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## Encouraging Adolescents to be Self-Directed Learners: Influences of Classroom Motivation on Student Outcomes

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**Encouraging Adolescents to be Self-Directed Learners: Influences of Classroom Motivation  
on Student Outcomes**

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HPR 401: Honors Project

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## INTRODUCTION

Humans do things because they are motivated to do so, whether it be a result of self-interest, or because of an external reward as a result of the task. These motivations extend to many areas of our lives, such as schooling which is compulsory in the United States through 12th grade. Research has shown that the intrinsic motivations in school sharply decrease up until a student is 12 years old and slowly stabilize until 15 years old (Gillet et al., 2012, p. 84), prompting researchers to examine possible ways to improve intrinsic motivators in school. The purpose of this paper is to examine the methods of promoting the healthy development of students as well as how to effectively produce true lifelong learners by looking at the basics of learning and motivation development in schools, effective teaching perspectives, ethical perspectives, and implications for future adolescents.

A student's growth both academically and developmentally have tremendous impacts on the rest of that student's life, including whether or not a student will continue choosing to learn outside of school in adult life, resulting in an increased quality of life (Tang & Hall, 1995, p. 385). Becoming lifelong learners is a goal of the American education system both with formal education and informal education. When teachers and schools are choosing teaching practices to use in their classrooms, there needs to be careful consideration of the effects on adolescent development and motivation they have to be sure their students are developing an inherent desire to learn, especially in the face of motivations stabilizing around the middle of adolescence (Gillet et al., 2012).

The foci of this paper include adolescent development and motivations. Main lenses through which to view development include agentic support, self-determination theory, and autonomy development; main lenses to view motivations include intrinsic and extrinsic

motivation. Contexts through which these foci will be examined include middle and high school, teaching practices, and ethical perspectives. These contexts will be examined individually, as well as how they interact together to affect the two foci. In this paper, basics of learning theory and motivation theory in the school context will be discussed, followed by a review and analysis of current teaching practices which span multiple educational philosophies. Ethical perspectives will be considered, especially related to the American Psychological Association (APA) and National Association of School Psychologists (NASP) guidelines, as well as Quality of Life (QoL) standards. Implications, limitations, and directions for further research will be discussed as well.

## BASICS OF LEARNING AND MOTIVATION IN SCHOOL

### **Basics of Motivation**

Motivations can be intrinsic, meaning tasks are done because of an inherent desire to do something, or extrinsic, meaning tasks are done in order to get some sort of external reward (Good & Brophy, 2008). Similarly, students experience a motivation to learn: either they are motivated to learn for the internal betterment and attainment of knowledge, or they are motivated by external rewards such as grades, GPA, or college acceptance. Students starting in middle school begin to learn more about their own competencies as a result of their development and when the presence of external reinforcers such as report cards and teacher evaluations on projects and tests becoming more formal and more frequent, those students may begin to realize they are not as capable as their peers, resulting in the reduction of competence beliefs and intrinsic motivation (Wigfield et al., 2016, p. 191). For students that do well, they may begin to equate their worth with their grades, feel objectified, and begin to turn themselves into commodities that are packaged and sent to colleges (O'Connor & Lessing, 2017). When this happens, the intrinsic

motivation to learn can be replaced by extrinsic motivations of grading, college acceptance, and GPA ranking, which is not as valuable or long-lasting as intrinsic motivation in the goal of creating students to be lifelong learners.

This trend of students losing intrinsic motivation and turning to extrinsic motivations can be explained through theories such as the overjustification hypothesis. According to Lepper et al. (1973), this hypothesis posits that a person's intrinsic motivation to do something can be undermined by making that person do that thing as an explicit means to an extrinsic reward. Lepper and his colleagues conducted this research in order to see some of the possible effects external reinforcers such as token economies and grades in schools can have and found that these extrinsic motivations could potentially backfire for the students who wanted to learn (Lepper et al., 1973, p. 136). Researchers before Lepper such as Deci in 1971 also found this effect with college students and money: when students solved inherently interesting puzzles and were paid, they were less likely to continue working on the puzzle during their break as compared to the group that was not paid, highlighting a possible decrease in intrinsic motivation (Lepper et al., 1973, p. 130). In the case of students, it may be the case that some who once loved to learn for the sake of learning became extrinsically motivated to learn by the increasing explicit presence of extrinsic rewards such as grades and GPAs as a result of their school work, which could yield a lower intrinsic motivation to learn.

