

Special Education a Provision and an Adjacent System – Exemplified Through Test Anxiety

Mikaela Nyroos¹

Abstract

In the context of the recently released DSM-5, here is discussed a common emotional experience among pupils and students, test anxiety, and demonstrated its multifaceted character, which terminates eligibility for both special educational and medical services. Severe test anxiety is associated with a huge range of deleterious life trajectories. However, it is also a biological reality; normative in its origin and in essence benign. Present paper merges the latest knowledge from different disciplines, and presents measures for theory and practice. Because intense and excessive test anxiety seems to be highly prevalent and the pathological symptoms are similar to those of other childhood anxiety disorders childhood test anxiety warrants attention.

Keywords: Childhood; Special education; School health care; DSM-5

1. Introduction

It is inevitable within the educational system that pupils attending school will be evaluated through examinations. There are benefits (e.g., accountability, monitoring) with testing, but there are also drawbacks, one such being test anxiety (TA) (Orrie, Ilan, & Kurman, 2013). Owing to the widespread and growing use of high-stakes tests to track pupils' academic progress and evaluate candidates for access to higher education, together with the known stress-inducing nature of exams (von der Embse & Witmer, 2014), it is clearly important to advance our understanding about the nature of TA; especially since the awareness of its existence greatly fails in many countries. TA is believed to be one of the most common sources of emotional distress in school-aged children, causing potentially serious academic impairment if occurring at excessive rates (Harpell & Andrews, 2013). When the intensity, duration or frequency of the anxiety and its anticipated impact are so severe that they are accompanied by non-productive overt and covert behaviours, such cases may meet the general criteria for an anxiety disorder in the *Diagnostic and Statistical Manual (DSM)* (American Psychiatric Association [APA], 2013), and thus warrant specialist help. Because of the importance of addressing both academic and mental health needs in anxious children, special educators are uniquely positioned in assisting (Sulkowski, Joyce, & Storch, 2012).

Notwithstanding the rather devastating character of TA described above, it should not be forgotten that TA can drive each individual to achieve their best performance, an aspect that has rarely been touched upon in the literature (Daly, Chamberlain, & Spalding, 2013). Inasmuch as TA is a problem, worry and anxiety, it is regarded as a normal aspect of children's development (Kozina, 2014). This bias towards its negative elements is unwarranted and needs consideration. Therefore, this paper strives to shed light on how TA conceals states associated with boosting, detainment, disability and disorder, interacting in different ways to affect an individual's performance and health. Hence, TA is reviewed from the perspective of it being a typical developmental fear in school, as a potential prerequisite for peak performance, through to its anomalies and potential for clinically significant distress.

¹ Department of Education, Umeå University, 901 87 Umeå, Sweden. **Telephone number:** 0046 90 786 8151, **Fax number:** 0046 90 786 6693, **Email:** mikaela.nyroos@umu.se

It has become apparent that how TA is experienced and its effects are not the same in all cultural- and age-groups, or as regards both sexes (Zeidner & Matthews, 2005). Yet, our understanding of the roles of culture, age, and gender, as screening scales in TA, and in this perspective, how the behavioural manifestations of TA vary, is still in its infancy (Nyroos et al., 2015a). While there is a plethora of research regarding TA, as anxiety in adults and adolescents, few studies have examined these particular aspects in young school-aged children. It is undoubtable that the earlier in life that problems with TA are identified and attended to, the better is the prognosis to obviate and ameliorate them (Ginsburg et al., 2014). But, currently our limited understanding of the development of childhood anxiety is a lost opportunity for pupils at risk of adverse developments (Karing, Dörfler, & Artelt, 2013). In recognition of special educators' specific skill set and the roles that they assume in school systems, this paper will highlight how special education provision can support anxious pupils. Equally, this paper postulates that the psychoeducational construct of TA constitutes an available resource in adjacent systems to the diagnostic criteria sets of Anxiety Disorders in the *DSM-5*.

