Enhancing Intrinsic Motivation Through The Use of a Token Economy

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Abstract

This work will examine the link between intrinsic motivation and external rewards by describing the experiences of twenty-seven academically under-performing adolescents who were enrolled in an after school program in a New York City public junior high school that implemented a token economy. The goals of the implemented token economy were to establish an objective measure of student competence, to enhance student perceptions of their autonomy, and to establish links between their classroom-based learning and its practical "real world" applications. It is argued that by achieving these goals, the token economy serves as a tool for enhancing levels of self-efficacy and providing opportunities for students to view their behaviors as self-determined. In this way, the token economy can be viewed as a mechanism for enhancing levels of intrinsic motivation through the use of external rewards.

Introduction

Motivation has generally been defined as an internal process that activates, guides, and maintains behavior over time (Eccles, 2002; Elliot, et al, 1999). With respect to academic environments, the general goal behind motivational strategies is to increase students' academic performance by increasing their motivation to learn. While many studies indicate that motivation alone is not sufficient to increase academic performance, motivation has been consistently deemed a necessary component in any formula for achievement (Anderman & Maehr, 1994; Graham, 1994; Jones, 1996). Furthermore, while some suggest that intrinsic motivation on the part of students should be the ideal (Carlton & Winsler, 1998; Kohn, 1998; Sax & Kohn, 1996), others concur that extrinsic forms of motivation are often the practical reality (Cameron & Pierce, 1996; Chance, 1993; Strong, et al., 1995). The purpose of this work is to examine the link between intrinsic motivation and external rewards by examining how token economies can be modified to serve as a tool for enhancing perceptions of competence,

fostering feelings of autonomy, and establishing the practical applications of school-based learning.

Declines in motivation during the adolescent period are well documented (Maehr & Anderman, 1993; Lynch & Cicchetti, 1997). Slavin (1999) suggests that, with respect to students, "intrinsic motivation generally declines from elementary school through secondary school" (p. 345). As a possible explanation for the documented declines in motivation, Lynch and Cicchetti (1997) propose that, "since children in middle school no longer have a primary teacher with whom they spend most of their day, they may have fewer opportunities to develop close relationships with teachers. This makes the transition to middle school stressful and mismatched with the needs of adolescence" (p.94). Furthermore, Lumsden (1994) notes that motivation to learn is fostered through modeling, communication of expectations, and socialization by significant others (such as parents, teachers, and siblings). Therefore, these declining perceptions of social support negatively impact upon student levels of motivation (Eccles, et al, 1993).

Factors Influencing Intrinsic Motivation

Intrinsic motivation refers to being involved in an activity for the sheer pleasure that such involvement elicits (Ryan & Deci, 2000). While some suggest that the focus of schools should be on enhancing the levels of intrinsic motivation in students, others suggest that- due to the nature of most school-based tasks and activities- the focus should shift toward the modification of the manner in which sources of extrinsic motivation are implemented (Anderson & Katsiyannis, 1997; Jones, 1996; McGinnis, et al, 1999). Furthermore, with respect to schools in urban settings that are often faced with diminished educational resources, since fewer opportunities exist for teachers to pique student interest through the use of educational technology and innovative pedagogy, the focus should shift from the student and onto school-based tasks and methods of instruction as the sources of lowered intrinsic motivation (Michelli, 2001).

Two critical features associated with intrinsic motivation are ones perceptions that ones actions are self-determined (including the opportunity to participate in environments that support autonomous activities) (Noels, 2001; Ryan & Deci, 2000; Ryan & Stiller, 1999) and ones feelings of self-efficacy (Bandura, 1995; Dweck, 1999; Zimmerman, 2000). Given that issues of control and management and summative assessment have been identified as typical of many urban schools, concern, therefore, arises regarding the opportunities provided to students that allow for both greater autonomy and alternative routes for displaying their competence (Michelli, 2001).

The Role of Self-Determined Actions

Ryan and Deci (2000) make a compelling distinction between intrinsic motivation and self-determined extrinsically motivated actions. They indicate that a proportional relationship exists between one's propensity for self-determined extrinsically motivated actions and one's level of intrinsic motivation. They note, for example, that unless individuals experience their behavior to be self-determined, feelings of confidence will not enhance intrinsic motivation.

Furthermore, they suggest that for a high level of intrinsic motivation, feelings of competence must be accompanied by feelings of autonomy.

The concept of self-determined actions takes into account the context within which learning takes place. For example, while one may not be intrinsically motivated to participate in a classroom-based task, one may be motivated to participate in the task because their performance in the task directly relates to some higher objective. For example doing better in a classroom assignment may impact upon one's grades that may impact upon one's ability to get into the college of one's choice.