### **Basics of Learning and Behavior Modification**

In current psychological practice, there are two main theories of learning and behavior development: Pavlovian theory and Skinnerian theory. Pavlovian theory is learning by association: it is based on respondent behavior, where a stimulus that does not elicit a certain desired response is paired with a stimulus that does, until the previously neutral stimulus is able

to elicit the desired response (Vargas, 2013, p. 8). A good example of this in classrooms is the pairing of fear or anxiety with things such as tests or presentations. Pavlovian theory posits that this is because these once-neutral things such as tests and presentations became paired with fear- or anxiety-provoking stimuli like failure or ridicule by peers, causing those feelings to be paired with tests. Skinnerian theory is learning by consequences: it uses operant behavior, where behavior operates based on the environment and its immediate effects (Vargas, 2013, p. 8). Vargas (2013) notes that Skinnerian theory posits that “all behavior, including ‘misbehavior’ is being *supported* somehow or it wouldn’t continue” (p. 13). Although both of these theories are valued in the field of psychology, Skinnerian theory is what is seen more in schooling. Many of the current teaching practices that will be explored later in this paper use elements of Skinnerian theory by using the environment of the classroom around the student and immediate effects such as external rewards or intrinsic motivators to promote behavior change and learning motivation.

### **Self-Determination Theory**

Another theory that is often seen in the classroom is self-determination theory. Self-determination theory is rooted in the assumption that maintaining a sense of well-being requires satisfying three basic needs: autonomy, competence, and relatedness (Good & Brophy, 2008, p. 163). Autonomy involves being able to decide what to do and how; competence involves developing and exercising skills for controlling the environment; relatedness refers to affiliation to others (Good & Brophy, 2008). Good and Brophy (2008) note that basically, people are “inherently motivated to feel connected to others in a social milieu, to function effectively in that, and feel a sense of personal initiative when doing so” (p. 163). This has been found to be fostered through practices such as the active facilitation of student involvement in person-centered planning (Cavendish, 2013). Cavendish (2013) found that the perceptions

students had around if their schools facilitated student involvement was significant in predicting that a student graduated from high school, so much so that “for every 1-unit increase in the student involvement score, students were 1.07 times as likely to graduate versus not” (p. 270). This study also found that self-determination and student perceptions of schools facilitating student involvement improved the likelihood of students being on track for graduation (Cavendish, 2013, p. 270). These findings highlight the importance of self-determination and the necessity of schools to be actively encouraging students, especially adolescents, to be building self-determination and in turn, intrinsic motivation.

### **Expectancy-Value Theory**

A final key theory of behavior motivations in school is expectancy-value theory. In academics, there are 4 outlined components: attainment value (personal importance of doing well), intrinsic value (interest or personal enjoyment from doing a task), utility value (how much the task will help with current/future goals), and cost (negative aspects in engaging with the activity) and understanding all of these components are important in realizing why students pick what they do as well as their task performance (Patall et al., 2013). With this, researchers know that intrinsic motivation is important in the decisions adolescents make when it comes to schooling, and are able to examine some key areas that need to be considered when investigating effective teaching practices.

These various theories and processes of learning play a critical role in the education of adolescents in public middle school and high school in America. By understanding these processes as well as the current developmental needs of the student, there are various effective teaching practices that can be used to promote lifelong learning and healthy development for adolescents.

## EFFECTIVE TEACHING PRACTICES

Effective teaching practices take into consideration both the developmental needs of the student and an understanding of motivational strategies, both extrinsic and intrinsic. There are various teaching strategies that are commonly used in individual classrooms, and many that are considered a part of an alternative education philosophy. In this section various classroom teaching practices will be evaluated in their effectiveness in promoting healthy development and lifelong learning tendencies, as well as more alternative classroom teaching practices such as those found in Montessori schools and Waldorf schools.

### **Intrinsically Focused Classroom Teaching Practices**

An approach that allows students to engage with material in a way that encourages risks is the gradeless classroom model. O'Connor & Lessing (2017) described their experiences with implementing a "gradeless" system into their high school English classroom to eliminate the pressures external marks have on students, saying things such as grades can objectify students and make them feel that they are only as good as their GPA or latest test grade (pp. 305-306). With more creative assessments such as papers, teachers can allow students to edit and resubmit them as many times as they would like to promote learning from mistakes (O'Connor & Lessing, 2017). Additionally, daily assignments are evaluated based on completion not accuracy, and the projects they create are commented on based on criteria that the students had a say in (O'Connor & Lessing, 2017). These strategies promote elements of self-determination such as autonomy and competence, which is beneficial for student development (Good & Brophy, 2008). All of these practices together as well as the student's own self-evaluation are considered by the teacher to assign an appropriate overall grade for the quarter or semester (O'Connor & Lessing, 2017, p. 308). These strategies encourage students to take hold of their own education with the push for

using their own successful strategies to create their own goals, promoting autonomy, competence, and self-determination.

