

A Sociological Framework to Reduce Aberrant Behaviour of School Students Through Increasing School Connectedness

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Abstract

A framework for understanding relationships between school connectedness and student aberrant behaviors is outlined that is synthesized from Merton's insights into anomie and Bernstein's theory of cultural transmission (which focuses on schools' instructional methods and students' internalization of schools' values). A seven-category classification system identifies students' risk of nonconformist behavior based upon students acceptance/rejection of dominant overarching cultural aspirations (commonly material prosperity); perception of schools' role in aspiration realization; responses to schools' instructional methods; and internalization of schools' values regarding conduct/character. We propose frustration weakens connectedness and is grounded in students' perceptions regarding their school's educational outcomes, degree of acceptance at school, and their school's values. We then consider student dispersal across schools, and how age may affect students' categorization and the influence of frustration risk factors. Finally, we discuss how initiatives within school organization, curriculum, and pedagogic practice may promote connectedness among different student categories and their potential adverse consequences.

Keywords

school connectedness, aberrant behavior

Introduction

This article proposes a new conceptual framework for understanding the relationships between teenagers' school connectedness and aberrant behavior, including violence and substance use, based upon the application of two influential sociological theories. These sociological theories are Merton's theory of social structure and anomie (Merton, 1938) and Bernstein's theory of cultural transmission (Bernstein, 1977). The outlined framework builds upon insights into relationships between school culture and students' health-related behaviors developed by Markham (2015) and the theoretical framework for health promoting schools developed by Markham and Aveyard (2003).

A growing body of evidence finds that adolescents who are weakly connected to school are at increased risk of a range of aberrant behaviors, including violence, bullying, and substance use (smoking, drinking, and illicit drug use) (Bonell et al., 2019; Markham, 2015; Rowe & Stewart, 2009; Waters et al., 2009; West et al., 2004). Some trials of wholeschool interventions aiming to improve student connectedness report weak effects on outcomes such as substance use (Bond, Thomas et al., 2004; Flay et al., 2004). However, promoting school connectedness forms an integral component

of more recent trials of whole-school interventions to improve student health and wellbeing. Hence, in the United Kingdom, Bonell et al. (2018, 2019) found convincing evidence that the intervention based upon the theoretical framework highlighted above (Markham & Aveyard, 2003) was significantly associated with reduced teenage bullying, and an array of positive secondary outcomes related to mental health and contact with police. Shinde et al. (2018) found that changing school climate in schools in India to promote school connectedness had similarly positive effects on students' mental health and risk behavior (bullying, violence victimization, and violence perpetration). Shinde et al. (2018) consequently demonstrated the international transferability of these relationships in their randomized control trial. Improving school connectedness through school climate changes in a variety of school systems with very different

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starting points may therefore improve a range of student health-related outcomes/aberrant behaviors.

A contributing factor to the varied effectiveness of whole-school interventions aimed at promoting school connectedness may be an incomplete theorization of school connectedness and its causes. Conceptual understandings of the relationships between students' school connectedness and behaviors including violence and substance use are most commonly grounded in psychological perspectives. The Gatehouse Project (Bond, Patton et al., 2004), for example, was based on attachment theory. Attachment theory is derived from studies of one-to-one interactions between parent and child (Ainsworth, 1979) and hence has questionable transferability to more dynamic systems with multiple points of interconnection between people, such as schools. Theories from social and health psychology have dominated schoolbased health-related intervention research (Moore et al., 2015). These theories have an important role to play in understanding how individuals maintain or change behavior. However, understanding how social systems such as schools harm or enhance health, and how they may be re-organized to minimize harms and maximize beneficial impacts, requires a deeper understanding of social and institutional processes (Moore et al., 2019).

This article proposes that students at greater or lower risk of disconnectedness from school and thus, aberrant behavior, may be identified through a seven-category classification system. We then go onto consider the following:

- How connectedness may be weakened through frustration (whose roots may include disappointment in schools' educational outcomes, a perceived lack of acceptance by school and the values underpinning the school ethos).
- How the categorization of students and/or the influence of risk factors for frustration and disconnectedness may change as adolescents mature.
- The dispersion of different categories of students across schools.
- Implications for intervention, in terms of school initiatives that may promote connectedness among the different categories of students and possible adverse consequences of these initiatives.

The outlined framework may inform the development of interventions to reduce teenage aberrant behavior through improved school connectedness that could be empirically verified, refuted, or extended via evaluations of interventions to change the organization of school systems to maximize students' connectedness to them. This is important as evaluations of interventions are a vital mechanism for the generation and testing of middle range theory (Bonell et al., 2012). We acknowledge throughout that a broad range of macrosocial trends, and issues over which individual schools have minimal control, such as teenagers' social class, family

norms, and neighborhood environment, drives both students' individual category membership and the distribution of categories. As one of our major influences, Bernstein (1970) also reasoned that schools cannot fully compensate for society. Nevertheless, we propose ideas for initiatives that schools might undertake to maximize connectedness throughout a student body with diverse barriers and facilitators to connectedness.

Theoretical and Empirical Perspectives Underpinning the Outlined Framework

Students who are disconnected from school are at increased risk of being perceived as deviant within the school setting (Markham, 2015) and of nonconformist and defiant behavior (Waters et al., 2009). Nonconformist behavior among teenagers is likely to be expressed as aggression and/or withdrawal (Kellam et al., 1998). Nonconformist behavior may also, for example, encompass active and rational decisions to smoke regularly, use illicit drugs, and drink problematically (Jamal et al., 2013; Markham, 2015; Michell & West, 1996). Factors underpinning teenagers' rational decisions regarding aberrant behaviors such as substance use uptake include the following:

- Substance use is part of some teenage identities (Fletcher, Bonell, Sorhaindo, & Rhodes, 2009) and helps teenagers identify "who is the same and who is different" (Markham, 2015);
- Substance use may be used to signify opposition and active rejection of dominant norms, for example, within the school context (Milner, 2006);
- Substance use may be intimately entwined with allegiances to powerful schoolmates and thus, self-preservation at school (Devine, 1995; Paulle, 2013); and
- Substance use may be used to self-medicate and help teenagers cope with stressful situations at school (Fletcher, Bonell, Sorhaindo, & Strange, 2009) including witnessing or experiencing bullying (Rivers, 2012).

Bernstein (1977) reasoned that all schools aim to transmit two separate but interrelated orders: the instructional and regulatory orders. The transmission of the instructional order focuses on students' acquisition of knowledge and skills. The transmission of the regulatory order focuses on students' internalization of the school's values regarding conduct, character, and behavior. These values, Bernstein (1977) reasoned, are commonly based upon the values of the "controlling classes"—a section of the middle classes who act as agents of cultural production. Bernstein (1977) proposed that the strength or weakness of each school's classification and framing determines how the instructional and regulatory orders are transmitted. Classification refers to boundaries between the school and the external world and within-school

boundaries. Framing refers to communication and includes pedagogic practice and aspects of curriculum development.

Markham (2015) drew heavily upon Bernstein (1977) and highlighted individual-level meaningfulness as a school-related factor affecting connectedness to school and substance use. Individual-level meaningfulness refers to a student's willingness and ability to engage in the school's cognitive and affective learning opportunities. Markham (2015) reasoned that individual-level meaningfulness is likely to be affected by each student's view of the school and expected/hoped for future occupation.

Merton (1938) drew particular attention to the influence of aspirations on behavior. He maintained that influences of culture on aberrant behavior are mediated through (a) the overarching culturally defined aspirations and goals (i.e., the product) and (b) the prescribed modes and methods for attaining these goals (i.e., the process) (Merton, 1938). Merton (1938) maintained that if people reject the pervading overarching culturally defined aspirations/goals and/or sanctioned methods for attaining these aspirations/goals, they will feel drawn toward and pressurized into nonconformist behavior.

