EMOTIONAL DISTURBANCE/SOCIAL MALADJUSTMENT: WHY IS THE INCIDENCE INCREASING?

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Numerous arguments have addressed the controversies surrounding the category of emotional disturbance (ED) and the exclusion, or proposed inclusion, of students with social maladjustment (SM). In this article we address the consensually agreed upon characteristics of ED that are in common with SM, in addition to examining characteristics that supposedly also differentiate students who are ED from those who are SM. Given that SM has not been clearly defined and therefore it has proven to be an exceedingly difficult task for practitioners to differentiate children who are ED from SM suggests that they should be considered as a single condition termed ED/SM. Characteristics of ED and SM have substantial overlap, but apparently enough difference is noted to argue that they are distinguishable disorders requiring differential diagnoses and treatment, resulting in one that warrants special education services, and one that does not. We argue that whether these children are classified as ED, SM, or ED/SM, they all should qualify for special education services based primarily on the inescapable fact that they need professional assistance if their condition militates against optimal educational attainment. Furthermore, there exists little, if any, differentiation of effective and enduring treatment on the basis of whether a child is classified as either ED or SM. Finally, an alternative nonenvironmental explanation is offered for the apparent increase in incidence of characteristics associated with ED/SM. The alternative explanation is based on the genetic phenomenon heterosis that provides a plausible argument that secular changes in several cognitive, physical, and psychological characteristics may have the same nonenvironmental etiology. © 2004 Wiley Periodicals, Inc.

Children and adolescents diagnosed with emotional disturbance (ED) evidence a constellation of behavioral, social–emotional, and academic difficulties. Moreover, their problems are pervasive in that they are exhibited in multiple environments (Reddy, 2001). The symptoms of emotional disturbance are manifested most notably in the form of poor peer relations, aggressive behavior, poor academic and social functioning, emotional problems, and anxiety (Clarizio, 1992). Although children and adolescents with ED are considered to be underdiagnosed and underserved (Coutinho & Denny, 1996), data trends reflect an increased incidence of the disorder (Reddy, 2001). It is assumed that this increased incidence is due to a commensurate increase in environmentally based factors such as cultural deprivation, poor nutrition, drug abuse, living with a single parent, and victimization.

According to the U.S. Department of Education’s Individuals With Disabilities Act (IDEA, 1990),

... emotional disturbance is defined as a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance; an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers or teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or
depression; and a tendency to develop physical symptoms or fears associated with personal or school problems [Section 300.7(b)(9)].

Children who are socially maladjusted (SM) are excluded from receiving special education services unless they also meet the criteria for ED. Unfortunately, the term social maladjustment has not been clearly defined nor has there been consensus among researchers and practitioners regarding its definition (Clarizio, 1992). Not surprisingly, the vague terminology and incomplete definition has prompted much controversy regarding the diagnostic distinctions between ED and SM, insubordination, and noncompliance (Clarizio, 1992; McGee & Short, 1991).

Obviously, clearly differentiating students who are ED from those who are SM, given that SM is not clearly defined has proven exceedingly difficult for school psychologists and special educators. It is peculiar that the authors of IDEA choose not to define SM, but nevertheless exclude children with this undefined disorder from qualifying for special education services. Due primarily to the lack of definition, the term socially maladjusted is open to liberal interpretation. Common interpretations are termed conduct disorder, externalizing behavior disorders, and social deviance. All of these can be construed as components of the definition of ED. In sum, both internalizing and externalizing behaviors are characteristics of ED and SM (Constenbader & Buntaine, 1999).

Specifically, depression, a component of the definition of ED is highly correlated with antisocial behaviors, a component of SM. Approximately 50% of the phenotypic correlations between these two dimensions can be explained by genetic influences (O’Connor & Plomin, 2000). Childhood depression undoubtedly warrants being addressed through special education services and school-based mental health providers (Kahn, Kehle, Jenson, & Clark, 1990). Depression is also related to less than optimal academic achievement, poor social relations, and atypical and inappropriate behaviors (Kehle & Bray, 2004). Similarly, conduct disorder, practically a synonym for “social maladjustment,” is characterized by repetitive and persistent violations of age-appropriate societal norms. These children also have higher incidences of several disorders commonly associated with ED such as problems with attending, learning, and communication, anxiety and mood disorders, impaired social and academic functioning, and depression (American Psychiatric Association, 2000).

