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Annette Maassen-Spates
University of Northern Iowa

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Abstract

Anorexia Nervosa, a syndrome first described over 100 years ago (Blumenthal, O'Toole, & Chang, 1984; Blumenthal, Rose, & Chang, 1985; Crisp, Hsu, Harding, & Hartshorn, 1980), today experiences a certain notoriety. There is a journal dedicated solely to studies on eating disorders (International Journal of Eating Disorders), and many books have been written about the illness, some by well-known figures in our society that have suffered from anorexia nervosa. The symptoms have been described in newspapers, popular magazines and even on television, with talk shows and movies familiarizing viewers with the 'popular' disease. Support groups have been formed on college campuses and in communities to provide some relief to those who suffer from anorexia nervosa, and many hospitals, recognizing that anorexia is potentially life-threatening, provide in-patient care for those with eating disorders.

SIMILARITIES AND DIFFERENCES BETWEEN
ANOREXIA NERVOSA AND RUNNING ADDICTION

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Annette Maassen-Spates
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Robert T. Lembke

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Date Approved

Adviser/Director of Research Paper

Robert L. Frank

October 14, 1987
Date Approved

Second Reader of Research Paper

Dale R. Jackson

Oct. 19, 1987
Date Received

Head, Department of Educational
Administration and Counseling

Anorexia Nervosa, a syndrome first described over 100 years ago (Blumenthal, O'Toole, & Chang, 1984; Blumenthal, Rose, & Chang, 1985; Crisp, Hsu, Harding, & Hartshorn, 1980), today experiences a certain notoriety. There is a journal dedicated solely to studies on eating disorders (International Journal of Eating Disorders), and many books have been written about the illness, some by well-known figures in our society that have suffered from anorexia nervosa. The symptoms have been described in newspapers, popular magazines and even on television, with talk shows and movies familiarizing viewers with the 'popular' disease. Support groups have been formed on college campuses and in communities to provide some relief to those who suffer from anorexia nervosa, and many hospitals, recognizing that anorexia is potentially life-threatening, provide in-patient care for those with eating disorders.

Interestingly, as the syndrome of anorexia nervosa experiences an increase in visibility, so does exercise, and in particular, running. We have become a nation 'on the run' with nearly 30 million people participating in the activity in the United States (Harris, 1986). As with anorexia and the anorectic, running and the psychology of the runner have come under scrutiny, with recent literature referring to running as an "ad-

diction" (Carmack & Martens, 1979; Glasser, 1976; Morgan, 1979; Sachs & Pragman, 1979; Sachs, 1982; Sheehan, 1979).

This paper will define the terms anorexia nervosa and running addiction, and will examine the similarities and differences between them.

Definitions

Anorexia Nervosa

According to the Diagnostic and Statistical Manual of Mental Disorders (1980), the symptoms of anorexia nervosa (AN) are: an intense fear of becoming obese that doesn't diminish as weight loss progresses, a disturbance in body image, a significant weight loss of at least 25% of original body weight, a refusal to maintain a minimal normal body weight, and amenorrhea. Several studies (Blumenthal et al., 1985; Epeling, Pierce, & Stefan, 1983; Richert & Hummers, 1986) also mention hyperactivity as a characteristic of the disease.

Running Addiction

This term is somewhat more difficult to define than AN, because there is a lack of agreement on whether running is a positive addiction, a negative addiction, or not an addiction at all. Sachs and Pragman (1979) defined it as:

Exercise addiction may be defined as a psychological and/or physiological dependence on a regular regimen of physical activity. Additionally, exercise addiction is characterized by recognizable withdrawal symptoms when the need to exercise remains unfulfilled after 24-36 hours. These withdrawal symptoms may encompass both psychological and physiological factors, including feelings of irritability, tension, guilt, uneasiness, and bloatedness (p. 143).