Underpinning Merton's approach is the notion of shared values and stable expectations regarding the future. This view resonates with the views of Bernstein who reasoned that historically the primary aim of the transmission of the regulatory order was for students to internalize the values of the controlling classes. The purpose of this internalization is to maintain the status quo, in relation to the existing social structures and existing social stratifications of people according to status, income, and occupation. However, society has changed since the seminal paper of Merton (1938) and the future is increasingly conceived as uncertain and full of discontinuities. In parallel, Bernstein (1996) reasoned that the controlling classes have more recently extended their concerns to include a focus on knowledge and skill acquisition to promote national-level wealth creation. In the United Kingdom, a notable shift has been the massification of higher education. University education was historically obtained by a small minority, offering substantially enhanced likelihood of entry to elite professions. Currently, approximately half of young people go onto university (Department of Education, 2018). However, as a higher education becomes obtainable to a larger proportion of the population, it loses some traction as a guarantee of higher social status. Hence, the value of university education is increasingly widely debated, including the emergence of new social hierarchies between "high and low" value options within the higher education systems (Vaughan, 2019).

As a result of these societal developments, students are faced with increased uncertainties about what goals to aim for, and the means to achieve these goals, while any overarching culturally defined goals that do exist vary in their associated power and prestige. However, achievement of wealth and material prosperity (and high wealth and social status

relative to those by whom one is surrounded) in adulthood, and its associated power and prestige, is increasingly becoming the principal overarching goal in industrialized countries such as the United Kingdom, shared across the social classes. One important prescribed method for attaining this goal of adult material prosperity is via schooling and educational attainment. However, young people who subscribe to this goal, yet perceive that the education system does not offer them a pathway to achieving it, may be at greater risk of finding alternative, perhaps illicit, means of achieving it.

Through the application of Merton's insights to those of Bernstein, this article proposes that the instructional order may have two principal components: the product and the process. The product is the school's educational goals and outcomes, often focused on success in prestigious examinations, which act to stratify students into groupings with effects for future prosperity. The process focuses on the instructional methods through which students attain these educational goals.

Drawing upon the theoretical perspectives of Merton (1938) and Bernstein (1977), this article reasons that five main factors may influence teenagers' connectedness to their schools and thus, their likelihood of aberrant behavior:

- Each student's perceptions regarding their potential overarching aspirations on leaving school;
- Each student's perceptions regarding the potential pathways for realizing their overarching aspirations;
- The educational goals and outcomes of the school;
- The school's instructional methods; and
- The school's regulatory order, and underpinning values.

Notwithstanding uncertainty surrounding what goals to aim for and how to achieve them, students' potential aspirations and preferred methods for realizing these aspirations, including their responses to schooling, underpin the proposed student classification system.

Categorization of Students Based Upon Their Aspirations and Responses to Schooling

Bernstein (1977) classified school students according to their responses to the transmission of the instructional and regulatory orders in their school, while Merton (1938) classified adults as Conformists, Innovators, Rebels, and Retreatists. Drawing upon both Merton (1938) and Bernstein (1977), this article proposes that within each of Merton's categories, adolescents may be more or less connected to their school, and that risk of aberrant behavior differs according to the combination of classifications from Merton and variation within classifications in connectedness proposed by Bernstein. We go on to reason that school students might be categorized into seven categories: Committed Conformists, Detached

Table 1. New Classification of Secondary School Students According to Their Overarching Aspirations and Views Regarding Educational Attainment as a Valid Method for Realizing These Aspirations.

Classification of students (Bernstein, 1977)	Classification of adults (Merton, 1938)	New classification of school students and potential connectedness to school	Rank in terms of risk of aberrant behavior
Committed	Conformists	Committed Conformists (potentially	I (Lowest risk)
Understand the instructional order methods and can meet		connected to the school)	
the instructional order demands		Detached Conformists (potentially connected to the school)	2
Understand and are committed to the regulatory order values			
Detached	Innovators	Augmenter Innovators (potentially connected to the school)	2
Understand the instructional order methods and can meet			
the instructional order demands		Rejecter Innovators (disconnected	5
Do not understand or are not empathetic to values of the regulatory order		from school)	
Estranged	Retreatists	Retreatists (disconnected from school)	7 (Highest risk)
Unable to meet the instructional order demands			
Understand and are initially committed to the regulatory order values			
Alienated	Rebels	Rebel Accepters (potentially weakly connected to the school)	4
Reject or are unable to meet the instructional order demands			
Do not understand or are not empathetic to the regulatory order values		Rebel Rejecters (disconnected from school)	6

Conformists, Augmenter Innovators, Rejecter Innovators, Rebel Acceptors, Rebel Rejecters, and Retreatists (Table 1). School students aligning with these different categories may vary in risk of aberrant behavior including violence and substance use. Hence, our theory proposes that school-based intervention approaches are needed which either

- are sufficiently flexible to maximize connectedness among all of these groups simultaneously or alternatively,
- in cases where the vast majority of students fall within a particular category, are tailored toward that category of students with additional support for those students who fall outside of the dominant category.

According to our proposed framework, Committed Conformists are likely to accept overarching cultural aspirations such as monetary success and the legitimacy of educational attainment as the principal pathway for realizing these aspirations. They are also willing and able to meet the instructional order demands and are empathetic to the values underpinning the regulatory order. Committed Conformists who are not frustrated are likely to feel strongly connected to the school and will therefore be at low risk of aberrant behavior. Based upon Bernstein (1977), we propose that historically in the United Kingdom, Committed Conformists were drawn primarily from the middle classes in relation to parental status, income, and/or occupation. However, since the late 20th century, the number of working-class Committed Conformists has steadily increased. This development has arisen because of (a) the extension of values underpinning schools' regulatory orders across schools that is driven by an

increased focus among the controlling classes on knowledge and skills acquisition at the expense of the maintenance of the status quo and (2) the expansion of tertiary education (Markham, 2015).

Detached Conformists may also accept overarching cultural aspirations, especially those associated with enhanced prestige. In addition, they are likely to acknowledge educational attainment as a legitimate part of the pathway for realizing these aspirations and will be both willing and able to meet the instructional order demands. However, we propose that Detached Conformists differ from Committed Conformists because they are at greater risk of rejecting the values of the regulatory order. This rejection may arise because they oppose values that support the maintenance of status quo, and/or they are not willing to attain their goals at the total expense of others, or at all costs. Detached Conformists who are not frustrated will commonly be connected to school and will therefore be at lower risk of being alienated from the regulatory order values and aberrant behavior than frustrated Detached Conformists. Drawing upon Bernstein (1977), Detached Conformists may be middle class or working class in relation to parental status, income, and/or occupation.

Augmenter Innovators are likely to internalize culturally defined overarching aspirations related to adult wealth, power, and prestige. They may also acknowledge that the school's instructional order outcomes legitimately lie on the pathway for realizing these overarching aspirations. Their innovation lies in the initiatives they and their families undertake to augment their efforts to realize their overarching aspirations through schooling and educational attainment. These initiatives enable them to gain advantage for themselves and

maintain the status quo. They include accessing additional, paid for, tuition outside of school and paying for private schooling in anticipation these initiatives will result in more effective instruction. They may also include moving within the catchment areas of "good" secondary schools. Hence, this identity is not solely the property of the individual adolescent, but also a reflection of the actions of families. Augmenter Innovators may/may not be able to meet the instructional order demands without these supporting initiatives. However, they will commonly accept the values of the regulatory order because they are usually from, or aspire to becoming a member of, a dominant social class that benefits from and supports the maintenance of the status quo. Augmenter Innovators are likely to be connected to the school. Their connectedness is, however, dependent on perceiving their school adds value in relation to the realization of their overarching aspirations and on their potentially perceived superiority over others which is an additional disconnectedness risk factor for Augmenter Innovators. The perceived added value of the school will consequently be inversely related to their likelihood of nonconformist behavior and substance use which may be modified by their potential superciliousness.

Rejecter Innovators may also internalize the overarching culturally acceptable aspirations such as adult material prosperity. They may/may not be potentially able to meet the instructional order demands. However, unlike Augmenter Innovators, Rejecter Innovators will be more likely to reject schooling and educational attainment as major routes through which they may realize their overarching aspirations. Their innovation lies in identifying alternative methods for attaining their overarching goals. These alternative methods may be

- proscribed or unlawful, such as engagement in criminal behavior to achieve wealth,
- lawful through employment that does not require the same degree of academic qualifications, and
- inherited wealth or social capital.

