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THE LAST WORD

Embodied self-regulation and mindful self-care in the prevention of eating disorders

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Eating disorders are, in their simplest form, a set of embodied, physical acts that function to negotiate what are perceived as overwhelming internal and external stresses and demands (Cook-Cottone, 2006, 2015a, 2015b). The intentionality, physicality, and ultimate embodiment of eating disorder symptomatology are distinct from symptoms manifest in mood, anxiety, and many other mental illnesses (American Psychiatric Association [APA], 2013). Despite broader etiology, efforts to function are narrowed to a set of physical actions designed to control the size, shape, and/or experience of the body by way of a pathological involvement with food (i.e., bingeing and restriction), pharmaceuticals (i.e., laxatives, diuretics), and exercise (APA, 2013). Since early conceptualizations, it has been understood that those who struggle lack an accurate or valid sense of themselves both in terms of the physical body and a cohesive, functional personal identity (e.g., Chernin, 1985). For clinical patients, the daily experience of the body is distorted, typical development and relationships may be altered, and mortality risk increased (Cook-Cottone, 2015b; Smink, van Hoeken, & Hoek, 2012).

In my clinical experience, I have observed that there is an irony present in clinical level eating disorders. I theorize that, in part, the persistence of eating disorders is related to how symptoms allow patients to be deeply connected to their bodies within the context of the challenging inner experiences they try to avoid (e.g., overwhelming feelings, cognitive challenges, and physical sensations) and an ostensibly invalidating and objectifying external world (Beadle, Paradiso, Salerno, & McCormick, 2013; Cook-Cottone, 2006, 2015a; Johnson, Cohen, Kasen, & Brook, 2002). That is, patients are doing two seemingly contrary things. Psychologically, patients are working extremely hard to *leave* themselves thereby avoiding the authentic experience of their bodies, thoughts, and feelings. Ironically, their eating disorders actively employ them in an intense, unremitting, cognitive, emotional, and most certainly pathological engagement with their bodies. In fact, clinical patients think of almost nothing else, continually distracted by thoughts about and

the sensations of the body (e.g., weight; size; shape; physical pain; starvation; bloating; and consequences of restriction, bingeing and purging; e.g., Hovrud & DeYoung, 2015). I often see patients desperately clinging to this irrational connection fearing that recovery means a loss of any sense of an embodied self of which they are in control.

Embodied self-regulation and self-care as prevention

Eating disorder prevention should address the doorway to pathology—the individual’s relationship with the body. To recover, or avoid illness in the first place, individuals must learn to be with, and in, their bodies in a healthy and effective way (Cook-Cottone, 2015a, 2015b; Piran & Teall, 2012). To be resilient, children and adolescents must feel competent effectively and positively negotiating internal challenges and feelings as well as external pressures and demands as fully embodied experiences. I argue, we can take it one step better. From an early age, we can teach children positive self-care practices and ways of being that go beyond prevention toward what it takes to live a life full of embodied self-regulation and body appreciation (Cook-Cottone, 2015b).

Our relationship with our bodies is multifaceted and can’t be fully captured by a set of ideas or concepts (e.g., body dissatisfaction). Connection to the body is emotional, physical, and relational. Phenomenologically, we are our bodies (Cook-Cottone, 2015a; Svenaeus, 2013). When development and experience are normal, individuals do not necessarily notice or think about their bodies as they are busy functioning in the world (Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015; Svenaeus, 2013). This includes a relative sense of proprioceptive and kinesthetic awareness as well as the natural allowing of life supporting functions, such as nourishing the body with food (Cook-Cottone, 2015a; Svenaeus, 2013). There is a common self-help quote that almost gets to it: “The way out is through.” To effectively prevent and treat eating disorders, children and adolescents must learn how to negotiate life without leaving themselves or turning against the body. To do this—*the way out is in*.

Going deeper than the cognitive

What is known about neuroscience supports this contention. Self-regulation, especially emotion regulation, involves integrated activity throughout the whole brain (see Koelsch et al., 2015). Consistent with cognitive approaches to prevention, conscious cognitive activity involving rational thought, logic, and language can help regulate and modulate activity of affect and effector systems (including emotional, motor, peripheral arousal, attention, and memory systems; Koelsch et al., 2015). Notably, self-regulation occurs in

both directions (Siegel, 2009). That is, how we think affects how we experience our feelings and bodies and how we experience our feelings and bodies affects how we think. Neurologically speaking, what we do and feel become our words and thoughts. In this way, we can change how we experience the world not only by shifting our thoughts. We can change how we experience the world through our embodied actions (Siegel, 2009).

Self-regulation deficits are implicated as central to eating disorder risk and the emergence of symptoms across all three of the major eating disorders (i.e., anorexia nervosa [AN], bulimia nervosa [BN], and binge eating disorder [BED]; Haedt-Matt & Keel, 2011; Lavender et al., 2015; Oldershaw, Lavender, Sallis, Stahl, & Schmidt, 2015). A sole focus on preventing the cognitive aspects of disorder (i.e., the undue influence of shape and weight on self-evaluation) is more specific to AN and BN and does not address core risk and maintaining features of BED (APA, 2013). The goal is not to ignore or drop the cognitive approaches to prevention. In fact, decades of research have aptly and effectively focused on the external influences that can lead to self-objectification, body dissatisfaction, and drive for thinness (Calogero, Davis, & Thompson, 2005; Hausenblas et al., 2013; Piran & Teall, 2012; Register, Katrevich, Aruguete, & Edman, 2015; Rohde, Stice, & Marti, 2015; Rohde et al., 2014; Stice, Shaw, & Marti, 2007). Nevertheless, prevention that targets the thin ideal continues to find robust, long-term effects elusive (i.e., eating disorder onset; Stice, Rhode, Butryn, Shaw, & Mart, 2015; Stice, Rohde, Shaw, & Gau, 2011). Stice and colleagues (2015) concluded, “the lack of eating disorder onset effects may imply that factors beyond the pursuit of the thin ideal now contribute to eating disorder onset” (p. 20). That is, consistent with the function of clinical level eating disorders in patients’ lives, the path to preventing eating disorders may be *more* than cognitive.