As a result, one's performance on a task may be similar regardless of whether one is intrinsically motivated to perform the task or one's task performance is a result of one's self-determined extrinsically motivated actions (Black & Deci, 2000; Noels, et al., 2000). Because of the typical nature of classroom based tasks, it may be important for educators to establish links between classroom-based assignments and their real-world applications (Palardy, 1999). In this way, educators can assist students in discovering the importance and relevance of the tasks they are required to complete. Of course, however, the goal is for students to establish these links for themselves so that they are able to determine how fulfilling their immediate objective of completing classroom based tasks is linked to their greater goal of college acceptance or the acquisition of the job of their choice. Ultimately, however, the focus should be on their self-determined actions rather than on whether they are intrinsically motivated to perform particular tasks.

Therefore, a pedagogical shift towards a focus on self-determined extrinsically motivated actions would involve providing opportunities for greater student autonomy and an altering of the role that extrinsic sources of motivation play in the classroom- for example, as a tool to inform students of their academic progress rather than as a tool to control student behavior (Scott, 1998).

The Role of Self-Efficacy

Given that motivation appears to decrease as students move from elementary to secondary school, issues of motivation cannot be discussed without reflecting upon some other aspects of psychological development that occur simultaneously. For example, levels of motivation are linked to levels of self-efficacy (where self-efficacy is generally defined as a person's belief in their ability to solve a problem or accomplish an objective (Bandura, 1995).

Discussions of the development of self-efficacy are often situated in schools because schools serve as the context within which students are granted the opportunities to establish certain psychological "strengths" (Bosma & Kunnen, 2001; Erikson & Erikson, 1981; Yoder, 2000). In this way, the presence or absence of particular classroom conditions considered necessary for enhancing levels of efficacy and motivation can have implications not simply for levels of achievement motivation with respect to specific school based tasks but more general levels of motivation with respect to any and all school based tasks (for a more detailed discussion of the relationship between self-efficacy and motivation see Zimmerman (2000)). It has been found (Rycik, 1997; Zimmerman, 2000), for example, that self-efficacy is linked to the kinds of

activities students choose to engage in, the kinds of problems they attempt to solve, the time they invest in attempting to solve them, and how they respond when faced with setbacks or unexpected challenges.

Zimmerman (2000) notes, "self-efficacy beliefs also provide students with a sense of agency to motivate their learning through the use of such self-regulatory processes as goal setting, self-monitoring, self-evaluation, and strategy use" (p. 84). Furthermore, there is evidence of a proportional relationship between student's perceptions of their abilities and the level of difficulty of tasks they attempt to solve (Dweck, 1999).

The Impact of Extrinsic Rewards

Extrinsic motivation refers to ones participation in an activity that is tied to the presence or absence of external rewards (Ryan & Deci, 2000). One common criticism of the use of extrinsic rewards is that they decrease intrinsic motivation to achieve because students shift their focus away from the material to be learned and instead concentrate solely on the reward (Cameron & Pierce, 1996). In fact, some researchers have found that once students have been exposed to an extrinsic reward (e.g., a token economy) for an extended period, the termination of extrinsic rewards results in decreased student motivation (Sax & Kohn, 1996).

Chance (1993), however, suggests that "studies which concluded that the use of extrinsic rewards decrease levels of intrinsic motivation generally involved participants who were presented with extrinsic rewards after completing tasks which they were initially intrinsically motivated to perform" (p 204). For example, several studies (Chance, 1993; Dickinson, 1991; McGinnis, et al., 1999) indicate that the impact of extrinsic rewards is a function of the relationship between the desired behavior and its reward (for a discussion of reward contingencies see Dickson, 1991). Furthermore, while three different reward contingencies (task-contingent, performance-contingent, and success-contingent rewards) are typically identified (Dickson, 1991; McGinnis, et al., 1999), only success-contingent rewards (those that may indicate achievement or advancement toward a goal) were found to increase interest in the rewarded activity (Chance, 1993).

It is not, therefore, the use of extrinsic rewards per se, but the manner in which extrinsic rewards are implemented- including the form of reward, its relationship to the desired behavior, and the rationale behind their use that impact upon intrinsic motivation. Slavin (1999), for example, found that "the use of rewards more often increases intrinsic motivation, especially when rewards are contingent upon the quality of performance rather than on mere participation in an activity, when rewards are seen as recognition of competence, and when the task in question is not very interesting" (p. 345).