The purpose of the hidden grades in the classroom is to alleviate the stress placed on students, especially those who base their worth off of the grades that they receive. The extrinsic motivations of elements such as grades and GPA can often be the only feedback a student receives, possibly leading students to evaluate who they are as a person off of that number. O'Connor & Lessing (2017) note: "imagine going to a place where adults tell you in a variety of ways that you are a failure, that you are not good, that you need to improve or else there will be dire consequences. Now imagine going to that place most of the year for 15 years and you will have some sense of how terrible school is for some young people" (p. 311). This model of classroom management highlights both the importance of intrinsic motivators for learning, as well as the need for students to develop self-determination and autonomy through the ability to have some say around their learning outcomes.

As previously noted, self-determination and autonomy are integral to the healthy school development of a student, especially in middle and high school. A study by Patall et al. (2019) found that using multiple self-determination skills such as self-regulation, self-advocacy, self-awareness, choice and decision making, problem solving, self-efficacy, and goal setting and attaining most or all of the time is beneficial for all students in the study, and went further than previous studies by highlighting *why* these skills specifically contributed to the success of students. These self-determination skills promoted students' sense of independence, motivated them to succeed, helped them to receive support from teachers, and helped them prioritize how they spent their own time (Parker et al., 2020). Another study by Patall et al. (2013) found that students' experiences of autonomy plays "an important role in their course value, and especially

their intrinsic and utility value for a course” (p. 27). These results indicate that students who have a choice in the classroom feel more autonomous, and as a result feel a greater liking of and interest in the material (Patall et al., 2013, p. 28). This is further supported by Good and Brophy (2008), who claim that students need to assume responsibility in their own learning, otherwise it could delay their development of independent responsibility and take away from teaching time (p. 79). Teachers can do this by including elements such as hands-on activities, open discussions, and opportunities for peer interaction into their lesson plans (Parker et al., 2020).

Homework has been shown to be an important component of the educational experience, but one fourth of students in a study by Patall et al. (2010) reported finishing their homework only sometimes, rarely, or never. This prompted them to seek out ways to promote homework completion and self-determination in high schoolers. Using a variety of classes with high school students (9th-12th grade), they found that by allowing students to have a choice in the homework they wanted to do (while both homework options were identical in difficulty and content), students reported feeling not only more interested in and enjoying homework more, but that they felt more competent regarding their homework compared to when they were not given a choice (Patall et al., 2010, p. 910). It should be noted that receiving choice in homework did not have much effect on the amount of effort, amount of tension and pressure, or perceived value of the homework (Patall et al., 2010, p. 910). Due to that, homework choice should be combined with other factors to increase intrinsic desire to do homework and continue learning in addition to the autonomy and self-determination being promoted through homework choice, like agentic engagement.

Agentic engagement describes a student’s involvement in their own proactive and constructive attempts to influence instruction and educational activities to better support their

own learning and motivation (Patall et al., 2019, p. 78). This can be described as activities such as actively participating in class, asking questions, and giving feedback. Daily agentic engagement was found to significantly predict an increase in “same class day experiences of autonomy and relatedness need satisfaction,” as well as an increase in experiences of behavioral, emotional, and cognitive engagement that day (Patall et al., 2019, pp. 84-85). It significantly predicted an increase in mid- and late-unit perceptions of overall autonomy support as well (Patall et al., 2019, p. 85). An interesting finding included when there was more agentic engagement earlier in the unit, it was more likely for students to perceive that teachers were considering the interests of students when creating activities (Patall et al., 2019). During late-unit, students were more likely to perceive that teachers were open and responsive to negative student affect and attempted to provide encouraging feedback (Patall et al., 2019). This study ultimately concluded that teachers may need to be trained to respond to students in a way that aligns with their adolescents’ needs at each phase of instruction and in a motivationally-supportive manner; teachers need to be promoting the intrinsic motivations to get a task done and learn material in a way that makes students excited and supported. This combined with practices such as homework choice can positively impact a student’s autonomy, self-determination, and lifelong learning outcomes, though more research must be done on these two strategies together.

