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Universal prevention of eating disorders: A concept analysis

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ABSTRACT

The definition of universal prevention is important for theoretical, research, and policy-related reasons. The present article provides an etymological and historical look at the concept of universal prevention, in and of itself and in terms of its position on the mental health intervention spectrum involving mental health promotion, selective prevention, indicated prevention, case identification, and treatment. Following a summary of the features commonly associated with universal prevention, these characteristics are fashioned into a family resemblance model for defining the construct. This model is applied to four of the articles constituting the journal *Eating Behaviors*' special issue on the universal prevention of eating disorders. It is argued that this family resemblance approach captures the diversity of current universal approaches to reducing risk factors and/or preventing eating disorders. This type of definition, coupled with Foxcroft's (2014) tripartite functional analysis of universal prevention, has the potential to improve evaluations of universal prevention, as well as large-scale collaborative projects that seek to integrate programs across the mental health intervention spectrum.

> It is more sensible, humane, pragmatic, and cost-effective to build psychological health and prevent maladjustment than to struggle valiantly and compassionately to stay its awesome tide.
>
> - Emory Cowen (1983, p. 14)

In the past 15 to 20 years there has been significant progress in the components of eating disorders (EDs) prevention: clarification of risk factors ➔ design innovation ➔ efficacy and effectiveness research ➔ program dissemination (Becker, Stice, Shaw, & Woda, 2009; Levine, in press; Wilksch, 2014). Nevertheless, it is still the case after well over 50 years that the definition of prevention, the categorization of prevention philosophies and programs, and the relationship, if not the distinction, between prevention and treatment can be very challenging (Caplan, 1964; Committee on the Prevention of Mental Disorders (Committee on Prevention), 2009; Foxcroft, 2014; Levine & Smolak, 2006). For example, as noted by Foxcroft (2014, p. 820):

> …whilst the universal-selective-indicated system for classifying prevention is a useful advance on previous notions of primary and secondary prevention, there remains some conceptual confusion about how environmental, community-based and individually oriented prevention approaches should be classified and how these different types of prevention relate to the universal-selective-indicated scheme.

Becker (2016) recently argued that the fields contributing to eating disorders prevention will benefit greatly and reduce unproductive misunderstandings, particularly with community stakeholders, if we strive for greater conceptual and linguistic accuracy. "Universal prevention" is a concept (or construct) that cries out for this type of in depth analysis. The rationale for universal prevention (the "why") has been articulated in detail elsewhere (Haines & Filion, 2015; Levine & Smolak, 2006, 2008), and its efficacy, effectiveness, and dissemination are the subjects of many and varied reviews (see, e.g., Levine, 2015; Wilksch, 2014) and of this special issue. The present article analyzes the concept of universal prevention in order to provide a working definition that captures the breadth and complexity of this important concept.

1. The roots of universal prevention: a selective and targeted review

1.1. Etymology

The English word *prevention* (n.d.) has its roots in late medieval Latin: *prae* (before) + *venire* [to come], which when combined as a transitive verb conveyed a sense of "anticipate to hinder." As an adjective, *universal* [n.d.] has Latin roots at least 200 years older: *universalis,* meaning "of or belonging to all" is derived from *universus*, symbolizing "all together, whole, entire." Even this highly simplified examination of the etymology of universal prevention highlights some of the challenges in understanding and applying a construct that focuses on "all" or an "entirety" in order to hinder a set of disorders (e.g., anorexia

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nervosa, bulimia nervosa, binge eating disorders) that are relatively rare (Keel & Forney, 2015).

1.2. Universal prevention is primary (1957–1983)

The etymology of universal prevention, like the declaration by Cowen (1983) that introduces this article, reminds us that prevention is primary (Levine & Smolak, 2006, 2008). The formal distinction between *primary* and *secondary* prevention, which dates to a 1957 monograph by the Commonwealth Fund's Commission on Chronic Illness (Mrazek & Haggerty, 1994), was elaborated and widely disseminated through an influential book by Caplan (1964). However, in 1983 Dr. Robert Gordon, a physician and special assistant to the Director of the National Institutes of Health (USA), wrote a 3-page letter to the journal *Public Health Reports* that deftly outlined the conceptual and practical limits of the primary vs. secondary distinction (see also Cowen, 1983). Gordon (1983) argued for an improved categorization of prevention as *universal* or *selective* or *indicated* (these days, often referred to as "targeted"[1]). It is noteworthy in a consideration of eating disorders that, according to Gordon, this typology is particularly useful in addressing disorders that are multifactorial in origin and that have a long and complex developmental trajectory.

Gordon (1983) introduces his typology by stating that:

> Preventive measures—those which should be applied to persons not motivated by current suffering—can be operationally classified on the basis of the population groups among which they are optimally used. The most generally applicable type, which we shall call *universal*, is a measure that is desirable for everybody. In this category fall all those measures which can be advocated confidently for the general public and which, in many cases, can be applied without professional advice or assistance. (p. 108; italics in the original)

Gordon (1983) added that universal prevention is likely to require different strategies than selective or indicated prevention, and should be undertaken only when the costs are low and there are significant benefits for the population.