The majority of research on the effects of external rewards on intrinsic motivation has focused less on perceptions of competence and more on issues of autonomy versus control (Ryan & Deci, 2000). In fact, Ryan & Deci (2000) note that "directives and competition pressure diminish intrinsic motivation because people experience them as controllers of their behavior [while] choice and the opportunity for self-direction appear to enhance intrinsic motivation, as they afford a greater sense of autonomy" (p 58). Given that several studies suggest that students

are not generally intrinsically motivated to perform academic tasks (Anderman & Maehr, 1994; Eccles et al., 1993; Jones, 1996), the introduction of extrinsically based strategies aimed at enhancing intrinsic motivation appears warranted (Baer, 1998; Chance, 1993; Slavin, 1999).

Several studies suggest that while some forms of extrinsic motivation represent sources of constraint and control, others represent sources of active engagement and self-regulation (Cameron & Pierce, 1996; Chance, 1993; Jones, 1996). Since school-based tasks are generally viewed by students as neither inherently interesting nor enjoyable (Palardy, 1999) it becomes critically important to incorporate teaching strategies that "promote more active and volitional (versus passive and controlling) forms of extrinsic motivation" (Ryan & Deci, 2000, p 149). In fact, Ryan and Deci (2000) note that "in schools it appears that intrinsic motivation becomes weaker with each advancing grade" (p. 54).

Extrinsic rewards can be used to control (to regulate behavior) or to inform (to make an individual aware that their efforts are paying off) (Dev, 1997). The use of rewards to control undermines intrinsic motivation. Controlling rewards foster extrinsic motivation while informative rewards foster intrinsic motivation (Dowd & Val, 1996). As a result, the particular impact of extrinsic rewards on intrinsic motivation is a consequence of the manner in which the reward system is implemented. For example, Anderman and Midgley (1998) found that once students entered middle school, the changes in their motivation were the result of the particular features of their learning environments. During adolescence, children search for opportunities to establish their independence and autonomy. Often, controlling school environments stifle opportunities for self-exploration. As a result, the structure of the typical school environment is not conducive to the developmental needs of the students.

One way to provide such a change is to provide opportunities for autonomy and active participation through the use of models that foster more self-determined forms of extrinsic motivation. As Ryan & Deci (2000) note, "the more one internalizes the reasons for an action and assimilates them to the self, the more one's extrinsically motivated actions become self-determined" (p 58). Through autonomous experiences and active engagement, students develop a sense of achievement that serves to enhance motivation (Bandura, 1995). Autonomous experiences can most easily be attained by allowing students to take an active role in classroom decision making. Teachers and school administrators often restrict opportunities for student involvement for fear of classroom disruption (Eccles, et al, 1993). However, Anderman and Midgley (1998) find that supporting student autonomy does not require major classroom upheaval or force teachers to surrender the control they have over their students' behavior. The benefit of such autonomy is that it consistently results in increased student motivation and, ultimately, increased student performance.

The Impact of Educational Environment on Motivation

Given that adolescent motivation is directly influenced by certain factors in the school and home environment, such as relationships with parents and teachers (Leung & Kim, 1998), it is important to clearly examine not only the immediate contextual influences such as classroom teachers and peers, but broader (Hanrahan, 1998; Ryan, 2001) influences such as the general method of student assessment and the disciplinary structure within the school.

Many researchers suggest that the primary focus of urban schools is on the control and management of student behavior and on the summative assessment of their school based knowledge (Kesten, et al., 1998; Sweetland & Hoy, 2000; Michelli, 2001). Such a focus undoubtedly has a significant influence on enhancing or even sustaining the levels of student motivation. One particular example discussed by Michelli (2001) is the impact of standardized testing on perceived levels of empowerment. The author notes that standardized assessment assumes the existence of a fixed body of knowledge that students are expected to acquire. As a result, in academic settings that assess student learning through standardized tests, student contributions to the body of knowledge to be learned is less likely to be solicited and is ultimately implicitly devalued. Students, therefore, perceive themselves to be less able to serve as active participants in their own learning. This negatively impacts upon their willingness to participate in discussions and activities and ultimately negatively impacts upon their levels of motivation (Michelli, 2001).