### **Extrinsically Focused Classroom Teaching Practices**

There are various motivational practices that use extrinsic motivators more heavily than intrinsic motivators in order to initiate behavioral change in the classroom. The Good Behavior Game aims to reward students for displaying appropriate behaviors during instructional times by dividing the class into two teams that compete against each other to earn the least number of

points, where points are awarded as a consequence of inappropriate behavior (Wilson et al., 2014). Wilson et al. (2014) also notes that the use of the good behavior game has been linked to positive long-term effects, including fewer behavioral problems, increased reading scores, and less likely to use tobacco or hard drugs, as well as increased standardized testing scores in high schools (p. 408). Other behavior modification strategies provided on the IRIS center website note that while extrinsic motivators are useful in moderation, they should be phased out to allow students the chance to build intrinsic motivation instead (IRIS, 2005). In regards to becoming independent learners specifically, the IRIS Center (2008) provided guidance that combined both intrinsic and extrinsic motivators to help students become self-motivated and independent, which can be useful in the classroom.

With extrinsic motivators being the main reinforcement, several problems and concerns arise. Many of the extrinsic motivators, especially of the tangible variety, are expected to come from the teacher, leaving teachers responsible for the cost of all of the prizes required whether that be a relatively small reward such as stickers or a relatively large reward such as pizza parties. Even social and activity-related rewards such as five extra minutes of lunch or extra computer time take away from the limited instructional time teachers have with their students. As previously mentioned, there are concerns around the amount of time extrinsic motivators are used in classrooms, with various websites noting that it should be used in moderation, however very little has been written about grades and GPA being extrinsic motivators that are used often in higher grades such as middle school and high school.

That being said, there is still value in extrinsic motivators being used in middle school and high school classroom settings. The IRIS center's module (2005) on helping a student see payoff for work notes that students should be given extrinsic motivators for a little while until

they see the “natural reinforcers” such as grades improving, increased peer acceptance, higher rates of teacher and parent approval, etc. These natural reinforcers can be argued to still be extrinsic because they are dictated by what the child can receive in return for their actions, however the natural reinforcers listed that include interpersonal relationships can in fact be considered intrinsic motivators since it is a natural part of human nature to desire connections and positive interactions with others (Good & Brophy, 2008). It can be determined therefore, that there are benefits to extrinsic motivators, especially when they are used to lead to the development of intrinsic motivators later on, illustrating the importance of using both intrinsic and extrinsic motivators together in some combination.

### **Montessori Schooling Strategies**

Montessori schools are well known as an early education model, but their educational framework extends through 12th grade, offering the same key principles as the early education model. The main framework of Montessori education is that of a student-led and self-paced education that is guided and assessed by teachers, encourages the leadership of peers, and promotes a nurturing environment (What is Montessori education, n.d.). The setup of the Montessori classroom is unique in that it is student-centered and allows adolescents to manage their own time: they can choose how they want to spend their uninterrupted 2+ hours in core curricular subjects, how to organize themselves, and how to practice self-regulation in a group setting, all of which promotes self-determination and autonomy (Montessori secondary programs, n.d.). The classrooms are broken into 2-3 year-age cohorts that allow for collaborative work and student leadership which encourages social development, autonomy, and leadership skills (Montessori secondary programs, n.d.). Montessori schools also claim to respect the need for their students to maintain their love of learning, so they typically do not use high-stakes

testing and limit the amount of homework their students have (Montessori secondary programs, n.d.). Instead, adolescents are encouraged to complete complex projects to illustrate their mastery of topics and their curriculum is rooted in hands-on, experiential learning as opposed to lectures and textbooks (Montessori secondary programs, n.d.). Due to this particular type of education style, students are supported in the development of their self-regulation and ability to choose what they want to do and how to do it, as well as learn from and correct their own mistakes (Benefits of Montessori education, n.d.).

All of the elements in middle and high school education using the Montessori model allow for the development of student autonomy, self-determination, intrinsic motivations to learn, lifelong learning practices, and the necessary skills to graduate. This fulfills the main goals of public education. By eliminating the need for high-stakes testing and regular extrinsic motivators such as grades, students in Montessori schools are allowed to foster a love of learning and can truly connect and understand the material that they are learning in a way public schools may not be able to offer due to set class periods. Their discouragement of high-stakes testing also alleviates the stresses extrinsic motivators can have on students and allows a more holistic interaction with material in their complex projects. Intrinsic motivations are fostered through the use of projects and reports that allow the adolescent to choose what they are presenting on and how. Self-determination and autonomy are promoted through the structure of freedom in the classroom: students are allowed to choose for themselves where their efforts and focus would be most appreciated.