1.3. The mental health intervention spectrum

Two influential versions of a book, published 15 years apart by representatives of several US governmental agencies led by the National Academy of Sciences' Institute of Medicine (IOM), have helped to refine, but not necessarily to validate, the theoretical construct of universal prevention (Committee on Prevention, 2009; Mrazek & Haggerty, 1994). In the latest edition, the Committee on Prevention (2009) continued to use Gordon's (1983) pioneering work to define *universal prevention* as "preventive interventions that are targeted to the general public or a whole population group that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group" [p. xxix]. This is contrasted with *selective prevention*, which focuses on "individuals or [to] a subgroup of the population whose risk of developing mental, emotional, or behavioral disorders is significantly higher than average" [p. xxviii]. Determination of significant risk—but *not* high risk—may be done without screening, based on research pointing to biological, psychological, or sociocultural variables operating at the family, community, or cultural level (Committee on Prevention, 2009).

Consider a prototypical multi-lesson classroom-based eating disorders prevention program (e.g., *Happy Being Me*; Dunstan, Paxton, & McLean, 2016), and imagine it is administered to all girls ages 11 through 14 years in the Los Angeles, California, region. This prevention project focuses on a very large (N = ~80,000, or roughly 2% of nearly 4 million people; Census Reporter, n.d.) asymptomatic group who are at greater risk than boys or younger girls because of gender roles, pubertal status, media pressures, etc. Consequently, I would place this program between universal and selective on the IOM's spectrum (Levine & Smolak, 2006, 2008).

In the more recent book the Committee on Prevention (2009) also used Mrazek and Haggerty's (1994) transformation of Gordon's tripartite categorization into a continuum or spectrum of interventions, based on the size and nature of the group for whom programming is intended. As shown in Fig. 1, according to the Committee on Prevention (2009) the *mental health intervention spectrum* ranges from general mental health promotion ➔ *universal* prevention ➔ *selective* prevention ➔ *indicated* prevention. The latter overlaps with the older concept of secondary prevention (Caplan, 1964) and thus shades into the traditional steps of clinical treatment: case identification ➔ intervention ➔ aftercare. This spectrum maintains Gordon's (1983) argument that (1) all people being addressed by prevention are asymptomatic; (2) universal refers to the broadest scope in the population; and (3) in contrast to indicated prevention, neither universal nor selective prevention involve screening of any sort (Committee on Prevention, 2009).

Given that its ultimate goal is healthier development, prevention subsumes systematic efforts to protect health. Thus, it is noteworthy that the Committee on Prevention's (2009) intervention spectrum juxtaposes universal prevention with mental health promotion. In other words, universal prevention is closely related to broad efforts to promote and develop assets in the physical environment, sociocultural groupings, individuals, and person-environment transactions, which together can foster developmental competencies, effective coping, and other forms of resilience in the face of inevitable stressors.

1.4. Foxcroft's (2014) functional analysis

Foxcroft (2014) provides an in depth examination of the meanings of universal prevention. Incorporating the work of Gordon (1983) and the IOM (Committee on Prevention, 2009; Mrazek & Haggerty, 1994), Foxcroft acknowledges the utility of a classification system in which "universal prevention takes the form of a whole population approach, where risk of developing a disease or disorder is typically diffuse and preventive interventions are not based on level of risk" (p. 819). Foxcroft adds that universal prevention will be most relevant when Rose's prevention paradox is in effect and when the interventions are determined to be acceptable to the population (see also Haines & Filion, 2015).

The Rose paradox is a statistical phenomenon at the heart of a population-based, public health approach to prevention (Austin, 2001; Haines & Filion, 2015). To illustrate, it is reasonable to assume that (1) the point prevalence of bulimia nervosa (BN) in females 14 years or older is ~2.0% (Keel & Forney, 2015); (2) there is evidence that a risk factor such as dieting or internalization of the slender beauty ideal (Austin, 2001; Becker et al., 2016; Rohde, Stice, & Marti, 2015) is normally distributed in the population; (3) those females who are not symptomatic but at high risk are 6 times more likely to develop BN than those at low to moderate risk, a very generous figure for relative risk (cf. Rohde et al., 2015); and (4) 10% of the population (e.g., those with z score on the risk factor of ≥ +1.28) is at high risk. Given these parameters, in a hypothetical population of 1,000,000 females ages 14 or greater, 7800 cases (7.8% × 100,000) will emerge from the high risk-group, while the comparable figure for the low-to-moderate-risk

[1] For three reasons "indicated" is preferable to the commonly used "targeted" prevention. First, "indicated" is the adjective used by Gordon (1983) and by the Committee on Prevention (2009; see Fig. 1). Second, use of "indicated" avoids confusion with the more general use of "targeted" as a verb, for example, in the Committee on Prevention's (2009) glossary definition of universal prevention see p. X of this article or in a statement such as "this selective intervention targeted adolescents who were at high-risk due to participation in gymnastics and long-distance running." Third, continuing to use "targeted" as an adjective because certain high-risk groups are the "target" of the intervention introduces or reinforces an undesirable psychological distance between prevention experts and the participants as stakeholders in the program.