With respect to issues of control and management, the focus on standardized "high stakes" tests leads teachers and students to more likely tie their sense of worth and esteem to the student's test performance (Thorkildsen & Nicholls, 1991). As a result, teachers and students grow more apprehensive regarding these forms of assessment as they come to represent far more than simply an objective test score. This apprehension on the part of teachers is often manifested through a greater emphasis on teacher directed activities involving fewer opportunities for student autonomy and self-direction. This apprehension on the part of students is consequently manifested as apathy and a lack of engagement in an effort to decrease the significance of the assessment and to protect their feelings of self-esteem (Thorkildsen & Nicholls, 1991). As some have noted, however, (Kohn, 2000; Ginsburg & Bronstein, 1993) the ironic consequence is that as teachers attempt to increase student performance by exerting greater control and implementing more teacher-directed activities, student performance generally decreases. For example, research by Flink, Boggiano, and Barrett (1990) found that teachers pressed toward higher standards were more likely to engage in controlling and instructing behaviors in their classrooms and that actually yielded poorer student performance, decreased student motivation, lowered task interest, and decreased task involvement. Ryan & Deci (2000), therefore, suggest that the goal of fostering intrinsic motivation in students is inappropriate given the structure of their educational environment.

One popular rationalization for why academic work in middle and high school is important is that it provides the foundation for future learning. While some of what is learned in middle or high school may not always be particularly interesting, the rationalization provided for learning the material is that it is information that one will need to know in order to excel in high school or college. Much in the same way that educators sometimes emphasize the importance of

certain material by stating that it will be "on the test", so to is it the case that the importance or value of text-based information is stated with respect to its relevance to some future oriented goal (such as success in high school or college). This future orientation assumes educational options that may not be realized by all students- particularly those with a lowered sense of self-efficacy and lowered levels of motivation.

Fewer perceived educational options (such as the opportunity to attend college) leads to a greater focus on the practical applications of school-based learning. In this way, students shift their focus from how school-based information may help them in the future to how the information may help them presently. These inconsistencies between the perceptions of educators and the perceptions of students regarding the perceived relevance of school-based learning are quite common and may result in lowered motivation and heightened frustration as the abstract concepts learned in school prove inapplicable in the "real world" context of the neighborhood or workforce (Donlan, 1991).

Redesigning Token Economies to Enhance Student Intrinsic Motivation

Some suggest that token economies are an effective tool for providing opportunities for active engagement and self-determined actions (Adair & Schneider, 1993; McGinnis, et al, 1999). Token economies are a form of extrinsic reward in which individuals receive rewards or "tokens" as a result of achieving some articulated objective. While token economies are generally used with respect to helping students develop self-regulatory skills for the purpose of improving their behavior, they have been implemented to deal with a variety of issues (McGoey & DuPual, 2000). For example, token economies have been instituted as a means of combating inappropriate social behavior (Anderson & Katsiyannis, 1997), as a means of enhancing academic skills (Donlan, 1991; Jones, 1996), and as a means of preparing students for real world scenarios (Lyon & Lagarde, 1997).

As a motivational tool aimed at enhancing academic skills, token economies have been used in an attempt to improve reading and mathematics performance by increasing student's motivation to regularly attend classes, to participate in classroom discussions, to learn new information, and to complete assignments (Inkster & McLaughlin, 1993). Although token economies are used to address a variety of concerns, they are particularly effective with students educators view as more difficult to engage. For this reason, some who are concerned about the introduction of extrinsic rewards argue that token economies should be used when specific conditions are present. For example, token economies should be used "only when a group of students is entirely out of control, when students do not care at all about their work, or when students have had a history of failure" (Sternberg & Williams, 2002). While depictions such as these appear to be characteristic of the student, it is quite clear that particular features of the learning environment make these kinds of characterizations more probable.

In summary, given that Ryan & Deci (2000) indicate that feelings of competence and feelings of autonomy must co-occur in order to achieve high levels of intrinsic motivation, and given the findings of Zimmerman (2000) regarding the link between self-efficacy and motivation, a redesigning of the token economy to serve as a tool for enhancing intrinsic

motivation must address three elements: the recognition of student competence, student autonomy, and the practical application of school-based learning.

Enhancing Recognition of Student Competence

Research by Maehr & Midgley (1991) found that student motivation was fostered through school-based activities that stressed learning, task mastery, and effort rather than those that stressed relative performance and competition. As has been suggested by Scott (1998), token economies must be structured so that they inform students of the quality of their work and/or behavior if they are to enhance their self-regulatory skills. In fact, systems that focus on the enhancement of self-regulatory behaviors have been found to increase students' academic performance (McGinnis, et al., 1999). Scott (1998), for example, found that although students exposed to both token economies and systems emphasizing self monitoring and self-management showed significantly decreased disruptive behavior and significantly increased on-task behavior resulting in increased academic performance, the changes were maintained longer under the self-management system. A token economy system must, therefore, have at its foundation a mechanism for enhancing self-regulatory skills if the gains it achieves in enhancing intrinsic motivation are to be maintained.