In 2013 the working tool for psychiatry, *DSM-5*, was released, and currently submitted to authorities around the world for official transcripts prior to adoption. *International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY)*, applied in the special education diagnosis and practice, supplies information about the diagnosis that is provided in classification of mental disorders, i.e., *DSM-5*. Given that special educators are the logical continuation of the psychiatric practice, and that the *DSM* has a large international influence, while much less is known about the ability of the *ICF-CY* components and categories to provide information on children's difficulties and strengths and to describe the impact of the environment (Klang, 2012), the role of *DSM* is of particular interest in the present undertaking. In addition the *International Classification of Diseases-11 (ICD-11)*, which bases all disabilities on the *ICF*, is to be released in 2015.

To the best of the author's knowledge this paper is one of the first that presents TA from the vantage point of childhood, and within an integrative framework encompassing the fields of medical science, educational science, and psychology. The aim is to critically illuminate TA centered on its practical ramifications and consequences. Dewey's (1916) theory on *Generative Knowledge*, i.e. knowledge worth understanding using various strands, and which richly connects to the subject matter serves as a foundation for this purpose.

2. Test anxiety

The present paper begins with an overview of TA, including a description of the phenomenon, concept, construct, correlates and manifestation, before discussing the utility of screening tools for identifying TA in child populations and the functions of non-clinical and clinical settings. The paper concludes by singling out certain implications of the TA continuum (i.e., booster, detainer, disability, disorder) which merit special consideration.

2.1 Phenomenon

Even if TA is a subtype of anxiety, the omnipresent nature of anxiety and the typical self-regulation styles of child anxiety are likely to be similar to those of TA (Zeidner & Matthews, 2005). Hence, general child anxiety theories will be discussed here. Anxiety is a normal phenomenon occurring during the development of children (Kozina, 2014). TA is seen as a normal reaction and typical worry factor that manifests itself during test situations when a pupil is faced with fearful distracters (Salend, 2011). Although childhood fears can be quite intense, most of them will disappear just as quickly as they have appeared (Broeren & Muris, 2009). Yet, for some children, this 'normal' worry goes beyond an 'unpleasant state' and becomes pathological. The phenomenology of TA defines this change from what is considered normal (Salend, 2011).

The most common pattern of problems arising from TA includes unwarranted rates of fear, worry and apprehension in pre-, intra-, and post-test situations, accompanied by physiological reactions and concern regarding (the consequences of) poor performance (Carter, Williams, & Silverman, 2008). Within this context, a sensory experience induces an emotion (e.g., fear) which ultimately is perceived as a feeling (e.g., TA) that varies from pupil to pupil; the explicit meaning of a stimulus (i.e., higher-order cognition) in conjunction with the implicit emotional processing result in an individual (stress) response (Purves et al., 2012). Anxiety in generic terms is an adaptive emotion enabling the escape of threat.

Inappropriate or disproportionate anxiety it is likely due to a biological vulnerability (Kozina, 2014); subtypes such as TA is often argued to be partly learnt and partly socialised (Varela & Hensley-Maloney, 2009). The threat-response systems are complex, redundant and comprehensive. Thus, the number of potential mechanisms and sites accountable for the dysregulation is vast (Pathak & Perry, 2006). Likewise, the environmental factors and components of social and physical threat concerns involved in childhood anxiety are hard to identify (Rapee, Kennedy, Ingram, Edwards, & Sweeney, 2010), particularly in the case of childhood TA (Nyroos et al., 2015a). Anxiety disorders belong to the most prevalent types of psychopathology during childhood occurring in magnitudes up to 10-15%, and showing an increased developmental trend (Kozina, 2014). With regards to TA, its ambiguous signatures, namely as a booster, detainer, disability and disorder, which will be delineated below, plus the fact that current criteria and thresholds seem to lack agreement, complicate recording any figures. In line with this, Chapell and colleagues (2005) proposed difficulties to identify eligibility for accommodations of TA under the *Americans with Disabilities Act (ADA)* because there was too small differences between high and low TA. Kofman's and colleagues (2006) investigation of both physiological and cognitive consequences of exam stress neither provided any support for a pathological stress.