Schooling may be perceived by most Rejecter Innovators as having limited long-term relevance for their current/future lives. For many, the main benefit of schooling focuses on accessing social support, and potentially networks of peers who are at increased risk of engaging in counter-school activities. Rejecter Innovators will consequently be at relatively high risk of nonconformist behavior.

We propose that some children of the very rich may perceive that educational attainment will have limited influence on the realization of their overarching aspirations. These adolescents are, we propose, at risk of being Rejecter Innovators, even though they are likely to be empathetic to the maintenance of the status quo and thus, core values underpinning the regulatory order. Extrapolating from Bernstein (1977), we also reason that working-class youth are at greater risk of being Rejecter Innovators than other

youth because they are less likely to perceive that educational attainment lies on the pathway to attaining their overarching adult goals. This may arise from the internalization of family norms which emphasize alternative routes to future goals and conflict with the dominant focus on academic attainment within the school setting. Working-class Rejecter Innovators are unlikely to be empathetic to regulatory order values and are, therefore, at even greater risk of being strongly disconnected and alienated from school than affluent Rejecter Innovators.

Rebel Acceptors may reject dominant culturally defined overarching goals such as adult material prosperity and replace them with alternative overarching goals, such as environmentalism and ethical citizenship, or remain strongly uncertain about what their overarching goals should be. Ethical citizenship among young people is gaining momentum as indicated by the School Strike for Climate (British Broadcasting Corporation [BBC], 2019) with more than 2 million school students taking part across 135 countries (Reuters, 2019). Rebel Acceptors will, however, perceive schooling and educational attainment as legitimate vehicles for realizing their alternative overarching goals, or alternatively, as worthy of investment until they formulate their overarching goals. Rebel Acceptors will typically be able to meet the instructional order demands but will be more likely to reject components of mainstream schools' regulatory orders which focus on the maintenance of the status quo. Rebel Acceptors are consequently at risk of being detached from mainstream school. However, providing they are not frustrated, their risk of aberrant behavior and substance use may be lower than for Rejecter Innovators, because they perceive that educational attainment may have potential value. Rebel Accepters may be working class or middle class, but are in either case likely to feel distant from dominant culture.

Rebel Rejecters are also likely to reject dominant culturally defined overarching goals such as adult material prosperity. They may replace them with other goals or remain uncertain about what overarching goals they should aim for. Importantly, however, Rebel Rejecters, unlike Rebel Accepters, are commonly either unable to meet the instructional order demands or consider these to be irrelevant to their future attainment of alternative overarching goals. Rebel Rejecters with alternative overarching goals consequently need to identify alternative routes for attaining these goals. Rebel Rejecters are likely to perceive that few aspects of mainstream schools are relevant to their lives. The most relevant aspect is likely to center on the possibility they might socialize with like-minded students and hence form counter-cultures and networks whose identity and status are constructed around alternative status markers, including violence and substance use. As a consequence of their opposition to both the dominant culturally defined overarching aspirations and schooling, Rebel Rejecters are at even greater risk than Rejecter Innovators or Rebel

Acceptors of being strongly disconnected from school and aberrant behavior including violence and substance use. Rebel Rejecters, in common with Rebel Accepters, may be working class or middle class and are likely to feel distant from the dominant culture.

Retreatists may internalize overarching culturally defined goals of material prosperity and are likely to be initially empathetic to regulatory order values. Initially they may also recognize the legitimacy of educational attainment as lying on the pathway for attaining their overarching goals and may understand the aims and methods of the instructional order. However, importantly they may be less able to effectively engage with the instructional order demands as they would wish. This reduced ability may result in being separated from others who share their empathy with the regulatory order values, by, for example, being placed in a lower achieving class.

Drawing upon Merton (1938) and Bernstein (1977), we propose that as time passes, Retreatists may feel increasingly defeated, resigned, and estranged. Eventually, they may become strongly disconnected and withdraw from school because these students may come to realize that the maintenance of the status quo may well disadvantage them. However, the primary reasons underpinning this withdrawal are likely to be related to a strong desire to escape the pressure of expectation and the cognitive dissonance they experience. This dissonance arises from (a) wanting to engage with the instructional order but being unable to do this successfully and (b) initially being empathetic to the values underpinning the regulatory order but being unable to engage with the instructional order demands to a level that is commensurate with the underpinning values of the regulatory order. As a consequence of the profound and negative influence of schooling on their psyche and outcast status, Retreatists are at exceptionally high risk of nonconformist behavior such as violence and substance use. Retreatists are more likely to be middle class than working class because they are likely to be initially empathetic to the values of the regulatory order, including the maintenance of the status quo.

Rebel Rejecters and Retreatists are then at very high risk of aberrant behavior including violence. Examples of extreme violence in school often attributed at least in part to a sense of alienation from mainstream school culture are increasingly being observed particularly in the United States (BBC, 2018).

What Causes Frustration, a Risk Factor for Disconnectedness, Among Committed Conformists, Detached Conformists, Augmenter Innovators, and Rebel Acceptors?

Students aligned to these groups may become frustrated as highlighted above, but relatively few of these students may become so frustrated that they become completely alienated from school. Frustration nonetheless inhibits school connectedness, but what are the potential causes of frustration among these adolescents? We propose, drawing upon Bernstein (1977), Merton (1938), and Kellam et al. (1998), that three key factors may cause frustration among these students:

Schools' educational outcomes, Students' sense of acceptance at school, and The values underpinning the regulatory order.

Educational Outcomes of the School

Two fundamental issues regarding schools' educational outcomes may promote frustration among these students:

- If they struggle to meet the instructional order demands, and
- If they perceive their school has low school-level meaningfulness.

School-level meaningfulness Markham (2015) proposed is determined by student's satisfaction with their school's educational outcomes. Satisfaction is based upon students' perceptions that (a) their school's school-level educational attainments are commensurate with their cultural expectations, (b) their school's educational outcomes may facilitate the realization of their potential aspirations (at least as much as the educational outcomes of other schools they could have attended), and (c) their school provides valued cognitive and affective learning opportunities that facilitate personal and social development.

Low school-level meaningfulness arises as a consequence of increased frustration among a greater proportion of students and reflects relatively widespread and contagious disappointment with the school's educational outcomes. The influence of low school-level meaningfulness schools on their student populations will be weaker than the influence exerted by middling or high school-level meaningfulness schools (Markham, 2015). Important influences on school students include schools, social class, families, and the communities to which they belong. However, the influence of low school-level meaningfulness schools will be relatively weak when compared with these other important influences (Markham, 2015). The importance of school-level meaningfulness is partially supported by studies that show a proxy measure for school-level meaningfulness; namely valueadded education that is adjusted for each school's student sociodemographic profile is inversely related to school-level substance use and violence (Aveyard et al., 2004; Bisset et al., 2007; Markham et al., 2008; Tobler et al., 2011).

Feeling Accepted by the School

We propose that Committed Conformists, Detached Conformists, Augmenter Innovators, and Rebel Acceptors are at increased risk of frustration when they

 Do not feel accepted by their school. Feeling accepted at school is dependent on these students perceiving they are not widely disliked and have positive relationships with school-based adults and the majority of their peers (Osterman, 2000).

Perceive their engagement with the school's educational processes is negatively influenced by unhelpful interactions with other students and teachers. School engagement is promoted when students feel they are safe, fairly, and consistently treated and not vulnerable to being bullied/victimized.

Regulatory Order Values

Detached Conformists and Rebel Acceptors are prone to frustration and possible detachment when they reject the regulatory order values. This likelihood is increased when the regulatory order values focus too strongly on the maintenance of the status quo.