One way in which students can be informed of their behavior and the quality of their work is to provide them with clear criteria for how tokens are to be disbursed. An end of day conference, for example, where teachers discuss their rationale for how tokens are allocated and where they provide specific information regarding how students can improve their performance and thereby improve their earnings has been found to increase levels of self-regulatory behavior (Stay-in-School Partnership Program, 1988). Furthermore, by providing students with specific information regarding how they can improve their performance (and particularly by providing that information in a supportive way), teachers can foster feelings of self-efficacy in students and ultimately enhance their feelings of motivation (Zimmerman, 2000). Deci & Ryan (2002) note, for example, that when assessment provides individuals with specific feedback regarding how they may achieve task-related success (and is done so in a supportive way), it generally has a positive effect on their levels of motivation.

Enhancing Student Perceptions of Autonomy

Token economies can be implemented to cultivate intrinsic motivation through the use of extrinsic rewards (Adair & Schneider, 1993; Lyon & Lagarde, 1997; McGinnis, et al, 1999). Such token economies serve as a form of informative reward that helps students to realize the relationship between their classroom behavior, the quality of their work and the rewards they receive. They also allow for students to become fully engaged in many aspects of how the token economy is structured.

Incentive programs are inextricably linked to their reward structure. Rewards must be deemed meaningful if they are to serve as a source of motivation. Of importance is that they are deemed meaningful by the individuals to be motivated rather than by the individual responsible for their disbursement. Students have to take an active role in selecting the rewards that will serve as reinforcers. Myles (1992), for example, found that the rate of achievement and

enjoyment of students participating in a token economy was higher when they were allowed to select their own reinforcers than when the teacher made the selection. Lyon & Lagarde (1997) found that adherence to rules and demonstrations of prosocial behavior increased when students were responsible for the disbursement of token rewards to their peers. Additionally, Anderson & Katsiyannis (1997) noted that one important ingredient in enhancing student motivation was student involvement in establishing classroom rules.

Based on these findings, it can be concluded that student participation in the creation of the criteria for earning tokens constitutes an opportunity to actively participate in the creation of classroom rules. In this way, the implementation of the token economy system affords students the opportunity for autonomous experiences that serve to enhance their levels of motivation. As a result, in the construction of any token economy designed to enhance intrinsic motivation, students must have a role in determining the kinds of items that serve as tokens, in determining the reinforcement schedule, and in determining the criteria for token disbursement.

Establishing the Practical Applicability of School-Based Learning

Research by Lepper (1996) has identified dimensions of school-based tasks that have been found to enhance student motivation to learn. These dimensions include providing a context for learning so that it helps students to see how skills can be applied in the real world, developing tasks that are challenging but achievable, and creating tasks that involve cognitive conflict.

As has been noted, tokens can be used as an informative tool that reflects student achievement with respect to specific goals such as the display of appropriate classroom behavior or the use of appropriate test preparation techniques. The use of tokens also provides a context for learning that mirrors the real world connection between work and earnings. While students may be provided with opportunities to collaborate regarding the development of criteria for earning tokens, in a modified token economy they assume individual responsibility regarding how tokens are to be redeemed. For example, students must be provided with clear short-term options (e.g. a reward received at the end of the class period or school day) and long-term options (e.g. access to an activity at the end of the month or marking period). These options force them to make choices and to consider possible opportunity costs associated with their decisions. In this way, they are forced to assess their immediate context to determine whether to opt for short term over longer-term rewards.

It is evident, therefore, that while the introduction of extrinsic rewards (such as token economies) has raised concern with respect to their impact on levels of intrinsic motivation, such forms of extrinsic motivation may be modified and may serve as a tool to enhance self determination and self-efficacy- critical components of intrinsic motivation.

The After School Program Token Economy Example

The purpose of this work is to examine the link between intrinsic motivation and external rewards by describing the experiences of under-performing adolescents who participated in a token economy that was implemented in their after school program. The goal of the token economy was to establish a mechanism for recognizing student competence, to enhance student's

perceptions of their autonomy, and to assist students in establishing links between their classroom-based learning and its practical applications.

Description of After School Program and Program Participants

Sixty-five students from a New York City public junior high school were enrolled in a mathematics and reading focused after school program that implemented a token economy. Twenty-seven of the sixty-five enrolled students participated in this study. Of the twenty-seven participants, fifteen were in the seventh grade (8 females and 7 males) and twelve were in the eighth grade (7 females and 5 males) with fifty-two percent identified as African American and forty-eight percent identified as Latino (based on information entered on their program applications).