2.2 Concept

Different views have been put forward regarding the concept of TA, as anxiety. Among scholars, Spielberger's conceptualisation of TA, from the early 70's, is prominently accepted and refers to an unpleasant state characterised by feelings of tension and apprehension, worrisome thoughts and the activation of the autonomic nervous system when an individual faces evaluative achievement-demanding situations (Han, 2009). A broader definition of TA adds threats to esteem due to others derogatory judgement to the focus on fear of failure (Putwain & Daly, 2013). Spielberger's seminal view of TA stemmed from the work of Freud in 1936, who conceived the concept of anxiety. Although this theoretical framework still dominates modern opinions on anxiety (Han, 2009), contemporary research on TA embraces its complexity and attempts to address its multifaceted character. In children, a behavioural sub-category has also been assigned (Wren & Benson, 2004). What is more, the concept of TA has generated different explanations in the literature due to the multimodal nature of its construct. Hitherto, no model exists that reproduces all the complexity of TA or matches data from contemporary research (Chapell et al., 2005). In addition, TA is conceivably better conceptualised by its objective presentation or symptoms, *and* how it is subjectively experienced.

2.3 Construct

TA is predominantly considered to induce physiological (producing sustained hyper-arousal), emotional (including bodily symptoms and tension) and behavioural (referring to auto-manipulative-, object-manipulative-, and inattentive-off-task behaviours) responses, as well as stimulating cognitive systems (e.g., worry and irrelevant thinking regarding a pending exam or evaluation) (Carter et al., 2008). Various theories of anxiety disorders in childhood relate cognitive distortions to the development and maintenance of anxiety (Muris & Field, 2008). But, development and related factors of the normative anxiety response system seem related to its different forms (Kozina, 2014). The scientific construct of TA does not define specific norms, or establish any thresholds, inflection points or standards, even though some scales offer cut-off points or group individuals into categories of high and low TA based on standard deviation. TA is equally not a formal clinical diagnosis in the *DSM*, although it was considered for inclusion as a form or sub-type of social anxiety disorder (SAD) or general anxiety disorder (GAD) or as a type of specific phobia (SP) in the revision of the *DSM-IV* (Andrews et al., 2010; Bögels et al., 2010).

According to the *DSM-5* (APA, 2013), *anxiety disorders* follow trajectories of excessive anxiety and fear paired with behavioural disturbances. Thus, *anxiety disorders* do not refer to fears and worries that are normal for a child's developmental stage but go beyond these. Given the similarities of TA with GAD and SAD, TA symptoms of sufficient severity could fall into either type. The key features of SAD and TA bear some resemblance, wherein individuals' fear of negative rejection and social humiliation because of inadequate performance is central. However, in SAD, the fear that anxiety symptoms may hinder performance is accompanied by social consequences while being observed (e.g., giving a speech). In TA, the source of fear is linked primarily to rational negative concerns (e.g., low admission points) but could lead to social worries about the upcoming situation with new classmates etc. that then becomes the main worry.

With regard to GAD, children's problem-based activities are associated with schoolwork (i.e., quality, competence) that the individual may find difficult to control (APA, 2013). Due to fact that a likely biological disposition (i.e., already high levels of general anxiety) will be exacerbated during evaluations, the general preference is that GAD be assigned (Andrews et al., 2010; Bögels et al., 2010). In line with this, in the DSM-5, a set of associated symptoms are listed to distinguish individuals with GAD from high worries (Comer, Pincus, & Hofmann, 2012). Given that only one symptom is required to be met in children, i.e., "Difficulty concentrating or mind going blank" (APA, 2013, p. 222), and that "difficulty concentrating" was identified in a meta-analysis by Comer and colleagues (2012) to be strongly associated with GAD diagnosis, TA, classified as GAD, should merit clinical attention.