Summary of the Potential Connectedness Among the Seven Different Categories of Students

We propose that Rejecter Innovators and Rebel Rejecters most commonly do not value their school's educational outcomes, are not empathetic with regulatory order values, and are unlikely to feel accepted by their school outside their friendship groups with like-minded students. These students together with Retreatists, who are unable to successfully engage with the school's educational processes as they would wish, are all likely to be at high risk of being disconnected from school and experiencing pressure to behave in nonconformist ways. Some of these three categories of student, especially Rebel Rejecters, may be strongly attached to families and communities that share their values which may potentially proffer some protection from aberrant behavior. However, when these students are not protected through their outside-school attachments, they will be at high risk of nonconformist behavior, such as violence and/or substance use. We theorize that Retreatists are most likely to experience this pressure followed by Rebel Rejecters and Rejecter Innovators (Table 1).

Committed Conformists, Detached Conformists, Augmenter Innovators, and to a lesser degree Rebel Acceptors all have a strong potential to be connected to their school because they perceive schooling and educational attainment lie on the pathway for realizing their potential overarching goals. Primary causes of frustration that might undermine connectedness among these students are (a) they struggle to meet instructional order demands, (b) they attend low school-level meaningfulness schools, (c) they do not feel accepted by the school, (d) they have unhelpful interactions that hinder engagement, and (e) they are not empathetic with the school's regulatory order. Frustrated Committed

Conformists, Detached Conformists, Augmenter Innovators, and Rebel Acceptors are also at risk of experiencing pressure to behave in aberrant ways. The extent of this pressure, and thus, the likelihood of engaging in behaviors such as violence and/or substance use is dependent on levels of frustration. However, as we go on to discuss, because adolescents continually develop as they age, the category to which they may be most closely aligned and the strength of influence of risk factors for frustration may change.

Age, Categorization of Students, and the Influence of Frustration Risk Factors

As adolescents age and develop, their aspirations may crystallize and become more concrete. They may also gain greater insights into how they may realize these aspirations and greater understanding of the implications of the maintenance of the status quo for them as individuals, and perhaps for society more broadly. Students may consequently move from greater alignment with one category to another as they mature. For example, they may change their minds and decide educational attainment may help them to realize their overarching aspirations and are able to meet the instructional order demands. However, at the population level, liking of school typically deteriorates as adolescents move toward the end of their school careers, perhaps as a consequence of growing academic pressures or as a reflection of a general worsening in well-being throughout adolescence. Hence, more initially committed young people may become increasingly detached from school as they mature (School Health Research Network, 2018).

Moreover, as Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Acceptors mature, the relative importance of risk factors for frustration may also change. Thus, the importance of perceiving their school as facilitating the realization of their overarching aspirations will increase. As a consequence, the importance of both being able to meet the instructional order demands, not having unhelpful interactions that hinder engagement and school-level meaningfulness, will also increase as these adolescents develop. Among Detached Conformists and Rebel Acceptors, the importance of rejecting the school's regulatory order values is also likely to increase which may in part be due to adolescents' increasing dislike of school as they age and because their own values crystallize and become more concrete.

Notwithstanding the influence of increasing maturity on both school connectedness and potential frustration, the proportion of students that may be assigned to the identified categories is likely to vary according to the category. In addition, the different categories of students are unlikely to be evenly dispersed between schools. The proportion of students who are at risk of aberrant behavior will therefore vary across schools but how are these variations expressed?

The Dispersion of the Different Categories of Students Across Schools?

Based upon the insights of Bernstein (1977) and Merton (1938), we propose most U.K. schools will serve a majority of students who could potentially be classified as Committed Conformists or Detached Conformists.

The prevalence of Detached Conformists may, however, be higher among working-class communities than middle-class communities, with schools commonly constructed around middle-class norms and values which lead to detachment and alienation among those from working-class communities. In addition, working-class communities are more likely to have a greater proportion of Rejecter Innovators, who may find means other than via schooling of achieving overarching goals related to material wealth. Many schools serving working-class communities will consequently have larger proportions of Detached Conformists and Rejecter Innovators than other schools. Schools serving extremely affluent communities may also contain a relatively large proportion of Rejecter Innovators.

Given the costs associated with augmentation and the deployment of these to gain advantage within and outside of the school system, Augmenter Innovators will congregate in fee-paying schools and schools serving predominantly middle-class families.

Rebel Acceptors and Rebel Rejecters may be relatively uncommon but, in the United Kingdom, free and alternative schools may potentially attract relatively high proportions of these students.

Retreatists, who are relatively few in number, are more likely to attend schools serving middle-class communities but are likely to be spread thinly across schools.

The majority of students across schools then are potentially connected fairly strongly to school without changing their classification, with the likely exceptions of pupils in very high-risk categories, for whom connectedness to school may only be achieved through support to move them to a lower risk category. For groups other than very high risk groups, connectedness is not a given, but is dependent on perceiving their school meets their needs. Each student's subjective assessment of how well their school meets their needs will shape their level of connectedness and therefore their risk of defiant behavior.

The key issue for Committed Conformists, Detached Conformists, Augmenter Innovators, and Rebel Acceptors is to attend a school where school-level educational attainment meets or exceeds their cultural expectations, that is, a school where the school-level meaningfulness is at least middling but preferably high. In addition, schools need to develop a regulatory order that resonates with the values of the students and communities served by the school. However, while education policy promoting "choice" in schooling has been widely pursued in the English education system, the ability of children or parents to obtain their school of choice may be

determined by socioeconomic factors. A family with greater flexible resources, for example, may be better equipped to deploy these to obtain access to their schools of choice (Burgess et al., 2019).

Effective support and control is particularly important for Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Accepters attending low schoollevel meaningfulness schools because they are at increased risk of frustration and thus, disconnectedness. This increased risk arises because of the perceived lack of effective school support and because these students are at risk of viewing the school's educational methods as contributing to the school's perceived underachievement. Drawing upon Merton (1938), we propose that these students will additionally be at increased risk of being overly concerned with their position in the educational hierarchy and thus, prone to competing in unhelpful ways with each other. This is likely to negatively influence social relations between students and thus, students' sense of acceptance at school and will consequently add to students' increased risk of frustration. The provision of appropriate support and control in low school-level meaningfulness schools to promote academic success and student connectedness and thereby reduce aberrant behavior including violence and teenage substance use is, therefore, of great importance.

By definition, approximately 15% of all schools will have low school-level meaningfulness. This is because the primary means of calculating school-level meaningfulness categorizes those schools one standard deviation from the mean for their "socio-demographic value-added" performance as having low school-level meaningfulness. However, it is important to note that this means of calculation frames school-level meaningfulness as a relative construct; an important aim for policymakers is to make this standard deviation smaller and schools more equal, so that even schools with low levels of meaningfulness in relative terms have good levels of meaningfulness in absolute terms.

Hence, a key challenge for schools from the perspective advanced here is how they might be organized in ways which promote connectedness across the diverse range of pupils served. A challenge for policymakers is thus, to minimize variations in meaningfulness between schools, in order to negate the perceived need for families to choose between "better or worse" schools.

Some school initiatives focusing on support and control may promote connectedness across the different categories of student, although this promotion may be weak with particular student categories. However, the school's potential to meet their students' needs and thus, the school's potential to promote connectedness and influence student aberrant behavior also varies according to the category to which the student belongs.

School factors to reflect upon when attempting to promote connectedness among the different categories of students are

- the school-level educational attainment and thus, school-level meaningfulness,
- the appropriateness of the support and control provided by the school (Markham, 2015; Markham & Aveyard, 2003),
- the strength/weakness of the classification and framing of the school (Bernstein, 1977),
- whether students feel accepted by the school
- valued cognitive and affective learning opportunities that facilitate personal and social development

Support and Control Initiatives That May Promote School-Level Meaningfulness and Connectedness Across the Different Student Categories

We propose that the primary focus of mainstream secondary schools serving adolescents is to promote engagement with the educational processes through the provision of appropriate support and control (Markham & Aveyard, 2003) as this will promote educational attainment (Sammons, 2007) and school-level meaningfulness. It will also reduce the potential for frustration among Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Acceptors.

