and easy to code. Its 209 cites, more specifically the 177 program evaluation research studies it included, constituted the data pool for the meta-analysis. Four largely operational criteria were used to select studies for inclusion in this analysis. A program first had to meet a construct definition of primary prevention that featured the goal of either preventing problem behaviors or promoting wellness and, additionally, had to (a) be targeted to participants under age 18; (b) include some type of control or comparison condition; and (c) focus primarily on behavioral and social outcomes.

Ground rules for inclusion in the IOM primary prevention research overview were less clear in several respects. The IOM volume covered much more than just primary prevention program evaluation research; it included chapters defining the concept, considering its new directions, and offering how-to-do-it suggestions in research, dissemination, and funding. Hence, a decision had to be made about chapters targeted to primary prevention research. By title, three chapters looked closest to filling that bill. The cleanest of the bunch, by far, was chapter 7, entitled: "Illustrative Prevention Intervention Research Programs" (223 references). The other two were: chapter 8, "Treatment Research and Prevention Research: A Collaborative Frontier" (59 references) and chapter 9, "Mental Health Promotion" (113 references).

All three chapters were considered preliminarily. Chapters 8 and 9 proved to be "wild goose chases." Because only 1 of their combined total of 172 cites (Spivack & Shure, 1974) also appeared in DW's bibliography, it became clear that examination of overlap between the two sources would have to come from IOM chapter 7. The latter's explicit focus on primary prevention research was close to the avowed focus of DW's meta-analysis of the outcomes of prevention intervention programs. Moreover, it was emphasized that chapter 7 studies were culled, because of their solid research footings, from a much larger number of primary prevention "service programs and demonstrations that have not incorporated rigorous research methodologies . . . or rigorous standards for assessment of program effectiveness" (p. 216).

Given that both DW's meta-analysis and IOM chapter 7 were billed as having a prime focus on research evaluating primary prevention intervention programs, the key turf-defining (operational) question was the extent of overlap in the studies they included (i.e., the de facto working base for their contributions). A first step in both cases was to identify and select pertinent source documents for inclusion in the review. There were similarities and differences in how the two groups proceeded in that regard. One important similarity was that both began with a comprehensive, computer-generated literature search, designed to identify a corpus of potentially eligible studies. For the IOM, this first step located 1,900 potentially relevant cites. Subsequent search steps, however, differed for the two groups. For DW, those steps included a manual search of 15 journals that focused on children and adolescents, examining pertinent books and book chapters in the field, tracking cites from identified studies, and a combined computer and manual search of Dissertation Abstracts. By contrast, the main additional sources used in the IOM search were papers and documents from NIMH and private foundations. In both cases, however, the key goal of this initial "search-and-select" process was to distill large numbers of potentially relevant primary prevention program outcome studies down to a small number of purer essences that reflected more rigorous standards of research evaluation. In that regard, both sets of studies were seen as "pick-of-the-litter" quality in the domain of primary prevention program evaluation research.

In any case, because primary prevention in mental health—especially sound primary prevention program evaluation outcome studies—is a relatively youthful and finite domain, and because both groups required that studies included in their reviews meet exacting research standards, there was reason to anticipate substantial overlap between them (as well as several reasons why such overlap should have been less than perfect). Among the latter is the fact that whereas DW's analysis was limited to programs for children and youths, the IOM report theoretically covered the full lifespan. Chapter 7's actual page allocations by age-band, however, were 51 (roughly 70%) for children and youths, and 22 for adults and the elderly. A second factor that somewhat reduced overlap between the two sources was that the closing date for inclusion in DW's analysis was December 1991, whereas IOM chapter 7 included a sprinkling of 1992 and 1993 cites. Thus, the IOM's ledger was open and 1½ years longer than DW's.

With that as backdrop, we can address the key issue of extent of overlap between the 209 DW and 223 IOM cites in these two reviews of exemplary primary prevention programs. To break the suspense quickly, there were only 13 cites in common; in 3 other cases the same project was accessed through different source articles in the two reviews. It makes little

difference whether one uses 13 or 16 studies as the "in common" core-figure; both reflect surprisingly little (6-71/2%) overlap.

Both reviews included some background (i.e., nonresearch study) cites. Excluding such cites and confining the overlap comparison to actual research studies (i.e., 177 of DW's 209 cites) did not materially modify the overlap figure. The latter remained minimal (6%). Put a bit more provocatively, 93% of the cites that constituted the core input data for these two reviews, each purporting to focus on a finite domain described by the common umbrella words "primary prevention research," did not overlap.

Short of calling this outcome astonishing, it is at least somewhat surprising. Based on the semantics of the situation, I would have expected at least 40–50% overlap in studies that the two sources cited. Because that did not happen, I pursued several other potentially clarifying tangents. The first was to "eyeball" the two sets of cites in seeking to form some impressions about differences in their foci. The definitional emphasis that most clearly differentiated the two was the extent of their focus on risk factors and the ultimate goal of preventing major, disorder-related "end-states." That combination of focus and goals, dominant in the IOM's semantics and overview, did not centrally guide DW's meta-analysis. The latter focused more on short-term outcome objectives and reflected wellness goals. This difference in focus may implicate different concepts of primary prevention, target groups, and program methodologies and, for those reasons, turn attention to different bodies of literature.