As previously stated, even one of the following characteristics would qualify a child as ED under IDEA and therefore eligible for special education services. That is the child would be eligible if he or she enduringly exhibits an inability to initiate and maintain satisfactory interpersonal relationships, depression, psychosomatic symptoms, or difficulty in learning that cannot be explained by intellectual, sensory, or health factors. Any one or all these characteristics can also be associated with the varied conceptions and definitions of SM. The significant point is that children with ED, by definition can also be SM. These children, if not treated, tend to persist into adulthood with their inappropriate interpersonal and socially deviant behavior often resulting in criminal activity, poor marital adjustment and social relations, and work-related problems.

Furthermore, the notion that there exists a bifurcation between ED and SM on the basis of the intentionality of the inappropriate behavior is also a false dichotomy. Our contention is that both groups are fully capable of both planned and purposeful, and impulsive and unintentional, inappropriate acts. Further, the argument that children classified as ED have few, if any, close friends in comparison to those with SM having many friends can be disputed as well. Children with ED or SM have few, if any, friends and are generally rejected by their peers and teachers primarily as a result of their dysfunctional behavior. The inability to initiate and maintain friendships is a common characteristic of both ED and SM (Forness, 1992). Finally, the argument to include SM in the definition of ED is supported by the apparent lack of need for, and effectiveness of, differential diagnosis and treatment (Gresham & Gansle, 1992).
Morgan and Jenson presented a very cogent and logical argument in 1988 that is still relevant. There exist many subgroups of children exhibiting behavioral disorders including children with conduct and personality disorders, aggression, social withdrawal, anxiety, and depression. However, the distinguishing features of these childhood disorders are that they are persistent and of sufficient frequency and intensity to clearly and adversely affect the child’s educational performance. The criterion for eligibility or exclusion from special education services should not be whether or not the child meets the federal guidelines for ED or SM, but whether or not the child exhibits persistent problems of sufficient frequency and intensity that mitigates against optimal educational achievement.

Curiously, there is apparently varied incidence of ED/SM-type behaviors as a function of socioeconomic status and ethnicity. Children living in poverty appear to be at a higher risk for developing ED/SM. In comparison with other students with or without disabilities, children with ED/SM are more likely to be male, African American, low socioeconomic status, living with one parent, in foster care, or in another alternative living arrangement (U.S. Department of Education, 1994). African Americans represent 14% of the school-age population; yet comprise 25% of children diagnosed with ED. Females are generally underrepresented (Cullinan, Epstein, & Sabornie, 1992; Reddy, 2001).

Related to the variability in incidence, as a function of ethnicity and gender is an alternative explanation for the apparent increase in incidence of characteristics associated with ED and SM. The majority of, if not all, psychological traits have been shown to have heritability estimates that range from 0.2 to 0.6 (Rutter, Silberg, & Simonoff, 1993). Furthermore, the correlations with respect to longitudinal consistency of these traits such as conduct disorder, depression, impulsivity, aggression, and other characteristics of ED/SM are commensurate with the longitudinal consistency of general intelligence (Bouchard, Lykken, McGue, Segal, & Tellegen, 1990; Goldberg, 1993). Although widely variable across and within states, data trends reflect an increased incidence of the characteristics associated with ED/SM (Reddy, 2001) as well as all other heritable psychological traits. These findings parallel increases in the more studied and documented secular changes in IQ.

The secular changes in IQ (Flynn, 1987), and several other physical and psychological phenomena, are most often based on the assumption that they are environmental influenced. However, Mingroni (2004) suggested that the genetic phenomenon heterosis is most likely the cause of these changes. Heterosis, or hybrid vigor, results from “outbreeding” that is defined as the mating of individuals who are genetically more distant from one another than those persons picked at random from the mating population… heterosis results from the creation of more heterozygous genes, which allows the phenotypic expression of advantageous dominant alleles; and there is a corresponding reduction in the number of phenotypically disadvantageous double-recessive alleles (Jensen, 1998; p. 196).

Broad-based genetic change or heterosis most fully explains the high heritability and low shared environmental effects observed not only in IQ, but in numerous other physical and psychological traits that are heritable; whereas an environmental explanation of these secular changes are theoretically and empirically unsubstantiated (Mingroni, 2004).