Extending and Improving Student Support

A helpful initiative is to have an assigned teacher who has pastoral care responsibilities for a single class who additionally remains as the appointed pastoral care teacher of that class as the students progress through the school years (Markham et al., 2017; Waters et al. 2009). This designated teacher would aim to develop caring and supportive relationships that are personalized to the needs of each student as this will promote students' sense of acceptance and importantly support advancement. Ideally, each student would participate in solving problems and developing strategies for self-control should this be required. Importantly, formal support would also include frequent, consistent, and supportive monitoring of students' cognitive and affective development (Gottfredson, 2002). Informal support would focus on positive reinforcement and include praise and recognition of student achievement.

Fostering Orderly Student Behavior

This would reduce opportunities for intimidation and bullying and would be achieved through enforcement of school-level and classroom-level rules and regulations (Sammons, 2007). As outlined by Markham et al. (2017) who drew upon Hattie and Timperley (2007), Gottfredson (2002), Markham (2015), Markham and Aveyard (2003), Mayer (2002), Sugai and Horner (2002), Swinson (2010), Ttofi and Farrington

(2011), and Walker and Shinn (2002), these school-level/classroom-level rules should

- be relatively few in number;
- be fair, transparent, consistently implemented;
- be understood by all students;
- focus on how to behave rather than how not to behave, for example, being organized, ready and on time, considerate, agreeable to undertaking homework, and requesting help when required and importantly seeking adult help when students are bullied;
- be developed in consultation with students (Bonell et al., 2018); and
- include a discipline statement with identified sanctions.

Proportionate unambiguous sanctions that do not dominate relationships between teacher and students would include thoughtful and sober talks, being referred to senior colleagues, changing teaching group for a fixed amount of time, being made to stay with an adult during recess times, reporting to the teacher when formal classes end, and removal of privileges. Reactive disciplinary procedures such as detentions, suspensions, expulsions, and moving to a different school should also be implemented consistently and only for major transgressions such as vandalism, violence, or dangerous acts.

These rules and sanctions would be supported by

- effective regulation of students in nonclassroom settings at all times throughout the school day including during recess and lunchtimes; and
- removal of authoritarian control including the employment of security staff, closed circuit television, metal detectors, high fences, and locked doors.

Enhancing both formal/informal support and formal/informal control and thereby promoting and maintaining school-level meaningfulness is also influenced by

- the strength/weakness of schools' classification and framing and thus, the school organization, curriculum, and pedagogic practice (Bernstein, 1977);
- valued cognitive and affective learning opportunities; and
- the category to which the student belongs.

The Strength/Weakness of the Classification and Framing of the School

As outlined in Table 2, typical strongly classified/strongly framed schools and typical weakly classified/weakly framed schools differ in relation to the school organization, curriculum, and pedagogic practice. They also have very different

Table 2. School Organization, Curriculum, and Pedagogic Practice of Typical Strongly Classified/Strongly Framed Schools and Typical Weakly Classified/Weakly Framed Schools (Drawn From Bernstein, 1977; Markham, 2015; Markham & Aveyard, 2003).

	Typical strongly classified and strongly framed schools	Typical weakly classified and weakly framed schools
School organization	Strong boundaries between the school and the communities outside of the school Strong boundaries within and between the teacher and student communities ensuring the senior management team dominate in the running of school	Increased consultation with parents, the communities served by the school and external organizations to facilitate a convergence of the values of the school with those of the communities it serves Greater input into the running of the school from communities served by the school, students, low-ranking teachers and nonteaching staff members
Curriculum	Strong boundaries between subject areas Veers toward a traditional curriculum focusing primarily on high-status examinations	Boundaries between subject areas are breached Integrated curriculum Extended range of school-approved educational outcomes by • broadening the curriculum or providing an alternative curriculum, • facilitating greater student input into curriculum development, • extending range of valued school-based performance arenas, e.g., to include sporting and drama arenas, and • increasing the range of extra-curricular activities, e.g., outward bound activities and cadet forces
Pedagogic practice	Predominantly teacher-led Commonly didactic Commonly empirically focused Focuses on knowledge and skill acquisition within tightly boundaried subject areas	Increased student-centered learning Greater student input into selection and pacing of classroom activities Greater focus on concepts, self-reflective skills, and problem-solving skills Greater use of "learning how to learn" techniques such as mind maps Greater use of co-operative learning in small groups

primary aims, relationships between the instructional and regulatory orders, valued school identities, and predominant teacher/student identity pairings (Table 3).

Promoting Connectedness Among Committed Conformists and Augmenter Innovators Attending Middling/High School-Level Meaningfulness Schools

Committed Conformists and/or Augmenter Innovators attending middling/high school-level meaningfulness schools who can meet the instructional order demands will perceive their school will help them attain culturally acceptable overarching goals in adulthood. These students are therefore likely to be satisfied with both the school's product and the school's process. They will consequently willingly accept a diverse range of support and control initiatives and engage with a diverse range of rules, policies, and teaching practices and be relatively robust in relation to challenges to their sense of acceptance at school.

Middling/high school-level meaningfulness schools can therefore promote connectedness among Committed Conformists and/or Augmenter Innovators through (a) relatively authoritarian narrowly focused hierarchical regimes with strong classification and strong framing, (b) relatively permissive regimes with weakened classification and weakened framing, or (c) a mixture of these approaches (Table 2, Table 3).

Many U.K. schools veer toward strong classification and framing because of government pressure to focus on knowledge and skills acquisition and high-status examinations, and because they believe this approach promotes prestigious examination success and benefits students. Many Committed Conformists and Augmenter Innovators attending middling/high meaningfulness schools with strong classification/strong framing will thrive as they will perceive their school delivers a valued service. The major frustration risk factor for Committed Conformists and Augmenter Innovators in this position is likely to focus on sense of acceptance. Many aspects of weakened classification and framing (Table 3) will promote a more widespread sense of acceptance. However, middling/high meaningfulness schools may wish to remain strongly classified/ strongly framed and maintain strong boundaries between subjects, teacher-led pedagogic practice, and their transactional approach to education. These schools may usefully consider increasing and extending extra-curricular activities and/or valued performance arenas, for example, sports and drama. When these initiatives are implemented within the context of strong classification and strong framing, they may potentially promote a more widespread sense of acceptance because they provide Committed Conformists and Augmenter Innovators with increased opportunities to

- perform well,
- develop cognitively and/or affectively, and
- cultivate their relationships with teachers and students.

Table 3. Characteristics of Typical Strongly Classified/Strongly Framed Schools and Typical Weakly Classified/Weakly Framed Schools (Drawn From Bernstein, 1977; Daniels et al., 1996; Dowling, 2009; Markham, 2015; Markham & Aveyard, 2003).

Characteristic	Typical strongly classified and strongly framed schools	Typical weakly classified and weakly framed schools
Primary aims of school	To elevate prestigious educational performance To ensure the efforts of willing and able students are not thwarted by the behavior of other school students	To promote the personal and social development of all students including those who may not succeed in high status examinations
Instructional and regulatory orders	Strongly positioned toward the instructional order	Instructional order deeply embedded within the regulatory order
,	Regulatory order focuses primarily on the maintenance of status quo and to a lesser degree the development of knowledge and skills for national wealth creation	Regulatory order is based upon general principles that focus on the provision of appropriate care, support, and additionally students' rights, responsibilities behavior, and safety
Valued school identities	Valued school identities are based upon performance in valued school-based arenas Tend to be stereotypical in relation to gender	Valued school identities focus on students' capacity for moral regulation, capacity to make progress, and capacity to relate well to others rather than performance Valued identities are less stereotypical in relation to gender
Purpose of education and predominant teacher/ student identity pairing	Education is predominantly viewed as transactional Veers toward teacher as service provider/ student as client identity pairing	Education is predominantly viewed as transformative Veers toward teacher as guardian/student as ward identity pairing

Promoting Connectedness Among Detached Conformists and Rebel Accepters Attending Middling/ High School-Level Meaningfulness Mainstream Schools

Detached Conformists and Rebel Accepters who can meet the instructional order demands are more likely to veer toward detachment when they attend strongly classified/strongly framed middling/high school-level meaningfulness schools rather than weakly classified/weakly framed middling/high school-level meaningfulness schools. This increased risk arises because the regulatory order values of strongly classified/strongly framed are likely to be orientated toward the maintenance of the status quo. This veering toward detachment may negatively influence these students' academic attainment and is, Markham (2015) proposed, associated with increased risk of being perceived as deviant within the school setting. These students, we propose, are at increased risk of experiencing pressure to behave in nonconformist ways.