All students who were enrolled in the program had failed both mathematics and reading in the marking period prior to their enrollment and many of the students (22 of the 27 interviewed) had failed both content areas in two prior marking periods. As a result of their level of performance in mathematics and reading, teachers and school administrators classified all program participants as under-performing. Participation in the program was mandated by the school administration but the administration mandated that academic scores obtained in the after school program were not allowed to be factored into a student's marking period grades (this information is noted because it exemplifies the student's concern that their competence-even when supported by evidence- was not recognized by their school). The fact that students were under-performing was an indication that other strategies at improving their academic performance, both internally and externally derived, had been unsuccessful. In this light, the use of the token economy represented not the initial approach but, in some ways, the approach of last resort to enhance levels of intrinsic motivation in students with a history of academic failure. The after school program was one housed in the same classrooms that the students used during their regular day sessions. At the end of the school day, students were instructed to stay in their classrooms. New teachers, who did not work in the school, met students in their classrooms at the beginning of each program day.

Students earned tokens with respect to their program attendance, their preparedness, their participation (in terms of the quality of their work and their engagement in activities), and their behavior (with respect to both their teachers and their peers). At the end of each session, students were provided with specific feedback regarding how they could improve their performance (and earn more tokens). Tokens could be redeemed for a number of items including snacks, school supplies, items from a catalog designed by students in the program, or they could be saved and redeemed for a savings bond whose value was a percentage of the redeemed tokens. Students were directly involved in determining the criteria for earning tokens, in determining when they would be disbursed, and in determining how they could be used.

The student comments that follow were generated during one of the program's weekly thematically oriented small group "chat sessions" where the program's coordinator facilitated a small group discussion involving five to six students. The purpose of this particular documented discussion was to obtain feedback regarding student's perceptions of the program and their suggestions for how the program should be modified. In the small group sessions, students were

specifically asked to discuss how the after school program differed from what they referred to as their "regular day program".

Goals Addressed

The following analysis of student responses is organized with respect to the goals of the program. In analyzing student responses across all of the small group sessions, the three themes (to enhance recognition of competence, to enhance perceived autonomy, and to establish practical applicability of knowledge gained from the completion of school-based tasks) emerged as being linked to their lowered levels of motivation to perform school-based tasks in their "regular" school (because they viewed these goals as not being reflected) and to their heightened motivation to perform these tasks in the after school program.

Recognition of Competence

One key area of student concern was the idea of having their work praised and valued. They were clear to point out, however, that praise was often handed out in disingenuous ways. For example, more than one student noted that while teachers would sometimes offer them praise, the praise felt almost condescending in that they were praised for their effort but not for the quality of their work. Also, they felt that the praise given to them by their teacher was not often supported by evidence that their work was valued.

For example, a male student in the seventh grade stated:

"I don't really do good in school. I guess that's why I'm here. It's like all they care about is grades and tests. I don't pass the tests and I don't get the grades so they don't care. The teachers just make me feel like I don't matter. They act like the smart kids are the only ones in the class sometimes. The pick on 'em to answer questions and they let 'em talk over everyone else. If they don't want us here, they should just have a different room for us. Even when I raise my hand, they don't pick on me because they think I'm just clownin around. But sometimes I really know the answer. I know that I be clownin an stuff, but sometimes I know the answer and they just don't think I do."

In a similar way, a female in the eighth grade shared her thoughts regarding the recognition of her competence in this way:

"If you don't get an A it doesn't go on the wall (displayed on the wall in the hallway outside of her classroom door). She be sayin all this stuff about "hey good job" but it don't go on the wall. If it's so good she should put it on the wall. My teacher's just phony. It's like she be sayin good job cause she can't think of nothing else to say. Kids know when teachers are being phony."

A male in the seventh grade summed up his thoughts on the relationship between teachers and students in a single, rather profound, sentence. From his perspective, his teacher's responses to students served as a mechanism for maintaining control rather than as a mechanism for providing support.

"Teachers need to make kids feel smart. That's what I think. You wanna know what I think? That's it. They make us feel stupid sometimes. We try to answer and they just say WRONG!. I know that we got some bad kids here but we ain't all bad and even the bad ones ain't stupid."

In describing the differences between "regular" school and the after school program, a female in the eighth grade focused specifically on the way in which tokens served as a mechanism for recognizing her competence.

"I don't feel stupid in after school because we do it different here. You can show that you're smart in different ways. Everybody is treated the same with tokens and its just about what you earn. It's not about if somebody is smart in regular school everbody just lets them slide here (assumes that they are smart). It's not like that. Last week I got more tokens than Maritza and she is mad smart in regular school. I'm not tryin to dis [disrespect] her but it makes me feel like I'm smart like her, even smarter."