### **Waldorf Schooling Strategies**

Similar to Montessori schools, Waldorf schools aim to inspire lifelong learners in all students and help them to fully develop their unique capacities as students (Waldorf Education,

n.d.). The creator of Waldorf schooling, Rudolph Steiner, created this form of schooling from an understanding of the needs of a student based on their developmental stages (Waldorf Education, n.d.). This resulted in each year of the curriculum being created with the specific developmental needs of the child in mind (Waldorf Education, n.d.). Education through this educational philosophy is said to be based on how to support and guide the healthy development of each student, group of students, and school community as a whole (Emerson Waldorf School Curriculum Guide, 2015, p. 8). For adolescents, that means that the curriculum is centered around their growing need for autonomy development and self-determination. In the Emerson Waldorf School Curriculum Guide (2015), each school year has a developmental explanation at the beginning of the grade's curriculum: the eighth grade overview includes "as a picture, the Eighth grader is at the precipice of the unknown. The future is hurtling towards them and they are grasping with being ready to meet it and find their own path ahead" (p. 69). The curriculum for eighth grade therefore is centered around there being at least two perspectives to look at for everything, allowing a tie between curriculum needs and the developmental needs of the student.

The grading and assessment process at Waldorf schools are more qualitative in nature, which eliminates the need for competitive testing and extrinsic rewards to promote learning and instead encourages children to take intellectual risks and interact the information creatively (Waldorf Education, n.d.). The small class sizes allow teachers to provide in-depth weekly reports on each student's social and personal development as well as how they are doing academically (Waldorf Education, n.d.). There are staff meetings every week to allow teachers to discuss with each other how each child is doing and brainstorm plans to help each child in their individual needs (Waldorf Education, n.d.). This holistic approach to a child's success and development is an important characteristic of the Waldorf educational model.

Although highly personalized education may not be feasible for all public schools in America, there are some important takeaways from this model of schooling. Instead of grading students exclusively on a numeric basis, teachers, parents, and students themselves are encouraged to see the child as a whole and not just a number. Integrating the student's personal and social growth into reports also creates an environment that gives the student more support than regular public education might. Although there are still quizzes and tests listed especially in subjects such as math, encouraging students to engage deeply with material in ways that allow them to take risks and explore new ways of thinking about different subjects is the core of Waldorf schools, promoting lifelong learning.

In summary, one can view motivational strategies as being delivered to students based on decisions of individual teachers at the classroom level, and/or delivered to students based on a philosophy of schooling at the whole school level (and translated by individual teachers). This review suggests the following conclusions. First, there needs to be a balance between the use of extrinsic and intrinsic motivations in classroom settings. While both are useful in certain situations, there still needs to be a mix between the two in order to have a successful classroom environment. This can look like using extrinsic motivation in the beginning of a unit and then allowing more intrinsic motivations to begin to take place to allow students to continue towards a future of lifelong learning. Second, the use of self-determination and autonomy supports tend to pair well with intrinsic motivation practices, such as the choice in homework assignments. When students are choosing which homework they would like to complete, not only are they able to feel more desire to do it, they are also more likely to feel autonomous and competent in the material. Third, this research shows that there are many strategies that teachers in different

schooling philosophies can take from each other and use in their individual classrooms to promote lifelong learning and healthy development.

## ETHICAL PERSPECTIVES

All aspects of human services and education are likely to benefit from the consideration of ethics and ethical perspectives on the topics of interest. In the world of schools and psychology, there are two main codes of ethics to follow: National Association of School Psychologists (NASP), and the American Psychological Association (APA). Both of these ethical codes are analyzed here in relation to behavior management of students in schools to assess possible ethical concerns with extrinsic and intrinsic motivation practices.

### **National Association of School Psychology Standards**

NASP states “in their professional roles, school psychologists have a duty not only to avoid ethics code violations but also to take affirmative steps to benefit clients, schools, families, and the community” (NASP, 2020, p. 41). NASP expects professionals to be looking out for the best interests of their students, like with guiding principle I.1 (autonomy and self-determination). This principle states that “school psychologists respect the right of persons in decisions affecting their own welfare” (NASP, 2020, p. 42). With this guiding principle, professionals should ensure students have the ability to develop autonomy and self-determination in the classroom. This can look like having options to choose classes within the necessary core curricula and have an overall voice in their educational journey, such as implementing a choice of homework as presented in Patall et al. (2010). Similarly, with the gradeless classroom discussed in O’Connor & Lessing (2017), students are able to have a voice in what exactly they are being graded on with self-assessments which allow them to create their own goals and direct what they are receiving feedback on (p. 310).