Middling/high school-level meaningfulness mainstream schools can therefore perhaps best promote connectedness among Detached Conformists and Rebel Acceptors by developing a regulatory order based upon general principles rather than the maintenance of the status quo (Table 2). This can be achieved by weakening the classification through extensive and diversified external and internal consultation and requires weakened boundaries between the school and the outside world and weakened within-school boundaries.

As a consequence of their increased risk of detachment, many Detached Conformists and Rebel Acceptors will be less able than Committed Conformists and Augmenter Innovators to withstand challenges to their sense of acceptance at school. Bullying tends to peak where a group of students new to their school seek to assert their dominance over their peers. Detached Conformists and Rebel Acceptors who are new to a school who find themselves in this position, and thus, very susceptible to challenges to their sense of acceptance at school, could potentially be protected. This can be achieved through initiatives that weaken the boundaries in a controlled way between new groups of students and older students. For example, in primary schools younger and older students commonly interact in more informal but supervised settings, such as breakfast clubs and after school clubs. Secondary schools could also promote these types of informal but supervised interactions. They could also consider extending extracurricular activities or valued performance arenas for Detached Conformists and Rebel Acceptors.

However, these activities will not reach all Detached Conformists and Rebel Acceptors. Schools serving relatively large proportions of these students, such as schools serving large proportions of working-class students, may usefully consider engineering positive student–student and teacher–student interactions through student-centered pedagogic practice. Pedagogical initiatives that potentially reach all students and promote stronger student–student and teacher–student bonds include widespread use of small group co-operative learning (Osterman, 2000). This is potentially important as strongly classified and strongly framed authoritarian regimes are less likely to promote connectedness among working-class school students many of whom will be Detached Conformists and Rebel Acceptors.

Promoting Connectedness Among Aspiring Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Acceptors Who Struggle to Achieve the School's Instructional Order Outcomes

Potential Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Acceptors are susceptible to frustration and potential reclassification when they struggle to achieve the school's valued educational outcomes.

Initiatives associated with weakened classification and framing (Table 3) may help to protect struggling students from frustration and reclassification. Two types of initiative are of particular importance for struggling students:

- Increasing student access to formal teacher support, and support from other trusted adults in the school setting (Littlecott et al., 2018), outwith scheduled lessons by weakening the constraints of the school timetable.
- Extending the curriculum and/or extra-curricular activities and thereby extending the valued schoolbased educational outcomes.

However, for curricular/extra-curricular initiatives to successfully promote connectedness among Committed Conformists, Detached Conformists, Augmenter Innovators, and Rebel Acceptors who struggle to achieve the school's valued educational outcomes, these students need to

- perceive that these initiatives provide valued cognitive and affective learning opportunities,
- be able to attain the additional educational outcomes, and
- perceive these outcomes potentially lie on the pathway to realizing their overarching aspirations.

Promoting Connectedness Among Rejecter Innovators, Rebel Rejecters, and Retreatists Attending Mainstream Schools

Rejecter Innovators, Rebel Rejecters, and Retreatists will also be influenced by school-level meaningfulness and the strength/ weakness of the school's classification and framing. We propose that when these students attend authoritarian high school-level meaningfulness schools that are strongly classified/ strongly framed, they will be at very high risk of being perceived as deviant within the school setting and strongly disconnected. They will also experience far greater pressure to engage in nonconformist behavior than similar students attending

 less authoritarian high school-level meaningfulness schools that are more weakly classified and framed, and • schools that do not have high school-level meaningfulness.

While universal interventions are vital, it is always likely they may not effectively reach vulnerable populations. Thus, for some very high-risk students, there is a need for targeted intervention (Markham et al., 2017) but targeted and delivered in a way that does not exacerbate problems through increasing stigma (Frohlich & Potvin, 2008). These targeted interventions would include personalized academic and/or behavioral support plans for students who continue externalizing problem behaviors and/or internalizing behaviors. However, promoting connectedness among Rejecter Innovators, Rebel Rejecters, and Retreatists may ultimately depend upon their re-categorization to a pro-school category such as Detached Conformist.

Extending the school educational outcomes by, for example, extending the curriculum to include work-related components and work placements (Gottfredson, 2002) may facilitate the re-categorization of Rejecter Innovators, Rebel Rejecters, and Retreatists. However, for this to happen these students need to be able to attain the additional educational outcomes and need to perceive that they lie on the pathway to realizing their potential overarching aspirations.

Greater external consultation with parents and the communities served by the school may also be used as a vehicle to help to re-categorize Rejecter Innovators and Rebel Rejecters as it may help to

- highlight to school students' families the relevance of schooling and the school's educational outcomes for their children which may positively affect their children's perceptions of the value of school (Sammons, 2007):
- raise parents'/carers' educational expectations when necessary which may positively impact on students' educational expectations;
- promote parental support for their children's efforts when necessary; and
- enable the development of a regulatory order based upon general principles which may reduce student alienation from the school.

We highlighted above that schools may promote more widespread acceptance of school students by improving school-based relationships between students in different friendship groups through

- an extended range of extra-curricular activities (with teachers and other trusted adults in the school setting) and valued school performance arenas and/or
- student-centered pedagogic techniques especially co-operative learning in small groups (Table 3) and/or

• informal but supervised initiatives that weaken the boundaries between younger and older students.

These initiatives would aim to increase the breadth of valued cognitive and affective learning opportunities which have the potential to facilitate personal and social development. Good relationships with teachers/other adults are particularly important for children with less family support and could offset some of the association of low family support with well-being outcomes (Moore et al., 2018). These initiatives are, however, unlikely to facilitate the re-categorization of Rejecter Innovators, Rebel Acceptors, and Retreatists, but they may positively influence connectedness albeit weakly and additionally result in fewer students being perceived as deviant. This will positively influence aberrant behavior such as substance use. These initiatives may also engender more positive attitudes toward education that may beneficially affect students in the long-term after leaving school.

Promoting Connectedness Among Rebel Acceptors and Rebel Rejecters Attending Free or Alternative Schools

Rebel Acceptors and Rebel Rejecters may attend schools that are

- empathetic to their alternative overarching aspirations and
- have regulatory orders that are underpinned by values they share.

In parts of the United Kingdom, this is possible via some Free Schools and some alternative schools. Free schools are funded by the U.K. government but have more control over how they are run while alternative schools include Steiner, Waldorf, and Montessori schools. However, school choice policies have been pursued to a far greater extent in England than elsewhere in the United Kingdom.

Free and alternative schools serving students who share their values may potentially have a greater relative influence on their students than most other schools and will consequently have high school-level meaningfulness irrespective of the strength/weakness of the school's classification and framing. Rebel Acceptors and Rebel Rejecters attending free and alternative schools that share their values and are empathetic to their overarching aspirations will be at reduced risk of nonconformist behavior such as violence and substance use. Providing, that is, that the values shared by the school and Rebel Acceptors and Rebel Rejecters are not supportive of nonconformist behavior. However, high school-level meaningfulness in this context may not translate into success in high-status examinations and may not consequently be identified through assessments of sociodemographic value-added education.

Potential Deleterious Effects of the Outlined Initiatives

This article has reasoned that connectedness to school is likely to positively influence teenagers' aberrant behavior such as violence and substance use, educational attainment, life chances and thus, adult health. Some outlined initiatives to promote connectedness through initiatives located in the school organization, curriculum, and pedagogic practice may be usefully applied to students from more than one category. However, in developing a potential framework for intervention ideas, it is vital to think not only of what benefits might occur as a result, but to also consider their "dark logic" (Bonell et al., 2015), or potential unintended harms which may arise from changing the dynamics of complex school systems. By their very nature as complex adaptive systems whose functioning is a product of complex interactions among various interconnected actors, changes introduced to the dynamics of schools can give rise to unpredictable emergent outcomes, which need to be considered carefully (Keshavarz et al., 2010).