Autonomy

A consistent finding was that students felt as though they had no voice in their daily academic lives. Some of the students even likened school to being incarcerated. They expressed a concern that an inconsistency existed between their need to "act grown" when they navigated their respective social worlds of their neighborhoods or their homes and their being treated "like babies" once they entered their school.

A male in the eighth grade shared his thoughts regarding his experiences in his "regular" school in this way:

"Man I ain't no baby. They be treatin us like babies here but I ain't no baby. They need to let us act grown. I gotta take care of my little brother and sister every day. I work with my father at his bodega (grocery store) everyday. I got my working papers and I make money. I come here and they act like I'm a kid. I can't go to the bathroom without a monitor. Teachers telling me what to do all the time. The principal didn't even let us pick out the colors for the yearbook. That's wack. It's supposed to be our school and nobody lets us do nothing. Let us make some rules, let us make some decisions. I hate this place. I hate school."

The clear statement of a "hate" for school that is derived from a lack of opportunities to have a voice is rather important because it speaks to an overall feeling of being disrespected that many students discussed. They expressed both a feeling of frustration at being devalued and anger, in some cases, at being viewed as incapable of regulating their own behavior. Some even stated that they felt better prepared to "deal with" the students in the school because they knew how not to disrespect them. Ultimately, due to these feelings of frustration and disrespect derived from a perceived lack of autonomous experiences, students tended not only to "hate" school but also to "hate" teachers and everything that the teacher represented (in terms of their particular content area of specialization).

A female in the seventh grade stated the following:

"If kids were in charge it would be a whole lot better. We know what we want to learn about and we know how to handle the bad kids. I shouldn't even say bad kids because they ain't bad all the time. Actually I'm one of those kids. Sometimes they be making me so mad. They always think I did something wrong and they're always telling me what to do. My grandmother tells me what to do and so does my sister. I come here and it's my teachers doing the same thing. It don't stop. Let me be the teacher or the principal. Let the kids make the rules. It would be way better than this. This place is garbage. I don't wanna do nothing when I'm in class except think about when I'm gonna leave."

Students viewed the implementation of the token economy in their after school program as a way of establishing their voice and asserting their independence. Many spoke proudly of the fact that they personally selected an activity or item that students could purchase with tokens. Even those who expressed disagreement with the selected items or activities expressed an appreciation for the opportunity to make a decision that was valued enough to be debated.

A male in the seventh grade stated:

"I like after school because at least we have a say. We make up a lot of the rules and we pick the snacks and the trips. We argue about stuff like that last trip ....them girls wanted that wack trip. But at least we get to pick them. We're goin where the fellas want to go next so it's all good."

A male in the eighth grade shared his thoughts in this way:

"I don't mind doing the work here because we sometimes get to pick what we learn. We just have more fun here. We do work, but we want to do it most of the time. I mean, not always, but most of the time, we even do some of this stuff at home."

A female in the eighth grade took great pride in not only providing a specific example of how her idea was valued and implemented, but in noting the logical complexity of her idea.

"See this, this is a list of the rules we came up with. This is more rules than regular school but they're good rules. See this one (pointing to one of the rules). This ain't stupid like the one in school. They have a rule in my school that says 'No Talking in the Library'. How you expect kids not to talk? It don't make no sense. We gotta talk. I gotta ask somebody where the book is. I gotta say something sometime. The librarian talks all the time. So how they gonna say no talking? We have "talk softly so you don't disturb other people." You can talk, just don't be all loud about it. See what I'm saying? We're smarter than the teachers."

Real-World Applications

It was discussed earlier that one rationale that students are given by teachers regarding the importance of completing school-based tasks is that the completion of these tasks is important for their achieving a future-oriented goal. For the students interviewed, however, their future-oriented goals were inconsistent with the academically oriented goals that their teachers described as an intended source of motivation. For them, the future was far more immediate and their concern was in terms of how what they were taught in school could be used immediately outside of school. Furthermore, they questioned the teacher's use of this motivational strategy in light of their perception that their teachers did not view them as competent.

One female student discussed the apparent inconsistency in this way:

"They say we can use this in high school and college and then they make us feel stupid. If we're so stupid how we gonna go to college? It don't make no sense."

A male in the eighth grade echoed this sentiment and depicted his perceived chances at college enrollment in this way:

"Yo man I'm gonna go to college. I'm going to UCLA. You know what that stands for? University on the Corner of Lexington Avenue."

Many of the students interviewed drew a strong distinction between the information they learned in school and the information they need to acquire "out there" (outside of school). Several of the students stated explicitly that they did not see how what they were learning in school would help them.

One young man in particular asked.