2.4 Correlates

The correlates of TA are many and span several fields, but its name alludes to the main activity it refers to. TA can range in intensity, frequency and consequent effects between and within groups. As anxiety, TA can be viewed as "fight-or-flight/freeze" arousal but the "flight/freeze" response, in its original form, serves pupils rather poorly in schooling. Instead the "flight/freeze" response has taken the form or expression of "cognitive and/or affective escape" (Hanoch & Vitouch, 2004). In an aversive somatic and emotional state (e.g., as accompanies high TA), which occurs naturally during the process of fear confrontation, the individual copes by worrisome thoughts, negative feelings and physical reactions to avoid suffering (Putwain & Daly, 2013). These regulated reactions are learnt during specific situations and then henceforth triggered. In the short term, they appear as functional (inner and outer) behaviour as the unbearable state is avoided, but the negative effects could worsen in the long term (Fentz et al., 2013). The consequences of the "flight/freeze" strategy is that the pupil's ability to function during the test, or even in the days and weeks leading up to a test, may be reduced, resulting in poor test achievements and possibly also poor social functioning. Thus, in the context of TA, this immediate functional-contextual copying presents a bias that may conceal the true potential of pupils (Putwain & Daly, 2013).

Besides poor academic outcomes, association studies have shown a significant relation between TA and several mental and physical states as formally diagnosable disorders (e.g., depression, sleep-disturbance, SAD, GAD) (Carter et al., 2008; Owens, Stevenson, Hadwin, & Norgate, 2012). As an actual, critical and for some chronic condition, pervasive TA in the most severe cases meets the general *DSM* diagnostic criteria for an anxiety disorder (Bögels et al., 2010).

The "fight" response, by contrast, can prove an advantage for making achievements if kept at adequate levels. Individuals seem to perform best under intermediate levels of TA (Ganley & Vasilyeva, 2014). This is often illustrated by the general psychological principle known as the "inverted u-curve" or the "Yerkes-Dodson Law", which addresses both the facilitative and debilitating effects of anxiety on performance. A moderate amount of anxiety is seen as beneficial to performance as it motivates the individual to apply an adequate effort to reach their full potential (Schwabe, Joëls, Roozendaal, Wolf, & Oitzl, 2012).

However, research on the factors that govern the switch between these two states and how individual differences in emotionality and psychopathology affect performance has been relatively scarce and largely based on small and/or biased samples (Sahlei, Cordero, & Sandi, 2010) or hampered by a lack of ecological rationality (Hanoch & Vitouch, 2004). Schwabe and colleagues (2012) showed that the point where anxiety switches from being a mere nuisance to debilitating to education also varies from individual to individual and depends on the nature of the task (Sahlei et al., 2010). The relationship between TA and performance may also vary in primary grades, due to minor test experience (von der Embse & Witmer, 2014). In keeping with this, Stankov (2010) suggested the possibility that the switching point varies between cultures, e.g., European compared to Confucian Asian peoples showed a lower optimum level of anxiety. In corroboration with this, higher levels of social anxiety symptoms in East Asia (compared to the U.S. and Europe) did not correlate with higher epidemiological rates of SAD (Lewis-Fernández et al., 2011).

Thus, it seems that symptoms of TA vary between groups, epidemiology or impairment criteria also differ between populations and causes of distress depend on a number of factors. Too often though, experience and expression are lumped together and measured as a composite measure and findings from country or age group are uncritically assumed to be universal (Nyroos et al., 2015a).