Still trying to find common ground (i.e., distilled essences of primary prevention) in the two sources, I examined the 16 common cites. That wellintended, but fruitless, effort increased, rather than diminished, my puzzlement. Common cites seemed quite diverse content-wise, and followed no clear ground rule that I could discern. Although all studies in common involved children or youths (necessarily so, since those were the only agebands included in DW's meta-analysis), they ranged in content from programs targeted to risk conditions for children of divorce; alcohol and substance abuse; and attention deficit disorders; to proactively oriented programs in competence building; enhancing school environments and facilitating school transitions; and home visit programs to strengthen childrearing practices and parent-child relationships. Thus, somewhat ironically, in the light of semantic differences in the definitions of primary prevention that guided the two documents, the 16 common programs spanned diverse substantive areas and reflected both problem reduction and wellness-enhancing objectives.

That reality shattered my initial assumptions about differences in the two approaches and the bodies of content on which they would focus. Having assumed that the IOM report was basically attuned to the long-term objective of preventing DSM "baddies," I was a bit puzzled by its inclusion of several short-term skill training programs (e.g., Elias et al., 1986; Rotheram, Armstrong, & Booraem, 1982; Spivack & Shure, 1974) but not others with equally strong research emphases (e.g., Allen, Chinsky, Larcen, Lochman, & Selinger, 1976). Moreover, such puzzlement was double-edged. For example, DW's meta-analysis included a few IOM-cited studies with DSM-IV type outcomes (e.g., Strayhorn & Weidman, 1989) but not others with similar outcome foci. DW also included 26 studies that involved important physical health (medical, dental, and surgical) outcomes, but only if the studies also featured prime behavioral and psychological outcome criteria. The IOM report did not include any of those studies.

Because the two approaches were oriented, in principle, to somewhat different issues and outcomes, and differed some in the search patterns used to identify inclusion-worthy research studies, the likelihood seemed substantial that they would focus on somewhat different journals and bodies of literature. That possibility prompted a more detailed analysis of the publication outlets in which the source articles for the two reviews had appeared. For the IOM chapter, 132 of 223 cites (59%) came from 68 different journals, an average of 1.9 cites per journal. The remaining 91 cites (41%) came from diverse sources including 20 books and 32 book chapters, 12 actual research grant applications (9 to NIMH), several government and foundation reports, program manuals, presented papers and singletons reflecting a newspaper article, an unpublished dissertation, and one submitted grant application. Journals cited in the IOM overview were scattered; 48 of the 68 provided only 1 article, and only 2 yielded more than 5 articles: Journal of Consulting and Clinical Psychology (n = 11) and American Journal of Community Psychology (n = 10). The 68 journals cited included medical, developmental, educational, psychiatric, psychological, sociological, social work, addiction, geriatric, legal, and enforcement outlets.

There were some similarities in the pattern of journal sources that fed into DW's review. Specifically, 151 of their 209 cites (75.6%) came from 59 journals, an average of 2.7 cites per journal. DW's 52 nonjournal cites (24.4%) were more concentrated than the IOM's, coming from only 3 sources on which their search steps focused: doctoral dissertations (26), books (11), and book chapters (15). Like the IOM report, their journal cites reflected diverse content areas. Numbers of cites per journal ranged from 1-17. The most frequently used were American Journal of Community Psychology (17), Elementary School Guidance and Counseling (14), Journal of Consulting and Clinical Psychology (10), and Psychology in the Schools and Child Study Journal (8 each).

There was overlap in only 22 of the journals (roughly one third) referenced in the two documents, and major fields were represented differentially in these journals. Some of those differences are easier to understand than others. In terms of similarities, the largest numbers of references for both came from psychology journals—14 such journals with 48 cites for the IOM report, and 15 with 51 cites for DW's meta-analysis. In both reviews these sources were paced by the same two journals: the American Journal of Community Psychology and the Journal of Consulting and Clinical Psychology. Still on the similar side, both sources drew from the same number of child development (n = 6) and health-related (n = 8) journals, although fewer than half were the same journals for the two reviews.

The journal sources used in the two reviews also differed in several ways. Unremarkably, the IOM survey had twice as many (≈20 vs. 10%) cites from medical and psychiatric journals. Several other differences in low-frequency categories (e.g., more IOM cites from geriatric, addiction, and legal and enforcement journals) are consistent with the IOM's life-span, versus DW's children and youths, focus.

Of the two major differences in journal outlets from which the two sources drew, one was anticipatable and the other surprising. Predicatably, given their focus on wellness enhancement, DW drew 44 journal articles (28%) from 13 educational journals compared to 4 (3%) from 2 such journals in the IOM report. More surprising, the DW analysis included 14 articles from 6 journals with the words therapy or counseling in their names, whereas the IOM report had no articles from such outlets. In summary then, beyond the striking nonoverlap in the specific articles that entered the two reviews, there were important differences in the journal sources and other types of documents that provided the raw materials (foundations) on which the two reviews rested.