Guiding principle II.3 (responsible assessment and intervention practices) also applies here. This principle states that “school psychologists maintain the highest standard for responsible professional practices in educational and psychological assessment and direct and indirect interventions” (NASP, 2020, p. 46). This applies to any and all assessment or intervention practices that school psychologists recommend for the betterment of student outcomes. Appropriate adherence to this principle can look like professionals ensuring that all of the intervention methods and assessments being used are valid, fair, reliable, and useful for all students. This can be done through the use of evaluation techniques such as those presented by W. K. Kellogg Foundation (2017), such as the logic model. The logic model is “a graphic representation of the theory of change that illustrates the linkages among program resources, activities, outputs, audiences, and short-, intermediate-, and long-term outcomes related to a specific problem or situation” (Kellogg, 2017, p. 106). Not only should school psychologists be implementing schoolwide evaluations for the effects of teaching practices on student motivation and development, they should also be encouraging teachers themselves to undergo routine evaluations of their own teaching practices in their individual classrooms for their individual classes of students. This can also look like school psychologists proactively reviewing the latest research on effective teaching practices that promote lifelong learning and healthy development, and having meetings with teachers in which these practices are discussed and possibly implemented into classrooms, for example with more alternative education models such as gradeless classrooms. The responsibility should not lie exclusively on the teacher, but on the whole school community including school psychologists and other school personnel.

Additionally, professionals under NASP have an explicit responsibility to proactively fight for reform in identifying social injustices, reform systems-level patterns of injustice, and

fight for fair school policies and practices that are in the best interest of the students they serve, as shown in Broad Theme IV (NASP, 2020, pp. 53-54). In this case, professionals have an ethical responsibility to be proactively fighting for students who may be adversely affected by current teaching practices. This can be achieved by promoting the education of school teachers and staff to actively evaluate their teaching practices along the guidelines of lifelong learning, motivation, and development. It can also look be achieved by actively evaluating the new teaching practices being implemented such as agentic engagement practices, gradeless classrooms, elements from Waldorf schools such as weekly reports on students, homework choice, or extrinsic motivators used to promote desired behaviors to see if these practices are promoting fairness and are in the best interest of students.

### **American Psychological Association Standards**

Similarly, the APA carries many of the same expectations and responsibilities for their professionals. Principle A is Beneficence and Nonmaleficence, meaning that psychologists are expected to strive to take care of, or at least not make anything worse; they are expected to “seek to safeguard the welfare and rights of those with whom they interact” (APA, 2017, p. 3). Given this expectation, can be debated that not only are some professionals not helping students, they are actively causing harm to students in their teaching practices through a heavy reliance on extrinsic motivators for education. Although there are practices that can take more time or effort on part of the teacher such as making two homework assignments for students to choose between instead of just one, teachers and school staff are expected to be actively promoting the wellbeing of students.

Additionally, the APA’s Principle C of Integrity requires psychologists to uphold “accuracy, honesty, and truthfulness” in what they do, and “consider the need for, the possible

consequences of, and their responsibility to correct any resulting mistrust of other harmful effects that can arise from the use of such techniques” (APA, 2017, pp. 3-4). Some of the possible practices that can promote adherence to this principle includes a weekly report on not just educational progress, but social and developmental progress as well, as presented in the Waldorf School model. This will allow professionals to keep a close eye on how their practices and actions are affecting their students, and encourages constant supervision for possible violations in order to catch and resolve them quickly. On a broader scale, evaluation methods in the classroom and in the school as a whole can allow there to be eyes on the effects of the techniques used on and with students.

Principle E, respect for people’s rights and dignity, calls for professionals to “respect the dignity and worth of all people, and the rights of individuals to privacy, confidentiality, and self-determination” (APA, 2017, p. 4). Several of the teaching practices discussed previously directly impact a child’s self-determination development and ability to exercise that self-determination. With gradeless classrooms, students are able to have more of a choice in how they wish to approach an assignment, and are allowed to take risks with their education without risking a penalization. Homework choice allows students to select the option that would work best for them and their learning styles and desires for that day. With agentic engagement, students feel as though they are valued members of the classroom and that the teacher sees and cares about making assignments more tailored to them and what they wish to do or how they learn (Patall et al., 2019). Especially given the developmental stage of the students in middle and high school, the respect and adherence to this principle is essential to the healthy development of students.