Glasser (1976) referred to running as a positive addiction and believed that those who engage in running can gain strength and a sense of worth and well-being from the activity. According to him, running is the most effective means of reaching the positive addiction (PA) state, which can be described as a euphoric, very pleasurable feeling. It takes commitment, however, to become positively addicted to running, because he believed that one must have the endurance to run for at least an hour before the PA state is experienced. For most, that kind of endurance can take months, or even years. Withdrawal symptoms are also mentioned, such as discomfort, sluggishness, and guilt, but he views these symptoms as having little importance.

Morgan (1979) believed that running can become a negative addiction, meaning that despite an injury, other dangers to health, or the advice of a medical professional to curtail or cease exercise, the runner continues to run. Other symptoms include neglect of job, family and friends, and the belief that one needs to run daily in order to cope with life.

Similarities Between AN and Running Addiction Personality Characteristics

Yates, Leehey, and Shipslak (1983), in a study comparing obligatory (addicted) runners and anorectics, found that the two groups shared several personality characteristics. Both groups tended to be "compliant, self-effacing, and uncomfortable with direct expression of anger" (p. 253). These findings are in agreement with those of Crisp et al. (1980), who found anorectics to be shy, overdependent, and compliant. In addition, Yates et al. (1983) found that it was common for runners and anorectics to be high achievers from achievement-oriented families. Depression was also present in both groups, with a tendency towards introversion and isolationism. Finally, obsessive thoughts occurred in both anorectics and addicted runners, with both groups obsessing about exercise, weight, and body fat percentage.

Athletes as Anorectics

Smith (1980) compared (amateur) athletes and anorectics, and found the two groups to be similar in several respects. He called serious athletes "rigidly self-disciplined and perfectionistic" (p. 140), characteristics descriptive of those suffering from AN (Crisp et al., 1980; Kron, Katz, Gorzynski, & Weiner, 1978; Sours, 1981). Weight loss and food aversion developed in the athletes much as it does in anorectics, "consciously and voluntarily...in the absence of any organic disease" (Smith, 1980, p. 140). It was also noted that both groups seemed to tolerate and even welcome hunger pains.

Amenorrhea (absence of menstruation), common in almost all female athletes who experience a considerable loss of body fat, is also common among anorectics (Crisp et al., 1980; Epeling et al., 1983); Kron et al., 1978; Yates et al., 1983).

Finally, both the athletes and the anorectics in the Smith (1980) study tended to pursue unrealistic goals in which there were no degrees of success, only complete success or total failure. The athlete's goal was the perfect performance in the perfect competition, while the anorectic strove for the perfect body, devoid of all fat.

Hyperactivity

Hyperactivity, recognized as a feature of AN (Crisp et al., 1980; Epeling et al., 1983; Katz, 1986; Kron et al., 1978; Richert & Hummers, 1986) and running addiction (Katz, 1986; Yates et al., 1983) has been explained in several ways. Kron et al. (1978) proposed that persons who suffer from AN may engage in excessive activity in order to speed weight loss, or that they may be using hyperactivity as a form of denial, believing that strenuous exercise would not be possible if they were truly sick.

Epeling et al. (1983) believed that in some cases, excessive activity and exercise may actually cause AN. It was indicated that "strenuous locomotor activity works to suppress appetite" (p. 40), and that increased activity levels and decreased caloric intake serve as reinforcements of each other. This situation leads to activity-based anorexia, which may account for 38% to 75% of the anorectic population. The authors suggested that activity-based anorexia "is most likely to occur in families, social groups, or organizations that encourage both high-rate activity and dieting practices" (p. 41).

Differences Between AN and Running Addiction

Personality Characteristics

Blumenthal et al. (1984) administered the Minnesota Multiphasic Personality Inventory (MMPI) to a group of 24 anorectic patients and to a group of 43 obligatory runners. Results of the MMPI revealed "that while 19 (79%) of the 24 anorectic patients obtained at least one clinical score greater than 2SDs above the norm ($T > 70$), only 16 (37%) of the 43 runners obtained at least 1 score in the abnormal range" (p. 522). Seven of the elevated scores in the runner group were males who obtained elevated scores on the masculinity-femininity scale (scale 5). Elevations on this scale are considered to be "a reflection of the aesthetic interests in educated men rather than a measure of psychopathology" (p. 522), and are not taken into consideration when examining the results of the profile. Only one runner obtained an elevation on a scale that could be interpreted as indicating emotional disturbance (depression, scale 2).