2.5 Manifestation

Despite few studies, and disparate findings on the prevalence and manifestation of TA in different groups (e.g., gender, age), theories on variation have generally been based on North American and Western European studies (Nyroos et al., 2015a). With few exceptions, these theories have assigned females, older students, Asian cultures (compared to Anglo and European cultures) and high stakes testing to be accompanied by higher levels of TA. Females, children and Asian people are further mentioned to manifest TA by more autonomic reactions. However, other studies into the cultural and age diversities have provided conflicting results and revealed a significant interaction of genetic factors and environmental demands (e.g., Wang et al., 2005). Young anxious children may also be less prone to respond emotionally in an appropriate cultural manner (e.g., Hesketh et al., 2010). In addition, children with anxiety disorders tend to differ in their clinical presentation compared to adults (Pathak & Perry, 2006); and its form likely changes through development (Kozina, 2014). Environmental factors are assumed to produce differences in childhood (Kozina, 2014), and the social and cultural influences are known to be important, but when in time these footprints start to emerge is still unclear. Bodas, Ollendick, and Sovani (2008) reported that cultural commandments and characteristics of the educational setting had a significant effect on experiences of TA across cultures. In line with this, (Nyroos et al., 2015a) study revealed cultural and contextual impacts on children's expression and experience of TA. Their findings raised concerns about the current construct and conceptualisation of TA, which does not seem universal. In conclusion, levels and dimensions of TA seem to vary with gender and age, but there is currently no agreement of the levels or nature of TA in a given context, age or gender group.

2.6 Screening and Assessment Measures

For the validation of generalisations, it is essential that scales and factor structures for assessing TA account for cultural and contextual effects and have a solid conceptual foundation (Nyroos et al., 2015a). However, of the huge number of assessments that have been developed for measuring TA, few are explicit measures of TA but scales comprised of items indicative of TA. The majority of scales were also developed for adolescent and adult populations. To the best of the author's knowledge, there is no scale for TA for which the objectivity reliability, equivalence and construct validity has been documented across groups. However, attempts have been made to translate and use scales from other cultures (e.g., Bodas et al., 2008). In addition, at present, only one public measure is available (note that other assessments exist though without open access) for assessing TA in children (in grades 3-6), the Children's Test Anxiety Scale (CTAS: Wren & Benson, 2004). To improve knowledge about how to prevent or reverse anxiety as well as the mechanisms that contribute to its development and dimensions, Creswell and O'Connor (2004) have argued that assessment measures of different conceptualisations of TA emanating from various theoretical issues are needed. In terms of the general criterion variable, the specifier of TA, reduced academic performance, TA measures seldom address this aspect (Daly et al., 2013). That leaves ample opportunity for growth in this area.

3. Implications for School Psychology

An elucidation of TA and its manifold causes is below merged into four representations of it, i.e. detainer, disability, disorder and booster, the focus being on the its more harmful effects. Special educational provision attempts to help pupils experiencing difficulties that interfere with learning and performance (Howlin, 2008). Its broader aim is to further social, emotional and behavioural development by eliminating all segregated schooling. A failure to attend to this might undermine the fundamental and inalienable equal rights of all children to growth and well-being to the maximum extent possible; and an education directed to personality, proficiency and mental and physical abilities. Thus, it could be argued that pupils who appear to be proficient or score highly in exams but are nonetheless restricted by, for example, TA, should also be included in special education.

3.1 Detainer

From the viewpoint of educational equity, TA as a soft detainer is a concern that needs to be considered at policy level and by educational stakeholders. In particular, different kinds of preventive actions should be investigated to reduce the high anxiety associated with high stakes testing and the validity of using the results of such tests to make important educational decisions should be appraised (von der Embse & Hasson, 2012).

Over time, pupils scoring high in examinations and putting a great deal of effort into high achievement may put their health (e.g., resulting in low affective well-being, stress and hopelessness) at risk. Educators therefore need to fostering a learning milieu free from emotional enforcement and tolerating mistakes deemphasise the stakes (Nyroos et al., 2015b).

3.2 Disability

The view of TA as a disability has important implications for special educational efforts and treatment for the management of symptoms. Disabilities have some purchase through conventions and acts that prescribe the provision of support and complementary strategies (Howlin, 2008). To proceed with these directives, special educational efforts ought to be part of the curricula and specifically address pupils' responses to TA. Linked to this, research should focus on intervention programmes to reduce TA. In a study by Liston and colleagues (2009), the stress levels of healthy students preparing for a high stake test for a month was found to reduce back to baseline levels four weeks after cessation of the stressful period. On the other hand, if pupils susceptible to anxiety and/or TA are repeatedly exposed to stress, they are more likely to develop chronic stress-related neuropsychiatric diseases.