### **Quality of Life Standards**

An additional framework for thinking about teaching practices linked to ethical considerations is that of assessing student quality of life (QoL) as an outcome of teaching and schooling practices. As discussed by Schwartz & Kelly (2021), QoL is defined as “a set of multiple individual and environmental factors and relationships that are important to all people based on individual needs and choices” (p. 163). QoL can include elements such as the following: self-determination, emotional well-being, interpersonal connections, material well-being, personal development, and physical well-being (Schwartz & Kelly, 2021, p. 165). This connects directly to the aim of this paper, which is to promote lifelong learning and healthy development of students through middle and high school teaching practices. QoL needs to be considered in all of the potential teaching practices implemented, like with agentic engagement. Agentic engagement has the potential to meet many of the elements included in QoL, such as self-determination, interpersonal connections, emotional well-being, and personal development. It promotes self-determination in that the student is actively involved in the process of learning; it promotes interpersonal connections because of the active participation required; emotional well-being is promoted through the perceived boost in competence as a result; finally, personal development is a direct result of learning (Patall et al., 2019).

Many of these elements that go into assessing a person’s QoL are being limited for students with current teaching practices. Focusing mainly on extrinsic motivations in classrooms have limited self-determination if any at all, meaning that this realm of QoL may be ignored, but natural reinforcers that can come as a result as described by the IRIS center can improve QoL. The emotional well-being of a student can be improved if they are free from stress and anxiety caused by extrinsic motivators such as grades and GPA through practices such as gradeless classrooms, or the use of educational philosophies such as those presented through Montessori or

Waldorf education. Additionally, especially for traditionally low achievers, allowing students to express themselves in self-determined projects to show their progress or promoting agentic engagement strategies can improve QoL. With personal development, professionals are expected to encourage students to authentically participate in activities and are not just rushing to get it done: they are intrinsically motivated to do these activities and not extrinsically motivated to get the paper filled out as quickly as possible.

Life should not just be about getting a good grade: professionals should be critically evaluating the current teaching practices in their schools and assessing if students are truly being filled and if their QoL is acceptable. As Skinner (1975) wrote, “it has been too easy to put possession ahead of acquisition, and to miss the importance of strength of behavior and its relation to contingencies of reinforcement” (p. 70). Practical concerns involving the ethical perspective of behavior change of students in the middle and high school classrooms are plentiful. With extrinsic motivators, there is a fear that students may learn that they just need to memorize the material and do what is expected only when there is a payoff or reward offered, which eliminates the purpose of having students become self-directed and intrinsically motivated lifelong learners (Good & Brophy, 2008). Research also suggests that the content students are learning values breadth over depth, which reduces the ability for students to make meaningful connections with material and understand the full picture of all of their studies together (Good & Brophy, 2008). This manner of instruction that values and rewards those who can memorize material fastest can lead to students simply memorizing information for the tests and then promptly forgetting it, as there is not enough time for sustained discourse (Good & Brophy, 2008). This is a disservice to both students and educators and can be resolved through careful consideration of the teaching practices being used in classrooms. Possible solutions could

include implementing elements of the Montessori classroom model with less structured work time, the Waldorf classroom model with emphasis on more qualitative grading measures, and other classroom models such as daily agentic engagement and gradeless classrooms, among others.

## IMPLICATIONS, LIMITATIONS, AND FURTHER DIRECTIONS

### **Implications**

Teachers and other school staff can implement multiple elements of the results of this study in their classrooms and schools. For teachers specifically, elements of various alternative education models could be useful in the classroom setting. For example, elements of Montessori education and Waldorf schools can be potentially integrated into the public school classroom, such as the emphasis on student-led projects and reduced homework to foster self-determination and autonomy development. The elimination of some extrinsic motivators such as frequent grades, heavy focus on structured exams, and extra busywork such as some homework can help students feel as though their time is valued and teachers want them to learn and succeed. This is not to say that homework and graded formal assessments such as tests are not valuable in certain contexts, but meant to illuminate the idea that perhaps homework and formal tests, though traditional, may not be the best evaluation device for teachers to be using in specific classrooms with specific students. This means that teachers should consider the needs of their students specifically, and attempt to adjust expectations and requirements to them.

This tailoring of expectations and requirements specifically to the students in the classroom is something that has been touched upon in many of the effective teaching practices discussed, including gradeless classrooms and various reports and studies on student motivations in classrooms. This idea relates directly to promoting the self-determination and autonomy of

students. When teachers consider where their students are developmentally and there is increased focus on what students need not just in terms of curriculum but as a whole person, there is potential for incredible growth and increased student participation. Even the simple choice between two homework options in the study by Patall et al. (2010) resulted in students feeling more competent in the material they were learning and enjoying the homework more, which promotes the healthy development of the student overall, not just in academic terms. This along with daily agentic engagement can create strong relationships between teachers and students based on mutual respect, interest, and support.