High-status examinations are more closely aligned with teacher-led pedagogic practice in tightly boundaried subject areas and thus, strong classification/strong framing than they are with weak classification/weak framing (Markham, 2015). Middling/high school-level meaningfulness schools wishing to implement student-centered pedagogic practice and/or an integrated/extended curriculum consequently need to monitor the effects of these initiatives on high-status examination results. If these initiatives negatively affect high-status examination results, this may have counterproductive impacts on school-level meaningfulness.

Weakening the classification and framing in low school-level meaningfulness schools by integrating/extending the curriculum and/or implementing student-centered pedagogic practice may be interpreted by students as contributing to the school's student-perceived underachievement (Markham, 2015). If the implementation of these initiatives in low meaningfulness schools gives rise to these perceptions, these schools may risk promoting even greater frustration among Committed Conformists, Augmenter Innovators, Detached Conformists, and Rebel Acceptors.

Weakening boundaries between students does not always promote students' sense of acceptance and thus, school connectedness. Weakening boundaries between younger students (aged 11–12 years) and other students may render younger students open to greater intimidation and bullying which will negatively affect their sense of acceptance (Gottfredson, 2002).

Introducing an alternative work-related curriculum at an early stage of students' educational careers may promote school connectedness. However, when a work-related curriculum is the only available curriculum, this may feed into potential self-fulfilling prophesies in which students seen by teachers as unlikely to perform in high-status academic

routes are encouraged into curricula that are afforded a lower social status. Introducing a work-related curriculum may also deleteriously affect students' life chances (Paulle, 2013) and thus, students' realization of their potential overarching aspirations.

As proposed above, Rebel Acceptors, and to a lesser extent Rebel Rejecters, are likely to be strongly connected to school when they attend schools that share their values and are empathetic to their alternative overarching aspirations. However, Rebel Acceptors and Rebel Rejecters may become entrenched in these values. This entrenchment may negatively impact on students' human functioning and health through (a) the inadequate realization of the essential human capacity for affiliation outside of the contexts of their families and communities (Markham & Aveyard, 2003; Nussbaum, 1990) and (b) its potential restriction on students' life chances.

Proposed Evaluation of the Outlined Theoretical Framework

This article proposes that how schools promote student connectedness may be understood as linked to the categorization of students according to our new sociological framework. It is concluded that no single intervention will promote student connectedness and thus, reduce student substance use and other aberrant behaviors equally effectively across all students within all schools. This is likely to be particularly true where interventions are defined rigidly in terms of their form and content, rather than being designed more flexibly, with form allowed to vary to suit the needs of the population served while maintaining commonality in function (Hawe et al., 2004). This proposal may help to explain why trials of interventions aiming to reduce student substance use through improved school connectedness have, to date, only reported weak to moderate intervention effects.

We also propose that developing appropriate interventions aiming to reduce aberrant student behavior, including substance use, through improved student connectedness to school requires

- identifying the school-level meaningfulness of the school through sociodemographic value-added education scores, and
- identifying the categories to which students belong and the needs flowing from this in terms of actions to enhance the likelihood of connecting pupils to school.

While this article has advanced a number of theoretical propositions, the next stage for this work would be to develop meaningful ways of validating and measuring school-level meaningfulness and the categories to which students belong. Tailored intervention strategies could then be developed that would vary according to the school's sociodemographic value-added education score or the categories to which the

school's students were assigned. This may include interventions which are universal in terms of their processes and functions, but are tailored to the situation of the school. The SEED intervention in Scotland, for example, assessed students' mental health using the Strengths and Difficulties (SDQ) questionnaire to identify students with high scores across subscales who were subsequently asked to drive choices on within-school intervention options (ISRCTN Registry, 2013).

Conclusion

The outlined framework and many of the suggested initiatives that may have meaningful impact on students relate to core aspects of the everyday business of the school. Schools may consequently find it difficult to flexibly alter their core business according to the needs of the student population at a given point in time. This difficulty arises because of the enormous pressure schools are under to obtain good results in prestigious external examinations. However, the outlined model of incrementally changing what schools already do, and treating current practice as a starting point, is arguably more practicable and sustainable than the external imposition of packages of intervention components seen as addons to schools. Any future efforts to develop and evaluate interventions using our framework should, however, pay close attention to potential deleterious effects arising from the implementation of the outlined initiatives.

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References

Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist*, *34*(10), 932–937.

Aveyard, P., Markham, W. A., Lancashire, E., Bullock, A., Macarthur, C., Cheng, K. K., & Daniels, H. (2004). The influence of school culture on smoking amongst pupils. *Social Science & Medicine*, 58(9), 1767–1780.

Bernstein, B. (1970). Education cannot compensate for society. *New Society*, *26*, 344–345.

Bernstein, B. (1977). Class, codes and control: Vol. 3. Towards a theory of educational transmission. Routledge.

Bernstein, B. (1996). *Pedagogy, symbolic control and identity*. Taylor & Francis.

Bisset, S., Markham, W. A., & Aveyard, P. (2007). School culture as an influencing factor on youth substance use. *Journal of Epidemiology & Community Health*, 61(6), 485–490.

- Bond, L., Patton, G., Glover, S., Carlin, J. B., Butler, H., Thomas, L., & Bowes, G. (2004). The Gatehouse Project: Can a multilevel school intervention affect emotional wellbeing and health risk behaviours? *Journal of Epidemiology & Community Health*, 58(12), 997–1003. https://jech.bmj.com/content/jech/58/12/997.full.pdf
- Bond, L., Thomas, L., Coffey, C., Glover, S., Butler, H., Carlin, J. B., & Patton, G. (2004). Long-term impact of the Gatehouse project on cannabis use in Australia. *Journal of School Health*, 74(1), 23–29.
- Bonell, C., Allen, E., Warren, E., McGowan, J., Bevilacqua, L., Jamal, F., Legood, R., Wiggins, M., Opondo, C., Mathiot, A., Sturgess, J., Fletcher, A., Sadique, Z., Elbourne, D., Christie, D., Bond, L., Scott, S., & Viner, R. M. (2018). Effects of the Learning Together intervention on bullying and aggression in English secondary schools (INCLUSIVE): A cluster randomised controlled trial. *The Lancet*, 392, 2452–2464.
- Bonell, C., Beaumont, E., Dodd, M., Elbourne, D. R., Bevilacqua, L., Mathiot, A., McGowan, J., Sturgess, J., Warren, E., Viner, R. M., & Allen, E. (2019). Effects of school environments on student risk-behaviours: Evidence from a longitudinal study of secondary schools in England. *Journal of Epidemiology & Community Health*, 73(6), 502–508.
- Bonell, C., Fletcher, A., Morton, M., Lorenc, T., & Moore, L. (2012). Realist randomised controlled trials: A new approach to evaluating complex public health interventions. *Social Science & Medicine*, 75(12), 2299–2306.
- Bonell, C., Jamal, F., Melendez-Torres, G. J., & Cummins, S. (2015). "Dark logic": Theorising the harmful consequences of public health interventions. *Journal of Epidemiology & Community Health*, 69(1), 95–98.
- British Broadcasting Corporation. (2018). 2018 worst year for US school shootings. https://www.bbc.com/news/business -46507514
- British Broadcasting Corporation. (2019). *Thousands join school strikes over climate change*. https://www.bbc.com/news/ukscotland-49758914
- Burgess, S., Greaves, E., & Vignole, A. (2019). School choice in England: Evidence from national administrative data. Oxford Review of Education, 45(5), 690–710. https://www.tandfonline.com/doi/full/10.1080/03054985.2019.1604332
- Daniels, H., Holst, J., Lunt, I., & Johansen, L. U. (1996). A comparative study of the relation between different models of pedagogic practice and constructs of deviance. Oxford Review of Education, 22(1), 63–77.
- Department of Education. (2018). *Statistics: Participation rates in higher education*. https://www.gov.uk/government/collections/statistics-on-higher-education-initial-participation-rates#history
- Devine, J. (1995). Can metal detectors replace the panopticon? *Cultural Anthropology*, 10(2), 171–195.
- Dowling, P. (2009). Sociology as method: Departure from the forensics of culture, text and knowledge. Sense.
- Flay, B. R., Graumlich, S., Segawa, E., Burns, J. L., & Holliday, M. Y. (2004). Effects of 2 prevention programs on high-risk behaviors among African American youth: A randomized trial. Archives of Pediatrics & Adolescent Medicine, 158(4), 377–384.
- Fletcher, A., Bonell, C., Sorhaindo, A., & Rhodes, T. (2009). Cannabis use and "safe" identities in an inner-city school risk