3.3 Disorder

TA accompanied by clinical symptoms of distress or impairment in social, occupational, or other important areas of life is eligible for mental health services that aim to relieve such disease symptoms. Severe TA also bears some relation to other formal anxiety disorders. Therefore, clinicians are advised to expand their screening battery and attend to TA as a forerunner to a severe trajectory of anxiety disorders or as a symptom of such anxiety. In addition, group programs addressing anxiety problems conducted in schools could be provided to a greater degree. In this respect, it should be noted that classification according to the *DSM* is in many cases the qualifier for services through the state or municipality. Despite being an ancillary aim of special educational provision, efforts to address childhood anxiety in school settings display considerable promise and applicability to common practice. Thus, while considering childhood anxiety in school settings the needs of many pupils who would otherwise be disenfranchised from receiving intervention are addressed (Neil & Christensen, 2009).

3.4 Booster

Lastly, from the perspective as a booster, tests need to be reconsidered and upgraded to *also* constitute a vital aspect of schooling. There is broad support for testing to be a valuable pedagogical tool. On the one hand, it can assist pupils in learning (e.g., providing feedback and guidance for future study, acquiring test-taking skills). On the other hand, it is a robust technique for improving pupils' memory for content (i.e., "testing effect"). In the light of current criticism that too much testing results in excessive stress and worry in school children, testing on the contrary has been found instead to alleviate this syndrome (Wiklund-Hörnqvist, Jonsson, & Nyberg, 2014).

4. Conclusion and Discussion

Despite the saliency of TA in younger pupils, childhood TA seems to be relatively neglected both in terms of concrete interventions and research into its variance and variety. Yet, the immediate impact of TA and as a developmental antecedent of anxiety disorders are a reality for some pupils. Drawing on both previous research and TA theories, the pathological uncertainties of TA and the nebulous character of its phenomena make it difficult to gain a clear understanding of the true breadth and depth of the TA syndrome in the general population. As a consequence, the urgent need for programmes targeting a reduction in symptoms of TA falls between the two stools of psychological treatment and special educational provision. An additional problem is that the development of theories and interventions for childhood anxiety has lagged behind other areas (Cartwright-Hatton, McNicol, & Doubleday, 2006). On top of this, educational and mental health researchers, like special educators and clinicians, seldom collaborate, which hampers the emotional well-being and academic attainment of pupils (Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007). It has become clear that both academic and mental health needs in children inevitably must be addressed to assist that trajectory, and special educators are uniquely positioned in this respect (Sulkowskiet al., 2012).

The multidimensionality of TA means it is also imperative to discuss whether TA should be included among the anxiety disorders in the *DSM-5*, or school-based intervention programmes should be implemented on a general bases to underpin an individual and positive development. TA seems to falls between both camps, and from this perspective, a grave concern is the potential disability and impairment implications. High levels of TA that interfere significantly with the child's adaptive functioning, social competence and social adjustment, and when present in childhood is critical and may follow a chronic course. Thus, warrant the urgent need to focus prevention efforts and clinical action.

Although TA is not a diagnosis it may provide clinically useful information (Chapell et al., 2005). Individuals with high levels of TA represent a group at particular risk of negative outcomes associated with TA (Carter et al., 2008). In the long-term, childhood anxiety is also a risk factor that seems to predispose adult mental-health problems. Thus, school children reporting high levels of TA may be indicative of more pervasive anxiety problems warranting converge in clinic care (Nyroos et al., 2015b).

Moreover, children with elevated TA may not seek or receive help from clinicians. The requirements for specialty psychiatric care are rigid compared to special educational provision, i.e., the presence of distress and disability governs the perceived need for treatment (Karing et al., 2013); and again TA is not a recognised diagnosis.