"When is someone gonna stop me on the corner and ask me to solve for x? I ain't gonna be on [the television show] Jeopardy or nothing. This ain't helping me."

When asked how their experiences in the after school program were different, many stated that they could "use" their learning by using tokens. For them, the tokens represented the tangible link between their participation, behavior, and learning and the "real world" outside of their school. For example, some of the children noted that they were responsible for younger siblings because their parents worked until late in the evening each day. They stated that they often used their tokens to purchase food (such as pizza that was provided by the program each day) to take home so that their siblings would have something to eat. One student spoke with pride about a pen that he purchased with tokens that he gave to his father for his birthday.

Several students also noted that they were regularly encouraged by their teachers in the after school program to apply what they learned in school outside of school. One student describes a moment of self-discovery in this way:

"That's what makes it real for me. We did this thing about ratio and percents. I didn't get it until I was watching a Knicks game and they said that Ward went 10 for 12 from the foul line and that he was shooting 83 percent. I worked it out on a piece of paper and I got 83 percent too. I was like, yo, I get this now! I did a couple more after that too!"

This example illustrates the importance of establishing a link between what is taught in school and how it can be used outside of school. For the students, there was a deep distinction between school and the outside world. They shared how in their neighborhoods people thought they were smart because they could do things (for example, one male noted that he was known as the "Bike Man" because he fixed all the kids bikes). At school, however, they felt that people (primarily teachers and administrators) thought they were stupid because they failed their classes.

They discussed how they made important decisions at home (for example, one female said that she selected her sister's pediatrician because her mother did not speak enough English) but had no opportunities to make decisions of importance in school. Furthermore, they shared their feelings of excitement and increased motivation as they discovered that what they learned in school was useful outside of school.

For the students, tokens represented what Perry (2003) refers to as the "counternarrative." They represented a mechanism to obtain tangible evidence of their competence- evidence that stood in stark contrast to the depictions of their competence constructed by their teachers and school administrators.

Implications for Educational Practice

The transition to secondary school is often described as being accompanied by decreases in the intrinsic motivation of adolescents as a result of a variety of factors including lowered feelings of self-efficacy and feelings that their actions are less self-determined. In light of these decreases in motivation, strategies to maintain and enhance academic intrinsic motivation in adolescents have often been sought. One approach that deserves further consideration is the token economy. While the effectiveness of token economies as a means of controlling behavior has been documented, they have often been viewed as an inappropriate mechanism for enhancing intrinsic motivation. However, given that research indicates that intrinsic motivation is linked to feelings of self-efficacy and the perception that one's actions are self determined, any mechanism designed to enhance both would, consequently, enhance levels of intrinsic motivation.

In this study, students reflected upon their experiences in an after school program that implemented a token economy. The token economy was introduced to address three specific factors that have been identified in the literature as impacting upon a student's level of intrinsic motivation to perform school-based tasks. The factors addressed by the program's

implementation were the student's perceptions of their competence, their perceptions of their autonomy, and their perceptions of the practical applicability of school-based tasks.

While no standardized outcome measure of intrinsic motivation was utilized, the responses of students indicated that the token economy enhanced both their levels of self-efficacy and their perceptions that their behaviors were self-determined. Several salient features of their responses illustrated this point. For example, for the students, tokens represented the recognition of their competence- competence not tied exclusively to test performance but a multidimensional competence reflecting their participation, their preparedness, their behavior, and their performance. This multidimensional view of competence allowed them to alter their perceptions of their competence and to ultimately view themselves as smart. This was reflected in their statements indicating greater interest in school-based tasks and an increased motivation. Students also felt that tokens afforded them the opportunity to make choices regarding when and how they were used. They also noted the importance of having input regarding the rules of the program and even regarding the material they were taught. In this way, they felt respected and supported in their need for greater autonomy. Finally, students viewed the use of tokens as a mechanism for applying their knowledge in the real world (as in the case of the male student who completed math problems at home after discovering the usefulness of a mathematical concept learned in school). In establishing this link, they expressed an enhanced motivation to participate in school-based tasks and to complete their assignments. As a result of these accounts, it is argued that the token economy should be viewed as a particularly effective mechanism for enhancing the motivation of students who have under-performed to engage in and ultimately acquire knowledge derived from their participation in school-based tasks.

Participant responses indicate that by developing clear mechanisms for informing students of the rationale for token disbursement and procedures for altering behavior and work quality, token economies can be structured as an informative tool that can prove effective in enhancing levels of self-efficacy and providing opportunities for students to view their behaviors as self determined. In this way, token economies can be structured to serve as a tool to enhance levels of intrinsic motivation through a system of external rewards.

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