The implications of these findings are not limited to the classroom specifically, but can be expanded to the entire school community. Schools may benefit from using evaluation methods to check in with how their students and school community is overall in regards to how current teacher practices are affecting the lifelong learning and development of students, as well as evaluating the ethical implications of current practices. Program evaluation techniques such as those provided by the W.K. Kellogg Foundation (2017) can be incredibly helpful to track the progress and impact of various practices being implemented. Not only will students feel heard and valued, teachers will be able to understand what practices are effective and how to navigate promoting lifelong learning in a way that lasts.

### **Limitations**

As with all research, several limitations of the current research should be acknowledged. One of the main arguments presented in this paper is the need for adolescents to have an active voice and choice in their education in order to promote healthy development and lifelong learning. There is a notable lack of adolescent perspective in current research. Studies examining what exactly students would like to see in their education and their opinions were not well

represented in this paper and should be addressed and included in future research. Another voice that was not present in this presentation but is important to the conversation around adolescent development and lifelong learning is that of the teachers themselves. This paper is most closely aligned with psychological perspectives. The perspectives of teachers are valuable as well and should also be examined in further research. This paper also examined a select number of teaching practices from public school and alternative education models, but there are a multitude of teaching practices that were not examined that may also contribute to promoting student development and lifelong learning. Future research could benefit from increased breadth of considerations beyond intrinsic and extrinsic motivation.

### **Further Directions**

The effectiveness and lasting power of lifelong learning is something that is understudied in current research. Directions for further research should consider a longitudinal approach to the lasting impacts of various teaching practices well into adulthood. All of the studies used showed short-term impacts, whether that be for a unit in the curriculum as with Patall et al. (2010), or a couple years with Cavendish (2013). Possible studies could include longitudinal studies of students who were taught using some of the strategies discussed here intended to promote self-determination, and autonomy development, as well as comparisons of those utilizing a higher reliance on intrinsic motivations compared with students who were taught with a higher reliance on extrinsic motivations. Following students well into their 20s or even later in life into middle and late adulthood, where and when feasible, and examining how they are functioning at work and what their habits are in terms of lifelong learning, such as reading practices, furthering their education informally through classes offered in the community, etc. could be very beneficial to understanding long term influences of teaching practices. Both short-term focused and

long-term focused research, together, will allow for the full implications of these practices to be evaluated. In the meantime, intentional and frequent evaluation of teaching practices and student outcomes are essential to promote lifelong learning and healthy development of adolescents.

## CONCLUSION

The purpose of this paper was to examine the effects of intrinsic and extrinsic motivations on adolescent development. Of specific interest was adolescent autonomy development and self-determination, in the context of public middle and high schools in America. By examining various teaching practices and their effectiveness as well as ethical perspectives and implications for teaching, the potential for ongoing development of teaching and schooling practices can be improved relative to creating lifelong learners. Intrinsic and extrinsic motivations were examined as well as their uses in the context of effective teaching practices, including elements from Waldorf schools, Montessori schools, and general classroom teaching practices such as gradeless classrooms, building self-determination skills, different approaches to homework, the good behavior game, agentic engagement, and others. Different ethical perspectives were also examined for any possible violations and/or guidance as to choices of methods. Elements of quality of life were also discussed, pointing at the importance of schools promoting quality of life in the types of teaching practices they choose.

There are several implications to note from this study: on the school-wide level, teachers and school administrators can use evaluation techniques such as the one provided by the W. K. Kellogg Foundation (2017) to assess how well their teaching practices are promoting lifelong learning and healthy student development using both short-term (1-3 years) and long-term (4-6 years) evaluations (p. 117). These are living documents that should be reviewed regularly (Kellogg, 2017). In individual classrooms, teachers can evaluate their own teaching practices and

the ways in which they are able to adapt those to the individual needs of students to promote cohesion and mutual respect between teachers and students, which can improve quality of life, student achievement, and lifelong learning. While limited in scope, as only a psychological perspective is presented, the analyses present in this paper could be used to consider and organize day-to-day teaching practices. Future work would benefit from inclusion of the voices of the adolescents themselves as well as teacher perspectives on issues such as effective teaching practices that contribute to healthy development. Finally, the long-term effects of these strategies on student lifelong learning could benefit from further research in the form of longitudinal studies that extend beyond the lengths present in the research literature currently available.

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