In contrast, two anorectic patients "obtained significant two-point elevations (two subscales > 70), and 12 patients obtained three or more scales elevated more than 2 SDs from the published norms" (p. 522). Furthermore, only five anorectics obtained scores considered

within normal limits.

Folkins and Sime (1981) have also suggested that exercise may enhance various aspects of the personality. They found regular exercise effective in the treatment of depression, and that it tended to improve self-concept. In a study on extraversion in runners, Mikel (1983) found that a group of runners and a group of non-runners obtained similar scores in extraversion on the Eysenck Personality Inventory, and that female runners were somewhat more extraverted than male runners.

The EAT and Goldfarb Fear of Fat Scale

The Eating Attitudes Test (EAT) is an instrument widely used in the detection of eating disorders, and measures of validity and reliability are high (Garner & Garfinkel, 1979). Wheeler, Wall, Belcastro, Conger and Cumming (1986) administered the EAT to a group of runners and a non-running control group. High-mileage runners (40 or more miles per week) obtained a mean score of 9.6, low-mileage runners (20-39 miles per week) obtained a mean score of 10.4, and the non-running control group obtained a mean score of 7.4. None of these approached a score of 30, considered indicative of an eating disorder. Furthermore, only 4% of the runners in the study indicated that weight gain "would be a primary

concern" (p. 78) if it became necessary to stop running.

Goldfarb and Plante (1984) administered the Goldfarb Fear of Fat Scale to 200 runners. The mean score for the group was 2.91, indicating a low-normal fear of fat. These results, in addition to the Wheeler et al. (1986) study, suggested that runners and anorectics do not possess the same attitudes toward food and eating as anorectics.

Running as a Coping Strategy

According to Blumenthal et al. (1985), "running represents a continuum of behavior based upon its use as a coping strategy for affect management" (p. 243), rather than an analogue of AN. This theory identified two types of runners: those who run to enhance positive affect (emotional state), and those who run to decrease negative affect. Positive affect runners exercise when they are in a positive emotional state and want to remain that way, and negative affect runners tend to run when they are in a negative emotional state and want to feel better. From this perspective, then, running is seen as a coping mechanism to achieve and maintain psychological well-being, while AN is a medical disorder that destroys psychological and physical health.

Conclusion

As anorexia nervosa continues to emerge as a serious, potentially fatal disease, and running becomes an increasingly popular activity in the United States, an attempt has been made to establish a relationship between them. Some research (Katz, 1986; Yates et al., 1983) suggested that similarities exist between runners and anorectics, while other research (Blumenthal et al., 1984; Blumenthal et al., 1985; Goldfarb & Plante, 1984; Wheeler et al., 1986) refuted the contention, and suggested that differences between the two groups outweigh the similarities.

Katz (1986) and Yates et al. (1983) suggested that runners and anorectics share various personality characteristics, but the research by Katz was based on 2 case histories, and research by Yates and colleagues was based on interviews that resulted in composite case histories, rather than actual cases (Blumenthal et al., 1985). Studies by Goldfarb and Plante (1984), Blumenthal et al. (1984), and Wheeler et al. (1986), however, were based on empirical research that employed valid and reliable instruments (MMPI, EAT, Fear of Fat Scale) to ascertain that similarities between runners and anorectics, if they existed at all, were for only a very limited group of runners.

After examining the existing research, it seemed that the logical conclusion was to view obligatory running behavior and anorexia nervosa as two separate and distinct entities. AN is a serious medical disorder that involves maladaptive coping strategies, psychopathology, and in some instances, death. Conversely, addiction to running is an adaptive coping strategy that enhances psychological and physical well-being.

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