In addition, special educators do not provide treatment or cures for medical problems, but are engaged in interventions. Programmes targeting a reduction in symptoms of anxiety and TA for young people in schools have shown promising results (Van der Embse & Hasson, 2012). School health implications of investigations also have the potential to go beyond their impact on the groups targeted. Thus, it is likely that focusing on the reduction of excessive concerns connected with testing may result in an overall better health situation (Weems et al., 2014). In keeping with this, it is conceivable that pupils who are detained or impaired by TA may attend teaching without their difficulties being recognised or help being provided. Thus, for schools to meet the needs of all pupils and maximise their entitlements, as given to special needs pupils, those programmes have great potential.

School settings provide unique opportunities for detecting, preventing, and reversing mental illness, including anxiety (Isomaa, Väänänen, Fröjd, Riittakerttu, & Marttunen, 2013). Information about a pupil's mental condition could easily be employed within the ordinary realms of school health and special education, i.e., incorporated into routine educational screening to detect potential anxiety disorders. Thus, the adoption of assessment measures encompassing TA could avert unintended consequences of delayed anxiety diagnosis and treatment and, as discussed above, unravel and alleviate precursors to reverse developmental trajectories (Battaglia et al., 2010). In doing so, special educational provision could establish a link between clinical practice and schooling.

The general aim of psychiatric diagnosis, to articulate the meaning of patient's experiences and find ways out of the problems (Alarcón, 2009), is in harmony with the essence of educational screening. Whereas practice in special educational provision still seems to be largely driven by phenomenology (i.e., identifying phenomena through how they are perceived by the subjects in a situation using inductive, qualitative methods such as interviews, and observation: Packer & Goicoechea, 2000), the predominant reliance on aetiology in medical treatment (i.e., determining causality of phenomena using careful sampling and measurement, comprising experimental interventions and often statistical analysis: Murrihy, Kidman, & Ollendick, 2010), has begun to extend beyond this.

Contemporary diagnostics (e.g., *DSM-5*) have come to recognise and accept cultural, gender and age considerations (Hoffman, Asnaani, & Hinton, 2010). In the *DSM-5* (APA, 2013) culture, gender, and age have been considered as regard classification, assessment, expression and experience. Thus, in the search for practical and feasible modes of action, researchers in the field of childhood anxiety should move towards each other, that is, clinical research should examine the specific processes involved (e.g., the role of parents, transient fears) (Varela & Hensley, 2009), and educational research should employ biologically determined models (e.g., interventions in specific sample groups compared to control groups) (Burkhardt & Schoenfeld, 2000). To summarise, the ideal psychiatric method considers the "best estimate diagnosis" procedure, i.e., administers a variety of tests or scales and uses information from observations and parent interviews (Kosten & Rounsaville, 1992). Diagnosis then helps to make an assessment of abilities, treatment and prognosis, which is just as crucial for clinical work as research (Alarcón, 2009).

In education, a corresponding approach may be found in “formative assessment”, i.e., different activities that the teachers undertake in teaching to moderate pupils’ learning processes (Black & William, 1998). Hence, the perfected mainstream schooling articulates accomplishment by such “best academic practice”, i.e., a number of specific teaching strategies (Howlin, 2008). Unfortunately, local and state authorities are prone to embrace organisational and policy strategies, and in so doing hinder the development of best practice and establishment of praxis.

Thus, even if both fields concur in recognising the importance of a wide but consensus-based approach to identify opportunities for enhancement through the use of an array of tools and from multi-perspectives, the educational field falls short in this respect due to restriction of the teaching-learning scope. Therefore, to implement the models advocated for and to foster a vigorous agenda, authorities in education need to take this into account and provide adequate advice to local school agents. Yet, within the scope of determining an intervention to accommodate pupils’ school failures and mental ill-health, beneficial accommodations need to be addressed across a continuum of services.

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