Given the recent changes in demographics throughout industrialized cultures, Mingroni (2004) suggested “…that under certain conditions, even a small demographic change can cause large genetically based phenotypic changes” (p. 65). As indicated by Dickens and Flynn (2001), IQ has been rising in several countries, however, the estimates of IQ heritability remain stable and therefore suggests supposed environmental factors could not have been influential in its alteration. Mingroni cited Bouchard (1998) and Jensen (1998) as supporting his assertion that there is no evidence
of secular changes in the IQ correlations of monozygotic twins raised apart, or in siblings. The degree that IQ is related to, or predicts academic or occupational outcomes, has not in the slightest been affected by secular changes in IQ (Jensen, 1998). "Any explanation of the secular change in IQ test raw scores must take into account the fact that, unlike population means, there are certain properties of the IQ that have remained virtually constant . . ." (Jensen, p. 322). These certain properties include "... its reliability, its correlations with measures of other psychometric abilities, its g-loading, and its external validity, as indicated by its correlations with variables such as SES, race, scholastic achievement, occupational status, and job performance" (p. 322).

"These findings suggest that any environmental factor(s) responsible for the IQ trend over time never varied among families at any single point in time" (Mingroni, 2004, p. 67) and therefore present strong support for hererosis. As a matter of fact, "there would seem to be no plausible way to explain the IQ trend without positing genetic changes" (p. 67). Furthermore, "it is actually difficult to find a heritable human trait that has not undergone large secular change in recent history . . ." (p. 68). These changes, for the most part, parallel the secular rise in the IQ trend. A partial list of those with heritability estimates above 0.6 includes height, growth rate, myopia, asthma, autism (one of the most highly heritable of all the psychological disorders), attention deficit hyperactivity disorder, head circumference, and brain size (Mingroni, 2004), plus, as is strongly suspected, increased incidence of other characteristics associated with the definition of ED/SM such as depression, anxiety, mood disorders, and aggression.

The condition that most probably causes heterosis to occur is the existence of microdifferentiation, or small-scale genetic heterogeneity between groups, that shifts to panmixia, or random mating throughout the larger population (Brody, 2004; Mingroni, 2004). As stated previously, such a change could, according to Mingroni (2004), have a disproportionate effect on rare alleles in that “even a small demographic change could have a very large effect on the phenotype under certain conditions” (p. 74). On the basis of the assumptions underlying heterosis as a tenable cause for secular changes in many human traits, Mingroni’s prediction that children who are more heterozygous than their parents should evidence higher intergenerational IQs, but would also evidence higher incidences of characteristics associated with ED/SM along with all other heritable physical and psychological traits that are expressions of dominant alleles, whereas children who are less heterozygous than their parents should evidence a mean intergenerational decline in IQ, and supposedly other heritable traits with recessive alleles.

As Mingroni (2004) has argued, there is no compelling environmental explanation for any one of these changes in several highly heritable physical and psychological traits other than the occurrence of broad-based genetic change afforded through heterosis. The understanding that an increase in incidence in the characteristics that comprise the definitions of ED and SM may be due to heterosis and not necessarily environmental factors should at least be considered. “In scientific investigation, incorrect assumptions that go unquestioned are often a greater impediment to progress than frankly admitted ignorance” (Mingroni, p. 79).

In conclusion, based on the observation of secular changes in incidence of several psychological disorders associated with the genetic phenomenon heterosis, it can be expected that school systems will be addressing increased numbers of children exhibiting a myriad of psychological disorders including characteristics of ED, SM, or SM with ED. It has been suggested that many complex psychological disorders, such as ED and SM, and their associated characteristics are polygenic with several genes influencing the expression of the phenotype (Plomin, DeFries, McClearn, & Rutter, 1997). It is tenable that with respect to ED or SM, only a proportion of these genes may be necessary to precipitate the ED or SM phenotype as defined by the IDEA diagnostic criteria for ED, or for exclusionary guidelines for SM, respectively. It is also tenable to assume, based on the commonalities of both disorders, that they share a proportion of genes. Consequently,
to correctly diagnose a child with ED or SM, or whether the child with SM has the requisite dysfunctional behavior to also warrant a diagnosis of ED, is quite difficult given the complexities involved in simultaneously determining both the degree of emotional disturbance, the degree of differentiation from social maladjustment, or the possible combination of both social maladjustment with sufficient emotional disturbance. It makes more sense to us, irrespective of federal guidelines that are often vague and not without error, to determine whether or not the child's pervasive and enduring condition is impeding his or her optimal academic achievement, rather than quibbling about largely irrelevant, particularly with respect to outcomes, diagnostic categories.

References