## DISCUSSION

Although there are reasons why the two approaches should have reflected somewhat different substance, those reasons are insufficient to explain the principal conclusion that comes out of this comparison, that is, despite the fact that both sources used sound primary prevention program evaluation research as their key defining focus words (semantics), when push came to shove (operations) they did not cover the same terrain. Notwithstanding this predominant *non*overlap, both ended up on comparably positive, encouraging (presumably research-anchored) notes about primary prevention's progress and current status. Direct quotes from the two sources punctuate that point:

With regard to preventive intervention research . . . the past decade has brought encouraging progress. At present there are many intervention programs that rest on sound conceptual and empirical foundations, and a substantial number are rigorously designed and evaluated. (IOM Report, 1994, p. 215)

Outcome data indicate that most categories of primary prevention programs for children and adolescents produce significant effects. These findings provide empirical support for further research and practice in primary prevention. (Durlak & Wells, 1997, p. 142)

Although it is heartening to see convergent positive conclusions about the efficacy of primary prevention from these two major, scholarly, pieces of work, that agreement is tempered by the fact that the two reports, to an appreciable extent, are talking about and citing findings based on different definitions of primary prevention's assumptions, practices, and pertinent bodies of literature. Although there are, to be sure, common elements and juncture points between them that may be compatible at a higher, more integrative level of abstraction, in the here and now they seem to reflect two somewhat different facets of a broadly construed world of primary prevention.

The preceding remarks should not be taken to mean that one approach is God-given, or intrinsically better than the other. They are, plain and simple, different and, at this stage in the evolution of primary prevention, each merits deeply invested effort that reflects a mutually enhancing, respectful coexistence, rather than imperialistic domination by either. Thus, in the course of a healthy process of growing definitional clarity, the concept of primary prevention seems to be moving toward the delineation of two somewhat different subworlds. The preceding is a statement of fact not a value judgment.

The single most illuminating finding emanating from this comparison of these two recent, field-advancing, analyses of primary prevention research, is the limited overlap in the substance (specific research studies) on which they are based and the, at most, modest overlap in the sources from which their input materials were drawn. This, again, is not to say that one set of decisions is good the other bad, or that one approach is right and the other wrong. Rather it is to say that these approaches are different, and that we should not be misled about that by the common focus words (semantics) in their titles and conclusions.

For the IOM report, the overarching emphasis is on "research designed to yield results directly applicable to interventions to prevent occurrences of disease or disability" (IOM Summary, 1994, p. 28). DW's broader focus embraces both interventions to reduce "the future incidence of adjustment problems" (not necessarily disease or disability prevention) plus "efforts directed to the promotion of mental health functioning." Those

are different turfs, with at least moderately different goals, target populations, strategies, and approaches. Having established these differences both in principle and in the nonoverlap of the programs these articles reviewed and the sources they scanned, I stress that both approaches are legitimate and offer genuine alternatives to mental health's classic repair-oriented ways. But they are not the same, and neither, by itself, can lay exclusive claim to the haloed name of primary prevention or its Good Housekeeping seal of approval.

It seems both useful and important to highlight differences in these two orientations and their derivative strategies. These differences suggest that they should be seen as complementary rather their competing approaches, with some points of convergence. One of Seymour Sarason's favorite stories neatly underscores this point. It is about a rabbi on a small shtetl (Jewish ghetto enclave in Eastern Europe), where he served members of his flock in many capacities. One day, an agitated parishioner came to see him. The parishioner spent a full hour spewing forth wall-to-wall venomous complaints about his wife. The rabbi listened patiently. Citing his wife's countless failings, the man's final, nonnegotiable conclusion was that she was an absolutely miserable person. The rabbi's two-word response, "You're right!," signaled his agreement. The very next day the man's wife came to see the rabbi. She too took a full hour for a similar tirade about her husband, citing his many ghastly failings one by one, and ending up with the unshakable conclusion that he was an absolutely miserable person. The rabbi again concurred, using exactly the same words he had used with the husband: "You're right!".

When the woman left, the rabbi's own wife stormed out from behind a curtain in the next room, where she had been eavesdropping. Shouting angrily, she confessed that she had listened to the conversations with both husband and wife. She then turned irately on her husband the rabbi, screaming: "You are an absolutely spineless, two-faced person to have said so shamelessly both to the husband and the wife that they were correct. The rabbi smiled, nodded his head gently, and said acceptingly: "You know what? You're right too!"

In my view, the rabbi's words apply to purveyors of the differently tinged notions of primary prevention reflected in the two major contributions reviewed in this article. To each, I say "You know what? You're right too!" I hope that both approaches thrive and do well, and that from them will emerge productive new answers to refractory mental health questions not well addressed by after-the-fact restorative approaches. It will help in this process to continue to sharpen our definitions, be clear about what is being done, and be tolerant of paradox and modest ambiguity.

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