Integrating an embodied approach to prevention can expand detectable points of impact. Self-evaluation and cognitive appraisal require metacognitive ability that is known to develop throughout adolescence into adulthood (Weil et al., 2013). This is the very same timeline at which individuals become increasingly at-risk for eating disordered behavior (Smink et al., 2012). As a prevention researcher, I have advocated for early prevention conducted before the internalization of the thin ideal and the crystallization of negative body image and self-objectification (e.g., Cook-Cottone, Kane, Keddie, & Haugli, 2013; Scime & Cook-Cottone, 2008; Scime, Cook-Cottone, Kane, & Watson, 2006). We have observed that younger children appear to benefit from the concrete, embodied components of prevention programs that address self-regulation and self-care (e.g., active yoga practice, relaxation strategies, feeling identification and coping). These observations are consistent with research suggesting self-regulation can be taught to and practiced by children prior to the full emergence of metacognitive skills with studies

showing improvement among children as young as in the first grade (Merritt, Wanless, Rimm-Kaufman, Cameron, & Peugh, 2012). Further, I have been challenged to adequately assess prevention work conducted among 5th grade, 10- and 11-year-olds as many of the accepted risk factors and eating disordered behaviors, simply have not developmentally emerged and changes are therefore difficult to detect (Stice & Shaw, 2004; Scime et al., 2006). Rather than conclude that prevention at this age is not feasible or effective, I argue that we explore approaches that enhance embodied self-regulation and self-care to accompany the media literacy and dissonance work known to have effect for older populations (see Cook-Cottone, Tribolo, & Tylka, 2013).

Mindful self-care and yoga-based approaches

Among the potential approaches that emphasize embodied self-regulation, mindful self-care and yoga present with promise (Cook-Cottone, 2015a, 2015b; Cook-Cottone, Keddie, Guyker, & Talebkah, 2015; Scime & Cook-Cottone, 2008; Serwacki & Cook-Cottone, 2012). Within the context of a media literate and body positive environment, teaching children and adolescents to engage in a variety of daily self-care behaviors and an active mind/body practice (e.g., yoga) is a top-down, bottom-up, and ultimately integrative approach that may deeply, effectively, and positively shift a child's experience of both thinking about and being in his or her body.

Mindful self-care is a set of active, daily behaviors that operationalize what it means to take care of and appreciate the self (for the Mindful Self-Care Scale see Cook-Cottone, 2015a). Mindful self-care is actionable, accessible, and addresses both the internal and external experiences of the self. Practices that address internal or intrapersonal experience include: self-awareness (e.g., I had a calm awareness of my feelings), self-compassion (e.g., I kindly acknowledged my own challenges and difficulties), and physical practices (e.g., healthy eating, hydration, moderate exercise, and rest, Cook-Cottone, 2015a, 2015b). Mindful self-care practices that address the external experience of the self include cultivating supportive relationships, creating a body positive environment, and setting personal boundaries (Cook-Cottone, 2015a, 2015b). Early pilot work suggests that mindful self-care may have a role in eating disorder prevention. In a matched controlled study of 5th grade females exploring the effectiveness of a yoga-based prevention program that encouraged self-care, significant findings included a decrease in drive for thinness and an increase in self care from pre to posttest (Cook-Cottone et al., manuscript in preparation). More research is needed to explore these relationships among males. Early analysis of the Mindful Self-care Scale suggests similar inverse relationships between mindful self-care and eating disorders risk factors and behaviors as well as substance use among adult males (Tylka et al., 2015).

Being embodied requires practice. Yoga is a mind/body intervention that combines breath work, physical postures (i.e., asana), and meditation to enhance self-regulation (Büssing, Michalsen, Khalsa, Telles, & Sherman, 2012; Frank, Bose, & Schrobenhauser-Clonan, 2014; Serwacki & Cook-Cottone, 2012). Yoga interventions involve three primary mechanisms: mind and body integration, self-regulation of attention, and nonjudgmental awareness of experience (Büssing et al., 2012). Yoga interventions seek to change one's relationship to daily experiences, building capacity for awareness, and decreasing reactivity thereby helping youth develop self-regulation skills that can be applied across settings and contexts (Cook-Cottone, 2015a; Frank et al., 2014). Initial research suggests that yoga may be effective as a complementary treatment for eating disorders (Cook-Cottone, Beck, & Kane, 2008; Klein & Cook-Cottone, 2013). Of particular relevance, an emerging body of evidence suggests that yogic approaches to eating disorder prevention show promise (Cook-Cottone, Jones, & Haugli, 2010; Cook-Cottone et al., manuscript in preparation; Neumark-Sztainer, 2014; Scime & Cook-Cottone, 2008).

Moving forward

I was pleased that this collection of articles was called “the last word in eating disorder prevention.” We don't need more words. We need embodied practices and active self-care. We have explored the domain of the thinking mind and the words and symbols that can trigger risk and there is more to be done. The neurological experience of the human being is more than a set of risky or healthy conceptualizations. It is embodied. What we do and embody co-creates our knowing and sense of self. Prevention of eating disorders should be a top-down, bottom up, and integrative process. Along with the tried and tested tools of combating media and cultural pressures to judge and objectify the body, effective prevention should include positive mind/body practices such as yoga within the larger context of self-care. Deep, authentic, and resilient love and appreciation of our bodies is most likely associated with being in our bodies in a mindful and caring way.

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