- environment. International Journal of Drug Policy, 20(3), 244–250.
- Fletcher, A., Bonell, C., Sorhaindo, A., & Strange, V. (2009). How might schools influence young people's drug use? Development of theory from qualitative case-study research. *Journal of Adolescent Health*, 45(2), 126–132.
- Frohlich, K. L., & Potvin, L. (2008). Transcending the known in public health practice: The inequality paradox: The population approach and vulnerable populations. *American Journal of Public Health*, 98(2), 216–221.
- Gottfredson, D. C. (2002). School-based crime prevention. https://www.ncjrs.gov/works/chapter5.htm
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112.
- Hawe, P., Sheill, A., & Riley, T. (2004). Complex interventions: How "out of control" can a randomised controlled trial be? *British Medical Journal*, 328(7455), 1561–1563.
- ISRCTN Registry. (2013). Social and Emotional Education and Development (SEED): Studying the impact of a Primary School feedback and guidance programme on improving social and emotional wellbeing of young people over a 5 year period.
- Jamal, F., Fletcher, A., Harden, A., Wells, H., Thomas, J., & Bonell, C. (2013). The school environment and student health: A systematic review and meta-ethnography of qualitative research. BMC Public Health, 13, Article 798.
- Kellam, S. G., Mayer, L. S., Rebok, G. W., & Hawkins, W. E. (1998). Effects of improving achievement on aggressive behaviour and of improving aggressive behaviour on achievement through two preventive interventions: An investigation of causal paths. In B. P. Dohrenwend (Ed.), Adversity, stress, and psychopathology (pp. 486–505). Oxford University Press.
- Keshavarz, N., Nutbeam, D., Rowling, L., & Khavarpour, F. (2010). Schools as social complex adaptive systems: A new way to understand the challenges of introducing the health promoting schools concept. Social Science & Medicine, 70(10), 1467–1474.
- Littlecott, H. J., Moore, G. F., & Murphy, S. M. (2018). Student health and well-being in secondary schools: The role of school support staff alongside teaching staff. *Pastoral Care in Education*, 36(4), 297–312.
- Markham, W. A. (2015). School culture and substance use amongst school students: A new conceptual and operational framework. *Educational Review*, 67(3), 282–299.
- Markham, W. A., & Aveyard, P. (2003). A new theory of health promoting schools based on human functioning, school organisation and pedagogic practice. *Social Science & Medicine*, 56(6), 1209–1220.
- Markham, W. A., Aveyard, P., Bisset, S. L., Lancashire, E. R., Bridle, C., & Deakin, S. (2008). Value-added education and smoking uptake in schools: A cohort study. *Addiction*, 103(1), 155–161.
- Markham, W. A., Bonell, C., Fletcher, A., & Aveyard, P. (2017). How can schools help to reduce the harm associated with teenage substance use? Development of a theoretically-driven whole-school approach. *Drugs & Alcohol Today*, 17(1), 1–11.
- Mayer, G. R. (2002). Behavioral strategies to reduce school violence. *Child & Family Behavior Therapy*, 24(1), 83–100.

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672–682.

- Michell, L., & West, P. (1996). Peer pressure to smoke: The meaning depends on the method. *Health Education Research*, 11(1), 39–50.
- Milner, M. (2006). Freaks, geeks and cool kids: American teenagers, schools, and the culture of consumption. Routledge.
- Moore, G. F., Cox, R., Evans, R., Hallingberg, B., Hawkins, J., Littlecott, H., Long, S., & Murphy, S. (2018). School, peer and family relationships and adolescent substance use, subjective wellbeing and mental health symptoms in Wales: A cross sectional study. *Child Indicators Research*, 11(6), 1951–1965.
- Moore, G. F., Evans, R. E., Hawkins, J., Littlecott, H., Melendez-Torres, G. J., Bonell, C., & Murphy, S. (2019). From complex social interventions to interventions in complex social systems: Future directions and unresolved questions for intervention development and evaluation. *Evaluation*, 25(1), 23–45.
- Moore, G. F., Littlecott, H. J., Turley, R., Waters, E., & Murphy, S. (2015). Socioeconomic gradients in the effects of universal school-based health behaviour interventions: A systematic review of intervention studies. *BMC Public Health*, 15, Article 907
- Nussbaum, M. C. (1990). Aristotelian social democracy. In B. Douglass, G. M. Mara, & H. S. Richardson (Eds.), *Liberalism and the good* (pp. 203–251). Routledge.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323–367.
- Paulle, B. (2013). Toxic schools. University of Chicago Press.
- Reuter. (2019). *How Greta Thunberg's climate strikes became a global movement in a year*. https://www.reuters.com/article/us-global-climate-thunberg-idUSKCN1VA001
- Rivers, I. (2012). Morbidity among bystanders of bullying behaviour at school: Concepts concerns, and clinical/research issues. *International Journal of Adolescent Medicine & Health*, 24(1), 11–16.
- Rowe, F., & Stewart, D. (2009). Promoting connectedness through whole-school approaches: A qualitative study. *Health Education*, 109(5), 396–413.
- Sammons, P. (2007). School effectiveness and equity: Making connections. A review of school effectiveness and improvement research—Its implications for practitioners and policy makers. CfBT Education Trust.

- School Health Research Network. (2018). Student wellbeing in Wales: Initial findings from the 2017/18. http://www.shrn.org.uk/wp-content/uploads/2019/05/Wellbeing-Briefing-Paper_FINAL 070319.pdf
- Shinde, S., Weiss, H. A., Varghese, B., Khandeparkar, P., Pereira, B., Sharma, A., Gupta, R., Ross, D. A., Patton, G., & Patel, V. (2018). Promoting school climate and health outcomes with the SEHER multi-component secondary school intervention in Bihar, India: A cluster-randomised controlled trial. *The Lancet*, 392(10163), 2465–2477.
- Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy*, 24(1–2), 23–50.
- Swinson, J. (2010). Working with a secondary school to improve social relationships, pupil behaviour, motivation and learning. *Pastoral Care in Education*, 28(3), 181–194.
- Tobler, A. L., Komro, K. A., Dabroski, A., Aveyard, P., & Markham, W. A. (2011). Preventing the link between SES and high-risk behaviors: "Value-added" education, drug use and delinquency in high-risk, urban schools. *Prevention Science*, 12(2), 211–221.
- Ttofi, M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, 7(1), 27–56.
- Vaughan, R. (2019). Damian Hinds aiming at "low value low quality" degrees in university tuition fee review. https://inews. co.uk/news/education/damian-hinds-low-value-low-qualityuniversities/
- Walker, H. M., & Shinn, M. R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. In M. Shinn, H. Walker, & G. Stoner (Eds.), *Interventions for aca*demic and behavior problems II: Preventive and remedial approaches (pp. 1–27). Guilford.
- Waters, S. K., Cross, D. S., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health*, 79(11), 516–524.
- West, P., Sweeting, H., & Leyland, A. (2004). School effects on pupils' health behaviours: Evidence in support of the health promoting school. *Research Papers in Education*, 19(3), 261–291.